

Perspectives for urban experts in future urban development and mobility practice in Serbia

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1 ABSTRACT

The focus of this paper is in reviewing the possibilities of new designed and tested teaching concepts, methods and skills at the Faculty of Architecture Belgrade University (FABU) based on the contemporary theoretical and practical European approaches in the field of sustainable urban transport and mobility and implications for future urban experts in the field of urban development and mobility practice in Serbia.

The importance of knowledge and information is rapidly rising in the knowledge economy especially in cities as nodes of production, processing, exchange and even trade of knowledge. Important role in that process which occurs in cities belongs to the Universities and research institutes, beside many other relevant actors like public authorities, NGO's & CBO's, private companies, civil society.

In the process of Serbia's accession to the EU the whole country is in the process of reform dealing with burdens from the past and aiming towards European values. Legislative as well as capacity building activities are present from the year of 2000 by democratically elected governments and by international NGO's and official governmental organizations (EU commission...).

FABU participates in the FP6 EU funded project 'Sustainable Surface Transport' as one of the partners in the project, disseminating knowledge on sustainable urban transport and mobility.

The project has enormous importance for improvement of all our institutions in the field of clean and sustainable urban transport systems and promotion and participation of Serbia in European Union projects. Benefits of using ELTIS web site is that experts from various fields can expand their knowledge on sustainable urban transport and mobility systems using findings and specific experience from other countries.

With the aim of disseminating knowledge on sustainable urban transport and mobility in Serbia the Faculty of Architecture realized several activities and results on urban transport and mobility issues:

- Promotion of ELTIS web site on seminars, round tables and trainings delivery in Serbia to public sector representatives (ministries, local authorities, urban planning traffic departments), NGO's (bicycle associations), private sector urban design offices.
- Translation of 56 English case studies into Serbian language and 13 Serbian case studies accessible on the ELTIS web site.
- In the education curriculum at the Bachelor level at the Faculty of Architecture new subject 'Mobility in cities' was established two years ago where students work with realized EU and Serbian case studies on sustainable urban transport and mobility and its implications on urban structure, compare EU & Serbian context and give recommendations in mentioned field in soft aspects for policy issues, urban planning & management concepts, and urban design.

These new teaching concepts and methods designed & conducted by the authors of this paper were tested for 2 semesters and proved to add value to the knowledge and specific expert skills in two direct ways. One was that the increased demand from the students on sustainable design and urban mobility led to the additional subject 'Traffic in cities' introduced last year. Another direct result was visible in the Urban Design Projects on Bachelor and Master level of studies where students applied new knowledge and skills on aspects of urban design and planning of the development of cities and reaching liveable and healthy cities for all users in accordance with principles of sustainable mobility concepts.

The paper explores and discusses new knowledge from the comparison of European and Serbian context and its applicability in the future urban development and mobility education and practice in Serbia.

2 INTRODUCTION

Aware of necessity of significant changes in Serbia, we are nowadays dealing with the problem of defining how to adjust our existing institutional and public authority capacities and their activities to the strategic development model demands. The major problems are appearing from incompatibility of existing

institutional and governmental capacities and their activities, established 50 years ago, in comparison to the organizational demands derived from new modern model of governance and management. Changes that are to be made mean fundamental reorganization of public sector.

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3 CHALLENGES FOR FACULTY OF ARCHITECTURE'S PARTICIPATION IN EU FUNDED PROJECTS

Under the coordination of prominent Austrian scientific research association Forschungsgesellschaft Mobilität gemeinnützige GmbH FGM AMOR Austrian Mobility Research (AMOR) Faculty of Architecture University of Belgrade (FABU) participates as a partner in the FP6 EU funded project 'Sustainable Surface Transport' from the year of 2005.

The Project aims to achieve international cooperation and review the possibilities of application of the results achieved so far within the EU FP6 projects in countries that have recently become EU members or countries that are its potential members. Participation of FABU in the Project is of the great importance, since it was the first time that one of the countries from the Western Balkans, potential EU members was included in the EU FP6 program.

European Union (EU) and European Commission have made great efforts for a long time in promoting sustainable urban transport. One of the ways that is the part of the Project is European Local Transport Information System (ELTIS) – an initiative of the European Commission's Directorate General for Energy and Transport. ELTIS is website that provides access to the best scientific and practical results and research materials for training and learning in the field of sustainable transport systems. The aim of ELTIS is to provide information and support a practical transfer of knowledge and exchange of experience in the field of urban and regional transport in Europe.

The Project's primary objectives are:

- to make easier to use and allow users easy access to all relevant information (news, files, materials)
- to increase the number of available examples, materials, and translations and to include new content and topics;
- to increase the number of users through the construction of "brand" ELTIS Web site and allow a professional Marketing (goal is that ELTIS website become "Google" search engine in the field of transport);
- to focus attention to the new EU countries and countries in the EU accession process through a system of expert training and workshops, translation of the most important examples of the languages of these countries and to offer active user support;
- to offer non-traditional ways of knowledge dissemination.

Through the ELTIS website it is possible at this moment to directly establish more than 150,000 contacts through various user's network that ensures the project's broad and far-reaching impact even after completion (expected in april 2010). It has been expected in 2005 and has been realized so far that inclusion of non-European partner network (Eastern European, Asian and Latin American) will enable new initiatives for the successful exchange of knowledge, and Europe on the other side will be able to promote its own approach to issues of sustainable urban transport systems on a global level and contribute to global dialogue.

The expected result of the implementation of the Project is increased level of knowledge and practical use of research results developed in the enlarged EU. It should be achieved through expanded ELTIS service, specific activities in the field of education and training of professionals and focused on development initiatives.

In that respect, FABU prepared and realized several activities within the Project with direct showing benefits to relevant stakeholders such as policy and decision makers, politicians, heads of urban management departments, public transport operators, practitioners in the field, university staff, researchers, students:

- Access to the Information network users through ELTIS web service;
- local representation of realized and potential projects (both research and practical) in the field of sustainable transport systems at European and world level;
- involvement in a series of workshops on topics of ecological and sustainable urban transport system that FABU will organize and implement;
- access to brochures and other relevant research and practical materials specifically oriented to the problems of the partner countries (in English and Serbian language);
- the possibility of inclusion in training courses for the training of experts.

The project has enormous importance for the capacity building activities of our institutions and organizations in the field of clean and sustainable urban transport systems and promotion and participation of Serbia in European Union projects.

Benefits of using ELTIS web site is that experts from various fields can expand their knowledge on sustainable urban transport and mobility systems using findings and specific experience from other countries.

With the aim of disseminating knowledge on sustainable urban transport and mobility in Serbia the Faculty of Architecture realized several activities and results on urban transport and mobility issues:

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4 REFORM OF HIGHER EDUCATION AT THE FACULTY OF ARCHITECTURE BELGRADE UNIVERSITY (FABU) AND RELATION TO EU PROJECT

University of Belgrade exists from 1846. Throughout the history it has changed several times its organizational form, but on the other hand many of the principles are rooted deep and it is almost a rule that change is something that happens very slowly in academic world.

Until the year of 2005 organizational form and structure of FABU dated from after the World War Two with cathedras as basic organizational units with different subjects within them. There were several attempts of radical change of educational plan and program and therefore organizational structure of FABU, but more or less they remained incremental or temporary.

Most of the proposed changes in the past failed due to several reasons, but most important was the resistance of people to change due to established norms and values within character of organizational structure mentioned above. Another reason was that there were not real pressure from outside environment that would call for fundamental change, especially in "well designed and planned system as Socialist centrally driven system was".

Things have changed with the political and overall changes in Serbian society at the end of '90s. Shifts from centrally planned to transitional economy in Serbia and attempts to follow European integration processes have had major impact on the FABU. Most important inputs are: 1) Bologna declaration, 2) Legislative change in Higher education in Serbia (new Law on Education from 2005) and 3) obvious need for improvement of Educational Processes and Programs at the Faculty.

Finally, Bologna declaration brought the change in 2005 both in organizational system of the Faculty in terms of:

- 1. three years of basic, Bachelors studies and two years of Master studies;

- 2. cathedra based organizational arrangement to independent subjects and their relations due to need of Educational programs;

Those changes created the platform in which new elective subjects could be established and included in the Faculty curriculum with the cooperation with other institutes or within national or international projects.

5 NEW CONTEMPORARY MOBILITY ISSUES AND CONCEPTS FOR FUTURE URBAN DESIGNERS AND ARCHITECTS

Education on the subject ‘‘Mobility in cities’’ is directed to explore contemporary aspects of multimodal transport in urban areas in order to achieve sustainable development of urban areas. Education aims to reach the outcome (product, result, effect) and the process (action plan, working method, route, activities). The goal is that students gain a basic understanding of modern management concepts in transportation systems and mobility in relation to land use in urban areas. It is also important that they understand the role of architects and urban designers and planners in these processes along with other experts and stakeholders such as public authorities representatives, local communities and their needs, private sector interests, etc.

Students acquire knowledge on methods, techniques and skills on organization of sustainable urban transport systems in relation to land use in order to apply their knowledge and learn what kind of implications will decisions based on principles of sustainable transport will have on the spatial organization.

The main goal in the teaching process is dissemination of aspects of design and planning of urban structure development in order to achieve higher levels of quality of life in urban areas in accordance with the principles of sustainable urban transportation systems.

Subject outcomes are closely related to the problems of urban design and planning and students applied new knowledge on the subject Urban Design Project on the same semester and in the Bachelor Design Project.

The basic knowledge and learning outcomes that students gain on the subject are:

- Understand key contemporary disciplinary issues related to enabling multimodality problems of transport and mobility of people in urban areas through the review of the basic assumptions in the field of sustainable transport: mobility management, parking management, relation of land use planning with the sustainable transport, aspects of safety and environmental protection.
- methods of mobility management, parking management and relation of land use planning with the sustainable transport
- Practical knowledge of the principles of urban design in accordance with the requirements of high mobility and sustainable transport in the city.

This theoretical and practical knowledge increased the competence of students in solving problems of urban design and planning in accordance with the principles of sustainable transport systems in the city and skills to collaborate with experts in the field of integrated transport in solving urban problems in a competent way.

Method of teaching that were used during the course were divided into two main blocks:

- Block of interactive lectures divided into four groups of basic trainings in the field of relation of land use planning with the sustainable transport, mobility management and transport, parking management, and safety and environmental protection;
- Block of exercises divided into two parts where students work on:
 - 1. The study of literature and analysis and comparison of implemented cases from the European Union and Serbia from one of these areas of their choice;
 - 2. Thematic exercise: analysis of selected specific real urban situation and forming conceptual proposal and solutions from one of these areas of their choice;
- Two presentations of added knowledge on key issues based on the results of implemented: 1) research, analysis and comparison of cases, and 2) the proposed solutions;

Final research report include findings from the research analysis and comparison of EU and Serbian cases, as well as guidelines for soft policy measures in the field of urban design and planning in accordance with the principles of sustainable transport in our community.

Students deal with important questions such as: What is missing in Serbia so that similar principles / decisions / actions like in EU can be applied in this context (for example: lack of integrated policies, transport awareness campaigns, institutional resources and know-how, the will to change or learn, the participation of relevant stakeholders, guidelines, laws, monitoring results, etc.)? What are the benefits in Serbia or what is better done than in the European Union, or what the pitfalls are? Further recommendations are given as the series of future and next steps in capacity building, travel awareness, stakeholders participation, campaigns targeted towards end – users.

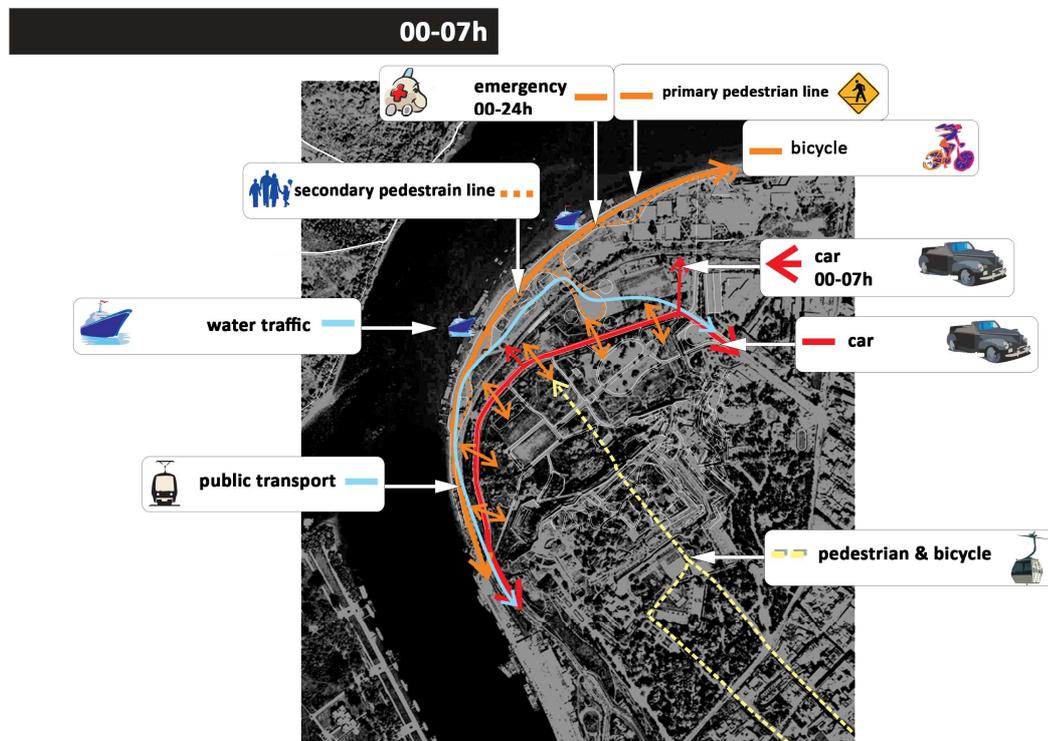


Fig. 1: Application of knowledge from “Mobility in cities” on student’s Master Urban Design Project (students Jovana Pavić and Stefan Drašković)

6 CONCLUSIONS AND EXPECTED IMPLICATIONS

Following criteria that the teachers and the authors of this paper included in the evaluation of results and findings are important both for the improvement of the subject “Mobility in cities” in the education process and for the specific knowledge and skills in the field of sustainable transport for future urban designers and architects.

- “emotional perspective” in order to support ideas and concepts for clean and sustainable urban transport like e-mail gimmicks, cartoons and illustrations;
- acceptance of professional English language terms with the outcome of reading and understanding English literature in the field of sustainable transport and sharing knowledge and experience with the global community;
- flexible process - students attitudes / stakeholders in real arena towards new topics (student’s identification of specific Serbian cases that are further presented, discussed and approved both by teachers and other students);
- identification due to flexible process that creates sense of belonging within the group and forming of identity trough the Case (for example – students often tend to call students upon specific cases they have elaborated – “Drunken drivers” for special service for drunk car drivers that want to safely be driven home by motor bikers);
- non-traditional ways of information and dissemination trough visual products from ELTIS such as brochures, website, presentations;

- attendance on local conferences and seminars in Serbia and enlargement of knowledge with relevant stakeholders from the region and neighbouring Balkan Peninsula countries;
- interactive workshops with guest lecturers from public enterprises in the field of sustainable transport, representatives of NGO's and CBO's;
- 24/7 on line support and e-mail communication with students / or end-users in "real urban arena" up to the creation of mobility centre for information; and,
- student's point of view on new gained knowledge and skills and general satisfaction related to expectations from the beginning of the subject period (beside general evaluation at the Faculty level).

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