

**STUDIES CONCERNING THE BRINGING THE LAW No 1/2000
CONCERNING FOREST CADASTRE INTO OPERATION
FOR THE DEVELOPMENT OF NEW FOREST PLANNING
IN BRESTOVĂȚ (TIMIS COUNTY)**

**STUDII PRIVIND APLICAREA LEGII 1/2000 ÎN CADASTRU FORESTIER
PENTRU CREAREA DE NOI AMENAJAMENTE SILVICE ÎN COMUNA
BRESTOVĂȚ (JUDEȚUL TIMIȘ)**

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Abstract. *The paper is written on the basis of the present legislation; it was made for the tabulation and dismembering of a forest plot. The forest cadastre is concerned with the inventory of all the areas with forest vegetation. Its aim is that of rational forest exploitation, new forest development and also revising the forest planning which exist on each administrative division. The measurements and data processing were made with the help of computers.*

Rezumat. *Această lucrare a fost scrisă pe baza legislației actuale în vederea intabulării și dezmembrării unei porțiuni de pădure. Cadastru forestier este prezentat ca un inventar din toate zonele cu vegetație forestieră. Scopul lucrării este prezentare a unei exploatații forestiere naționale, dezvoltarea unei noi păduri și revizuirea planului forestier care există în fiecare amenajament silvic. Măsurătorile și procesările de date au fost efectuate cu ajutorul calculatorului.*

Key words: *Trimble 3305 DR total station, forest planning, cadastral work*

Cuvinte cheie: *statie totală Trimble 3305 DR, amenajament silvic, plan cadastral*

INTRODUCTION

The stocktaking and record activity logging fund is based on topographical and survey works, pedological and plot description works, where all related factors to the production and optimal capitalization of forest products are show up.

Lands, being part of logging fund are identified and delimited on occasion of forestry arrangements elaboration.

Main objective of forestry arrangements consist in the establishment of a judicious balance between the trees real production ability and annual rate of ligneous exploitation quantity or woods growth by amelioration, restoration and forestry found development. These arrangements are revise from 10 to 10 years ensuring on this way a periodical maintenance of forestry found.

Considering the above mentioned aspects, it is obvious that the necessary works for forestry cadastre are to be achieved together with the execution of forestry arrangements. *Forestry works are related to:*

- The identification and delimitation of plots belonging to forestry founds, operation made together with the necessary works for the general cadastre, when forestry arrangements are taken into account;
- The necessary topographical survey use to draw up the forestry arrangements;
- Pedological filing and plot description, where all the factors are related to the wood production and optimal capitalization;

The cadastral plans resulted as forestry found survey, based on plots and forestry units compose the base for the Forestry cadastre land register.

Forestry cadastre is part of not agricultural land use. Its main purpose is to keep up the track of systematic inventory of national forestry found, of forest arrangements particularizing the surface, wood nature, the age and wood consistence etc.

The activity is made by the Environment Protection, Water and Forest Resources Ministry according to rational forest exploitation.

Taken into balance the actual and the perspective situation, a real relationship between the forestry found forestry cadastre and general cadastre can be established. The main problem of forestry cadastre consist in a data base implementation, at a national level equipped with informative programme, having the main purpose to allow the necessary data inputs to update the data base.

Also, a permanent update of the information acquiring system was obtained by teledetection, and many other collateral activities of forestry cadastre.

This forestry cadastre services are intended to respond at processing information demands for the specialty cadastre, including those referring to land jurisdiction such as changing the temporary or definitive land using category.

MATERIAL AND METHOD

The cadastral work was executed for land register and dismember a forest plot having a 7.5 ha surface situated on *BRESTOVĂȚ* village, *TIMIȘ* County. The documentation was made to register a forest part from "*Forestry arrangement of Brestovăț*", which is part of Lugoj Forestry Department. The land emplacement is part of the 2nd forestry land considering from the production point of view. The land is covered with forest vegetation.

The purpose of the work is to register into the Land Record the forest plot achieved by propriety rights institution.

The juridical situation of the real estate: The plot is a forest inscribed on Propriety Title nr.12, released on the date of 02.12.2002 by Timiș County authorities, in order to establish the propriety rights for the Brestovăț lands in Timiș County.

The record into the Land Registry will be temporary made according to the 7/1966 Law (Cadastre Law) and considering the Propriety Title released according to 1/2000 Law.

The forest plot in surface of 7.5 hectares is situated in the North part of *Hodoș* locality, on the South side of the hill, having as neighbourhood in North by Hunedoara County, to East and South by pastures and in West by forest. The site where the forest is places has an extension of 250 meters among the North-South axis and about 190m among East-West axis. (Figure 1)

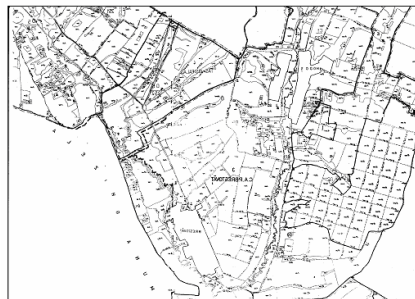


Figure 1. Situation before tabulation, scale 1:15000

According to the altitude extension point of view the plot level values are between 80–85 meters (Black Sea reference system). Considering this reason, it was no necessary to execute a level curves plan in order to effectuate a proper dismember plot operation.

The topo-geodesy survey of Pd 1059 has been effectuated with Trimble 3305 DR, total station, the plot being identified on the field according to the cadastre plan (1:5000 scale) created in correspondence with the 1/2000 law.

The boundary points of the plot and also the detail and landmarks elements were determined from the station point, situated at the plot border. The coordinates of boundary points for the plot presenting in the situation plan with the 1:1000 scale are calculated in the Stereographic Projection System STEREO – 70. The station point I 100 has its marking elements described in the present documentation. The plot surface was computed using the boundary point coordinates and is in total agreement with the surface mentioned in the Real Estate Title. The following points were sight as reference points: Hodoş Church, Catholic Berestovăţ Church, Lucareţ Church and Coşar Church.

The download and primary data processing were effectuated on the computer using the following computer programs: Leica Survey Office, Notepad, Excel, Word, AutoCad 14, Surfer 7.0 and MAppSys 4.4.

RESULTS AND DISCUSSION

In order to register the forest plots as consequences of dismembering, the following step was to elaborate the technical documentation in accordance with article 61 from Cadastre Law. The plot surfaces were 1000 m² (Pd.1059/2/1) and 66259 m² (Pd.1059/2/2), surfaces that will be temporary register into a new book of the land registry for Berestovăţ village (Figure 2).

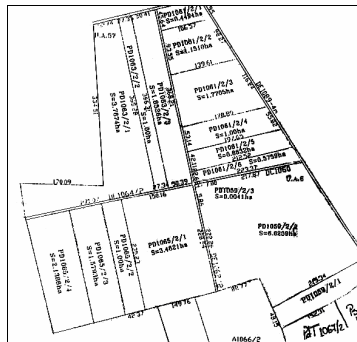


Figure 2. Situation after tabulation scale 1:5000

CONCLUSIONS

It must be specify that due to the hard work, caused mainly due to the hilly relief, by the vegetation and taking into account the technical-economical aspect of the found the topo-geodesic works are executed by simplified technical works that are not required a high precision to determine the points altitude and points coordinate.

In the last years, the fotogrammetric methods has practically replace all survey methods mainly because along with the quantitative and qualitative planimetric survey of high efficiency, it allows also a qualitative forest inventory (species, ages, humidity, density, illness etc.) using as purpose the teledetection procedure.

However, in future, the outstanding performance of the global positioning systems, will steps forward towards to obtain results in a much better accuracy, quickly as time and cheaper as costs. Geographical Information Systems will have all the benefits of these evolutions, the highest precision of SSP – permanent probes surfaces, from the forest inventory arrangements works.

Data acquire with GPS devices lead to computed coordinates into a universal system of coordinates (such as U.T.M), in our country for instance, the Stereographic Projection System STEREO – 70 is use. Considering this, to integrate the data achieved by GPS systems, lot of coordinate transformation are necessary.

The system coordinate of Stereographic Projection System STEREO – 70 are transformed in geographical coordinate and later on allow the direct transformation in Datum Geodetic Universal which is sustained by the WGS 84 projection system used by GPS devices.

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