New Master Study Programme in Land Law and Economy at the Faculty of Civil Engineering the University of Belgrade

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Key words: Serbia, Tempus III, Master Study Programme, The Faculty of Civil Engineering.

SUMMARY

The process of integration of Serbia into the European Union, initiated in 2000, offered the opportunity for qualitative reform of higher education, as well as for restructuring of the current educational system in accordance with Bologna objectives. In 2001 the Serbian Ministry of Education and Sport declared establishment of a modern system of higher education. In September 2005, a new Higher Education Law (LHE) aimed at harmonising higher education of Serbia in accordance with Bologna process was enacted. In line with this Law, the Faculty of Civil Engineering (FCE), the University of Belgrade (UB) undertook a reform of the basic - undergraduate - studies (BSc). Taking into consideration the on-going educational reform at University of Belgrade, FCE accepted the invitation of the Technical Institute for Technology (KTH) and under the Tempus III framework, jointly developed new Master study programme in Land Law and Economy. The programme shall pay attention to legal and economic questions especially related to land consolidation and urban/suburban land development. It will be the first MSc programme in Land Law and Economy of the Balkan region developed in accordance with the Bologna declaration. The project will last two years, and occupy four Serbian faculties (Faculty of Civil Engineering, Faculty of Architecture, Faculty of Law and Faculty of Organizational Sciences) and three respective foreign educational institutions - Royal Institute of Technology (KTH, Stockholm, Sweden), Helsinki University of Technology (TKK, Helsinki, Finland) and the University of Ljubljana (UL, Ljubljana, Slovenia) as well as the Republic Geodetic Authority of Serbia.

SAŽETAK

1. HIGER EDUCATION REFORM IN SERBIA

The Republic of Serbia signed the Lisbon Convention in 2001 and ratified it in September 2003. The ratification instruments were deposited in 2004. Some of the relevant legal provisions comply with the legal framework of the Convention and subsequently adopted supplementary documents. The Law on Higher Education (LHE), which fully implements the Bologna Declaration, came into effect on 10th September 2005. The LHE stipulates that the activity of higher education shall be carried out by the following higher education institutions:

- University;
- Faculty or academy of arts within university (three levels study programs);
- Academy of professional studies (basic and specialized professional studies);
- Higher school (basic and graduate academic studies); and
- Higher school of professional studies (basic and specialized professional studies).

The Law places private faculties and the faculties founded by the Republic of Serbia on equal level regarding their rights but also the obligations. In the academic year 2006/2007, a total of 98,259 students have been enrolled in all the higher education institutions in Serbia.

The activity of higher education is performed through academic and professional studies based on granted/accredited study programs for the achievement of high education. First level study is basic academic studies. Second level studies are: 1) Graduate academic studies-master and 2) Specialist academic studies. Third degree studies are doctor academic studies.

Basic academic studies last three to four years, and basic professional studies last for three years. Graduate academic studies can be organized by the university, faculty or higher school. Graduate academic studies last one or two years depending on the duration period of the basic academic studies. PhD studies can be organized by universities and faculties. PhD studies last for at least three years with previous basic and graduate academic studies that lasted for at least five years.

The National Council for Higher Education (National Council) establishes standards and the procedure for accreditation of study programmes taking into account the results of the quality assessment and self-assessment defined by the LHE. The National Council for Higher Education adopted on 20th October 2006 the Accreditation Standards that are fully harmonized with the Standards and Guidelines for Quality Assurance in the EHEA.
In the process of quality monitoring, the students’s evaluation of the curriculum shall be taken into account. The methods of evaluation of the curriculum and teaching have been regulated by the universities under their respective Rules on evaluation of the professors educational work by the students. At the Minister’s request, the Commission for Accreditation and Quality Assurance (Commission) examines the fulfillment of obligations of the institution within its structure, concerning the quality against the annual plan of action, and according to a particular instruction by the National Council. The system of the quality assurance encompasses the entire system of higher education in Serbia. The accreditation procedure includes all the three scheduled elements (internal assurance, external assurance and announcement of the results). The LHE provides that the Commission may solicit the services of international organizations and associations for quality assurance in higher education, in line with the enactment by the National Council. Also, internationally recognized foreign university teachers, scholars, artists and experts may be appointed as reviewers in the accreditation procedure.

The LHE provides that, in the procedure of validation of foreign higher education diplomas, the system of education of the country where the diploma of higher education was acquired, the study programme, the enrolment conditions for the programme, the rights granted by such a higher education diploma in the country where it was acquired, and other facts of significance for recognition by a higher education institution, shall be taken into account. The ENIC Centre of Serbia, formed within the Ministry of Education and Sport of the Republic of Serbia in 2001, as a member of the ENIC/NARIC network, participates actively in providing electronic information to all the stakeholders in the network, as well as to the students (during and after their studies), to the university teachers, administrative departments of higher education institutions, ministries and other administrative authorities, international organizations, employers and other interested parties.

The measures conducive to mobility include introduction of the ECTS system at all the faculties and harmonization of the programmes by professions (faculties of technical sciences, faculties of law, economics, etc.) in the first cycle of studies. Also, modernization of the existing curricula and introduction of new ones is continually implemented after the models of curricula of the European higher education institutions.

International mobility, contacts and visits of the Serbian universities staff to European universities are regularly carried out, among other forms and basis, through a variety of Tempus projects. They vary in length of stay, but most frequently they last from several days to a few months, although there are some Serbian professors who teach at European universities on the more frequent basis. Many European guest professors teach at the universities in Serbia. Those contacts enable transfer of knowledge, exchange of information about the teaching methods and curricula, sharing experience in implementation of the Bologna process, organisation of joint programmes, etc.

The Law set out the obligation to issue Diploma Supplement. The students who shall graduate in 2007 shall automatically and free of charges receive the Diploma Supplement,
corresponding to the format of the EU Diploma Supplement, the Council of Europe and UNESCO, in Serbian and English.

2. RESEARCHING OF THE NEEDS OF THE SURVEYOR PROFESSION IN SERBIA

Historically, geodetic education in Serbia was primarily technical. If aiming to perform his daily duties in a high quality level, a surveyor has to constantly develop his knowledge, learn from the international achievements, permanently educate himself and exchange knowledge and experience, both with the people from his profession and those of other education profiles.

In Serbia, although about 88% of farmland is in private ownership. Ownership rights to this land are often difficult to establish. Some of the socially-owned agro-kombinats (AK) (average land owned 700 ha) have been restructured and partially privatized by employees, but their full privatization remains an issue. Private farms are highly fragmented (average 3-5 ha). Land sales are legal but the land market is thin. Most rural land transfers are carried out through inheritance or informal short-term leases. Land market development and consolidation of agricultural holdings is a challenge in Serbia due to incomplete registration of property rights. In the country, 80% of rural land property rights have been established.

There is luck of official data however by the assumption in Serbia some 60% of surveyors are working in the Republic Geodetic Authority of Serbia. National Land Survey Institution in any country beside the role in surveying, mapping, photogrammetry and other basic geodetic works has to have leading role in the management of land related information. In Serbia is ongoing integration process of Cadastre and Land book (Land Register) in Real Estate Cadastre that will represent unique register of landownership and information related to land parcel. As Serbia is country in transition, changes social system from a planned economy to a market economy, which introduces economy perspective of land. Process of land restitution and privatization is state interest. Land use planning, property valuation and other land administration issues are also significantly important for country in this stage of development.

To achieve the modern surveyors objectives in reality is impossible without new type of specialists who will possess legal, economic and surveying knowledge related to land and real property. In other words, such professionals shall be well familiar with the following key issues of real property sector such as:

- Policy issues, i.e. when efficient and effective policies with regard to development of land markets are to be developed and their implementation is monitored.

- Legal issues – national cadastre and land registration laws that must be precise and must harmonise with other related laws and comply with international and European regulations and standards.
IT issues – technological developments is also of crucial importance, especially the balance between latest state of the art on international basis and the necessity of its implementation.

Financial issues – the development of a functioning land market involves huge financial means, from the state and / or from the private sector.

For development of a functioning land market all these key issues must be addressed by modern university training programmes.

For the purpose of objective comprehension of the need of professional education and the possibilities of application of modern teaching education methods, the first author of this article with the group of young researchers, conducted a poll in eight Real Estate Cadastre Centers in the territory of Serbia, with around 300 participants (15% of the total employees at that time). The results of that poll, with the accompanying graphic pictures are presented at INTERGEOEAST in February 2005. The intention of the poll was to assert the interest in forms of continuous education, percentage of specific levels of education among surveying professionals, knowledge of foreign languages, availability of access and use of Internet, level of communication of those employed with the international and local geodetic institutions and individuals, level of use of PCs in everyday work, method of acquiring new knowledge, etc. The participation of those employed in the private sector was negligible in this case (about 18% of the sample volume), and therefore the results obtained are primarily based on the information provided by RGA staff, and naturally, as any poll have the limited reliability level.

The main characteristics of the participants of the poll would be as follows1:

- Education levels: 61% geodetic technicians, 30 % geodetic engineers and about 9 % graduated geodetic engineers;
- Knowledge of foreign languages: 41% (43%) English, 11% (17%) German, 40% (30%) Russian and 8% (10%) French;
- Use of technical-professional literature: 73% (54%) literature by local authors, 1% (1%) international authors, 1% mainly international and 25% (46%) regular use of all available literature;
- Method of acquiring knowledge: 43% (57%) from literature, 12% (13%) through the equipment selling companies, 11% (10%) acquired in school and 34% (20%) through combination of different methods;
- International contacts: 78% (38%) no contacts, 20% (58%) very rare contacts and 2% (4%) regular contacts with the profession outside Serbia;

1 In the results explanation section, the percentage out of brackets relates to total no. of participants, while the one in brackets relates only to those with university education; i.e. of the total no. of poll participants 41% use English language, while of the total no. of participants with university degree, that percentage is 43%.
- Contacts with schools locally: 70% (41%) none, 24% (52%) rare contacts and only 6% (7%) maintains regular contacts;
- Ratio of knowledge acquired in school and work requirements: at 16% (15%) of the cases school provided the required knowledge, in 64% (65%) of the cases additional training required, at 10% (12%) of the cases significant additional training required, same applies to 10% (8%) of the participants with school knowledge insufficient for successful realization of work;
- Field of work: 49% (45%) Real Estate Cadastre (REC), 16% (14%) cadastral-topographic survey, 11% (4%) basic geodetic works, 4% (11%) GIS, 4% (4%) engineering geodesy, 2% (25) topographic survey, 1% (4%) photogrametry and 13% (145) other fields;
- Interest in attending education courses: 26% interested in new technologies, followed by REC with 19% and GIS with 17%;
- Use of PC in work: 78% (93%) regular, 21% (7%) occasional and 1% no use.

From the analyses of the above poll it is evident that the need for education in geodetic profession after the end of official education is significant. That claim can be supported by the fact that 100% of the poll participants expressed their interest in this type of professional training. However, the knowledge of foreign languages is insufficient, both by structure and quality, meaning that a very small number of individuals has active knowledge of any foreign language and uses international professional literature and Internet services in the professional sense. It is assumed that of those who claimed the knowledge of some of foreign language, only a small number is capable of active use of international professional literature. Level of coverage of the market with local technical literature in the field of law acts and standards, cadastral topographic survey, geodetic equipment and instruments, engineering geodesy, GIS and photogrametry is assessed as very low, so there is no specific area outstanding, meaning that all fields have equally low coverage. It is important to stress that there is almost no contact of geodetic experts with the geodetic profession abroad, while an insignificant number of individuals maintain regular international contacts. Finally, it is very important to stress that with all the difficulties and insufficient knowledge of foreign languages, over 70% of surveyors use PCs in their daily work, which forms a solid base for the use of contemporary education methods.

Referring to the response and the objectiveness of the answers, the poll can be considered successful, at least in relation to RGA staff. With respect to the nature of responses provided by geodetic technicians and geodetic engineers, the results have significant correlation. The answers given by graduated geodetic engineers are to some extent similar to the general outcome, although there are some expected discrepancies that certainly deserve special interpretation. An in-depth analysis of the private sector was omitted at this time and will be the subject of a separate research.
3. THE STUDY PROGRAMME AT THE FACULTY OF CIVIL ENGINEERING / DEPARTMENT OF GEODESY AND GEOINFORMATICS

In 2001 University of Belgrade (Faculty of Civil Engineering), after 15 years of isolation, intensified international cooperation and began the reform of education. The Department of Geodesy and Geoinformatics at the Faculty of Civil Engineering was established in 1935. Until the year 2005, on this Faculty, 10359 students had graduated, 491 masters of science and 245 philosophy doctors had been promoted. The Faculty has 170 teaching and technical staff and more than 2000 students. In turn the Department of Geodesy and Geoinformatics consists of 25 teacher and has about 250 active students within a five year educational programme. Since October 2005, the Faculty adopted new curricula in accordance with the Bologna objectives. The new structure of study programmes (3+2+3) has initiated changes in the academic structure of the Faculty and especially at the Department of Geodesy and Geoinformatics.

Studies of Geodesy and Geoinformatics on the equally named section of the Faculty of Civil Engineering is not exactly in line with LHE and Bologna process. 80 new students are admitted annually. Studies are divided into two parts: basic academic studies (BSc) and graduate academic studies (MSc). The basic studies last for three years (six semesters) and have the value of 180 ECTS credits, and the graduate academic studies (master studies) last for additional two years (four semesters) with the additional value of 120 ECTS credits.

The general list of courses on basic academic studies is shown in Table 1. After finished studies, the student acquires the degree of university Geodesy and Geoinformatics engineer, so he/she could get employed or continue academic studies. Graduate academic studies are divided into two groups: Geodesy group and Geoinformatics group. They consist of the set of obligatory courses (approximately 80% of total classes), choice courses (approximately 20% of total classes) and graduate (master) thesis, for which the last semester of studies is reserved. Overview of the obligatory and choice courses per groups on graduate academic studies is shown in Table 2. The subjects in the programme under considerations are classified into three core subjects: 1) Surveying and Mapping, 2) Geographical Information Management and 3) Land Management. Several courses are outside above mentioned core subjects and could be classified under two types, namely: 1) Maths and 2) Others.

At the first study level all courses are compulsory and students do not have a chance to choose any course. Only Diploma work is included as an option but not necessary as his/her future occupation. From these tables it is clear that the study programme is purely technical, not interdisciplinary. The emphasis of the skills profile is on surveying, specially at the basic level course.

The second stage programme is purely academic. Surveying and Mapping, GeoInformation Management (GIM), Land Management and Maths courses are included, but Law and Economy type of subjects are fully refused. The students are required to take seventeen
compulsory courses and they have to choose another seven by way of specialization subjects. Spatial planning contents are very purely included only at the MSc level. At this point of view master thesis could be good chance to overcome that deficiency.

**Table 1: Structure of basic curriculum study programme – common to both groups**

<table>
<thead>
<tr>
<th>Type of subject</th>
<th>Subjects</th>
<th>credits (credits)%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Math., Physics, Mechanics and Descriptive geometry</td>
<td>9</td>
<td>39.5</td>
</tr>
<tr>
<td>B Social sciences</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>C Informatics</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>D Plane surveying</td>
<td>6</td>
<td>26.5</td>
</tr>
<tr>
<td>E Advanced geodesy</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>F Photogrametry and Remote Sensing</td>
<td>4</td>
<td>13.5</td>
</tr>
<tr>
<td>G Geoinformatics</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>H Cadastre and Spatial Planning</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>I Cartography</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>J Engineering surveying</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>K Adjustment calculation</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>L Common courses/Basics to geosciences</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>M Diploma work</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>47</strong></td>
<td><strong>180</strong></td>
</tr>
</tbody>
</table>

Geographical Information Management - GIM (C+G): 12%
Land Management (H+part of B/Basics of Management): 6%
Surveying and Mapping (D+E+F+I+J+K): 55%
Maths (A): 22%
Others (part of B/Basics of Economy and Introduction to Law+L): 3%
Diploma work: 2%

**Table 2: Structure of academic curriculum study programme – geoinformatic’s group**

<table>
<thead>
<tr>
<th>Type of subject</th>
<th>Subjects /common</th>
<th>Subjects /choice</th>
<th>credits</th>
<th>(credits)%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Math., Physics, Mechanics and Descriptive geometry</td>
<td>3</td>
<td>11.5</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td>B Social sciences</td>
<td>1</td>
<td>3</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>C Informatics</td>
<td>2</td>
<td>8.5+4.0</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>D Plane surveying</td>
<td>1</td>
<td>4.0</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>E Advanced geodesy</td>
<td>1</td>
<td>3</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>F Photogrametry and Remote Sensing</td>
<td>2</td>
<td>8.5+8.0</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>G Geoinformatics</td>
<td>2</td>
<td>7</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>H Cadastre and Spatial Planning</td>
<td>2</td>
<td>7.5+12.0</td>
<td>16.3</td>
<td></td>
</tr>
<tr>
<td>I Cartography</td>
<td>2</td>
<td>8.5</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>K Adjustment calculation</td>
<td>1</td>
<td>4.5</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>M Master thesis</td>
<td>1</td>
<td>30</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>18</strong></td>
<td><strong>7</strong></td>
<td><strong>120</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Law + Economy: 0%
GIM (C+G+part of B/Management): ≈19%
Cadastre and Spatial Planning: ≈16%
Surveying (D+E+F+I+J): ≈27%
Others (A+K+L): ≈13%
Master theses: ≈25%

During the writing of this article, initiated by teachers involved in the MSc Tempus project, working group for refreshing this proposal (Table 1 and Table 2) were made and third profile (Real Estate Management) will be introduced and prepared for accreditation.

4. THE NEW MSc PROGRAM IN LAND LAW AND ECONOMY

Considering the on-going educational reform at University of Belgrade, actual needs of Serbia to establish transparent land administration system and property market, it is clear that is of great importance for the University to develop a new education programme in addition to the current undergraduate programmes in geodesy and geoinformatics. The programme shall pay attention to legal and economic questions especially related to land consolidation and urban/suburban land development.

This project is a result of a fruitful cooperation of University of Belgrade with Royal Institute of Technology (KTH). The cooperation started in 2003 when KTH responsible for International Master programme in Land Management accepted Serbian students. Those Serbian students after study completion return to the home country and join their home organisations/universities and thereby encouraged the staff to modernise educational process, to update courses, to apply new teaching methodologies and IT techniques. Since then, teaching staff of UB and KTH have contacts through annual visits of KTH teaching staff to Serbia for student selection. Besides, in May 2006, a group of teachers from the Faculty of Civil Engineering, the Faculty of Law of the University of Belgrade as well as the representatives from the Republic Geodetical Authority, the High civil-geodetic school and the Ministry of finance visited KTH within the activities of “Capacity Building for Serbia Real Estate Cadastre and Registration Project” running for RGA. At that time the teachers from UB discussed with KTH colleagues different possibilities for future cooperation between the universities and thus the idea of the project was born. As a follow-up, two representatives of the Faculty of Civil Engineering visited the Division of Real Estate Planning and Land Law of KTH for a week for joint writing of a TEMPUS application in October 2006.

The Faculty of Civil Engineering has high expectations from this new Master programme in terms of a growing interests among future national and international students (especially Balkan region), in term of increased competence of Faculty teaching staff and therefore, of quality of education in general, and of strengthened cooperation between the UB and participating EU universities through finding mutual interested research topics. Moreover, the Faculty will increase its level of technical support of the whole educational process. Having based on the specific project objectives, the application writing team has decided to...
involve the following consortium members:
- Royal Institute of Technology (KTH, Stockholm, Sweden)
- Helsinki University of Technology (TKK, Helsinki, Finland)
- The University of Ljubljana (UL, Ljubljana, Slovenia)
- University of Belgrade (UB, Belgrade, Serbia)
- Republic Geodetical Authority (RGA, Belgrade, Serbia)

Development and introduction of new Master programme in Land Law and Economy at University of Belgrade is the overall goal of this project. The main target groups are teaching staff and students of the Faculty of Civil Engineering and particularly those of Department of Geodesy and Geoinformatics. Additionally, teachers and students from closely related Faculties (e.g., Economics, Law) are also considered to be target groups of the project. University decision-making bodies (e.g. the Councils of the Faculties, the Councils of the Universities) are to be directly involved into the project implementation as well.

The project is planned for a two year period, namely September 2007 – September 2009. This implies introduction of a new speciality in Land Law and Economy at UB by September 2009 through creation of new curriculum and new courses, which will be taught during a two year period after three years of undergraduate (Bachelor) study. The intention is to develop a complete set of new courses together with newly prepared modern teaching materials, while new teaching methodologies are also going to be developed and applied. This study programme will end up with thesis work and obtaining Master’s degree by students.

During the two-year period of project implementation the specific objectives of the project are as follows:
- to develop new curriculum of Master programme in Land Law and Economy, new courses with teaching materials;
- to establish Centre for Land Management;
- to introduce new IT teaching methodologies;
- to retrain teachers and students; and
- to disseminate the results.

In order to ensure relevance of the project outcomes for current labour market of Serbia, a Reference team was created. It consisted of representatives of the UB administration and representatives of the RGA as well as the Ministry of Education and Sport. This Reference team acts as a consulting body for the project and at the same time will evaluate quality of new curriculum, new courses and the quality of the project outcomes in general.

The actual work on curriculum development started with review of current courses of relevant profiles and evaluation of the academic and technical potentials of UB. The summary of this investigation was presented during a kick off meeting at the UB in October 2007. All the consortium members ensured the common understanding of the project goals, outcomes and
activities as well as roles of each partner were assigned in details. The coordination, management and communication procedures were discussed and settled as well. During the kick-off meeting the project management group was established. Moreover, a responsible teacher for each new course was assigned.

The project will develop an interdisciplinary curriculum formed in three subject blocks: economic, legal and technical ones. Therefore, the new Master programme will focus on combination of issues related to land, economic development, socio-political organization, and environmental sustainability. The following twelve courses with preliminary number of ECTS credits are to be developed during the project:

Legal block:
- Real Property Law
- Environmental and Planning Law

Economic block:
- Property market
- Real Property Investment Analysis
- Real Property Valuation and Taxation

Technical block:
- Natural Resources
- Infrastructure
- Geographic Information Systems
- Land development and consolidation, basic course
- Land development and consolidation, continuation course
- Urban Land Management
- Negotiation and communication.

The thesis work will consist of in-depth studies in a subject area within the scope of the program and has 30 credits.

To assist in teaching process, new teaching materials are to be prepared. Lecture notes of new courses as well as textbooks will be developed by the UB teaching staff in co-operation with academic staff from KTH, TKK, and University of Ljubljana through study of existing European textbooks in land management, discussions and analysis of teaching materials used by the EU consortium members.

In parallel with development of new courses and new teaching materials, the Centre for Land Management is to be established at the UB (Faculty of Civil Engineering). That Centre will consists of a library supplied with modern literature and IT laboratory. The laboratory will be equipped with PCs and, consequently, each student will have his/her own workplace during the seminars. This laboratory will intensively be used for teaching/studying of Master
students as well as for examination and, therefore, new teaching methodologies will be applied. The total number of graduate students to be educated in these laboratories is estimated as 20-25 annually.

Retraining of the Serbian teachers includes several study visits to the EU consortium universities for experience exchange, learning new teaching methodology and acquiring new ideas. The study visits will last two weeks at each EU consortium member. To improve communicative skills of the teaching staff of the Faculty, the intensive English courses are planned. They will be taught by English teachers of respective universities on-site. Moreover, methodological seminar at KTH is to be organised for the Serbian teachers. It will include presentation of existing IT teaching methodologies applied at KTH and in particular a study visit to KTH Learning Lab. The participating Serbian teachers will be able to test on-line technologies and to discuss them with KTH teaching staff.

Within the project student mobilities in both directions (i.e. CS-EU and EU-CS) are planned. In particular, one postgraduate student or a young teacher with relevant profile from UB takes part in the International Master programme in Land management at KTH. The intention is to prepare the student for teaching the newly developed courses at UB and, thereby, to support education and training of a young teacher by exposing them to other educational environment. The student selection procedure will be undertaken by KTH staff at UB. The selection criteria are as follows: potential students shall be postgraduate students in law, surveying or economics of UB or a young teacher shall be employed by UB. The selection procedure will consist of two parts, namely written translation (i.e. from Serbian to English) of a piece of professional text as well as oral discussion of relevant issues. The decision will be made by the KTH staff in co-operation with UB administration on the basis of level of students’ performance. Another student mobility implies that one graduate/postgraduate student from any of EU consortium members goes to Serbia for a month for practical placement in a company or an institution dealing with legal land issues in Belgrade. The main selection requirement is English skills with basic knowledge of Serbian as well as studying in the relevant field at home university. The aim of this mobility is for students to collect factual information for writing a thesis in the future and to reinforce mutual co-operation between the universities involved.

Dissemination activities include the dissemination conference to be held at UB (Faculty of Civil Engeneering) in May 2009 with active help from all consortium members. Teaching staff and students of UB as well as the Reference team and professionals from the Republic Geodetic Authority and other government authorities will be invited. The website is to be developed to disseminate the results and to increase the public awareness about efficient land management. In particular, the websites will become a place where different opinions not only of academia but also of professionals from practice about the existing situation in land management of Serbia will meet and be openly discussed. To promote the new Master programme, an advertising campaign is to be undertaken in Serbia in March-June 2009. To make this campaign visible, informational booklets about a new programme and posters about the on-going project will be published and distributed. The graduate students and teachers

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Integrating Generations
FIG Working Week 2008
Stockholm, Sweden 14-19 June 2008
involved will advertise a new Master programme at the local and national level in Serbian mass media.

The training courses for enterprisers, local authorities, private sectors, and other target groups are not formulated as an outcome of the project, but during the development of the new Master programme possibility to use them as a base for training courses for different target groups in the future will be discussed.

5. CONCLUSION

The successful development of this Tempus project is of great importance to the Faculty of Civil Engineering, specially to its Department for geodesy and geoinformatics. Special attention is point out to the international cooperation between Serbian teachers and EU universities. They will improve their mass of professional knowledge and take new experiences in teaching methodology. The Faculty of Civil Engineering is a main beneficiary of this project and it is expected that this project will facilitate teaching staff to be more aggressive in their efforts to improve education process in accordance to European education changes and to be more mobile and cooperative in international cooperation. RGA as a state institution with notable role in land administration sector and potential organization that will employ students from subjected course is one of the important Project participants.

REFERENCES


BIOGRAPHICAL NOTES

Branko Bozic
From 1982 to 2006 employed at the Military Geographic Institute in Belgrade. Work activities related to surveying lasted until going to the Faculty. Since 2000 assistant professor at the Department of geodesy at the Faculty of Civil Engineering in the area of surveying. From 2003 to 2005 Head of the Institute for geodesy at the same Faculty. From 2001 to 2005 Head of Belgrade's Geodetic Society. Since 2006 lecturer in several subjects related to the adjustment and calculation. During the same period Head of Belgrade's other technical discipline designers in Serbian Engineering chamber. Author of more than 30 articles and projects and editor of 3 books.

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B.Sc. in Geodesy, engineering 2003, (five years studies) the University of Belgrade, Faculty of Civil Engineering, Department of Geodesy. From July 14, 2003 started with work in the Republic Geodetic Authority of Serbia (RGA), Regional Cadastre Office of Pancevo. From September 2004 – July 2005 attended Master’s Programme in Land Management on Real...
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