

**DECISION OF THE GOVERNMENT OF THE REPUBLIC OF ARMENIA ON  
APPROVING THE CONCEPT PAPER ON ESTABLISHING AND MAINTAINING  
GEOINFORMATION SYSTEM OF THE REPUBLIC OF ARMENIA**

*“I hereby ratify”*

President of the Republic of Armenia

R. Kocharyan

*12 March 2005*

**GOVERNMENT OF THE REPUBLIC OF ARMENIA**

**DECISION**

No 197-N of 20 January 2005

**ON APPROVING THE CONCEPT PAPER ON ESTABLISHING AND MAINTAINING  
GEOINFORMATION SYSTEM OF THE REPUBLIC OF ARMENIA**

In execution of the requirements of subpoint (i) of part 4 of Article 2 and subpoint (b) of Article 4 of the Law of the Republic of Armenia “On geodesy and cartography”, the Government of the Republic of Armenia shall hereby ***decide to***:

1. Approve the concept paper on establishing and maintaining geoinformation system of the Republic of Armenia, pursuant to the Annex.
2. This Decision shall enter into force on the day following its official promulgation.

**Prime Minister  
of the Republic of Armenia**

**A. Margaryan**

2 March 2005

Yerevan

**Annex  
to Decision of the Government of  
the Republic of Armenia No 197-N  
of 20 January 2005**

## **CONCEPT PAPER**

### **ON ESTABLISHING AND MAINTAINING GEOINFORMATION SYSTEM OF THE REPUBLIC OF ARMENIA**

#### **I. PREAMBLE**

The Republic of Armenia does not have an information system complying with up-to-date requirements, which is necessary for state administration and local self-government bodies (hereinafter referred to as “the governing bodies”) for effectively resolving issues existing in the field of economy management.

With a view to increasing the effectiveness of maintenance of the cadastre of immovable property, as well as establishing and maintaining a single information system for the cadastre of immovable property, activities with regard to mapping of communities of the Republic of Armenia and creation of digital maps, aerial photography and satellite photography of the territory of the Republic of Armenia have

been carried out. Digitalisation of the received data is underway. Activities with regard to registration and record-registration of geographic objects, adjustment of administrative boundaries of the communities of the Republic of Armenia, inventory of irrigated lands and preparation of documents for initial record-registration of the communities of the Republic of Armenia have been carried out. First state registration activities, as a result of which owners of immovable property, according to ownership holders, qualitative, quantitative data on immovable property and property rights have been specified, are at the completion stage. Tax base for immovable property has been established, as a result of which qualitative properties and valuation of immovable property, including agricultural lands have been specified. Systematic monitoring of immovable property and immovable property market are regularly carried out, as a result of which zoning was set up, according to the location and value of the property. Activities with regard to creating electronic archives of cadastral files of immovable property are underway. Activities with regard to introducing an automated system for the maintenance of cadastral maps and registration of immovable property are at the stage of introduction.

Large volume of activities have been carried out, but the information systems existing and being created in the state administration bodies are not interconnected, which makes the use of information available at various information databases or of the information systems for ensuring the effectiveness of governance, developing effective programmes or increasing the effectiveness of implementation of state programmes difficult or sometimes impossible. Moreover, low level of automation, data duplication and the inconsistency thereof significantly complicate the process of providing the governing bodies with the necessary information.

With a view to effectively managing natural and economic resources of the Republic, it is necessary to have a reliable and complete information on the economic situation and natural resources of the Republic of Armenia, its separate administrative-territorial units, including information on land, water, forest resources, useful minerals,

economic development, industrial and agricultural sector, population distribution, qualitative, quantitative data on immovable property, ownership holders, road network and other elements of infrastructures and ecological situation.

The introduction of geoinformation system of the Republic of Armenia (hereinafter referred to as “geoinformation system”) shall — for the purpose of complex analysis of the situation — make it possible to provide governing bodies with diverse spatial information during the solution of issues of the Republic of Armenia, its separate administrative-territorial units, as well as separate branches.

The use of up-to-date geoinformation systems in the sector of state administration and local self-governance will contribute to:

- (a) developing effective programmes for economic development of marzes, communities of the Republic of Armenia and separate territories (national park, Ararat valley, etc.) thereof;
- (b) increasing the level of standardisation of collecting and processing data necessary for governance;
- (c) excluding unnecessary duplication of spatial information and inconsistency of data being used in different sectors of economy;
- (d) facilitating the process of creating back-up of spatial data, increasing the efficiency and reducing expenses;
- (e) ensuring the availability of spatial data;
- (f) ensuring accessibility of information for the public;
- (g) developing internal mechanisms for verification of completeness, reliability, accuracy of data.

## II. GOAL AND OBJECTIVES OF ESTABLISHING GEOINFORMATION SYSTEM

The goal of establishing geoinformation system of the Republic of Armenia shall be the establishment of the Single State Geoinformation Bank, which shall be the centralisation of complete textual and graphical data on natural and economic resources of the Republic, legal status and value thereof, and shall be aimed at increasing the effectiveness of resource management. The main goal and objectives of establishing geoinformation system shall be the following:

(a) establishing and managing the Single State Information Bank of Geoinformation Data of the Republic of Armenia (information bank for cartographic and textual data on administrative-territorial division or separate territories of the Republic of Armenia, geographic objects, land fund, intended purpose, operational significance of the immovable property, land types, physical, qualitative and value characteristics of the immovable property, registered rights and restriction on immovable property, holders of state registration, hydrography, terrain, objects of linear infrastructures);

(b) ensuring availability, accessibility, continuity of the information necessary for governing bodies and the public, and increasing the effectiveness of providing information;

(c) information support to:

exercising state supervision over effective management of natural resources of the Republic;

developing targeted programmes on effective use of natural resources of the Republic and increasing the effectiveness of the implementation thereof;

taking optimal and operational decisions in emergency situations;

developing programmes on the use of economic, natural, urban, agricultural and other resources and increasing the effectiveness of the implementation thereof;

optimal planning of development of marzes, communities and separate territories of the Republic.

### **III. PRINCIPLES FOR ESTABLISHING AND MAINTAINING GEOINFORMATION SYSTEM**

The main principles for establishing and maintaining geoinformation system shall be the following:

1. Geoinformation system shall be open, except for the cases provided for by the legislation of the Republic of Armenia.
2. Geoinformation system shall have three levels:  
republican;  
marz;  
community.
3. Geoinformation system shall be established and maintained as a centralised information system.
4. Geoinformation system shall be established and maintained solely in an electronic format.
5. Geoinformation system shall be established according to the World Geodetic Coordinate System (WGS-84).
6. The following scales for the maps shall be defined for different levels of the geoinformation system:

	1 : 100 000,
republican level:	1 : 200 000,
	1 : 500 000,
marz level:	1 : 25 000,
	1 : 50 000,
community level:	1 : 5 000,
	1 : 10 000,
	1 : 25 000,
for urban communities and/or separate territories	1 : 500,
(cities, urban-type settlements, etc.):	1 : 1 000,
	1 : 2 000:

7. In geoinformation system each object shall have a unique code, the basis for which shall be the cadastral code of the immovable property.
8. The procedure for carrying out codification of objects of the geoinformation system shall be prescribed by the Government of the Republic of Armenia.
9. In geoinformation system each (electronic) document must be of a standard form.
10. Forms of (electronic) documents of the geoinformation system shall be prescribed by the bodies authorised by the Government of the Republic of Armenia.
11. Geoinformation system shall consist of basic and thematic geoinformation systems.
12. Basic geoinformation system shall be established and maintained by the State Committee of the Real Estate Cadastre adjunct to the Government of the Republic of Armenia.

13. The list of thematic geoinformation systems and procedure for the maintenance thereof shall be prescribed by the Government of the Republic of Armenia.
14. Thematic geoinformation systems shall be established on the basis of the basic geoinformation system.
15. The procedures for establishing and maintaining basic and thematic geoinformation systems, exchanging information between them and providing information, and the content of databanks shall be prescribed by the Government of the Republic of Armenia.
16. Thematic geoinformation systems as per spheres shall be established and maintained by the bodies authorised by the Government of the Republic of Armenia. Where the geoinformation system being established comprises information classified as a state or official secret, it shall be subject to encryption as prescribed by the legislation of the Republic of Armenia.
17. Geoinformation system shall be established and introduced by stages. The stages of establishment and introduction of thematic geoinformation system shall be prescribed based on stages of establishment and introduction of basic geoinformation system.
18. The stages (schedule) for establishing and introducing geoinformation system shall be approved by the Government of the Republic of Armenia.

#### **IV. BASIC GEOINFORMATION SYSTEM**

The datank of basic geoinformation system shall be established on the basis of digital topographic, cadastral plans and maps and shall comprise data (graphical and textual) on the following:



1. administrative-territorial boundaries of the Republic of Armenia (state border, marz, community);

2. geographical names of the Republic of Armenia;

3. immovable property of the Republic of Armenia, including:

the land fund according to the intended purpose, soil types and holders of ownership;

buildings and structures according to the intended purpose, operational significance, types and holders of ownership;

location (address);

cadastral code of immovable property;

physical and qualitative characteristics of immovable property;

registered rights to and restrictions on immovable property.

4. hydrographic layer of the Republic of Armenia, including:

lakes;

rivers;

streams;

water reservoirs;

water canals.

5. terrain of the Republic of Armenia, including:

mountains;

mountain-ranges;

mountain passes;

gorges, kloofs.

6. Linear infrastructures of the Republic of Armenia, including:  
railways and motorways (interstate, state and local significance);  
gas pipelines, water mains, oil pipelines (above-ground, underground);  
telecommunication channels (above-ground, underground);  
high-voltage power transmission lines (above-ground, underground);  
utility infrastructures (above-ground, underground).

## V. THEMATIC GEOINFORMATION SYSTEMS

Thematic geoinformation system of the Republic of Armenia comprises the following main thematic geoinformation systems:

- (a) immovable property appraisal and systematic immovable property market monitoring system;
- (b) natural resources and nature protection system;
- (c) urban development system;
- (d) linear infrastructures system (energy, communication, transport, water mains, gas pipelines, etc.);
- (e) historical and cultural values system;
- (f) agriculture administration system;
- (g) systematic emergency situations monitoring and forecast system;
- (h) industry administration system;
- (i) social protection system;
- (j) human resources and resettlement system.

## **VI. STAGES FOR ESTABLISHING AND INTRODUCING GEOINFORMATION SYSTEM**

Studies of foreign practice in establishing and introducing geoinformation system show that it is a long process and requires huge human and financial resources. Taking into account foreign practice in establishing and introducing similar systems, limited budgets of the governing bodies, as well as current condition of telecommunication channels of the Republic, geoinformation system shall be established and introduced by stages: firstly, basic geoinformation system and afterwards — thematic geoinformation systems according to the level of readiness.

Schedules for establishing and introducing thematic geoinformation systems shall be drawn up based on the stages for establishing and introducing basic geoinformation system.

The list of measures of and stages for performance of activities envisaged for the establishing and introducing the system shall be prescribed by Annex No 1.

## **VII. FINANCING SOURCES FOR ESTABLISHING AND INTRODUCING GEOINFORMATION SYSTEM**

For the purpose of establishing and introducing geoinformation system, financial means of state and local budgets, grants and directed credits shall be used.

According to the preliminary estimates, nearly 792 600,00 thousand drams will be needed for establishing basic geoinformation system (Annex No 2).

Expenses for maintenance, support and service of geoinformation system shall be made at the expense of the means of the State Budget of the Republic of Armenia.

Size of financial means needed will be specified when the programme on establishing and maintaining geoinformation system will be drawn up.

Activities listed in points 1-7 of Annex No 3 shall be implemented within the framework of the programme on implementation of activities with regard to creating state basic topographic maps of succeeding scales of the Republic of Armenia and aerial photography.

Network for exchange of data referred to in point 12 of Annex No 2 is necessary for exchange of data between basic and thematic geoinformation databanks and will be needed in 2008.

**Minister-Chief  
of Staff of the Government  
of the Republic of Armenia**

**M. Topuzyan**

**Annex No 1  
to the Concept Paper on  
establishing and maintaining  
geoinformation system of the  
Republic of Armenia**

## **SCHEDULE**

**FOR ESTABLISHING AND MAINTAINING GEOINFORMATION SYSTEM OF THE  
REPUBLIC OF ARMENIA**

Names of measures and activities	Period for performance	Responsible executing body
1	2	3
Stage I. Preparatory activities	2005	State Committee of the Real Estate Cadastre adjunct to the Government of the Republic of Armenia
Development and approval of concept paper on geoinformation system	2004 4th quarter	
Development and approval of programme on basic geoinformation system	2005 1st quarter	
Approval of state bodies authorised for establishing and maintaining thematic geoinformation systems	2005 2nd quarter	
Development of regulatory legal framework necessary for establishing and introducing basic geoinformation system, including:	2005	
approval of the list of regulatory legal acts necessary for establishing and introducing geoinformation system	2005 2-3rd quarters	
development of the procedure for establishing, maintaining, updating of databank of basic geoinformation system, and for exchanging of information	2005 4th quarter	
development and approval of classifiers and standards for basic geoinformation system		

development and approval of conventional symbols of basic geoinformation system		
implementation of pilot programme on establishing basic geoinformation system	2005	
Stage II. Establishing, introducing and operating basic geoinformation system	2005-2011	
Establishment of digital maps and databanks for republican, marz and community levels	2005-2010	
Completion of activities with regard to the first state registration	End of 2005	
Preparation of ortophotoplans on a scale of 1:2 000 from aerial photographs on a scale of 1:7 000	2005-2007	State Committee of the Real Estate Cadastre adjunct to the Government of the Republic of Armenia
Creation of basic topographic maps on a scale of 1:10 000	2005-2007	
Field analysis of materials on a scale of 1:10 000 of aerial photography and space surveying	2005-2007	
Development and digitalisation of topographic maps on a scale of 1:10 000 from aerial photographs	2005-2007	
Development and digitalisation of topographic maps on a scale of 1:10 000 from space photographs	2005-2007	

<p>Digitalisation of topographic maps on a scale of 1:10 000</p>	<p>2005-2007</p>	
<p>Creation of topographic digital maps on a scale of 1:25 000 to 1:1 000 000 by way of generalisation</p>	<p>2005-2007</p>	
<p>Drawing up, updating and digitalisation of topographic surveys on a scale of 1:2 000 based on cadastral cartographic materials on a scale of 1:500 and 1:2 000 of territories of large settlements of the Republic of Armenia, which are developed and envisaged under the prospect of development</p>	<p>2005-2007</p>	
<p>Pilot operation of basic geoinformation system in the republican executive bodies and the State Committee of the Real Estate Cadastre adjunct to the Government of the Republic of Armenia</p>	<p>2008</p>	
<p>Staff training and retraining</p>	<p>2006-2008</p>	
<p>Installation, adjustment and operation of basic geoinformation system in the republican executive bodies and the State Committee of the Real Estate Cadastre adjunct to the Government of the Republic of Armenia</p>	<p>2009 Second half of the year</p>	

Stage III: Establishing, introducing and operating thematic geoinformation systems	2006-2013	Relevant authorised state bodies
Establishment of a coordinating committee (working group) for establishing and introducing geoinformation system	2006 2nd quarter	
Development and approval of the programme on thematic geoinformation systems	2006 3-4th quarters	
Development and approval of procedures for establishing and maintaining thematic geoinformation systems	2007 1st quarter	
Implementation of pilot programmes on establishing thematic geoinformation system	2007 2-4rd quarters	
Stage IV: Introducing and operating geoinformation system of the Republic of Armenia	2008-2013	
Joint pilot operation of basic and thematic geoinformation systems	From 2008 to 2013 — according to the schedules for introducing thematic geoinformation systems	State Committee of the Real Estate Cadastre adjunct to the Government of the Republic of Armenia relevant authorised state bodies



Staff training and retraining (in terms of thematic geoinformation systems)	2008-2013	relevant authorised state bodies
Production operation of geoinformation system of the Republic of Armenia	January 2014	

**Annex No 2**  
**to the Concept Paper on**  
**establishing and**  
**maintaining**  
**geoinformation system**  
**of the Republic of Armenia**

**PRELIMINARY ESTIMATES OF FINANCIAL MEANS FOR BASIC GEOINFORMATION  
SYSTEM OF THE REPUBLIC OF ARMENIA**

NN In numerical order	Name of Activity	Amount (thousand drams)
1.	Elaboration of ortophotoplans on a scale of 1:2 000 from aerial photographs on a scale of 1:7 000	
2.	Field analysis of materials on a scale of 1:10 000 of aerial photography and space surveying	
3.	Development and digitalisation of topographic maps on a scale of 1:10 000 from aerial photographs	

4.	Development and digitalisation of topographic maps on a scale of 1:10 000 from space photographs	
5.	Digitalisation of topographic maps on a scale of 1:10 000	
6.	Creation of basic topographic maps on a scale of 1:10 000	
7.	Creation of topographic digital maps on a scale of 1:25 000 to 1:1 000 000 by way of generalisation	
8.	Drawing up, updating and digitalisation of topographic surveys on a scale of 1:2 000 based on cadastral cartographic materials on a scale of 1:500 and 1:2 000 of the territories of large settlements (cities, urban-type settlements) of the Republic of Armenia, which are developed and envisaged under the prospect of development	532 600,00
9.	Implementation of pilot programme on establishing basic geoinformation system	50 000,00
10.	Acquisition of software necessary for establishing basic geoinformation system	50 000,00
11.	Acquisition and modernisation of computer equipment necessary for establishing basic geoinformation system	50 000,00
12.	Establishment and/or modernisation of a network for the exchange of data of basic geoinformation system	100 000,00
13.	Staff education and retraining	10 000,00
	Total	792 600,00