



## Training Young Romanian Land Surveyors in an International Context

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### Abstract

The integration of Romania into an international context implies the harmonization of new requirements regarding cadastral activities and their organisation. New legislation has been issued regarding cadastral activity, of which we can mention the following: The Agricultural Real Estate Law on the retrocession of lands to the former owners or to their inheritors, the Cadastre and Land Registration Law tackling the provisions for all landed property to be registered in the Land Book and the Forest Fund Law with the later additions on the system of retrocession of forests to their previous owners.

These laws are now in harmony with the European legislation through a generalised cadastral record keeping system for lands registered in the Land Book. The Romanian system is based on the Austrian system, which is at the basis of most cadastral systems in Europe.

We should remind you that Romania has until recently had two separate cadastral record keeping of real estates. One was based on the Austrian system and it was used in northern, western and central Romania. The other was based on the French system of Records Registries valid for the south and east of Romania. This situation led to a series of discrepancies that caused problems in meeting deadlines, in the citizens – administration relationship and that was in the end, a waste of human and material efforts. There are also many cases in which different institutions store and use similar data on an administrative territory but they have their own means of data gathering and storing, which leads to different entries for the same record.

In this context of transition in the field of cadastre and land registration, the training of future specialists in cadastral record keeping organisation activities, such as The Owners' alphabetic index, the Registry of Parcels, the Registry of Property Items and etc allows the young degree holders of this field to work in an international context. They are also introduced into cadastral and land registration service providing and they are encouraged to acquire competences to manage a new cadastral database and a computerised system that records land books.

The software designed by the Romanian National Agency for Cadastre and Land Registration is also part of their curricula. Such software is the 'Property Item' that generates a database for each owner. This database will then be part of the general cadastre of Romania, materialized in 'E-Terra,' which has been designed to manage the cadastre and land registration activities in all Romanian regions.

The computerized record keeping system implies geodetic aids that can be included in the management of Land Books. Thus, CAD and similar software and Romanian cadastral software such as Mapsys are included in the students' curricula.

The practical training of students includes practical activities carried out in Romanian companies active in the field of land measurements and cadastre, in local public administrations and in the branches of the Romanian National Agency for Cadastre and Land Registration. The national Ministry of Education has issued a decision by which institutions and companies are required to receive students for practical activities so as to create the link between theory and practice. The Romanian companies are encouraged to give private study scholarships for the best students.

Another opportunity for students in higher education are student mobility programmes, which offer them the chance to study or to have practical, training in Universities or private companies or partnerships abroad. Thus, a future professional of a field that has specific characteristics in each country encourages experience sharing and contacts between the experts.

### 1. Introduction

"The general cadastre is the unitary and compulsory system of technique, economic and judicial evidence, through which the identification, registration description and representation on maps and cadastral plans of all lands is drawn, but also of other real estates from the territory of

the entire country, no matter their destination and the owner."-Law no. 7/1996-"The Cadastre and Land Registration Law".

Starting from this statement, the main purpose of the general cadastre is that of giving in any moment, the real data to the juridical and fiscal organisms, concerning the quantitative part of the

real estate rights and also the economic data that establishes the qualitative part of the estates from an administrative territory (village, town, and city).

## **2. The study of the cadastral legislation and of the organization of the territory**

### **2.1 Law no. 18/1991**

The year 1991 marked the beginning of vesting of possession and issuing title deeds of possession of land based on Law no. 18/1991. The concerned surface measured approximately 8 million hectares and it was the object of the constitution and reconstitution of property rights. By the constitution of the new surface parcelling, the old lines of parcelling were modified, thing that imposes the drawn of new cadastral plans on a scale of 1: 2000 for outside built-up areas and 1: 1000 or 1:500 for localities.

The Agricultural Real Estate Law no.18/1991 stipulates that "all kind of lands, no matter the destination, the title they are owned or the public or private domain they take part of constitute the Agricultural Real Estate Law of Romania."

### **2.2 Law no. 7/1996**

Law no. 7/1996 stipulated the introduction of the general and modern cadastre and of land registration. It was in conformity with the demands of the legal rights of property. Land registration ensured the consolidation of the legal rights of property and the facility of land and property transfer in favour of the right beneficiaries. In this purpose, according to article 68, law 7/1996 that "In term of 90 days from the finalization of the cadastral work on an administrative territory, the evidence about the cadastral parties of all owners, must be transmitted to all Land Book Offices attached to the Courts of Law of the first instance in order to draw up land books for the real estate."

### **2.3 Law no. 1/2000**

Law no. 1/2000 was adopted to regulate the reparatory measures that had to be taken after the analysis of the application of the Agricultural Real Estate Law no. 18/1991, Law no. 1/2000 deals with the reconstruction of the property right of lands and forest funds. This law also contains regulations concerning the legal situation of some real estates, the constitution of real usage rights and the juridical circulation of the lands exploited by associations that were established based on the stipulations of this Law.

### **2.4 Order no. 634/2006**

The regulation of drawing the documents on different work categories was regulated and systematized by this order given by the National Agency for Cadastre and Land Registration.

In conformity with the regulation concerning the contents and the modality of drawing up the cadastral documentation in order to register a land in the Land Book, the documents will be drawn up as it follows:

- a) Real estate that requires documentation for the first registration;
- b) Real estate that requires documentation for detachment;
- c) Real estate that requires documentation for attachment;
- d) Real estate that requires documentation to register a final construction on a land already registered in the Land Book;
- e) Real estate that requires documentation to modify the property limit;
- f) Real estate that requires documentation to modify the surface;
- g) Real estate that requires documentation to describe the dismemberments of the property right;
- h) Real estate that requires documentation to reconstruct the lost, destroyed or stolen land book.

## **3. The study of cadastral evidence systems**

### **3.1 The Austrian system**

Land books, as they function nowadays, organized on a based of precise measurements and correct cadastral maps, were institutionalized for the Austro-Hungarian Empire in the Civil code in 1896 and a Law from 1897. They unified the land legislation under the next principles: the force of the registration, the constituent effect of rights of registrations, the solemnity of operations, legacy, and specialty, general and absolute registration. According to these principles, the registration can be made only for estates that can be precisely identified with the exact proof of rights given by the organisms determined by law, in a solemn form. These registers are public and their contents have force of evidence to a third party.

### 3.2 The French system

In France, the revolutionary laws (1790) were concerned with encouraging loans and with rendering alienation and attainments opposable to third parties. The legal solution was found to be transcriptions. They meant copying the legal document and mortgages in a register from the Court Clerk's Offices from the district where the estate was located, in order of appearance. The transcription in the registers was not compulsory, and their registration was personal, incomplete and imperfect, which required subsequent changes by the help of a Law from 1789 when the obligation of transcription of all property documents was introduced.

### 3.3 The Romanian land registration system using Land Books

Nowadays, the land registration system by land books is regulated by the Decree-Law no. 115/1938 in order to unify the dispositions concerning the land books, applied by law no. 241/1947.

The land books were introduced for the first time in Austria, from the order of the emperor Joseph II, in order to have a land tax based on real topographic data. In that time these taxes were the main income of the Austrian Empire and after that of other European countries. Nowadays, the land registration system is applied in Austria, Germany, Switzerland, Hungary, the Czech Republic, Slovakia, the former Yugoslavia, some territories from Poland, Italy, in the interwar period in England also, and in some of the British colonies.

On the territory of our country, the land books were introduced in Transylvania, Bukovina and gradually as it follows:

- 1794 – the old bordering regions;
- 1855 – in the territories where the Hungarian right was applied;
- 1870 – in the territories subjected to the Austrian Civil Code, including Bukovina.

In conclusion, in Transylvania, three-land book regimes were applied, although they were similar, they also had some particular regulations. They were valid even after the constitution of the Romanian state, until the coming into force of the Decree-Law no. 115/1938 (1947 in Transylvania and 1938 in Bukovina).

The land books from Transylvania were regulated by the Austrian legislation in some localities and by the Hungarian one in others.

During this different regulation, the Leading Council from Sibiu, that administrated the territory of Transylvania between 2nd December 1918 and 2nd April 1920, the institution of land books was kept even after the Leading Council was dissolved and after the Romanian Government took over on 2nd April 1920. The institution of land books survived as local land legislation and it lasted until the legitimization of the Decree-Law 115/1938.

## 4. Training young Romanian land surveyors in an international context

### 4.1 The system of the study credits

In a synthetic definition, the credits are numerical conventional values that measure and express the normal volume of work required from the student to learn the knowledge, skills and work capacities for the subjects that are present in the curriculum of the study programme that the student applied for. The main addition of study credits is based on the estimated time of work, necessary for the study activity and all its forms: courses, seminars, laboratories, individual study, essays, projects, practical work, field work, preparation for the current assessments, assessments from the exam sessions, papers and final exams of studies (bachelor's degree, dissertation, thesis, etc.).

A credit unit expresses a specific number of hours, and the number (package) of credits given to a subject, a compact period for studies (semester, year) or to a series of studies (bachelor's degree, master, doctorate) expresses the study time recognized as necessary for the learning of contents and the gaining of competences according to the subject, the period of time, the series of studies through the collective learning activities, that suppose the presence of the student in the class, but also through the individual and independent learning activities.

The system of study credits was originally created not as a standardization and recognition of studies system in the case of pupil and student mobility, as it was to evolve in Europe under the form of ECTS (European Credit Transfer System), but as a system of differentiation of studies based on the individual capacities and motivations of students (pupils). The credits appeared as a construction technique of the curriculum based on the principle that the essential requirement when designing a curriculum was to assure the correspondence between the contents and learning tasks, on one hand, and time and the learning possibilities of students (pupils), on the other hand.

With this significance, the system of the study credit was first applied in the USA, Canada and some European countries, as an internal organizational study system, based on assigning credits to each course (subject) taking into consideration the time for studying imposed by the educational curriculum. At the same time, through the possibilities of students (pupils) to choose between different levels of credits of the compulsory subjects and between the different packages of elective or optional subjects, the system of credits was a good practical solution for individualizing the time of learning by adapting them to the personal rhythm of learning for each student.

There was an imposed compatibility concerning the units of study programme because, usually, the mobility of students did not last for the whole period of studies but only for shorter periods, as most actions and scholarships took place for a period of three, six months or at most a year. Because of this situation, the necessity that the study programs should be divided into units with personal programmes appeared and also in order to be followed by students as a whole package of subjects and learning activities comparable and replaceable with the counterpart package from the study programme of the basic institution (the place from where the student leaves and where he/she returns to finish the studies).

Based on the experience of most European countries, ECTS recommends the semester as a

fundamental unit of study programmes and the semester as a principle of drawing the curriculum. The length of a study programme is expressed in number of semesters and every semester is rated with a standard number of 30 credits. In this way, a program of study with a length of 3 years (6 semesters) will be credited with 180 credits, a programme of 4 years (8 semesters) will be credited with 240 credits and a programme of 5 years (10 semesters) will be credited with 300 credits and to those are also added a number of credits (15-30) to all final exams (bachelor's degree, dissertation).

For the recognition of credits and periods of study, the compatible system is necessary for the level of assessment and grading. It is obvious that the student that studied at a different university cannot benefit of the recognition of that period of time in the original university unless he/she promoted the forms of assessments practiced by the host university. This is why ECTS guarantees the academic recognition of studies by a system that allows to compare and transfer marks or appraisals obtained in different institutions and educational systems.

The ECTS grading scale has 5 levels of success (the letters A-E) and two levels for failure (the letters FX and F). The option for a scale with seven levels and for a grading with letters (not numbers) resulted from a pilot study on a group of 84 European universities. The main idea is that the

ECTS grades	Definitions and performances descriptors	Estimated weights	Grades in the Romanian system
A	Excellent – outstanding performance with only minor errors	10%	10
B	Very good – above the average standard but with some errors	25%	9
C	Good – generally good work with a number of notable errors	30%	8
D	Satisfactory – fair but with significant shortcomings	25%	7-6
E	Sufficient – passable performance, meeting the minimum criteria	10%	5
FX	Fail – some more work required before the credit can be awarded.	–	4
F	Fail – considerable further work is required.	–	3-1

Table 1: Grading scale

ECTS scale must be flexible and transparent enough to adapt to some of the different grading systems without interfering with any of them. In this purpose, every level of the scale is nominally defined (by appraisals) and by the synthetic description of performances. Also, the ECTS grading scale provides, with an approximate title, the normal distribution of students for every level under the form of estimated weights.

The correlation of the Romanian grading scale from 10 to 1 with the ECTS grading scale in order to recognize the credits for the students that participate in European mobility is set on a basis of correspondences from the following table. It must be mentioned that the weight for each level, or grade, is approximate and depends on the experience and practice of each university and faculty. For example, 9 can be assimilated to excellent (A) if the level of exigencies practiced at the university, faculty or the program of study places this grade at the level of remarkable results. Under these circumstances, level B will be the equivalent to 8, level C to 7 and level D to 6.

#### 4.2 The students' practical training

The practical training of undergraduate students is organized according to Law 84/1995, Law 288/2004 and the Charter of "1st December 1918" University of Alba Iulia. The responsibility for the coordination, organisation and realization of the students' training belongs to:

- a) At the university level -the vice-rector for education, strategy and quality;
- b) At the faculty level – the vice-dean/the scientific secretary nominated by the Dean as responsible for students' training.
- c) At the level of departments – the training responsible for each study program, nominated and reconfirmed at the beginning of each university year by the council of the faculty.

According to their specialty, the faculties can draw instructions with completions at the present statute, validated by the faculty council and communicated to the university, to the vice-rector for education, strategy and quality.

The training is compulsory and its length is regulated by the curriculum of each programme of study according to the laws in force.

The training takes place in institutions/ companies/ laboratories or compartments of the faculty. These must have a relevant domain of activity for the specialty of the students. Working

students can receive training in the workplace, if the requirements for accumulating the competences set in the training subject data sheet are met.

The training periods are organised based on a training agreement (Annex 1), signed at the level of faculty/department. Based on the training agreement, the host company assures, for the whole training period, the guidance of students by designating a training coordinator.

The students have the possibility to choose between different ways of doing their training:

- a) The training stage proposed by the student; the identification of the place where the training takes place is the student's obligation, it's also a challenge and a way of training in finding a job after graduating.
- b) The training period organized by the faculty; the faculty and the department facilitates to find some training places for students.

In order to do the training in the host company proposed by the student, after finding a training place, the students files an application form to the coordinating department (Annex 2).

The student presents himself/herself at the training place based on an address issued by the Faculty Dean's Office to the host company (Annex 3). In the first day of training, the student presents to the host company the following documents:

- a) The address issued by the Faculty Dean's Office (Annex 3);
- b) The training subject data sheet;
- c) The example certificate that is to be filled in by the host company at the end of the training stage.

The regulation of the training activity between student and the host company can be drawn as a training contract. The student takes the whole responsibility to respect the organization norms and labour safety specific to the host company for the whole period of the training period.

During the training period, the students have the obligation to do homework, a project with relevance for the domain/ specialty they follow, and their activity must apply the theoretical knowledge they achieved during the educational activities. The activities must be relevant for their specialty. The host company must designate a person responsible for the training activity of students and this person must assist them during the whole period of training.

At the end of the training period, the student must have the training project that must contain the following:

- The first name and name, the faculty, the specialty, the year of study;
- The name of the host company, the period of training, the total number of hours of training;
- The training coordinator designated by the host company;
- The training subject data sheet;
- The activities carried out, specific professional aspects;
- Other documents that were demanded by the coordinating department.

The host company evaluates the project (very good, good, satisfactory/unsatisfactory) and validates the training period by issuing a Training Certificate (Annex 4).

The recognition of the training period is finalized by giving the credits set in the curriculum. The evaluation of the achieved skills of the student during the training period takes place as oral examination, by a Training Evaluation Committee designated at the level of the coordinating department at the beginning of the academic year.

The training period will be recognized during the oral examination only if the following requirements are met:

- The Training agreement between the faculty and the host company is signed;
- The student works in a domain linked to his/her specialty, using and achieving relevant knowledge to practice profession he/she trains for, having as a reference the training subject datasheet;
- The training project was verified and counter-signed by the training coordinator of the host company;
- The host company validated the training project by handing out the Training Certificate (Annex 4).

The assessment is based on the following elements:

- The analysis of the training project presented by the student; the relevance of the activities made for the professional training according to the training subject datasheet; the skills and achieved knowledge, the evaluation obtained from the host company;
- The assessment of the presentation performance of the training report in front of the Evaluation Commission;
- The presentation of the Training Certificate given by the host company.

<b>Between</b>	<b>UNIVERSITY "1<sup>ST</sup> DECEMBER 1918" ALBA IULIA THE FACULTY OF SCIENCES</b>
<b>Dean</b> ( <i>name, address, phone, fax, e-mail</i> )	Prof. Sorin Briciu, Ph.D. 510009, Alba Iulia, 11-13 Nicolae Iorga street Phone: +40 258 806263 Fax: +40 258 806329 E-mail: secretariat_stiinte@uab.ro
<b>Contact person (training responsible)</b> ( <i>name, address, phone, fax, e-mail</i> )	
<b>The Company manager</b> ( <i>name, address, phone, fax, e-mail</i> )	
<b>Contact person (training coordinator)</b> ( <i>name, address, phone, fax, e-mail</i> )	

Table 2: Training Agreement for academic year 2008/2009.

**4.2.1 Annex 1**

The above persons agree to cooperate in order to accomplish the students' training. The partner company binds itself to:

- Assure training places;
- Organize monitoring and assistance activities for students, including the briefing for work safety;
- To assure the carrying out of the training according to the initial plan, signed by both parties.

The university binds itself to:

- Select the students;
- Organize the final assessment of the training activity;
- Disseminate the results of the students' training in agreement with the partner company.

The assessment of the training will be made by the university and also by the company, based on the training subject data sheet, annexed to the present agreement.

No.	Faculty	The field of undergraduate studies/Specialty	Year of study	Number of students	Period
1.	Sciences	Geodetic engineering/ Land surveying and Cadastre			

Table 3: The students' training.

University "1 <sup>st</sup> December 1918" Alba Iulia, The Faculty of Sciences	The name of the company
Dean: Prof. Sorin Briciu, Ph.D. Signature: Training coordinator at the level of faculty: Signature	General Manager: Signature:
Date:	Date:

Table 4: Signatures of the authorized representatives.

**4.2.2 Annex 2**

FACULTY OF: \_\_\_\_\_  
DEPARTMENT OF: \_\_\_\_\_

Approved  
Training responsible

**APPLICATION**

I, the undersigned, .....student in year of study.....specialty.....field of studies..... hereby apply for a training period within the company/institution .....located in (address).....

My reasons for the application are..... I would like to add that the area of activity of the company is..... and the requirements for the acquisition of competences mentioned in the training subject data sheet are met.

Date, Signature,

### 4.2.3 Annex 3

FACULTY OF: \_\_\_\_\_  
DEPARTMENT OF: \_\_\_\_\_

To,.....  
(the host company of the training)  
to the General manager.....

Based on the training agreement for students, signed between the Faculty ....., from the University "1<sup>st</sup> December 1918" of Alba Iulia and .....(name of the company), we inform you that the students:

1.  
2.  
were assigned for practical training within your company. The coordinators for the training period of the students from our Faculty are:

1.  
2.  
The training period lasts for 2/3 weeks, between....., with an average of 6 hours a day. The daily and weekly program of the training are decided by the training coordinators of the faculty, the training coordinator of the company and the students, according to the schedule and the nature of activity of the company.

The students have the obligation to follow the training programme exactly as well as the rules and norms of behaviour established by the internal regulations of the company and of the working place where the training takes place. The students are responsible for any violation of these regulations and for the prejudices brought to the company.

In this respect, please appoint a training coordinator from your company.

Thank you!

Training responsible  
Dean,

### 4.2.4 Annex 4

INSTITUTION  
Address:

CERTIFICATE  
For training period

We hereby certify that ....., student at the Faculty....., specialty.....year.....of study, undertook in the period.....- practical training in the specialty in.....(the name of the company), department..... The training coordinator appointed by the company was Mr./ Mrs.....

The training project of the student was assessed in our company according to the training subject data sheet, receiving the evaluation.....

The present CERTIFICATE was issued to serve for the student's recognition of the training period during the oral examination.

Date

General Manager,



### 4.3 The study of applications drawn by ANCP I for the management of the cadastral services

#### 4.3.1 The modules of the “GENERARE CP” application

In the process of preparing the documents for special papers in the field of cadastre, we need to get some standard files for storing the information in the estate chart and for storing the coordinates according to the outline of the estate.

The modules of the “GENERARE CP 1.0.17” application facilitate receiving these files in a standard format, which should allow their storing and validation by the inspectors of the Cadastre and Land Registration Offices.

The GenerareCP.msi application is for the physical/judicial persons authorized to execute special works in the field of cadastre in Romania.

These files obtained through the present application have to be handed in to the Cadastre and Land Registration Offices, together with the documents prepared for the real estates, whose owners requested that cadastre work should be done (Figure 1).

The application allows the introduction of the cadastre information regarding the land and constructions in a window programme conceived for this purpose, but it also allows saving them in the same file with their coordinates, necessary for their import into the cadastre database by the Cadastre and Land Registration Offices.

As the chart of the estate item is separately created for lands and apartments, the application offers the possibility to select the type of land the chart is made for: apartment or land.

Date cadastrale teren

Adresa imobil

Judetul: ALBA Tip artera: STRADA

Teritoriul administrativ: Alba Iulia Denumire artera: Vanatorilor

Intravilan:  Numar: Bloc: Scara:

Localitatea: Alba Iulia Tarla: Parcela:

Tip subunitate administrativa: Cvaratal Nume subunitate administrativa:

Descriere suplimentara

F5-Adauga parcela Sterge parcela

**Date referitoare la teren**

Nr. parcela	Categoria de folosinta	Cod grupa destinatie	Suprafata din masuratori (mp)	Clasa de calitate	Zona in cadrul localitatii	Mentii
1	CC	TDI	3836		centrala	

Total suprafata masurata: 3836 mp Total suprafata din acte: 3800 mp

F6-Adauga cladire Sterge cladire

**Date referitoare la constructie**

Nr. corp cladire constructie	Denumire	Suprafata construita la sol (mp)	Cod grupa destinatie	Mentii
C1	Casa	96	CL	
C2	Anexa	71	CA	

Total suprafata masurata: 167 mp Total suprafata din acte: 3800 mp

Nume autorizat: Oprea Luciana Serie autorizat: AB 190

Fig. 1: The estate item chart filled in completely for a construction land.

### 4.3.2 The management of the cadastre and land registration services in Romania – “e-Terra”

The “Registry” (RGI) module is one of the three main modules of the integrated Cadastre and Land Registration “e-Terra” System, the purpose of which is to computerize, automate and optimize the registration flow of applications in the Cadastre and Land Registration offices.

The Registry module accomplishes a management of the applications addressed for supplying cadastre and land registration. The applications that are introduced in the system receive a number and a registration date, and their resolutions are further observed in the system.

The RGI module implies the following process:

- Attestation;
- Application registration;
- Establishing the date when then they can be resolved;
- Allocating applications so that they can be resolved;
- Reallocating applications;
- Establishing unavailability intervals;
- Fill-in paper;
- Searching;
- Resolving/finding solutions;
- Analysing the application after the solution has been found;
- Administration;
- Generating Registry reports.

The special staff of the National Agency of Cadastre and Land Registration, respectively the ones of the Cadastre and Land registration Offices that participate in the RGI module are as it follows:

- Public Relations Advisor;
- Assistant registration officer;
- Registration officer;
- Chief Registration officer
- Inspector;
- Chief Engineer;
- System administrator.

The main menu of the RGI application has the following submenus:

- Registration: allows the introduction of the data related to a certain application and saving them in the database;

- Searching: allows searching for the applications that respect certain criteria;
- Finding multiple solutions (assistants): allows finding solutions for more applications at the same time (only for registry assistants);
- Reallocating LB;
- Reallocating CAD;
- Processing: allows observing the applications after a solution has been found or filling in papers.

What is very important is the fact that the application offers security on an access level; thus, the submenus are active (available) for users, according to the rights established for the type of function it has. Searching for information can be done according to one or more searching criteria:

- The number of criteria;
- The time when the application was introduced;
- The person who applied;
- The solicitor;
- Authorization;
- The Land Book Office list;
- The land arrangement unit;
- The position of the person to whom the application was given;
- The people hired in Cadastre and Land Book Office;
- The number of the land book;
- The state of the application (the solutions of which have been found at the beginning of the search, with an exceeded term).

After one or more searching criteria have been selected, the “Search” button should be pressed. For a new search the “Delete filter” should be pressed (Figure 2).

## 5. Conclusions and suggestions

The economic activity of a country cannot take place without a solid cadastral background that certifies the right of property for the investors.

The introduction of the general cadastre in Romania is a necessity that challenges people to find the best technical solutions. The solution for this problem is difficult. On the one hand because the introduction of the general cadastre was carried out in different stages, with the help of different methods because of the dynamics of the legislation, and on the other hand, because

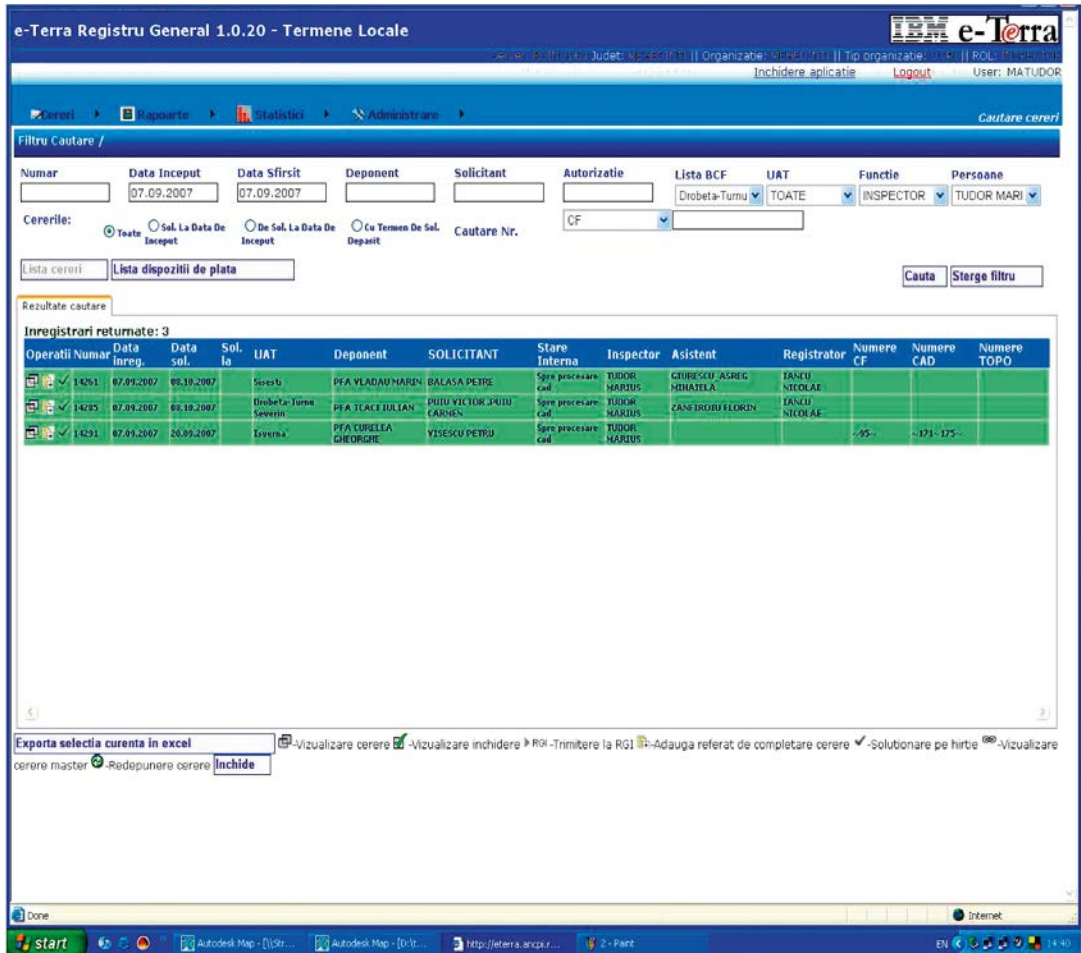


Fig. 2: Searching information regarding the cadastral documents filed in.

homogeneity was required even if the demands came before achievements.

In approaching this work, the general objective was to find efficient solutions about the optimization of the cadastral work, work that represent the basis of the introduction of the general cadastre optimizing of the cadastral work, work that represent the basis of the introduction of the general cadastre and that make possible the achievement of the most existing problems in this domain on a short period of time.

In this context, the training of young Romanian land surveyors implies the presentation and implementation of some technical topographical-land surveying solutions according to the demands of the Romanian Agency for Cadastre and Land Registration. These were stipulated in the Order no. 634/2006 for Romania, and also any

other legislative act that regulates the cadastral activity in a certain country.

In this context, the training activity of the specialty "Land surveying and cadastre" from the field "Geodesy Engineering" is structured as follows, in three important directions:

- A first direction that shows the stages of a cadastral work;
- The second direction is given by the legislation that governs the means of drawing up the cadastral documents;
- The last concerns the means of drawing up documents, pinpointing the main documents that are drawn by a land surveyor.

The multilateral connections between the different means of drawing up cadastral documents have singularities of manipulation and transformation of

the data that could be solved only by specialized knowledge corroborated with IT knowledge and a big effort from the students, future graduates, during the whole educational activity in the four undergraduate study years.

At the same time, the educational activity and the training for the specialty proves a continuous interest to combine theoretical knowledge and practical training. Several papers prove this that students wrote which were strongly anchored in the geodesic reality.

Working for the Offices of Cadastre and Land Registration and Town Halls cadastral Offices, or for sole proprietors or for surveying companies, students can benefit from a significant decrease of the study time as information is given together as a package, their projects have a higher execution precision and the students can access the necessary information to complete their assignments more easily and in due time. This way, the main purpose of the learning process is achieved.

At the same time, the interest of the students and teaching staff in ensuring a quality higher education and also a modern one from the point of view of the methodology and of the contents, benefits academic education as university methodology is connected to the current practical training.

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