CARTOGRAPHY IN UKRAINE
2007-2010

National Report for the 15th General Assembly of the International Cartographic Association
Paris, July 2-8, 2011

Kyiv 2011
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The national report
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1. ORGANIZATION OF CARTOGRAPHICAL ACTIVITY. OFFICIAL CARTOGRAPHY


The Law of Ukraine “On topographic and cartographical activity” regulates relations in the sphere of topographic and cartographic activity in Ukraine, defines the main principles of scientific, industrial and administrative activity in the course of creation of geodetic, topographical and cartographic materials, data, geodetic and cartographic products to satisfy the requirements of the state, institutions of local governing and individuals with the results of this activity.

The Law of Ukraine “On place names” defines legal foundations for the regulation of the activity in regard to naming and renaming of geographical objects, as well as normalization, use, accounting, registration and preservation of place names.

The state policy formation and implementation in the sphere of topographic and cartographic activity in Ukraine are carried out by the governmental body of the State Service of Geodesy, Cartography and Cadastre (Ukrgeodescartographia), which functioned in 2005-2009 as a part of the Ministry of Environmental Protection of Ukraine. By Resolution of the Cabinet of Ministers of Ukraine of December 23rd, 2009 Ukrgeodescartographia had been re-subordinated to the State Committee of Ukraine on Land Resources (since April 8th, 2011 – the State Agency on Land Resources of Ukraine).

Ukrgeodescartographia in accordance with the established procedure organizes and coordinates the implementation of topographic and cartographic works on the nation-wide scale, conducts works on modernization of the State geodetic network, forms the Ukrainian network of global navigating satellite supervision, provides cartographic and geodetic support of contract legal registration of the Ukrainian frontiers. An important line of activity of Ukrgeodescartographia is maintenance and updating of the uniform nation-wide topographic foundation for the formation and conducting of all types of the state cadastres, as well as cartographic, geodetic, scientific and methodological provision for the state cadastres. Ukrgeodescartographia supports the activity of the State Cartographical and Geodetic Fund of Ukraine, Interdepartmental Scientific and Methodological Council in the Issues of Geographical Names, forms the State Register of Geographical Names of Ukraine and the world, renders geoinformational services to state bodies, legal and physical persons.

The principles of the state policy in the sphere of topographic and cartographic activity were defined by the State scientific and technical program for the development of topographic and geodetic activity and national mapping for 2003-2010, which provided for the creation of modern infrastructure of geospatial data and manufacture of cartographic products based on
all-round application of digital methods and geoinformational technologies, provision of open access to geospatial information for consumers thanks to the application of telecommunication technologies, further expansion of market relations, integration of Ukraine into international organizations, creation of a system of certification of cartographical information for the state needs.

Resolution No 2354-r of the Cabinet of Ministers of Ukraine of December 29th, 2010 ratifies the Concept of the State target scientific and technical program for the development of topographic and geodetic activity as well as national mapping for 2011-2015. The Program's purpose is the development of a system for provision of public requirements for all kinds of geospatial data, the increase of efficiency in application of geospatial data and geoinformational technology in support systems for managerial decisions of public authorities and local governments in economic, social, ecological, military, and scientific sphere by introduction and development of the national geospatial data infrastructure.

Cartographic activity in Ukraine is carried out by the subjects of entrepreneurial activity of all patterns of ownership on the basis of licenses issued by the State Service of Geodesy, Cartography and Cadastre. After the adoption of the Law of Ukraine “On modification of some acts of Ukraine concerning restrictions in regulation of economic activities” (October 2010) licensing in the sphere of topographic and cartographical activity was cancelled. As of January 1st, 2011 cartographic and geodetic activity is carried out by almost 2500 business subjects, including 29 state enterprises of Ukrgeodescartographia that carry out a complex of hi-tech works on astronomy, gravimetry, geodesy, photogrammetry and cartography.

Cartographic activity for the needs of the army is carried out by the Topographic Service of the Armed Forces of Ukraine, the management of which is assigned to the Central Military-topographic and Navigation Management of Central Administrative Board of Operative Support of the Armed Forces of Ukraine. The primary goals of Topographic Service are: preliminary preparation of topographic, geodetic and navigation materials for the territory of Ukraine, creation and accumulation of corresponding cartographic materials for foreign territories, topographic, geodetic and navigation support of constant alertness of the Armed Forces of Ukraine, participation of the troops in operations, participation in nation-wide actions on legalization of frontiers. The topographical service operates on the basis of requirements of the Armed Forces for the topographic and geodetic information on the basis of the Military Doctrine of Ukraine and the current state analysis of the topo-geophysical support for the territory of our state and the adjacent ones.

There are structural divisions that provide their specific kinds of cartographical works in
the system of other state structures. The most authoritative among them are the State Service of Geology and Bowels of Ukraine (geological mapping), the Ministry of Infrastructure of Ukraine (aeronavigation and sea navigation mapping), the State Agency of Forest Resources of Ukraine (mapping of forests).

2. MAIN SCIENTIFIC CARTOGRAPHICAL ESTABLISHMENTS

Scientific cartography is carried out by scientific research institutes of the State Service of Geodesy, Cartography and Cadastre, the National Academy of Sciences of Ukraine, scientific institutions of the ministries of Ukraine, higher educational institutions.

Research and developmental works in Ukrgeodescartographia are oriented along the following guidelines:

- geodesy, topographic cartography, geoinformatics and standardization – at the Scientific Research Institute of Geodesy and Cartography (Kyiv);
- thematic cartography, normalization of place names – in the State Scientific Production Enterprise Kartographia (Kyiv);
- geographical cartography, scientific development of fundamental cartographic products – at the Institute of Geography of the NAS of Ukraine (Kyiv);
- photogrammetric instrument engineering and software – in the State Scientific Production Enterprise Heosystema (Vinnysia).

The Scientific Research Institute of Geodesy and Cartography (http://gki.com.ua) is a leading scientific institution of the State Service of Geodesy, Cartography and Cadastre.

The Institute carries out research works in the field of geodesy, topographic cartography, remote sensing of the Earth, standard provision of topographic and cartographic works; working out and introduction of geoinformation systems, creation of a base set of geospatial data of different degrees of detailed elaboration, drawing up of address registers of settlements and digital models of localities; formation of the cartographical data bank for the territory of Ukraine; creation of geoinformational systems and cartographical software for directory systems, control systems for territories and enterprises. The experts of the Institute form an organic part of official delegations and provide cartographical and geodetic support of contractual formalization of Ukrainian frontiers, actively participate in the activity of the Technical Committee for Standardization TC 103 Heohrafichna informatsiia/Heomatyka of the Derzhsposzhvystandart (State Consumer Standard) of Ukraine, in the work of editorial board of the magazine Visnyk heodezii ta kartohrafi (Geodesy and Cartography Bulletin), in preparation of scientific professional editions of the series Heodeziia, kartohrafiia, kadastr (Geodesy, cartography, cadastre).

The State Scientific Production Enterprise
“Kartographia” (SSPE “Kartographia”) (www.ukrmap.com.ua) carries out research works in the field of contextual and educational cartography. The Department of Standardization of Geographical Names of the enterprise develops scientific and methodical documents aimed at the implementation of the Law of Ukraine “On place names”, participates in scientific and methodical support of the activity of the Interdepartmental Scientific and Methodological Council in the Issues of Geographical Names, cooperates with the United Nations Commission of experts on place-names, participates in the international and national conferences on standardization of place-names.

The Institute of Geography of the National Academy of Sciences of Ukraine (NAS of Ukraine) in its cartography department carries out scientific, methodological works and research works within the limits of the state and academic programs. The most significant achievement of Ukrainian geographic and cartographic science is the fundamental cartographic product finished in 2007, the official state edition – the National Atlas of Ukraine.

The main idea of the Atlas and the ways of its implementation had been preset by the Atlas Concept (2001) developed by the Institute of Geography of the NAS of Ukraine; the Concept defines scientific bases and technological decisions of its development. The Institute of Geography provided scientific and methodological support for the creation of the National Atlas of Ukraine. The main objective for the creation of the Atlas is informative support of the development of the state and its regions thanks to integration of knowledge of its history, features of the nature, population, economics and ecological conditions of the environment.

The State Scientific Production Enterprise Heosystema (http://www.vingeo.com) develops and serially produces photogrammetry complexes with the devices and equipment of the world level with its own software technological support that are intended for digital processing of materials of space and aerial photography. They are, in particular, “Delta” digital photogrammetry station, “DeltaScan” color photogrammetry scanner, “StereoAnagraph” analytical photogrammetry station, “3-DAS-1” scanning aerial camera, cartographical flat-bed scanner. The Delta/Digitals software provides for the correctness of conversion of the created digital topographic maps and plans into software products of leading GIS-systems and data processing of space imagery.

The products of Heosystema were exhibited at the “Intergeo East” (Sofia, 2007), “Intergeo” (Leipzig, 2007) “GeoForm +” (Moscow, 2007) exhibitions and the 21st International Photogrammetry Congress (Beijing, 2008).

The tools and technologies developed and manufactured by the enterprise are used in the CIS countries, the USA, Canada, Great Britain, Sweden, Norway, Austria, Switzerland, Spain, the United Arab Emirates, Italy, Poland and many other countries.

Scientific developments of certain kinds of thematic mapping are also carried out by other institutes of the National Academy of Sciences of Ukraine: the Institute of Geological Sciences
(geological mapping), the M.G. Holodnyi Institute of Botany (geobotanical mapping), the Institute of the Ukrainian Language (linguistic mapping, toponymic researches), the Institute of Telecommunications and Global Informational Field (system engineering of cartographical support for ecological safety control and monitoring of perpetual resources). Separate directions of thematic mapping are developed by scientific institutions of other ministries. Among them one should mark out, first of all, the Ukrainian Research Hydrometeorological Institute of the Department of Hydrometeorology of the Ministry of Emergencies of Ukraine (climate mapping), the Ukrainian State Geological Prospecting Institute (UkrDHRI) of the State Service of Geology and Mineral Resources of Ukraine (geological mapping), the Ukrainian Scientific Research Institute of Environmental Problems of the Ministry of Environment and Natural Resources of Ukraine (ecological mapping).

Considerable scientific potential is concentrated in higher educational institutions of Ukraine where theoretical, methodological and practical works in many directions of mapping are performed. Cartographic scientific developments are carried out, first of all, in the institutions of university type (the Taras Shevchenko Kyiv National University – ecological mapping, mapping semiotics, history of cartography; the V.N. Karazin Kharkiv National University – complex regional thematic mapping, nature protection and tourist mapping; the Ivan Franko Lviv National University – complex regional, social and economic mapping; the Dnipropetrovsk National University – educational and ecological mapping, toponymic researches; the V.I. Vernadsky Taurian National University – nature protection and recreational mapping; the Lesya Ukrainka Volyn State University – educational atlas mapping; the Kyiv National University of Building and Architecture – geoinformational mapping; the Military Institute of the Taras Shevchenko Kyiv National University – geoinformational mapping.

3. PRINCIPAL TYPES OF CARTOGRAPHICAL WORKS

**TOPOGRAPHICAL MAPPING**

At present the territory of Ukraine is fully covered by topographic maps of the following scales:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Sheets</th>
</tr>
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<tbody>
<tr>
<td>1:1 000 000</td>
<td>9 sheets</td>
</tr>
<tr>
<td>1:500 000</td>
<td>26 sheets</td>
</tr>
<tr>
<td>1:200 000</td>
<td>157 sheets</td>
</tr>
<tr>
<td>1:100 000</td>
<td>536 sheets</td>
</tr>
</tbody>
</table>

1:50 000 1975 sheets
1:25 000 7554 sheets

As of January 1st, 2011 the territory of Ukraine (29402 sheets) is 99.9 per cent covered by topographic maps with the scale of 1:10 000 (except for separate territories of mountain areas).

The territory of Ukrainian urban settlements is provided with topographical plans in the scales of 1:5 000 and 1:2 000. Topographical plans of
scales 1:1 000 and 1:500 are created for separate parts of cities, towns, settlements and industrial zones.

There are topographic maps of scales 1:10 000 and 1:25 000 for internal reservoirs and continental shelf areas.

2003 was the year of initiation of works on modernization of the State geodetic network of Ukraine. The research works on parameters modeling for geodetic reference coordinate system of Ukraine, the Ukrainian permanent network of global navigational satellite supervision, researches and a quasigeoid model in the territory of Ukraine had been carried out. As a result, since January 1st, 2007 the State Geodetic Reference Coordinate System USK-2000 was introduced.

Topographic maps and plans are designed and updated by the state enterprises with use of modern geoinformation technology in uniform coordinate and heights system with conventional signs. The points of the State geodetic network of Ukraine and points of geodetic fine grids make up the geodetic foundation of plans and maps. The ruling and nomenclature of all scale line are subordinated to a uniform system.

In 2005 a project of the Ukrainian cartographical network was launched. It is a geoinformational system for manufacture, supply and use of geospatial data based on the Internet access. It is an aggregate of distributed servers of digital cartographical data bases, software for Web-mapping, creation and use of interactive electronic maps in directory, cadastral, monitoring, navigation and other systems, which unites enterprises that manufacture, supply and use the geospatial data on the basis of Web-mapping and Internet interaction. The geo-informational resources of the cartographical network constitute a digital map of Ukraine with the scale of 1:500 000, of oblasts and the Autonomous Republic of Crimea with the scale of 1:200 000, separate cities and towns with the scales of 1:2 000, 1:5 000, 1:10 000. Actualization of the digital maps in the Internet is carried out in the on-line mode.

Digital maps and plans are created in a system for classification and coding of topographic information according to the rules of digital description of topographic objects and conventional storage format. Geospatial data bases are created on their basis.

Works on creation and updating of topographic maps of all scales, since 1997, in conditions of budgetary financing deficiency, were considerably reduced. At present the major part of topographic maps of all scales lag more than 20 years behind and do not represent the current state of the areas.

Subdivisions of the Military topographical service create maps of all scales (more than 4 thousand nomenclature sheets of maps are prepared for publication), over 70 million copies of topographic and special maps have been printed, more than 40 per cent of points of the geodetic network surveyed and restored, catalogs of coordinates of geodetic points created and updated, a topographic map of joint actions with scale of 1:250 000 in the NATO standards (JOG) had been developed and a map of this scale for the territory of the country had been prepared for print, a significant amount of military ranges of the Armed forces of Ukraine in the NATO
standards mapped, as well as an aeronavigation map of Ukraine with the scale of 1:250 000 in the NATO standards (JOG AIR).

At present the basic line of activity in the sphere of topographical mapping in Ukraine is determined by the necessity of approval of the Order of Nation-wide Topographic and Thematic Mapping, in which the main principles, general requirements, directions and structure of a system for creation and updating of state topographic maps in graphic, digital, photographic and other forms for support of needs of the society, public authorities, local government, in economic, social, ecological, defensive, scientific spheres and for the interests of business subjects and population in cartographical production, will be defined.

Works on creation of the National infrastructure of geospatial data started in Ukraine. A draft Law of Ukraine “On National infrastructure of geospatial data” was developed and published. Works on creation of digital maps with the scale of 1:10 000 for the territory of Ukraine, as a basic map on the formation of geospatial data infrastructure, are being carried out. The standards of the country are being harmonized with the corresponding international standards thanks to certain experience in formation of digital spatial data under requirements of international standards.

**FRONTIERS DELIMITATION AND DEMARCATION**

An important line of activity of Ukrgeodescartographia is further development of cartographic and geodetic support of the frontiers delimitation and demarcation processes, a practical embodiment of the principles and norms of differentiation of land and sea spaces between Ukraine and her neighbors.

The Ukrainian state aerogeodetic enterprise and the Scientific Research Institute of Geodesy and Cartography for the last years have provided performance of a considerable complex of works on delimitation and demarcation of land sites of borders with the neighboring states. A considerable amount of works on delimitation of Ukrainian-Belorussian, Ukrainian-Moldavian and Ukrainian-Russian borders, and the demarcation of Ukrainian-Moldavian border has been carried out; however certain issues of the central part of Ukrainian-Moldavian border remain non-regulated. In 2010 the demarcation of Russian-Ukrainian border started.

Delimitation of sea spaces also proceeds. Ukraine inherited and confirmed by treaties the border of the exclusive economic zone and the continental shelf with Turkey, established by the former USSR. After the decree of the International Court of the United Nations (2009) there appeared a border of the exclusive economic zone and continental shelf with Romania. Still there are some unsettled parts of frontier with the Russian Federation in the Black and Azov Seas and the
Kerch strait, the limits of exclusive economic zone and continental shelf in the Black Sea with the Russian Federation.

THEMATIC AND SPECIAL MAPPING

The State Service of Geology and Bowels of Ukraine which operates as a part of the Ministry of Environmental Protection of Ukraine (since December, 2010 - the Ministry of Environment and Natural Resources of Ukraine) is engaged in complex geological, hydro-geological, ecology-geological and engineering-geological mapping.

Considering economic and ecological needs and the actual state of geological knowledge of the territory of Ukraine, the main priority type of the geological mapping is geological additional studying of areas in the scale of 1:200 000 for the purpose of creation, preparation and publication of a multi-purpose State geological map of Ukraine with the scale of 1:200 000 (Derzhgeolkarta-200) (Fig.1). The structure of the complete set of this map on each sheet of the topographical nomenclature includes geological maps of pre-Quaternary formations, Quaternary deposits, buried horizon (for example, for the Ukrainian sheet it is the crystal Precambrian base, for Volyn-Podillia - pre-secondary cut etc.). 11 complete sets of Derzhheolkarta-200 (Central Ukrainian, of the Black Sea region, the Crimean, Volyn-Podillian, Dnipro-Donetsk, the Carpathian series of sheets) have been prepared for publication in 2007-2010.

In 2007 the Complete set of maps “Geology and minerals of Ukraine” with the scale of 1:1 000 000 was published. It includes: 1. Geological map; 2. Map of minerals; 3. Map of pre-neozoic formations; 4. Metallogenic map; 5.

2007-2010 became an important stage in development of atlas mapping in Ukraine.

The National Atlas of Ukraine, finished in 2007 and created in accordance with the Decree of the President of Ukraine “On the National atlas of Ukraine” (2001) and the Resolution of the Cabinet of Ministers of Ukraine “On approval of the Program for preparation and publication of the National Atlas of Ukraine” (2003) became the most significant achievement of Ukrainian geographical and cartographical science and practice.

The National Atlas of Ukraine is the result of the joint work of scientists and cartographers of Ukraine. The National Academy of Sciences of Ukraine developed the concept and carried out the authoring for almost 50 per cent of the total number of maps. Experts of the academic Institutes of Geography, Geophysics, Zoology, Botany, Geological Sciences, Ecology of the Carpathians, as well as the State Geological Service, the Ukrainian Research Hydrometeorological Institute, National Universities (Kyiv, Lviv and Taurian) etc. took part in the working out of the maps of the Atlas. Scientific and methodological support of the creation of the National Atlas of Ukraine was carried out by the Institute of Geography of the NAS of Ukraine. Works on preparation of the Atlas for the edition were executed by the SSPE “Kartographia”. The general organization of the works on creation and publication of the Atlas was provided by the Coordination Council and the Editorial board.

A fundamental cartographical product of such contents and volume was created in Ukraine for the first time.

The atlas corresponds to the structure of knowledge about the Nature and the Society of the country and consists of 6 thematic blocks: General characteristics, History, Environment and natural resources, Population, Economy, Ecological condition of the environment – 33 sections containing 875 maps.

Subjects of the “General characteristics” block (38 maps on 28 pages – 6,4 per cent of the total volume) are aimed at the representation of Ukraine as a component part of the world and European space. It provides guidance on a role and place of Ukraine in their natural landscape, political, economic, social environment.

Maps of the “History” block (79 maps – 8,5 per cent of the total volume – on 36 pages) reflect the basic historical events that influenced the formation of the Ukrainian nation and the state. Maps are grouped in subdivisions: ancient history, the Middle Ages and the early new time, new epoch and the newest time.

Block of maps “Environment and natural resources” includes thirteen sections (324 maps on 150 pages – 34,1 per cent of the total volume). The maps represent features and spatial laws of distribution of natural objects and phenomena, the intensity of display of their relations and interactions, the provision of Ukraine with natural resources.

Block of maps “Population and human development” (181 maps on 61 pages – 14,5 per cent of the total volume). The block’s structure
Fig. 2. National Atlas of Ukraine
is defined by logic sequence of indicators of the complex characteristic of the population for the purpose of revealing and reflection of laws and regional distinctions of their display.

Block of maps “Economy” (177 maps on 98 pages – 22,3 per cent of the total volume) reflects a level of development of productive forces of Ukraine, the structure, specialization and territorial organization of the economy, general tendencies of transformation of the economy and its place in the global economy and the informational field.

Block of maps “Ecological condition of environment” (76 maps on 32 pages – 7,3 % of the total volume) is a concluding part of the atlas. The peculiarities of interaction of the Nature and the Society in Ukraine as well as the estimation of its consequences are represented here.

Paper (with the Additional volume of translations of texts, legends, and other elements of the support for the maps: schedules, diagrams, tables, names of illustrations, etc. in Russian and English) and electronic versions of the National Atlas of Ukraine had been created. The basic scale of the maps is 1:2 500 000, other scales used are 1:5 000 000, 1:4 000 000, 1:8 000 000, 1:12 000 000. The volume of the National Atlas of Ukraine is 440 pages of 31,5×47,0 cm format.

The National Atlas of Ukraine became an important source of informational support for the state development, state public institutes, it satisfies informational needs of the society and individual citizens.

A group of experts of the Institute of Geography of the National Academy of Sciences of Ukraine and of the SSPE Kartographia was awarded with the State Award of Ukraine in the field of science and technologies for the work at creation and publication of the National Atlas of Ukraine by the Decree of the President of Ukraine (2009).

A series of reference atlases, developed and prepared for publication in the SSPE Kartographia, present a new trend of atlas mapping in Ukraine. Among them are: The Atlas of Teacher (2010), Reference Atlas of the World (2010). The atlases have the same format and hard cover.

The Geographical Atlas of Teacher and the Reference Atlas of the World are complex cartographic editions reflecting the subjects of general geography and cartography, characterizing environment and resources, population and economics of the world and Ukraine, represent continents and oceans, countries and the world regions (their general geographical characteristic, changes of population and economic situation). The atlases are created on the basis of up-to-date cartographic sources, literary and statistical materials. Maps of the atlases are supplemented with the text and graphic information. The editions contain indices of place names, and dictionaries of terms used in the atlases(Fig.3).

The Complex Atlas of Kyivska oblast (Kyiv region), developed and published by the SSPE “Cartography” in 2009, belongs to the line of complex regional mapping (Fig. 4). This cartographical edition contains information on historical development, administrative and territorial structure, the environment and resources, population, economics and social infrastructure of Kyivska oblast. Up-to-date statistical materials had been used in the process
Fig. 3. Reference atlases of the world
details reflect geographical features of separate territories of the country. General geographic maps of all 25 administrative and territorial units of Ukraine are prepared for publication and 3 maps are already published.

Editions of the Kyiv Military-Cartographic Factory: the series of topographic maps of oblasts of Ukraine with the scale of 1:200 000, as well as topographic maps with the scale of 1:100 000 on the basis of nomenclature sheets of topographic maps have become traditional (Fig. 5, Fig. 6).

One of the basic thematic lines of mapping works of the state cartographical and geodetic service is compilation and re-edition of political and administrative maps of Ukraine (scales 1:500 000, 1:750 000, 1:1 000 000, 1:1 500 000), the primary goal of which is the reflection of changes in the political and administrative structure of the state and other elements of the map contents. The SSPE Kartographia regularly publishes administrative maps of all oblasts and the Autonomous Republic of Crimea with the scale of 1:250 000 that provide detailed and conclusive characteristics of the administrative and territorial structure, representing all settlements and borders of the administrative units up to the lowest ranks – village councils. Maps of the oblasts have a status of official publication and are published as folded ones with the index of place names.

Maps for the wide circles of the population in Ukraine are created and published, as a whole, by a small number of organizations among those are the state-owned (the SSPE Kartographia, Kyiv, the Kyiv Military-Cartographical Factory, the SSPE Ukrinzhheodeziia, the State Cartographic
Factory (Vinnitsia) and others), as well as private enterprises (Joint-Stock Company Institute of Advanced Technologies, Mapa, Mikhukho-Maklai, scientific production firm Heos (all are in Kyiv), Soiuzkarta and Svit (Simferopol), scientific production firm Karty i atlasy (Lviv), SPAERO PLUS (Kharkiv) and others).

Development of tourism and tourist infrastructure in Ukraine has led to a considerable growth of demand for **cartographical production aimed at tourists**. The SSPE Kartographia published the atlas “**Get acquainted with Ukraine**” in 2009, which provides general information on history, environment and resources, population and economy of Ukraine, as well as contains information of regional studies per each region.

For those who are interested in the natural, historical and cultural heritage of Ukraine, the atlas “**Tourist necklace of Ukraine**” (the SSPE Kartographia, 2011) had been created. The atlas contains maps with the overview of Ukraine and detailed information on regional studies. The most famous historical, cultural, architectural and archaeological monuments, sights, objects of natural reserved fund, museums, resorts of Ukraine are presented on the maps. The Atlas’ maps are supplemented with texts, drawings, space images and a considerable number of photos.

A series of tourist atlases of the oblasts of Ukraine was launched in 2009. “**Kyivska oblast. Tourist atlas**” (the SSPE Kartographia, 2009) and the “**Ternopilska oblast. Tourist atlas**” (the SSPE Kartographia, 2010) are already published.
They present up-to-date and full information on historical and cultural monuments, natural reserved objects and a tourist infrastructure of the regions. The atlases are intended for a wide range of users - tourist organizations, amateur tourists, regional specialists, and will help to plan better rest and to familiarize with sights of the region.

"Mountainous Crimea. Tourist atlas" (the SSPE Kartographia, 2010), scale 1:50 000 is intended for connoisseurs of productive leisure in the mountains of the Crimea - hikers, bicycle tourists and other fans of active sports. The Atlas’ maps make it possible to move freely in the mountain forest zone of the Crimea, they show interesting excursion destinations, recommend tourist routes and other points of tourist infrastructure (Fig. 7).


In the course of 2007-2010 the SSPE Kartographia continued the edition of the series of large-scale (1:50 000, 1:75 000) route charts for
unorganized tourism of such recreational territories as the Carpathians and the Crimea (more than 40 titles are already published), which visually reproduce hiking routes, skiing lifts, objects of services for tourists, sights and excursion objects. In 2008 the enterprise has launched a new series of tourist maps of administrative oblasts of Ukraine with the scale of 1:250 000, 6 of them are already published.

A considerable quantity of cartographical products for tourists in the Crimea is published by local publishing houses Souyuzkarta and Svit. The big variety of atlases for fishermen and hunters is offered by the Kyiv Military-Cartographic Factory. Maps for tourists are also published by Joint-Stock Company Institute of Advanced Technologies (Ukraine, the Crimea), the SSPE Ukrinzheodeziiia (the Carpathians, the Crimea). Throughout 2009-2010 within the limits of the project VeloStrana the SPF Karty i atlasy together with the SSPE Kartographia published a series of tourist maps for bicycle tourists with the scale of 1:70 000 for the region of the Ukrainian Carpathians (Fig. 8).

The important place in publication of cartographical production of wide consumption range belongs to atlases and plans of cities and towns. First of all, they are plans of the oblast centers, large industrial cities, tourist centers. The majority of cartographic enterprises of Ukraine is engaged in their creation.

The SSPE Kartographia continues to expand the assortment of the series begun in 1993 “Cities and towns of Ukraine”. Each plan, besides the basic map, contains the inset of the central part of a city or a town in the large format, as well as a survey of suburbs, and indispensable text information. In total almost 100 plans of cities and towns are published (in the period of 2007-2010 – 22 new plans of cities and towns).

Since 2003 the SSPE Kartographia has been publishing plans of medium and small towns of Ukraine of the series “Face of the town” (more than 50 titles have been published already, 29 of them – in 2007-2010) with reference materials of historical, cultural and tourist character. Other publishing houses have an insignificant share in this sphere of mapping.

Atlases of big cities of Ukraine for business purposes with a detailed and exact geographical foundation of the main map, representing all city buildings and their address binding, have considerable circulations. Such atlases are regularly reprinted, for example, the atlas “Kyiv” (the SSPE Kartographia) has ran through thirteen editions already (1998-2010).

Creation of maps and atlases of communication means became one of demanded trends of thematic mapping.

The biggest variety of atlases of motorways is published by the SSPE Kartographia: Europe (1:3 500 000), Ukraine (1:1 000 000, 1:500 000, 1:250 000), The Crimea (1:300 000, 1:250 000, 1:100 000, 1:50 000).

During 2007-2010 the SSPE Kartographia annually re-edited the series of the updated motorway maps of all oblasts of Ukraine with the scale of 1:250 000, started in 2005. Maps, as a rule, are added by plans of the biggest cities and indexes of names of settlements.
In 2009-2010 maps of motorways of foreign countries: Belarus, Moldova, Poland, Hungary, Bulgaria, Romania, the Balkan countries have been published.

Among other publishers of atlases and maps of motorways of Ukraine are the Joint-Stock Company Institute of Advanced Technologies, the Kyiv Military-Cartographic Factory, publishing houses Mapa, Svit, Miklukho-Maklai, etc (Fig. 9).

Schools of general education are traditionally provided with school atlases and contour maps in Geography and History for each grade (the SSPE Kartographia, Joint-Stock Company Institute of Advanced Technologies, Kartag). Numerous school wall maps in Geography, World History and History of Ukraine as well as maps for learning of foreign languages at school (Kartographia, Joint-Stock Company Institute of Advanced Technologies) are published (Fig. 10, Fig. 11).

The SSPE Kartographia published children's atlas "My Ukraine" in 2010. The authors of the edition presented much information of various types, adapted for children’s audience on Ukrainian
Fig. 8. Tourist maps
and its historical lands: its history, about the peoples who settled this territory, about the present-day symbols of the state, about the people who have glorified Ukraine, about monuments of history and culture, national crafts etc. In 2007 the joint project of the SSPE Kartographia and publishing house HarperCollins – the “Illustrated atlas for children” – was published. The atlas represents an authorized translation of the English edition, gives the chance to expand an outlook of a child and to deepen its knowledge about the world.

The atlas of reproductions “Ukraine on ancient maps. The middle of the 17th – the second half of the 18th century” (the SSPE Kartographia) became the continuation of the series the Cartographical Monuments of Ukraine published in 2009. The Atlas includes the reproductions of the West European maps with the images of territories of Ukraine from the funds of the V. Stefanyk Lviv National Scientific Library of Ukraine and the Central State Historical Archive of Ukraine in Lviv. 86 maps with pictures of the Ukrainian lands are presented in the atlas in chronological order. Facsimiles of ancient maps are added with profound descriptions in the Ukrainian and English languages (Fig. 12).

Manufacturing of relief maps and globes is a traditional branch of thematic mapping. Multisheet relief maps of the world (1:15 000 000) and Ukraine (1:635 000, 1:800 000, 1:1 650 000) are issued by the SSPE Kartographia and the State Cartographical Factory. Physical, political and souvenir globes of the diameter of 120 mm, 210 mm and 320 mm are created by the SSPE Kartographia and the Joint-Stock Company Institute of Advanced Technologies.

Topographic and geodetic works and special mapping of forests, creation of a digital database of forest plantations with the scales of 1:10 000 and 1:25 000 are carried out by the PA Derzhlisproekt of the State Agency of Forest Resources of Ukraine. The basic guidelines are the introduction in forest regulation and forestry of geoinformational technologies aimed at the creation of the inventory of forests, ecological monitoring of their condition, which expands the possibilities for estimation of forest fund by creation of various thematic maps, forecasting of dynamics for the forest fund, construction of surfaces and cuts of relief for the support of steady management of forests at various levels.

Branch of the state body Derzhidrohrafiiia – Ukrmorkartohrafiiia – (the Ministry of infrastructure of Ukraine) prepares and publishes official sea navigation maps, sailing directions, necessary for navigation safety; carries out processing and edition of sea navigation maps of water area of the Black and Azov seas, provides
Fig. 9. Atlases and maps of communications
Fig. 10. School wall maps

Fig. 11. Educational digital aids
working out, manufacture and introduction of new methods of technologies and means of navigation, hydrography and sea cartography. In total more than 150 official sea maps in hard copy and in electronic form: general maps (scales 1:500 000 - 1:1 250 000); traveling (1:100 000 - 1:300 000); partial (1:25 000 - 1:75 000); plans (1:5 000 - 1:12 500) are published.

The first Ukrainian specialized complex the “Oceanographic atlas of the Black and Azov seas” (state body Derzhdrohrafiia, Ukrmorkartohrafiia, 2009) which provides the comprehensive scientific information on conditions of the water environment and the basic features of these seas became an important milestone of the long-term cooperation of scientists with sea cartographers (Fig. 13).

Functioning of the national aeronavigation system together with civil and military system for organization of air traffic of Ukraine is provided with the State enterprise of service of air traffic of Ukraine (Ukraeroruh) which is subordinated to the Ministry of Infrastructure of Ukraine. The enterprise carries out aeronavigation service of air traffic of Ukraine and in air space over the high sea by means of the aeronavigation maps, created according to the requirements of the International Civil Aviation Organization (ICAO).

“Ecological Atlas of Ukraine”, compiled and published by the Centre of Ecological Education and Information in 2009, was a joint project of the Institute of Geography of the NAS of Ukraine and the Ministry of Environment of Ukraine. It is a reference scientific edition, containing spatial information about the environmental situation of the natural components and the consequences of interaction of the society and nature in different regions of Ukraine.

Atlas “Ukraine. Radioactive pollution” was published on demand of the Ministry of
Emergencies and the Protection of the Population from the Consequences of the Chornobyl Disaster (private company Intelektualni systemy GEO, 2008). The maps of the Atlas illustrate the consequences of the accident on the Chornobyl Nuclear Power Plant, which took place on April 26, 1986. Significant attention is paid in the Atlas to the basic problems of the people – the victims of the accident, to the influence of radioactive pollution on people and the medical consequences of the accident, as well as the social and economic ones (Fig. 14).

The cartographic products published by the SSPE for work on creation and publication of the National Atlas of Ukraine by the Decree of the President of Ukraine (2009) Kartographia and the Joint-Stock Company Institute of Advanced Technologies, were repeatedly honoured with diplomas at international and national exhibitions.

**STANDARDIZATION OF PLACE NAMES**

The primary goal of standardization of place names is the normalization of writing of place-names, their unified reproduction along the two guidelines: normalization of writing of national place names and normalized rendering of foreign place names from various foreign languages. Consecutive application of exact place names is an important condition of effective global communication that promotes social and economic development, and the functioning of the national infrastructure.

Ukraine is a full member and actively works in two linguistic and geographical departments of the Group of Experts of the United Nations under place names – the Department of Eastern Europe, Northern and Central Asia (since 1994) and the Department of East, Central and Southeast Europe (since 1993). Since 2005 Ukraine takes part as a country-observer in sessions of the Baltic Department.

The Department of Standardization of place names of the SSPE Kartographia works at the development of scientific and methodological documents in normalization of place names and instructions on rendering into Ukrainian of place names of foreign countries. According to the developed instructions a Gazetteer of world place names in Ukrainian was created.

During 2007-2010 the Department of
Standardization of place names has developed the following scientific and methodical documents:

- the structure and support of the State Register of Place Names has been worked out;
- Toponymic Guidelines (for map editors and other editors) (in Ukrainian and English for international use);
- order for carrying out of examination of offers on naming and renaming of geographical objects;

The SSPE Kartographia prepares preliminary offers on ascertainment and normalization of place-names, naming and renaming of geographical objects for carrying out of examination of offers and decisions of public authorities that are examined at sessions of the Interdepartmental scientific and technical council concerning place-names.

With the aim of the uniform rendering in the Ukrainian language of the names of geographical objects of foreign territories 6 instructions on reproduction by the Ukrainian language of place-names and terms of foreign countries, namely: Belgium, Estonia, the Netherlands, Albania, Slovenia, Macedonia had been worked out during 2007-2010 (in total there are 28 instructions of rendering from different languages). Reference book “The Administrative Division of the Countries of Europe” was prepared, as well as an updated and expanded reprint of the reference book Names of Countries and world territories.

The Interdepartmental Scientific and Technical Council in the Issues of Geographical Names is a permanent advisory body in the sphere of ascertainment and normalization of place-names. The council has been created in September, 1993, with changes in 2004, 2006, 2008. The council is headed by the chairman of the State Service of Geodesy, Cartography and Cadastre. At three sessions of the Council there were considered questions on specification of settlements names, on returning of former names to cities and towns of Ukraine, about names of railway stations, etc. as well as directories and dictionaries of place-names recommended for printing.

In March, 2010 in Chernivtsi on the basis of the Yury Fedkovych Chernivtsi National University (philological and geographical faculties) a scientific and practical conference “Oronymy of the Ukrainian Carpathians” was held. The onyroms are a considerable layer of toponyms of the Carpathian region and provoke great interest among the experts of various branches – philologists, geographers, cartographers, historians, regional specialists, ethnographers. In comparison with other place-names (hydronymy, oikonymy, micro place-names), the onyroms in Ukraine at present time are the least studied.

In 2006 the Convention of UNESCO on preservation of a non-material cultural heritage where the place-names are considered to be an important element of linguistic heritage and national traditions, came into force. The preservation of this valuable cultural phenomenon was the main goal of the conference which allowed to direct efforts to research, streamlining and preservation of onyroms of the Ukrainian Carpathians and to correct reproduction and display of onyroms on maps and other cartographical editions.
4. CARTOGRAPHICAL FUNDS

The central establishment that carries out gathering, ordering and storage of topographic, geodetic, cartographical, air photography and other materials and data having the state significance, is the State cartographical and geodetic fund of Ukraine (Ukrkartheofond).

Ukrkartheofond keeps the materials created by structural divisions of the State Service of Geodesy, Cartography and Cadastre, the Ministry of Defense of Ukraine and other subjects of business activity during performance of:

- astronomy geodetic, leveling, gravimetric works, as well as inspections and restoration of points of geodetic and leveling networks;
- topographical works on creation of topographical plans and maps of all scale line in various systems of coordinates, including the works related to shooting of a continental shelf and water objects, state frontiers;
- air photography for creation of topographical plans and maps;
- works on digital mapping;
- space shootings;
- works on creation and preparation for publication and publication of topographical plans and maps of all scale line for the territory of Ukraine and other states.

Ukrkartheofond keeps topographic maps, summary catalogs of coordinates of geodetic points, technical projects, programs and reports (catalogs). The archive of the topographic maps makes more than 200 thousand copies.

Ukrkartheofond is a component of the National Archive Fund. The quantity of documents of the constant storage related to the National Archive Fund, as of 1/1/2011 makes about 530 thousand units.

Ukrkartheofond provides the consumers with cartographic and geodetic information, as well as, in necessary cases, with maps. Ukrkartheofond carries out a complex of cartographic works on duly updating of the Reference map of Ukraine with the scale of 1:100 000.

Cartographical materials are also kept in other departments: data of space sensing – National space agency, geological and geophysical maps - State Service of Geology and Bowels of Ukraine, sea charts - Ukrmorkartohrafiia, for own needs all enterprises of Ukrheodezkartohrafiia have their own cartographical funds.

A big collection of cartographic products is stored at the funds of libraries, first of all in the V.I. Vernadsky National Library of the NAS of Ukraine (over 48,3 thousand copies) and the Vasyl Stefanyk Lviv Scientific Library of the NAS of Ukraine (about 21,8 thousand copies). A big collection of ancient maps is kept in the Scientific Library of the Ivan Franko Lviv National University.

Cartographical collections are kept in museums (the D.I. Yavornitskyi Dnipropetrovsk Historical Museum, the Alupka Palace-museum,
the Odessa Archaeological Museum of the NAS of Ukraine, the Odessa Museum of Local Lore, the Crimean Republican Museum of Local Lore, etc.) and the state archival establishments (first of all in the Central State Historical Archive, Lviv).

5. CARTOGRAPHICAL EDUCATION

Ukraine has formed its own branched network of establishments for the training of experts of topographic and cartographic profiles.

Training of specialists in Cartography, Geodesy, Photogrammetry and Geoinformatics in Ukraine is provided by such higher educational institutions as:

the Taras Shevchenko Kyiv National University,
the “Lviv Politechnika” National University,
the N.V.Karazin Kharkiv National University,
the Ivan Franko Lviv National University,
the Kyiv National University of Building and Architecture,
the Donetsk National Technical University,
the Krivyi Rih Technical University,
the National University of Water and Wildlife Management (Rivne),
The Kyiv Institute of Management and Informational Technology.

Training of junior experts in cartography in Ukraine is carried out by the Kyiv College of Land Management and Information Technologies.

In 2007-2010 in the specialty “geographical cartography” in Ukraine 9 dissertations for a scientific degree of a candidate of geographical sciences and 3 dissertations for scientific degree of a doctor of geographical sciences were defended.

An important direction in distribution of scientific knowledge is carrying out of scientific and technical conferences and symposiums. The Ukrainian Cartographical Association is the organizer of regular (once in two years) conferences “National mapping: condition, problems and development perspectives” (2008, 2010). The Ukrainian Society of Geodesy and Cartography since 1996 annually holds scientific and technical conferences “Modern achievements of geodetic science and manufacture”.

Ukrheodezkartohrafiia, the Ukrainian society of geodesy and cartography, the Ukrainian Cartographic Association and the Scientific Research Institute of Geodesy and Cartography jointly publish the scientific and technical magazine Visnyk heodezii i kartohrafi (Geodesy and Cartography Bulletin) started in 1993. The magazine was initially published 4 times a year, and since 2006 – 6 times a year (Fig. 15).

From 1996 till 2010 at the Taras Shevchenko Kyiv National University on the basis of the geodesy and cartography department of the geographical faculty a collection of papers “Kartohrafiia i vyshcha shkola” (Cartography and High School) was published, which in 2010 changed its name to the “Chasopys kartohrafi” (Cartography Magazine).
6. INTERNATIONAL COOPERATION

Ukraine participates in several international organizations.

Ukraine is a member of the International Cartographic association (ICA) since 1993 and is presented there by the Ukrainian Cartographic Association.

In September, 2006 under the decree of the General Assembly of Eurogeographics Ukraine became a member of the European association responsible for official mapping of Eurogeographics at level of a full member.

Ukraine is a member of the Department of Eastern Europe, Northern and Central Asia and Department of East Central Europe and Southeast Europe of the United Nations Group of Experts in Geographical Names (UN GE GN).

It participates as an observer in sessions of the Baltic Department of the UN GE GN.

As an observer Ukraine takes part in sessions of the Interstate Council in Geodesy, Cartography, Cadastre and Remote Sounding of the Earth of the CIS states-participants that is a coordination body of cartographical and geodetic services of the CIS states-participants. Information interchange about changes of place-names of the CIS states-participants is carried out by the Working group on place-names of the Interstate council.

In the territory of Ukraine there are four (Katerynivka, Feldshtein, Baranivka, Staronekrasivka) geodetic points of the transboundary object “Geodetic arch of Struve” (Belarus, Estonia, Finland, Latvia, Lithuania, Norway, Moldova, Russia, Sweden, Ukraine) which in 2005 was included into the List of the World Heritage of UNESCO. In 2009-2010 the Scientific Research Institute of Geodesy and
Cartography on the order of Ukrheodezkartohrafia has carried out a complex of geodetic works on full investigation of all 63 points of the Geodetic arch of Struve located in the territory of Ukraine. After the performance of corresponding procedures, the list of geodetic points of the transboundary object “Geodetic arch of Struve” in the territory of Ukraine will replenish with minimum of 13 units (these geodetic points still exist at their locations).

The Ukrainian cartographical association cooperates with the Ukrainian Society of Geodesy and Cartography (takes part in the International federation of geodesists – FIG) and the Ukrainian Society of Photogrammetry and Remote Sounding (the participates in the International Society of Photogrammetry and Remote Sounding of the Earth – ISPRS).
THE LIST OF CARTOGRAPHICAL PRODUCTS

1. ATLASES

1.1. Atlases of the world


1.2. Complex and regional atlases


1.3. Thematic atlases


1.4. Atlases of communications, tourist atlases

15. Ukraina. Atlas zaliznyts (Ukraine. Atlas of Rail-

ways) / Compiled and prepared for print by the SSPE Kartography in 2008; Ed.: I.V. Kopylova, O.V. Khilchevska; Design by S.M. Sukhenko. – 1:750 000, 7,5 km in 1 sm. – Kyiv: Kartographia, 2008 (Blits-Prnt). – 80 pp: index of railway stations’ names, junctions, tables, multicoloured; 23 x 16 sm.


stitute of Advanced Technologies, 2008 (Vid A do Ya). – 96 pp: index of localities’ names, tables; multicoloured; 23 x 16,5 sm.


27. Sevastopol. Atlas turysta (Tourist atlas) / Compiled and prepared for print by the SSPE Kartographia in 2011; Ed. H.M. Koshova. – 1:12 000, 120 m in 1 sm. – Kyiv: Kartographia, 2011 (Novyi druk). – 80 pp: text, thematic in-
dex, index of streets’ names, advertisements: multicoloured; 23 x 16 sm. – 4 p. (C.). – (Turysm Ukrainy).

1.5. City atlases


31. Zhytomyr. Atlas / Compiled and prepared for print by the SSPE Kartographia in 2009; Ed. L.P. Hryhorchuk. – 1: 12 000, 120 m in 1 sm. – Kyiv: Kartographia, 2009 (Blits-Prynt). – 64 pp: thematic index, index of streets’ names: multicoloured; 16 x 10 sm.


druk). – 56 pp: text, thematic index, index of streets’ names, advertisements: multicoloured; 16 x 10 sm.


37. Lutsk. Atlas / Compiled and prepared for print by the SSPE Kartographia in 2007; Ed. H.M. Koshova. – 1:12 000, 120 m in 1 sm. – Kyiv: Kartographia, 2008 (Blits-Prynt). – 64 pp: thematic index, index of streets’ names, advertisements: multicoloured; 16 x 10 sm.


40. Makeievka. Atlas s kazhdym domom (Makievka. Atlas showing the numbers of buildings) / Karty i atlasy 2008; Author of the schemes V. Chuprin. – 56 pp; 30 x 21 sm.


47. Ternopil. Atlas / Compiled and prepared for print by the SSPE Kartographia in 2009; Ed. H.M. Koshova. – 1:12 000, 120 m in 1 sm. – Kyiv: Kartographia, 2009 (Blits-Prynt). – 48 pp: text, thematic index, index of streets’ names: multicoloured; 16 x 10 sm.


49. Kharkov s kazhdym domom (Kharkiv. Atlas showing the numbers of buildings) Reference cartograph-
ic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2009; Ed. Sydorenko S. – 1:16 000, 160 m in 1 sm. – Kyiv: Institute of Advanced Technologies, 2009 (Vid A do Ya). – 84 pp: thematic index, index of streets’ names; multicoloured; 23,5 x 16,5 sm.


1.6. Atlases for children


2. MAPS

2.1. Topographic maps


2.2. General geographic maps

3. Kyiv ta okolutsi (Kyiv and the outskirts) 1, 2 / Compiled and prepared for print by the SSPE Kartographia in 2008; Ed.: V.V. Vdovenko. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2008 (Kyiv: KMCF). – 1 sheet: text, index: multicoloured; 92 x 80,5 sm, folded 23 x 11,5 sm. – (Duplex printing).

4. Kyiv ta okolutsi (Kyiv and the outskirts) 3 / Compiled and prepared for print by the SSPE Kartographia in 2009, Ed.: V.V. Vdovenko. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2009 (Kyiv: KMCF). – 1 sheet: text, index: multicoloured; 92 x 80,5 sm, folded 23 x 11,5 sm.

5. Kyiv ta okolutsi (Kyiv and the outskirts) 4 / Com-
Piled and prepared for print by the SSPE Kartographia in 2008; Ed.: V.V. Vdovenko, D.I. Tykhomyrov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2008 (Kyiv, KMCF).

– 1 sheet: text, index: multicoloured; 92 x 80,5 sm, folded 23 x 11,5 sm.

6. Kyiv ta okolytsi. Vyshhorod, Vyshneve, Brovary, Boryspil (Kyiv and the outskirts) / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed.: V.V. Vdovenko. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). – 1 sheet; multicoloured; 92 x 66 sm, folded 23 x 11 sm.

2.3. Thematic maps

Derzhavna heolohichna karta Ukrainy m-bu 1:200 000 (State geological map of Ukraine with the scale of 1:200 000), 2 km in 1 sm / Ministry of Environment of Ukraine, State Geological Service, 2007-2009 – sheet – On each sheet: the scheme of sheets’ location in the series; the scheme of the used materials.

Karpatska seriia (The Carpathian series)


– Sheet 1: Heolohichna karta dochetvertynnykh utvorenykh (Geological map of the pre-Quaternary formations). – 1 sheet; 92 x 88 sm.

– Sheet 2: Karta korysnykh kopalyn dochetvertynnykh utvorenykh (Map of mineral resources of the pre-Quaternary formations). – 1 sheet; 67 x 64 sm.

– Sheet 2: Heolohichna karta i karta korysnykh kopalyn chetvertynnykh vidkladn (Geological map and the map of mineral resources of the Quaternary deposits). – 1 sheet; 67 x 63 sm.


– Sheet 1: Heolohichna karta dochetvertynnykh utvorenykh (Geological map of the pre-Quaternary formations). – 1 sheet; 106 x 80 sm.

– Sheet 2: Karta korysnykh kopalyn dochetvertynnykh utvorenykh (Map of mineral resources of the pre-Quaternary formations). – 1 sheet; 78 x 64 sm.

– Sheet 2: Heolohichna karta i karta korysnykh kopalyn chetvertynnykh vidkladn (Geological map and the map of mineral resources of the Quaternary deposits). – 1 sheet; 94 x 73 sm.


11. M-36-XXXIII: Tsentrnoukrainska seriia (Central Ukrainian series).


17. L-36-XXIII: Krymska seriia (The Crimean series).


22. Poshtovi indeksy Yevropy (Postal codes of Europe) / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. O.V. Khilchevskya. – 1:4 000 000, 40 km in 1 sm. – Kyiv: Kartographia, 2010 (LunaPak). – 1 sheet; multicoloured; 108 x 122 sm.
23. Ukraina. Karta poshtovoi indeksatsii nasele
nykh punktiv (Ukraine. Map of postal codes of localities) / Compiled and prepared for print by the SSPE Kartography in 2009; Ed. I.V. Kopylova. – 1:1 100 000. – 11 km in 1 sm. – Kyiv: Kartographia, 2009 (Avanpost-Prym). – 1 sheet: table of postal codes of Ukraine; multicoloured; 87 x 67 sm, folded 22 x 11,5 sm.


2.4. Political, political and administrative maps

25. Politychna karta svitu (Political map of the world) / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. Zh.Ye. Soliar. – 1:23 000 000, 230 km in 1 sm. – Kyiv: Kartographia, 2010 (LunaPak). – 1 sheet: state flags: multicoloured; 104 x 152 sm.


27. Politychna karta svitu (Political map of the world) Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2010; Editors: Hrechaniy V., Busol I. – 1:22 000 000, 220 km in 1 sm. – Kyiv: Institute of Advanced Technologies, 2010 (Vid A do Ya); 1 sheet; multicoloured; 110 x 160 sm.


29. Yevropa. Politychna karta (Europe. Political map). Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2009; Editors: Onyshchenko M., Sharhorodskia N. – 1:5 400 000, 54 km in 1 sm. – Kyiv: Institute of Advanced Technologies, 2009 (Vid A do Ya); 1 sheet; multicoloured; 110 x 77 sm.


31. Rossiiskaia Federatsiia. Poliko-administrativnaia karta (Russian Federation. Political and administrative map). Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2008; Ed. Hrechanyi V. – 1:5 500 000, 55 km in 1 sm. – Institute of Advanced Technologies, 2008 (Vid A do Ya); 1 n.: multicoloured; 80 x 110 sm, folded, 22,5 x 13 sm. – Duplex printing.


33. Kyivska oblast / Compiled and prepared for print by the SSPE Kartographia in 2007; Ed. V.V. Vdovenko. – 1:200 000, 2 km in 1 sm. – Kyiv: Kartographia, 2007 (LunaPak). – 1 sheet: multicoloured; 112 x 148 sm.

2.5. Tourist maps, maps of motorways

34. Zakarpatska oblast. Turystychna karta (Tourist map) / Compiled and prepared for print by the SSPE Kartographia in 2010; Red. L. Khmara. – 1:250 000, 2,5 km in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). – 1 sheet: text, tables, index: multicoloured; 59 x 84 sm, folded 23 x 12 sm. – (Tourist maps).


36. Lvivska oblast. Turystychna karta (Tourist map) / Compiled and prepared for print by the SSPE Kartographia in 2010; Red. L. Khmara. – 1:325 000, 3,25 km in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). –
1. Sheet: text, tables, index: multicoloured; 70.5 x 67 sm, folded 23 x 11.5 sm. – (Tourist maps).

37. Sumskaya oblast. Turystychna karta (Tourist map) / Compiled and prepared for print by the SSPE Kartographia in 2008; Ed. D.V. Isaiev. – 1:355 000, 3.5 km in 1 sm. – Kyiv: Kartographia, 2008 (Novyi druk). – 1 sheet: text, tables, border check-points, index: multicoloured; 78 x 58.5 sm, folded 23 x 13 sm. – (Tourist maps).

38. Sumskaya oblast. Putylysskiy raion. Turystychna karta (Tourist map) / Compiled on the basis of materials provided by SE Sumyheodezkatorthrafia 2008; Ed. D.V. Isaiev. – 1:60 000, 600 m in 1 sm. – Kyiv: Kartographia, 2008 (Novyi druk). – 1 sheet: ill., text, index of place names, advertisement: multicoloured; 67 x 84 sm, folded 23 x 13 sm. – (Tourist maps).

39. Ternopilska oblast. Terminil. Turystychna karta (Tourist map) / Compiled and prepared for print by the SPC Karty i atlasy 2009; Ed: I. Dykyi, V. Hrytseliak. – 1:350 000, 3.5 km in 1 sm. – Lviv: Karty i atlasy, 2009. – 66 x 45 sm, folded 16 x 11.5 sm.

40. Chernivetska oblast. Turystychna karta (Tourist map) / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. D.I. Tykhomyrov. – 1:250 000, 2.5 km in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). – 1 sheet: text, tables, index: multicoloured; 58 x 96 sm, folded 23 x 12 sm. – (Tourist maps).

41. Chernivetska oblast. Chernivtsi. Turystychna karta (Tourist map) / Compiled and prepared for print by the SPC Karty i atlasy 2010; Ed: I. Dykyi, V. Hrytseliak. – 1:350 000, 3.5 km in 1 sm. – Lviv: Karty i atlasy, 2010. – 45 x 67 sm, 22.5 x 11 sm.

42. Tiachaivskiy raion. Turystychna karta (Tourist map) / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. O.P. Homaionov. – 1:150 000, 1.5 km in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). – 1 sheet: text, tables, index: multicoloured; 48 x 68 sm, folded 24 x 10 sm. – Text parall. in Ukr. and Engl.

43. Shatskiy natsionalnyy park. Turystychna karta (Shatski National Park. Tourist map) / Compiled and prepared for print by the SSPE Kartographia in 2008; Ed. O.P. Homaionov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2008 (Lohos). – 1 sheet: text, advertisements, index: multicoloured; 68 x 78 sm, folded 23 x 13 sm. – (Tourist maps).

44. Carpathians / Tourist map. – 1:300 000, 3 km in 1 sm. – Kyiv: Kartographia, 2007. – 1 sheet: text: multicoloured; 88 x 108 sm, folded 23 x 12 sm. – Engl.

Seria Velokraina [Merezha velomarshrutiv] m-bu 1:70 000 (Series Velokraina [The network of bicycle routes] in the scale of 1:70 000) / Compiled and prepared for print by the SPC Karty i atlasy 2009-2010

45. Verkhovynskyi raion. Merezha velomarshrutiv (The network of bicycle routes) / Compiled and prepared for print by the SPC Karty i atlasy, the SSPE Kartographia in 2009; – 1:70 000. – Lviv: Karty i atlasy, 2009. – 68,5 x 48 sm, folded 16 x 11,5 sm. – (Velokraina).

46. Hlybotskiy raion. Merezha velomarshrutiv (The network of bicycle routes) – (Velokraina).

47. Yaremchanskiy raion. Merezha velomarshrutiv (The network of bicycle routes) – (Velokraina).


49. Kosivskyi raion. Merezha velomarshrutiv (The network of bicycle routes) – (Velokraina).

50. Rakhivskyi raion. Merezha velomarshrutiv (The network of bicycle routes) – (Velokraina).

51. Krym. Chudesa i anomalyie zony (The Crimea. Miracles and anomalous zones) / Compiled and prepared for print by the SSPE Kartographia in 2009; Author A. Tavricheskiy; Ed. D. Isaiev. – 1:400 000, 4 km in 1 sm. – Kyiv: Kartographia, 2009 (Avanpost-Prym). – 1 sheet: multicoloured; 59 x 85 sm, folded 23 x 12,5 sm.

52. Krym. Ekstremalnyi turizm (The Crimea. Extreme tourism) / Compiled and prepared for print by the SSPE Kartographia in 2009; Author A. Tavricheskiy; Ed. D. Tikhomyrov. – 1:400 000, 4 km in 1 sm. – Kyiv: Kartographia, 2009 (Avanpost-Prym). – 1 sheet: multicoloured; 58,5 x 87,5 sm, folded 19,5 x 12,5 sm.

Seriai Turystski marshruty [Ukrainy] m-bu 1:50 000 - 1:75 000 (Series Tourist routes [of Ukraine] in the scales of 1:50 000 - 1:75 000) / Compiled and prepared for print by the SSPE Kartographia in 2007-2010.

53. Karpaty. Verkhovynskyi raion. (The Carpathians) / Ed. O.P. Homaionov. – 1:75 000, 750 m in 1 sm. –

55. Karpaty. Volovets’kyi raion. (The Carpathians) / Ed. O.P. Homaionov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2010 (Kyiv. Milit. Cartogr. Fact.). – 1 sheet: text, tour. routes, index, adv.-s: multicoloured; 83 x 72 sm, folded 23 x 12,5 sm. – (Tourist routes).

56. Karpaty. Mizhhir’skyi raion. (The Carpathians) / Ed. O.P. Homaionov. – 1:75 000, 750 m in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). – 1 sheet: text, service objects, tour. routes, index, adv.-s: multicoloured; 65 x 75 sm, folded 23 x 12,5 sm. – (Tourist routes).


59. Karpaty. Rozhnatiyvskyi raion. (The Carpathians) / Ed. O.P. Homaionov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost). – 1 sheet: text, service objects, tour. routes, index, adv.-s: multicoloured; 90 x 56 sm, folded 23 x 11 sm. – (Tourist routes).

60. Karpaty. Svaliavskyi raion. (The Carpathians) / Ed. O.P. Homaionov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2010 (Kyiv. Milit. Cartogr. Fact.). – 1 sheet: text, service objects, tour. routes, index, adv.-s: multicoloured; 83 x 75 sm, folded 23 x 12,5 sm. – (Tourist routes).

61. Karpaty. Storozyntynskyi raion. (The Carpathians) / Ed. O.P. Homaionov. – 1:75 000, 750 m in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). – 1 sheet: text, service objects, tour. routes, index, adv.-s: multicoloured; 68 x 71 sm, folded 23 x 12 sm. – (Tourist routes).


70. Krym. Rybachiie – Morskoie (The Crimea) / Ed. O.P. Homaionov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2008 (Avanpost-Prym). – 1 sheet: multicoloured; 59 x 57 sm, folded 23 x 12,5 sm. – (Tourist routes).

72. Krym. Sudak – Shechebetrovka (The Crimea) / Ed. O.P. Homaionov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2008 (Avanpost-Prym). – 1 sheet: text, index of place names; multicoloured; 46 x 59 sm, folded 23 x 12.5 sm. – (Tourist routes).

73. Krym. Staryi Krym – Hrushevka (The Crimea) / Ed. O.P. Homaionov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2008 (Avanpost-Prym). – 1 sheet: multicoloured; 59 x 57 sm, folded 23 x 12.5 sm. – (Tourist routes).

74. Krym. Chatyrdag (The Crimea) / Ed. O.P. Homaionov. – 1:50 000, 500 m in 1 sm. – Kyiv: Kartographia, 2009 (Avanpost-Prym). – 1 sheet: text, index of place names; multicoloured; 57 x 46 sm, folded 24 x 12.5 sm. – (Tourist routes).

75. Respublika Belarus. Karta avtomobilnykh doroh (Republic of Belarus. Map of motorways) / Compiled and prepared for print by the SSPE Kartographia in 2009; Ed. E.V. Khlichchevska. – 1:850 000, 8,5 km in 1 sm. – Kyiv: Kartographia, 2009 (Avanpost-Prym). – 1 sheet: index of localities' names, table of distances, advertisement: multicoloured; 67,5 x 81 sm, folded 22,5 x 13,5 sm. – (Avtoshliakh Yevropy).


77. Polsha. Karta avtomobilnykh doroh (Poland. Map of motorways) / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. O.P. Homaionov. – 1:750 000, 7,5 km in 1 sm. – Kyiv: Kartographia, 2009 (Avanpost-Prym). – 1 sheet: table of distances, advertisement: multicoloured; 88 x 65 sm, folded 22,5 x 13 sm. – (Avtoshliakh Yevropy)

78. Ukraina. Karta avtomobilnykh shliakhiv (Ukraine. Map of motorways) / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. O.P. Homaionov. – 1:1 350 000, 13,5 km in 1 sm. – Kyiv: Kartographia, 2010 (Express Map, Poland). – 1 sheet: tables; multicoloured; 47 x 99 sm, folded 23 x 11 sm. – (Comfort map).


80. Lvivska oblast. Karta avtomobilnykh shliakhiv (Ukraine. Map of motorways) Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2010; Editors: Kostuik B., Onyshchenko M. – 1:200 000, 2 km in 1 sm. – Kyiv: Institute of Advanced Technologies, 2008 (Vid A do Ya); 1 sheet: index of localities' names; multicoloured; 67 x 98 sm, folded 22,5 x 12 sm. – Duplex printing.

81. Odessa oblast. Karta avtomobilnykh dorog (Odesa oblast. Map of motorways). Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2010; Editors: Kostuik B., Nykandrov O. et al. – 1:250 000, 2,5 km in 1 sm. – Institute of Advanced Technologies, 2010 (Vid A do Ya); 1 sheet: index of localities' names, tables; multicoloured; 67 x 98 sm, folded 22,5 x 12 sm. – Duplex printing.


2.6. City plans

84. Kyiv. [City plan] / Map compiled and prepared for print by the SSPE Kartographia in 2010; Editors: R. Haldetska, L. Marchenko. – 1:25 000, 250 m in 1 sm. – Kyiv: Kartographia, 2010 (LunaPak). – 1 sheet: index of streets’ names: multicoloured; 140 x 112 sm.


86. Bucha. Plan mista (Town plan) / Compiled and prepared for print by the SSPE Kartographia in 2008; Editors: R. Haldetska, V. Prokopieva. – 1:10 000, 100 m in 1 sm. – Kyiv: Kartographia, 2008 (Avanpost-Prym). – 1 sheet: text, ill., list of street names: multicoloured; 58 x 60 sm, folded 23 x 12 sm. – (Mista Ukrainy).

87. Vinnytsia. Plan mista do kozhnoho budynku (Plan of the town showing the numbers of buildings). Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2007; Ed. Sydorenko S.M. – 1:10 000, 100 m in 1 sm. – Kyiv: Institute of Advanced Technologies, 2007 (Vid A do Ya); 1 sheet: index of street names; multicoloured; 67 x 98 sm, folded 22 x 12 sm. – Duplex printing.


90. Dnepropetrovsk. Plan goroda (Dnipropetrovsk. City plan) / Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2008; Editors: Kostuik B., Nykandrova O., Hrechanyi V. – 1:26 000, 260 m in 1 sm. – Institute of Advanced Technologies, 2008 (Vid A do Ya); 1 sheet: index of street names; multicoloured; 67 x 97 sm, folded 22,5 x 12 sm. – Duplex printing.

91. Donetsk. Plan goroda (Dnipropetrovsk. City plan) Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2007; Editors: Kostuik B., Hrechanyi V. – 1:30 000, 300 m in 1 sm. – Institute of Advanced Technologies, 2007 (Vid A do Ya); 1 sheet: index of street names.; multicoloured; 67 x 97 sm, folded 22,5 x 12 sm. – Duplex printing.

92. Donetsk. Makeievka. Plany gorodov (City plans). Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2010; Ed. Sydorenko S. – 1:30 000, 300 m in 1 sm. – Institute of Advanced Technologies, 2010 (Vid A do Ya); 1 sheet: index of street names; multicoloured; 67 x 97 sm, folded 22,5 x 12 sm. – Duplex printing.

93. Irpin. Plan mista (Town plan) / Compiled and prepared for print by the SSPE Kartographia in 2007; Ed. H.M. Koshova. – 1:8 000, 80 m in 1 sm. – Kyiv: Kartographia 2007 (Lohos). – 1 sheet: text, adv.-s, list of streets; multicoloured; 64 x 72 sm, folded 23 x 12 sm. – (Mista Ukrainy).


95. Zhovti Vody. Plan mista (Town plan) / Compiled and prepared for print by the SSPE Kartographia in 2007; Ed. O. Yu. Korol. – 1:10 000, 100 m in 1 sm. – Kyiv: Kartographia 2007 (Lohos). – 1 sheet: text, adv.-s, list of streets; multicoloured; 69 x 60 sm, folded 23 x 12 sm. – (Mista Ukrainy).

96. Kyiv. Plan mista (City plan) / Compiled and prepared for print by the SSPE Kartographia in 2010; Editors: R. Haldetska, L. Marchenko. – 1:27 000, 270 m in 1 sm.

98. KYIV. Tourist map. Reference cartographic edition / Compiled and prepared for print by the private company *Institute of Advanced Technologies* in 2008; Ed. Sydorenko S. – 1:30 000, 300 m in 1 sm. – Kyiv: *Institute of Advanced Technologies*, 2008 (Vid A do Ya); 1 sheet: index of localities’ names, tables, thematic index; multicoloured; 97 x 67 sm, folded 22.5 x 12 sm. – Engl.


100. Kramatorsk. Plan mista (Town plan) / Compiled and prepared for print by the SSPE *Kartographia* in 2007; Ed. H.M. Koshova. – 1:18 000, 180 m in 1 sm. – Kyiv: *Kartographia* 2008 (Lobos). – 1 sheet; text, adv.-s, list of streets; multicoloured; 88 x 67 sm, folded 23 x 12 sm. – (Mista Ukrainy).


102. Konotop. Plan mista (Town plan) / Compiled and prepared for print by the SSPE *Kartographia* in 2010; Ed. H.M. Koshova. – 1:15 000, 150 m in 1 sm. – Kyiv: *Kartographia* 2010 (Avanpost-Prym). – 1 sheet; text, list of streets; multicoloured; 68 x 58 sm, folded 23 x 11,5 sm. – (Mista Ukrainy).


104. Lviv. Tsenr mista (City centre) / Compiled and prepared for print by the SSPE *Kartographia* in 2010; Ed. L. Marchenko. – 1:8 000, 80 m in 1 sm. – Kyiv: *Kartographia*, 2010 (Express Map, Poland). – 1 sheet; text, index of streets: multicoloured; 32,2 x 67,7 sm, folded 16 x 9,7 sm. – (Comfort map).


106. Lviv. Plan mista do kozhnoho budynku (Plan of the city showing the numbers of buildings) Reference cartographic edition / Compiled and prepared for print by the private company *Institute of Advanced Technologies* in 2010; Editors: Kostyuk B., Sydorenko S. – 1:12 000, 120 m in 1 sm. – Kyiv: *Institute of Advanced Technologies*, 2010 (Vid A do Ya); 1 sheet: index of streets; multicoloured; 67 x 98 sm, folded 22 x 12 sm. – Duplex printing.

107. Odessa. Tsenr mista (Odesa. City centre) / Plan compiled and prepared for print by the SSPE *Kartographia* in 2010; Ed. V. Prokopieva. – 1:8 000, 80 m in 1 sm. – Kyiv: *Kartographia*, 2010 (Express Map, Poland). – 1 sheet; index of streets: multicoloured; 32,2 x 67,7 sm, folded 16 x 9,7 sm. – (Comfort map).


109. Odessa. Plan mista do kozhnoho budynku (Odesa. Plan of the city showing the numbers of buildings) Reference cartographic edition / Compiled and prepared for print by the private company *Institute of Advanced Technologies* in 2010; Ed. Onyshchenko M. – 1:16 000, 160 m in 1 sm. – *Institute of Advanced Technologies*, 2010 (Vid A do Ya); 1 sheet; index of streets; multicoloured; 67 x 97 sm, folded 22,5 x 12 sm. – Duplex printing.
110. Pavlohrad. Plan mista (Town plan) / Plan compiled and prepared for print by the SSPE Kartographia in 2010; Ed. L.P. Bila. – 1: 18 000, 180 m in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). – 1 sheet: text, adv.-s, index of streets’ names: multicoloured; 46 x 57,5 sm, folded 23 x 12 sm. – (Mista Ukrainy).

111. Poltava. Plan-skhema (Plan-scheme) / Compiled and prepared for print by the Kyiv Military Cartographic Factory in 2009 – 1:17 500, 175 m in 1 sm. – Kyiv: KMCF, 2009. – 78.8 x 106.8 sm, in cover, folded 24.5 x 12 sm. – (List of streets’ names)

112. Severodonets. Plan goroda (Town plan) / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. L.P. Bila. – 1:12 000, 120 m in 1 sm. – Kyiv: Kartographia, 2010 (Avanpost-Prym). – 1 sheet: text, adv.-s, index of streets’ names: multicoloured; 46 x 57 sm, folded 23 x 11,5 sm. – (Mista Ukrainy).

113. Slavutych. Compiled and prepared for print by the SSPE Kartographia in 2008; Ed. O.V. Radchenko. – 1: 4 000, 40 m in 1 sm. – Kyiv: Kartographia, 2008 (Avanpost-Prym). – 1 sheet: text, adv.-s, index of streets’ names; multicoloured; 55 x 72 sm, folded 23 x 12 sm. – (Mista Ukrainy).

114. Truskavets. Plan goroda (Town plan) / Compiled and prepared for print by the SSPE Kartographia in 2007; Ed. O.V. Onyshchak. – 1: 6 500, 65 m in 1 sm. – Kyiv: Kartographia, 2007 (Lohos). – 1 sheet: text, adv.-s, index of streets’ names: multicoloured; 46 x 54,5 sm, folded 23 x 12 sm. – (Mista Ukrainy).

115. Cherkasy. Plan mista do kozhnoho budynku (Plan of the town showing the numbers of buildings). Reference cartographic edition / Compiled and prepared for print by the private company Institute of Advanced Technologies in 2008; Ed. Busol I. – 1:16 000, 160 m in 1 sm. – Kyiv: Institute of Advanced Technologies, 2008 (Vid A do Ya); 1 sheet: index of streets’ names; multicoloured; 67 x 97 sm, folded 22 x 12 sm.

2.7. School maps


117. ESPAÑA. FÍSICO. POLITICO. [Spain. Physical map. Political and administrative map.] For educational establishments of general education / Compiled and prepared for print by the SSPE Kartographia in 2010; Editors: V.O. Prokopieva, S.V. Kapustenko. – 1: 1 600 000, 16 km in 1 sm; – Kyiv: Kartographia, 2010 (LunaPak). – 1 sheet in a frame: multicoloured; 112 x 162 sm. – Geogr. subnotes – Sp.

118. FRANCE. PHYSIQUE. ADMINISTRATIVE. [France. Physical map. Political and administrative map.] For educational establishments of general education / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. I.O. Yevropina. – 1: 1 500 000, 15 km in 1 sm; – Kyiv: Kartographia, 2010 (LunaPak). – 1 sheet in a frame; 112 x 162 sm. – Geogr. subnotes – Fr.

119. UNITED STATES OF AMERICA. [Physical map.]. For educational establishments of general education / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. S.V. Kapustenko. – 1: 3 000 000, 30 km in 1 sm; – Kyiv: Kartographia, 2010 (LunaPak). – 1 sheet in a frame, text, pic.: multicoloured; 112 x 162 cm. – Geogr. subnotes – Engl.

120. Ukraina. Ekonomichna karta (Ukraine. Economic map). For educational establishments of general education / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. I.I. Drohushewska. – 1: 1 000 000, 10 km in 1 sm. Con. eq. prop. – Kyiv: Kartographia, 2010 (LunaPak). – 1 apx.: multicoloured; 112 x152 sm.

121. Ukraina. Pryrodnop-zapovidenyi fond (Ukraine. Natural reserved fund). For educational establishments of general education / Compiled and prepared for print by the SSPE Kartographia in 2010; Comp. V.O. Shevchenko; Ed. S.V. Kapustenko. – 1: 1 000 000, 10 km in 1 sm. Con. eq. prop. – Kyiv: Kartographia, 2010 (LunaPak). – 1 sheet: multicoloured; 112 x 152 sm.

122. Derzhavy Yevropy u 1815-1849 rr. (European countries in 1815-1849) : For educational establishments of general education / Compiled and prepared for print by the SSPE Kartographia in 2010; Ed. O.Yu. Korol. – 1: 4 000 000, 40 km in 1 sm. – Kyiv: Kartographia, 2010 (LunaPak).
3. ELECTRONIC MAPS ON COMPACT-DISCS (CD-ROM)

4. PRINCIPAL PUBLICATIONS

4.1. Monographs, bibliographies, methodological developments


4.2. Collected papers


4.3. General issues of cartography


31. Volodchenko A. Ob informatsionno-semioticheskoi


45. Parkhomenko H. Perspektyvy rozvytku heohrafiia ta kartohrafiia v mezhakh heoinformatsiinoi paradyhymy (Per-


4.4. **Topographical mapping**


57. Ostrovs'kyi A. Suchasni vymohy do tochnosti pro- ektuvannia ta stvorennia matematychnoi osnovy velykomashtabnykh topografiachnykh kart (Current requirements to the precision of drafting and creation of mathematic foundation of large-scale topographic maps) / A. Ostrovs'kyi, S. Klym, V. Tarnavskyi // Novitni dosiahennia heodezii,
heoinformatyki ta zemlevporiadkuvannia – yevropeiskyi

58. Solomakha I.V. Metodychni zasady vyvchennia
dynamiki miskoi terytorii za kosmichnymy znimkamy z
vysokoiu rozdlouho zdatnistiu (Methodological foundations
of the study of urban territory’s dynamics with the help of
space images with high resolution) / I.V. Solomakha // Ukr.

59. Solomakha I.V. Mista Ukrainy yak obiekty kartohra-
fichnykh doslidzhen ta ikh vidobrazhennia na aerokosmich-
nykh znimkakh (Cities and towns of Ukraine as objects of
cartographic research and their presentation on space im-
ages) / I.V. Solomakha // Visnyk heod. ta kart. – 2007. – No
5. – P. 14-20.

4.5. Thematic mapping

60. Bainazarov A.M. Monitorynkh yakosti osvyty dia
potreb kartohrauvannia: rehionalniy aspekt (Monitoring of
education quality for the needs of mapping: regional aspect)
/ A.M. Bainazarov // Heohrafiiia v informatissiinomu suspist-
114-117.

61. Barladin O.V. Heohrafichni atsly dlia 12-richnoi
shkoly (Atlases in Geography for schools with 12-year-long
term of studies) / O.V. Barladin, D.V. Isaiev, I.V. Busol //
Shkilna heohr. osvita: tehnolohii navchannia: coll. pap. –
Kyiv: Kartographia – 2007. – P. 141-144.

62. Veklykh L.M. Z dosvidu pidhotovky vydannia Na-
tsionalnoho Atlasu Ukrainy (From the experience of prepara-
tion for print of the national Atlas of Ukraine) / L.M. Veklych,
V.B. Kulyk, V.V. Molochko et al. // Nats. kartohrauvannia:
stan problemy ta perspektivy rozvytku: coll. papers – Kyiv:

63. Davydenko A.C. VIL/SNID i ruberkuloz yak
obiekty medyko-heohrafichnoho kartohrauvannia (HIV/
AIDS and tuberculosis as objects of medico-geographical

64. Datsenko L.M. Osoblyvosti proektuvannia ta uk-
ladannia istorychnykh kart dlia shkoly (The peculiarities of
drafting and compilation of school maps in History) / L.M.
Datsenko // Problemy bezperernoi heohrafichnoi osvity i
kartohrafii: coll. papers – Kyiv: In-t of Advanced Technolo-

65. Dudun T.V. Struktura ta zmist atlasu stanu heno-
fundu naselennia Ukrainy (Structure and contents of the
Atlas of the State of Ukrainian Gene Pool) / T.V. Dudun //
Kartohrafiiia ta vyslcha shkola: coll. papers – Kyiv: In-t of

66. Duk N.M. Kartohrafichne zabezpechennia anali-
tychnoi roboty v mytni sluzbhi (Cartographic provision of
analytical work in Customs Service) / N.M. Duk // Pro-
blemy bezperernoi heohrafichnoi osvity i kartohrafii: coll.
papers – Kyiv: In-t of Advanced Technologies, 2009. – Issue
No 9. – P. 85-90.

heohrafia svitu” dla 10-11 klasiv yak poiedannia vydan
poperednykh rokiv i novykh kart (Atlas Economic and So-
cial Geography of the World for the 10th – 11th forms as the
combination of previous years editions and new maps) / I.O.
Yevropina, V.B. Kulyk, V.I. Ostroukh // Visnyk heod. ta
kart. – 2010. – No 5. – P. 19-23.

68. Zhravel O.S. Kartohrauvannia dytiacho-yunats-
koho turyzmu – akturalniy napriam suchasnoho turystich-
noho kartohrauvannia (Mapping of children’s and youth’s
tourism as an important trend of present-day touris map-
ing) / O.S. Zhravel // Problemy bezperernoi heohrafich-
noi osvity i kartohrafii: coll. papers – Kyiv: In-t of Advanced

69. Isaiev D.V. Istorychna kartohrafia u sikoli: stan i
– No 3. – P. 41-44.

70. Karachunova L.V. Struktura, pryntsypy i napri-
amky GIS-kartohrauvannia sotsialni systemy suspistva
(Structure, principles and trends of GIS-mapping) / L.V.
Karachunova // Kartohrafiiia ta vyslcha shkola: coll. papers


85. Putrenko V.V. Heoinformatsiine kartohrafuvinia teknhochnykh ryshyv na terytorii Ukrainy (Geoinformational mapping of manmade risks on the territory of


4.6. Complex regional mapping


99. Levytskyi I.Yu. Rozrobka struktury i zmistu elektronnykh kompleksnykh kartohrafichnykh tvoriv adminis-


4.7. Modern mapping technologies


110. Bondarenko E.L. Osoblyvosti vidoskonalennia GIS dla vyrisennia problemno-orientovanych zavad ekoloho-geografichnoho kartohrafuvannia (Peculiarities of GIS upgrading with the aim of salvation problem-oriented tasks of ecological geographic mapping) / E.L. Bondarenko // Kartohrafia ta vyshcha shkola: coll. pap. – Kyiv: In-t of


4.8. History of Cartography


123. Kovalchuk I.P. Analiz istorii kartografiuvannia


