



THE ROLE OF THE NATIONAL GIS FOR THE OWNERSHIP OF THE LAND PROPERTIES

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Abstract: *The creation, storage and transmission of data from the plans and maps and property records to them, used for the development of general and detailed plans is granted to various institutions. This raises serious inconvenience and problems relating to the guarantee of the natural and legal persons' property in the investment design, real estate trade, territory planning etc. The establishment of a National Geographic Information System, which combines created in Bulgaria maps and plans which serve in the investment planning and spatial planning will ensure the ownership and will end many litigations, which have not only tangible but also intangible consequences.*

Key words: *national GIS, land properties*

Background

The state of the plans and maps that serve as starting materials in the preparation of General Plans and detailed development plans (DDP) is characterized by:

According to the Bulgarian legislation, the responsibility for developing plans and maps is available in various state and municipal structures. Mapping of the recovered property is carried out by the Ministry of Agriculture and Agrarian Reform (now the Ministry of Agriculture and Food). The maintaining and storing is carried out by MAF, and after its inclusion in the cadastral map from the Agency of Geodesy, Cartography and Cadastre of the Ministry of the investment design. The creation, maintenance and preservation of the cadastral map and cadastral registers are made by the Geodesy Cartography and Cadastre Agency.

General and detailed plans are assigned, maintained and stored by the municipalities.

The map of the restored property is created by MAF's Information systems and in this stage of development is supported only in the places where there is no cadastral map.

In about 21 % of the country, a cadastral map in numerical form is established. An integrated informational system for cadastre and property registry has been functioning for about 3 years.

There is no informational system created for the activities related to the projection in the field of spatial planning in the municipalities. Although under the Ordinance № 8/2001 on the scope and content of the site development schemes and plans “The site development schemes and plans are executed with computer technology in digital and graphical form, when required by the task.” In some of the municipalities, the General and Detailed site plans are made in numerical form by using software available to the companies executing the projecting activities. There are often collisions such as the GSP and DSP are in numerical form, but the municipality does not have the appropriate software and plans can only be used in graphic form. This implies that the approved plans that are in numerical form are not supported. For this reason, many municipalities draw schemes by hand.

Raw materials for making Detailed site development plans (DSP).

For the creation of DSP, starting materials are regulated by Ordinance № 8 /2001 at [5]. Must be examined all the existing plans and maps, charts of the communication and transport network for the site, as well as the transmission and distribution systems, the underground ducts, the geological characteristics and structure of the site, the wind rose, the demographic development of the settlement, the passenger flow and the number of motor vehicles per minute on different streets, etc.

To obtain this huge amount of data an extensive research in various institutions and operating companies is carried out. Unfortunately, in practice this is done by writing letters and requests for information. There is no established national information system, where this information and data could be obtained through direct access.

We will focus on a concrete practical example.

In connection to the implementation of the restitution laws in Bulgaria after 1990 a continuous variation and regulation of the cadastral plan of the town Golyamo Malovo ¹ is necessitated. These plans were approved in 1987, but due to the many changes in the boundaries and ownership of the properties, modification or development of entirely new regulation plan is necessary to be created. Decision of the municipal council of 23.04.2008 agreed to extend the regulation limits of the urban area of the town of Golyamo Malovo, and the border of the regulation should include areas owned by natural and legal persons as well as to build infrastructure and streets to be registered as a municipal

¹ Fictitious name

public property. The adjustments of water sites and their delimitation should be included in this project.

In pursuance of this decision a plan for the regulation of the city is assigned. The action takes place very rapidly and at the end of the same year a new regulation plan was approved by decision of the municipal council (Only for 8 months an executor was chosen, the work was assigned and done and coordinations with various operating associations were accomplished, the Regional Inspectorate of Environment and Water, the Regional Health Inspectorate, it is considered on the meeting of the municipal expert council of the spatial planning, it is reported to the stakeholders, and the objections are examined) .

In the development of the project the requirements of Ordinance № 8/2001 are not observed, the borders of the urban areas are not registered as in the map of the restored property (MRP), which at the time of the creation of the DSP was entered into force. The boundary points of the urban area (the regulation) are determined by the contractor of the technical activities for the restoration of the ownership and use of agricultural land (OUFLA). A file was specified, containing text and graphical part – an explanatory note and coordinate register of boundary points. The coordinates of these points are used in the further development of plans for the urban area. When in the boundaries of the urban area new agricultural lands are included, they are with their coordinates and thus the changed boundaries of the urban area are clearly defined.

Violations of regulations

The existing cadastral and regulation plan of the urban area of the town of Golyamo Malovo is not compatible with the map of the restored property which rises various unpleasant consequences.

When creating the cadastral map of a land, the map of the recovered property and the cadastral map (or the maps and plans of art. 41 of the Cadastre and Property register) of the urban area should be compatible and then very often, territories are overlapped or remain blank fields. In such cases a special procedure for removing errors in the contact zone is made.

In this case not even an attempt to reconcile the existing plans has been made, moreover in this part of the plan it has simply been copied from the latter actual plan, and the question for the map of the recovered property has not been mentioned. The approval of the regulation from the Municipal Council resolution in 2008 had been made with significant gaps.

A natural person owns the land (PI) 32.18 bordering regulation and carries out a procedure to change the status of the land - from agricultural territory to urbanized.

In the procedure the main participants are the property owner and the municipality.

The municipality has **allowed** a development procedure for the mentioned property on the basis of a reasoned request and technical task of the owner. After the **approval** the elaborated detailed plan and with the decision of the Commission for the land, the status of the property has been changed. The change has been registered in the map of the restored property in the municipality. The municipality has issued a visa for the design of a retaining wall in PI 32.18 and has approved the relevant construction documents. A construction permit has been issued for the retaining wall and it has been built, its height is from 3.00 m to 3.30 m. All protocols have been completed regularly during construction and the municipal administration has signed these protocols

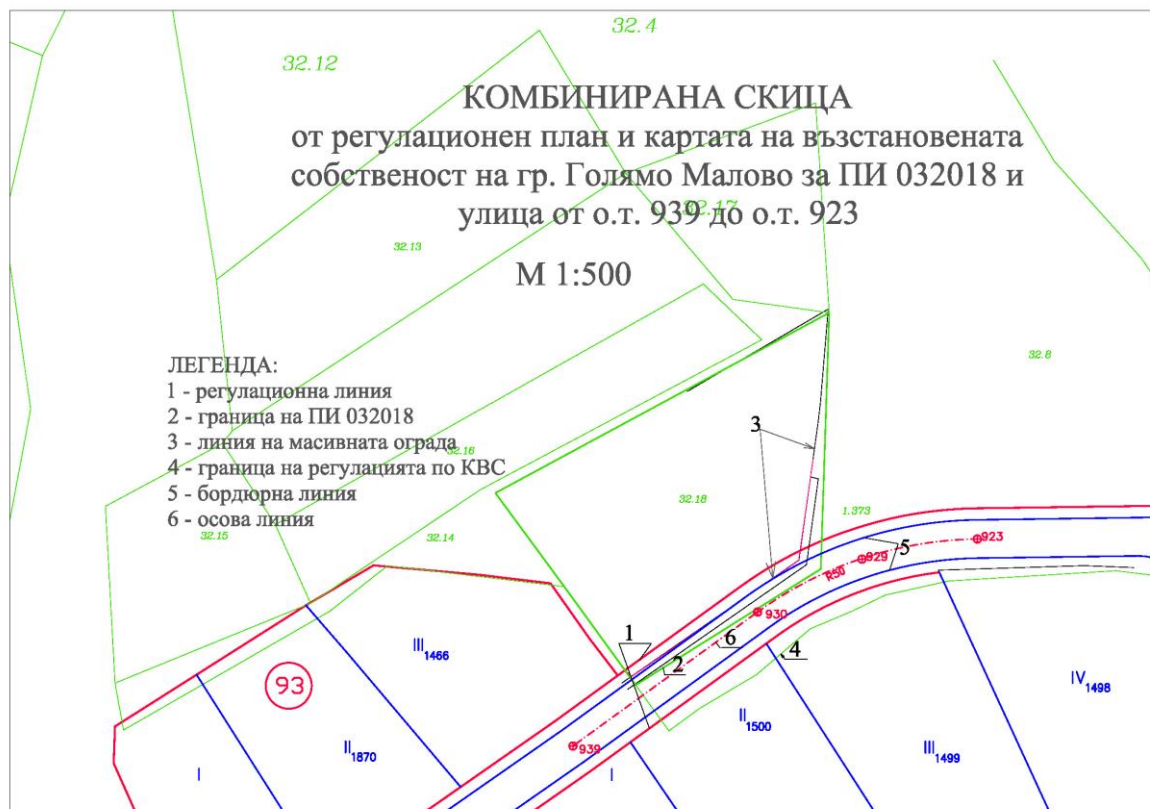


Fig . 1. Composite sketch : 1- regulating line , 2- limit of 32.18 PI 3 - line fence , 4- border regulation in KBC 5 - curb line, 6- axis line

without any comments.

At the request of the property owner, the municipality has issued a visa for a fence over the already existing retaining wall. All the required construction documents have been approved. As with the previous construction, a permit for construction has been issued, in which explicitly has been written, the construction of the fence to be made on the property boundary. All papers have been completed during the construction works that have been signed by officials in the municipality.

After the building of the fence a neighbor complained to the municipality about an illegal construction – a retaining wall and fence. The complaint has

been lodged also to the district administration for national and construction supervision. Protocols, regulations, orders for removal of the buildings have been issued.

The location of the regulation and the plot is shown in Figure 1.

The owner wrote explanations, filed objections, but they were unheard. Nobody pays attention, even the municipality does not bother to verify the implementation of the regulation plan and the approved construction documents. Finally it came to court.

The owner of the plot has approved construction documents and issued the bonds for the construction, but no one was interested in his rights. He was shocked by what was happening, the municipality saw its mistake, but was afraid of appellant because he works in the construction ministry.

The main mistakes are two:

First in the development and the approval of the planning scheme in 2008 had not been used all actual at that time plans and

Second the Municipal Administration which has issued the permits for the design and construction, has approved construction documents, has signed the protocols for opening the construction site and determining the line without bothering to check where on the regulation plan the plot (reflected in CAS) of the man falls.

Causes of the problem

The main reason is the lack of a Geographical information system that contains and provides updated information for the ownership of real estate property (land, buildings and individual units in the building) and spatial planning.

The other reason is that the local governments, i.e. municipalities on the one hand and the management of the state on the other, have no vision and policy for the construction of such information system. An information system has been created of cadastre and land register, which represent an integrated but not one information system. The Ministry of Agriculture and Food has its own information system and maintains a map of recovered property. At present, these systems are not interlinked and each functions separately.

The situation in the municipalities in terms of information provision is extremely poor, single are the cases where municipalities have the software and can use plans and maps in numerical form, which they themselves approved.

Consequences of the lack of a geographic information system

To cite some examples.

Plot (PI) with ID 32.13 in the land of the town of Golyamo Malovo has changed status, i.e. already represents an urban area. In the reconciling the plan for regulation of the town of Golyamo Malovo Large and the map of the restored property 32.13 overlaps the regulation in the area of HCP 939 to HCP 929.

The issued construction permits were for construction of a retaining wall and fence on the property boundary of 32.18, which means they fit the line № 2 of Figure 1, which is almost in the middle of the street, according to the regulation plan.

The boundary of the land marked by № 1 and the limit of regulation line of MRP labeled № 4 differs about 3.00 m.

Statements of findings for the commitment of illegal construction are issued to the owner of PI 32.18 as well as an order to remove the retaining wall and fence.

As a result of this unprofessional behavior of the municipalities and the state enormous damages to the various owners are caused such as:

- Lack of property protection, which is guaranteed by the Constitution. [1]
- Two costly constructions for which there are approved documents in accordance with the provisions of the law must be eliminated.
- Although the compliance with the laws of the country the individual citizen is never sure what problem would occur as a result of the incompetence of the municipal and state administration.

In addition to the material damage there are also moral: the individual property owner is not sure that even law abiding, the municipality (and state) will guarantee his rights and his property which are given to him by the Bulgarian legislation.

Conclusions:

1. Cadastre maps (urban areas) and maps of the restored property ownership of the agricultural land and forests are source of geodesic information and information for the ownership of real estate.

2. Inconsistencies in the plans and maps are found when detailed site plans are implemented, some of which have been prepared and adopted before the mentioned in the first conclusion sources of geodesic information. These differences give rise to actual litigation and have certain tangible and intangible consequences.

3. To bring the geodesic information to the surveying requirements of investment planning, the creation of a National GIS [8] is needed.

4. An important condition for the successful operation of this GIS is to prepare professionals for the collection, processing and use of spatially certain information.

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