

## Standard Summary Project Fiche – IPA centralised programmes

### **Project number 8: Higher Education Teaching Infrastructure Programme**

#### **1. Basic information**

- 1.1 CRIS Number: 2009/021-765**
- 1.2 Title:** Higher Education Teaching Infrastructure Programme
- 1.3 ELARG statistical code:** 02.26
- 1.4 Location:** Republic of Serbia

#### **Implementing arrangements:**

- 1.5 Contracting Authority:** EU Delegation to the Republic of Serbia
- 1.6 Implementing Agency:** EU Delegation to the Republic of Serbia
- 1.7 Beneficiary (including details of project manager)**

**Ministry of Education of the Republic of Serbia**, Secretary of State, 22-26, Nemanjina, 11000 Belgrade, Serbia.

**Ministry of Science and Technological Development of the Republic of Serbia**, Secretary of State, 22-26, Nemanjina, 11000 Belgrade, Serbia.

**The Senior Programming Officer** is the State Secretary of the Ministry of Education. Address: 22-26 Nemanjina St., 11000 Belgrade, Serbia.

Project implementation will be coordinated by the Ministry of Education and Ministry of Science and Technological Development.

A Project Team consisting of five people will coordinate project implementation.

A Steering Committee will comprise representatives of the Ministry of Education, the Ministry of the Science and Technological Development, the contracting authority and will have regular meetings every six months, or as needed. The Steering Committee will be chaired by the Senior Programming Officer. The Steering Committee will supervise the project activities/outputs.

- 1.8 Overall cost: 25.000.000 EUR**
- 1.9 EU contribution: 25.000.000 EUR**
- 1.10 Final date for contracting:** 2 years after signature of the FA
- 1.11 Final date for execution of contracts:** 4 years after signature of the FA
- 1.12 Final date for disbursements:** 5 years after signature of the FA

#### **2. Overall Objective and Project Purpose**

##### **2.1 Overall Objective:**

Support the development of a knowledge based economy in Serbia that responds to future labour market demands in line with the Lisbon Strategy.

## 2.2 Project purpose:

To improve the quality of education and training in Serbian higher education institutions which is demanded by the new knowledge-based society, modern learning processes, standards of industrial research and emerging labour market needs.

## 2.3 Link with AP/NPAA / EP/ SAA

In accordance with the article 102 of the **Stabilisation and Association Agreement(SAA)** the priority for higher education system is to realise the objectives of the Bologna Declaration. Education reform will ensure access to all levels of education and training in Serbia is free of discrimination on the grounds of gender, colour, ethnic origin or religion. The relevant Community programmes and instruments shall contribute to the upgrading of educational and training structures and activities in Serbia. Cooperation shall take due account of priority areas related to the Community *acquis* in the education reform sector.

The priorities for Serbia in the fields of Education and Research, defined by the Council Decision of 18 February 2008 on the principles, priorities and conditions contained in the **European Partnership** with Serbia including Kosovo as defined by the United Nations Security Council Resolution 1244 of 10 June 1999 and repealing Decision 2006/56/EC are to continue efforts to improve education system, establish better links between vocational and higher education and the labour market and economic needs, strengthen administrative capacity and improve coordination among relevant bodies (page 9, L 80/54).

As underlined in the **European Commission Progress Report 2008** (4.1.9. Education and Research, p.39), this project builds the relationships between Serbian education and labour market needs in order to expand employment generation opportunities. This project will improve education and teaching capacities in terms of providing education which equips young people with practical skills that meet the labour market requirements and promotes life-long learning. Reinforcing Higher Education Teaching capacities promotes increased postgraduate providing more competitive project proposals aimed at 7<sup>th</sup> framework programme (FP7).

This project is closely linked with the strategic objectives of the **Lisbon Agenda** which strongly encourages universities to embrace the knowledge-based society. The Lisbon Agenda prioritises the development of high-level skills through applied scientific knowledge, entrepreneurial acumen and exploitation of communications and information technology.

## 2.4 Link with MIPD<sup>1</sup>

A main priority of the MIPD 2009 – 2011 socio-economic chapter (section 2.2.2) is the promotion and implementation of education system reforms in order to support economic development and to meet the demands of the Lisbon agenda.

This project will address the following MIPD Priorities under Socio-economic Criteria in the field of education (paragraph 2.3.1.2, page 23):

- Promoting and implementing the Reform of the Education System to support the development of economy and to meet the demands of the Lisbon agenda.
- Provide soft and hard support for education, higher education, and vocational education and training.

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<sup>1</sup> Multi-Annual Indicative Planning Document

- Fostering a better match between education and labour market needs (school to work and university to work principle<sup>2</sup>) by adapting education and training systems to new competencies' requirement and by enhancing the involvement of relevant stakeholders.

## 2.5 Link with National Development Plan (where applicable)

N/A

## 2.6 Link with national/sectoral plans

One of the key strategic priorities of the **National Investment Plan of the Republic of Serbia for 2008**, is to support “Education focused on improvement of knowledge and skills needed for growth and improvement of competitiveness of the national economy and technological development “(Article 2). Mid-term priorities for the education sector in the NPI include: and increase education resource allocation from GNP to 6% as the basic prerequisite for providing quality education for all and reform of financing at all Education levels.

Moreover the **National Plan for Integration (NPI) incorporates the Lisbon recommendations** of 2000 as well as the ‘3% objective’ related to budget allocations for research and development by 2010. It envisages budget allocations for scientific and research activity to the amount of 1% of GDP in 2010 in order to increase Serbia’s involvement in FP7 and contribution to the European Research Area.

**The National Strategy for Economic Development of the Republic of Serbia** for 2006-2012 defines knowledge as the basic capital of future development of The Republic of Serbia. The phases of educational system reform of the Republic of Serbia include: balancing general and vocational, i.e. theoretical and practical education, and the further modernization of the teaching content, organization and methodologies.

**The National Employment Strategy** (2005-2010) identifies three main goals: (i) increasing employment, (ii) investing in human resources and increasing the quality of labour supply, and (iii) ensuring a more cohesive labour market, in line with goals set out for the EU by the Lisbon Council.

The **Adult Education Strategy** adopted in December 2006 supports the modernisation of the education system in order to: improve the quality of education; improve financing and management in education; strengthen the active involvement of all stakeholders; enhance professionalism and efficiency in education aimed at promoting life long learning.

**The Memorandum of Understanding between the European Community and the Republic of Serbia on the Seventh Framework Programme** which contributes to the creation of the European Research Area and Innovations (2007-2013), signed in June 2007, envisages that Serbia participates in the Seventh Framework Programme activities under the condition that it keeps in line with requirements stipulated by the Framework Agreement and in line with goals, deadlines and requirements set in the Memorandum of Understanding and its annexes. This project will enhance Serbian participation in the Framework Programme by producing more research graduates and research proposals.

### 3. Description of project

#### 3.1 Background and justification:

As with other European countries, the Serbian government regards the Higher Education sector as a crucial national asset in meeting the demands and challenges of economic globalisation. Serbian Universities are seen as vital sources of new knowledge, innovative thinking and as providers of skilled personnel for the economy.

To date through the Bologna Process and the Tempus Programme, Serbia has used the opportunities presented by the EU in promoting the modernisation agenda for University reform as a core condition for the success of the broader Lisbon Strategy.<sup>3</sup> The European Commission has defined the role of universities as the “knowledge triangle of research, education and innovation”<sup>4</sup> The European Commission has encouraged governments to view high quality, internationally competitive research and higher education, contained within universities, as prerequisites for long-term success in a globalised knowledge economy.

Within this wider European debate, the key policy issue to be addressed is how European governments can support their university systems to affordably embrace both research capable of competing globally, while providing higher education qualifications for larger segments of the rising generations. The Serbian government has been identifying ways to address this policy issue. The government’s approach reflects the EU agenda in terms of supporting Universities as institutions to provide advanced skills training as sources of innovation that can be translated into advantage in a fast changing global economic environment.

Support actions to date in Serbia have involved the use of regulation (Law on Higher Education of the Republic of Serbia, 2005) and incentives (especially financial) to support and facilitate change in the Serbian university sector. The Law on Higher Education (Article 4) has introduced:

- harmonization with the European higher education system and promotion of academic mobility of teaching staff and students
- participation of students in governance and decision-making, in particular in matters relating to teaching quality assurance
- Standards of quality assurance and efficiency of studies
- Unity of teaching and scientific research and/or artistic work

Furthermore, the Law provided for the establishment of a National Higher Education Council that is in charge of ensuring development and promotion of quality higher education. In addition a Conference of Universities was created under the law for the “coordination of work, formulation of common policies and realisation of shared interests.” Another important element was the inclusion of student representatives in the work of decision making bodies and the formal creation of Student parliaments/associations.

Serbia has six state universities - University of Belgrade, University of Arts, Belgrade, University of Nis, University of Kragujevac, University of Novi Pazar and University of Novi Sad. The total student body is approx 220,000 students (a doubling of numbers since the 1990s) with over 10,000 University teaching staff. The fees for 112,000 university students

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<sup>3</sup> Delivering on the modernisation agenda for universities: education, research and innovation. European Commission. COM (2006) 208.

<sup>4</sup> *The European Research Area: new perspectives*. European Commission. COM (2007) 161.

are paid by the state budget. There are also a number of private universities but the majority of students go to public universities.<sup>5</sup>

The Ministry of Education has determined the need for well directed investment from national and international sources in the Third Level Education sector that will promote:-

- the functions of universities in providing direct in-out benefits for Serbian society's economic prosperity;
- the direct relationship between university applied research and economic prosperity through the medium of scientific and technical innovation spreading into the economy;
- the high correlation between prosperity, social contentment and university research in science and technology; and;
- the potential of universities to play a central role as dynamos of growth in the innovation process and generators of employment and wealth creation

The emphasis on Universities contribution to the economic development reflects the fact that the Serbian economy which has recently seen high GDP growth rates (+6 % in 2006 and +7.% in 2007), is not producing more employment generation opportunities. At end September 2007, 808.200 persons were registered as unemployed, and almost a half of them were registered as first-time job seekers, more than a half being less than 40 years of age. The employment rate rose to 51.5% of the working-age population in October 2007, while the unemployment rate fell to 18.8% compared with 21.6% a year earlier (Republic Statistics Office).

The educational structure of the unemployed shows a high percentage of those with elementary education (27.7%) and secondary education (55.1%). **Importantly, 31% of unemployed persons possess a higher education degree.** The duration of job-seekers is lengthening: up to one year 28% of the unemployed, one to two years 20% of registered unemployed and over two years 50% of the registered unemployed. These long durations of job-seeking results in a rapid loss of knowledge and skills. Analysis suggests a relationship between the low levels of historical investment in higher level education teaching resources and the incompatibility of graduates with the skill demands of the labour market. According to estimates, some 40% of students never finish their studies (source: *Centre for Educational Policies*). Moreover graduate students are equipped with extensive theoretical knowledge but there is a lack of functional knowledge and problem-solving skills. The number of research graduates is low with a preference for post-graduate studies in overseas Universities which contributes to brain drain. A key factor in the student drop out rate and not staying to further their studies is the lack of teaching and research resources in Serbian Universities.

The Bologna process is making steady process in Serbian Universities. The accreditation process of curricula of primary, masters and doctoral degrees at all Universities in Serbia is on-going, and finalization of accreditation is planned for end 2009. Currently in Serbia there are about 8,500 post-graduates engaged in research work in around 100 registered science and research organizations (SRO) and at about 80 faculties. As the majority of these research institutes are part of the public universities, the development of integrated educational/research system is of an utmost priority for both the Ministry of Education and Ministry of Science and Technological Development.

Serbian universities have successfully utilized the support under the Bologna process and the Tempus Programme for the modernization of the curricula, university management as well as

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<sup>5</sup> This project will only support Serbia's Public Universities.

interaction with industry and civil society. As per the MIPD further progress is required in the improvement of the equipment and teaching infrastructure facilities (hard investments).

To assist in remedying this situation, this project will cover activities related to the modernisation of teaching assets ( lecture rooms, seminar rooms, labs etc ) and the supply of teaching equipment for Universities as well as relevant works that are needed for the installation of the equipment. The supply of new equipment may acquire additional improvements in the equipped laboratories and other premises. Extensions to existing university teaching and research rooms to accommodate more students will also be supported. The rehabilitated teaching spaces and equipment will be available for all levels of University students/researchers and there will be a focus on the rehabilitation of teaching areas that are multi-purpose in terms of accommodating the maximum number of students in modern teaching environments. Accessibility for students with special needs will be incorporated in the rehabilitation of teaching resources and installation of equipment.

Importantly this IPA 2010 project will be directly linked to the implementation of the **200 Million Euro EIB funded R&D Infrastructure Investment Initiative** which will invest in the R/D capabilities of Serbia. This Initiative will support the following mix of hard and soft projects:-

- Building the Belgrade Science and Technology campus (using the existing infrastructure at the Institute of Physics in Belgrade)
- New capital equipment for research
- Upgrade of the Academic Computer Network and infrastructure for the Supercomputing initiative
- Capacity and space upgrade for the Science and Technology park in Niš
- New apartment buildings for young researchers (in Belgrade, Niš, Novi Sad and Kragujevac)
- Human resources program (bringing around 1400 Serbian scientists working abroad back to Serbia)
- Infrastructure for the Ministry of Science and Technological Development
- The Petnica Science Centre
- The Mathematical High School Campus
- New Science Centre in Belgrade

These projects have been screened and selected by the Ministry of Science on the basis of: Impact on Implementing the National R/D Strategy, linkages between hard (infrastructure) and soft (human resource development), impact on employment generation social inclusion, gender balance, environmental issues, local commitment, ownership and management commitment including the financial capacity to operate and maintain project outputs.

The rehabilitation of teaching space and provision of equipment under this project links up with the R&D Infrastructure Initiative by increasing the flow and quality of graduates engaged in R&D to meet the demands of the labour market. The project proposals from the six public universities that will be supported under this project will be identified and screened prior to the project commencing. Their initial selection has been made on the principles identified above namely; Progress in Bologna standards, links to skills needs of the Serbian economy, implementation of the Serbian Employment and Economic Development Strategies, accreditation in accordance with Law on Science and Research, participation in the Tempus

programme. Moreover projects will be only be supported that implement the University Development Strategy with the financial resources to meet the full maintenance costs of any project supported with EU funding. In all over 20 projects have been selected for support consideration. Project actions that can be supported include:

- Rehabilitation and renewal of worn out teaching buildings, lecture and seminar rooms
- Extensions of existing teaching spaces to accommodate more students
- Supply and replacement of teaching equipment to modern EU standards including furniture.
- Rehabilitation of reading and study rooms
- Supply of power and communication resources to modern EU standards
- Full ventilation and lighting of teaching spaces
- Rehabilitation and expansion of student communal areas and rest rooms.

As well as the National Labour Market Strategy, this project is also using the EU funded study 'University Education and Employability in Serbia: A Study to Build Graduate Conversion Systems to Meet the Needs of the Economy' (2007) to focus teaching infrastructure investment. This study identified key Third level education disciplines demanded by the labour market. These disciplines included - Information and Communication Technology (ICT), Electrical Engineering, Natural Sciences (bio-chemistry, biology,) Environmental Engineering, Civil Engineering, Agricultural Science, Multi-Media/Digital Media and Business Studies.

To review the selection process and facilitate the timely implementation/contracting of this programme, the identified projects will be undergo a further feasibility analysis and be prepared for contracting (procurement documentation) under the on-going CARDS 2006 Project Preparation Facility which is designed to prepare projects for future IPA funding.

### **3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)**

- The project will contribute to the rehabilitation of Serbia's Third Level Education Teaching Infrastructure and facilitate the improved instruction of graduate students.
- The project facilitates the draw down of a EIB loan of 200 MEURO by directing resources to undergraduate teaching infrastructure and providing a PMU to manage the loan arrangement.
- Increased teaching capability will allow Universities to attract more students, research funding and offer a greater variety of teaching courses.
- The project will be sustainable because the key project selection criteria will include the capability of the University to maintain and meet annual operational costs of the supported Teaching Infrastructure assets.
- The increase in University Teaching capacities in Serbia will also attract more students from Neighbouring countries particularly Montenegro and Bosnia Herzegovina.

### **3.3 Results and measurable indicators**

#### **Result 1: Selection and Implementation of Priority Teaching Infrastructure and Supply Projects**

*Measurable indicators for reviewing progress include:*

- Number of Projects meeting Bologna, Employment/Labour Strategy, Employer Skills needs
- Number of Projects that will support graduate flow to projects supported under EIB funded R/D Infrastructure Initiative
- Number of projects meeting University Development Strategies with multi-annual budgets committed for Maintenance and Operational Costs
- Number of Projects with Full Pre-feasibility and Feasibility studies (Financial affordability analyses, Budgetary planning, Environmental and Social Impact Assessments)
- Number of projects with Completed design (CD) including all technical specifications, bills of quantities and procurement documentation.
- Number of Teaching Spaces Rehabilitated
- Number of Teaching Equipment Units installed.
- Number of University lecturers trained in new Teaching and Research Equipment
- Increase in student numbers utilising teaching spaces and equipment

#### **Result 2 Technical Assistance to support implementation of Teaching Infrastructure Projects**

*Measurable indicators for reviewing progress include:*

- Launch of Service Tender to recruit full Project Management Unit
- Number of Projects Reviewed from University Teaching Infrastructure Project Pipeline
- Number of Projects supervised from University Teaching Infrastructure Project Pipeline
- Number of Project Planning Schedules benchmarks realised
- Number of Projects completed meeting full design standards and procurement demands

#### **Result 3: Technical Assistance to supervise implementation (Project Management Unit) of 200 MEURO R/D Infrastructure Initiative (EIB)**

*Measurable indicators for reviewing progress include:*

- Launch of Service Tender to recruit full Project Management Unit
- Number of Projects supervised from R&D Infrastructure Initiative
- Number of Project Planning Schedules benchmarks realised
- Number of Projects completed meeting full design standards and procurement demands



## **Activities:**

### **Related to Result 1: Selection and Implementation of Priority Teaching Infrastructure and Supply Projects**

- Project selection from Teaching Infrastructure Pipeline that meet priorities including impact on labour market, projects with full feasibility analysis and completed contracting and procurement documentation. (Up to 20 projects)
- Implementation of projects that rehabilitate Teaching Spaces
- Implementation of new Teaching Equipment Units

### **Related to Result 2: Technical Assistance to support implementation of Teaching Infrastructure Projects**

- Review of tendering dossiers and contracting documentation
- Support to tendering and contracting process
- Supervision of works and supply contract implementation on time and under budget
- Support to all reporting requirements as under EU standards

### **Related to Result 3: Technical Assistance to supervise implementation (Project Management Unit) of 200 MEURO R/D Infrastructure Initiative (EIB)**

- Review of tendering dossiers and contracting documentation
- Support to tendering and contracting process
- Supervision of works and supply contract implementation on time and under budget
- Support to all reporting requirements as under EU/EIB standards

The project will be implemented through 2 service contracts and a number of works and supplies contracts to be determined.
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### **3.6 Conditionality and sequencing:**

- The final beneficiary of this project is the University student. Teaching Infrastructure Projects will only be supported that address teaching requirements in the Universities. No funding will be made available for University administration rooms etc. No projects will be reviewed for funding that do not directly address a teaching infrastructure need that directly benefits the Serbian University Student.
- The University(s) is committed to the maintenance and good operation of projects supported under this programme. This translates into human resource and budget commitment for maintenance and day to day operational costs. The University is committed to immediately putting into operation upon completion teaching assets funded under this project.
- Projects will only be supported that have been exposed to a full feasibility analysis and can be procured and implemented in a timely fashion.
- Prior to project launch the University(s) will have any building permits or legal documents in order.

- The sequencing of projects will be based on a project quality in terms of strategic impact, readiness, implementation efficiency and sustainability.
- The success of the project is dependent on the commitment by the Universities working together and with the Ministry of Education/Ministry of Science and Technological Development in addressing any emerging issues with implementation.

### **3.7 Linked activities**

The CARDS 2006 **Project Preparation Facility** will provide technical assistance for project preparation and associated tendering documentation to support project implementation.

The CARDS 2006 funded **‘University Education and Employability in Serbia: A Study to Build Graduate Conversion Systems to Meet the Needs of the Economy’ (2007)**. This study identified the key Third Level skills demanded by both Serbian and overseas’ companies.

**The Council of Europe** is implementing the project Strengthening Higher Education Reforms in Serbia which is funded by the EU. The project aims to support and accelerate higher education reforms in Serbia, based upon the Bologna Process in order for Serbian Universities to compete at a European and International level.

**The Tempus program** is implementing over 50 projects in Serbia including the reform and modernization of study programs, study processes, institutional reform as well as various systemic reforms aiming to promote higher education as a whole (47 different faculties participated in 81 Joint European Projects, 14 faculties participated in 21 structural and complementary measures and 111 individual mobility grants were awarded to academics, administrative staff, international relation officers at universities and to staff of Ministry of Education). University authorities also participated in Tempus projects. Between 15-20 teaching staff per Tempus project had the opportunity to visit their partners in the EU.

The IPA 2007 project, **Modernisation of VET project focuses on the NQF, Quality assurance and Adult Education**. The Project will support transformation of the present national VET centre into a national VET Agency which will contribute to the implementation of the Life Long Learning process, dealing with the issues of qualifications and the quality of delivered education and training.

**EU funded CARDS VET** projects in two phases (2003 and 2005) supported VET reform in seven sectors by designing 28 pilot curricula based on outcomes providing competences needed on the labour market

**GTZ** funds an ongoing VET reform programme in 35 pilot economic related schools;

**The World Bank** provided a \$10 million loan for an Education Improvement Programme aimed at the modernisation of the general education (primary and secondary education) including development of an IT system

**The World Bank** four year project ‘Delivery of Integrated Local Services’- DILS (46.4 Million US\$) will cover the period 2009-2012 focusing on education, health and social protection development at the local level.

**The British Council** is funding an on-going project on Quality assurance measures in the Ministry of Education

Under a on-going loan agreement with the **European Investment Bank** €25 million is being invested in the rehabilitation of Pre-University School Infrastructure. The implementation of this loan is supported through the Technical Assistance of the CARDS VET 2005.

### 3.8 Lessons learned

- Investment in the Third Level education sector over the coming years will play major dividends for Serbia when the global economy returns to a growth pattern. In particular, investment in the scientific and technical capabilities of Serbian Universities, which are relatively well developed, can produce major benefits. This reflects the arguments of the European Commission President Barroso who stated in March 2009 that it would be a mistake to cut public spending on education and research during an economic downturn period as it would have a direct negative impact on future growth, “ *Investing more in education and research will help Europe emerge from recession faster and in better shape*”<sup>6</sup>
- The Council of Europe has underlined the importance of investment in education during the present economic downturn. For the Council, full consideration should be given to the essential contribution which education and training can make towards economic recovery. Increased and more efficient investment in human capital is needed. Efforts should also be stepped up to ensure that education can fulfil its role in the knowledge triangle (education-research-innovation) as a key driver of a knowledge based society.<sup>7</sup>
- The European University Association’s (EUA) March 2009 conference, “*Facing Global Challenges: European Strategies for European Universities*“ also highlighted the importance of continued investment in University Teaching infrastructure as the foundation of future R/D. A key message to European Political Leaders was the need for the up grading of European universities’ facilities and campus infrastructure – to provide support to higher education and research while also stimulating the economy and providing employment in other sectors, e.g. construction. Universities in Europe should build on existing opportunities offered by the European Investment Bank (EIB), and be closely linked to the use of the structural and pre-accession funds as a way of supporting the renewal and upgrading of teaching and research infrastructure
- For all works and supplies contracts all building permits and planning documents must be in place by the Universities prior to project launch.
- The implementation of the Bologna Declaration and Tempus projects have highlighted the need for improved Teaching Infrastructure at Serbia’s Universities as with new curricula in the natural sciences will enable students to spend 75% of teaching time in practical and applied activities.
- All Teaching infrastructure projects must be put into operation immediately and not be dependent on subsequent or related projects.
- Universities will have to review their annual budgets to ensure that they can properly maintain and operation new Teaching infrastructure resources
- The Higher Education Council has an important function in promoting partnerships between Universities to ensure that funding has the largest impact on student welfare.

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<sup>6</sup> European University Association “Facing Global Challenges: European strategies for European Universities“. Prague March 2009

<sup>7</sup> Key messages to the Spring European Council in the field of education and training EDUCATION YOUTH AND CULTURE Council meeting Brussels, February 2009

#### 4. Indicative Budget (amounts in €)

University Infrastructure			SOURCES OF FUNDING									
			TOTAL EXP.RE	IPA CONTRIBUTION	COMMUNITY CONTRIBUTION	NATIONAL CONTRIBUTION						PRIVATE CONTRIBUTION
ACTIVITIES	IB (1)	INV (1)	EUR (a) = (b) + (c) + (d)	EUR (b)	% (2)	Total EUR (c) = (x) + (y) + (z)	% (2)	Central EUR (x)	Regional / Local EUR (y)	IFIs EUR (z)	EUR (d)	% (2)
Activity 1												
contract 1 (TA)	x		2,000,000	2,000,000	100%							–
contract 2 (TA)	x		1,000,000	1,000,000	100%							
‘contract’ 3 (Works/supplies)		x	22,000,000	22,000,000	100%							
<b>TOTAL IB</b>			3,000,000	3,000,000	100%							
<b>TOTAL INV</b>			22,000,000	22,000,000	100%							
<b>TOTAL PROJECT</b>			<b>25,000,000</b>	<b>25,000,000</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Amounts net of VAT

(1) In the Activity row use "X" to identify whether IB or INV

(2) Expressed in % of the **Total** Expenditure (column (a))

## 5. Indicative Implementation Schedule

<b>Contracts</b>	<b>Start of Tendering</b>	<b>Signature of contract</b>	<b>Project Completion</b>
Contract 1	N + 1 Q	N + 4Q	N + 17Q
Contract 2	N +1 Q	N + 4Q	N + 17Q
Contract 3	N +6 Q	N + 7Q	N + 16Q

## 6. Cross cutting issues

### 6.1 Equal Opportunity

Among the objectives of the project is to ensure absence of discrimination on the grounds of gender, colour, ethnic origin or religion. as well as to provide access to all levels of education and training in Serbia. All teaching infrastructure and equipment funded under this project will also facilitate students with special needs.

### 6.2 Environment

All works and equipment procured under the project will comply to the state policy on environment issues. An Environmental Impact Assessment and Review will be carried out prior to any works projects.

### 6.3 Minorities

The project directly contributes to improving access to University education for all young persons in Serbia. The lack of teaching space reduces the opportunities for marginalised groups to receive a University education. The project will promote a tolerance towards differences which is a major learning outcome of the higher education experience

## ANNEX I

<b>LOGFRAME PLANNING MATRIX FOR Project Fiche</b>		Programme name and number	
Education Infrastructure Investment Programme		Contracting period expires 2 years after signing the FA	Disbursement period expires 5 years after signing the FA
		Total budget: <b>25 Million</b>	IPA budget: 25 million
<b>Overall objective</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	
Support the development of a knowledge based economy in Serbia that responds to future labour market demands in line with the Lisbon Strategy	1. Positive opinion of the EC on the reform of higher education and its compliance with the European and international standards 2. Improved scoring of students of the curriculum and teaching quality in minimum 50% of beneficiary higher education institutions in comparison with 2008/09 evaluation	The EC Annual Progress Report	
<b><u>Project purpose</u></b>	<b><u>Objectively verifiable indicators</u></b>	<b><u>Sources of Verification</u></b>	<b><u>Assumptions</u></b>
To improve the quality of education and training in Serbian higher education institutions which is demanded by the new knowledge-based society, modern learning processes, standards of industrial research and emerging labour market needs.	Increased Number of University Students completing degrees Increased Number of University Students engaging in post graduate research Increased Number of University Graduates employed	_Project Reports Report and data by the Ministry of Education Labour Market Reports Reports by the Foreign Investment Council	Government is committed to support the lifelong learning principle in education and support quality, accessibility and educational opportunities at all levels of education/research and training Implementation the procedure of accreditation of the institutions and curricula in the field of higher education and research

<u>Results</u>	<u>Objectively verifiable indicators</u>	<u>Sources of Verification</u>	<u>Assumptions</u>
<p><b>Result 1:</b> Selection and Implementation of Priority Teaching Infrastructure and Supply Projects</p> <p><b>Result 2:</b> Technical Assistance to support implementation of Teaching Infrastructure Projects</p> <p><b>Result 3:</b> Technical Assistance to supervise implementation (Project Management Unit) of 200 MEURO R/D Infrastructure Initiative (EIB)</p>	<p>Number of Projects meeting Bologna, Employment/Labour Strategy, Employer Skills needs</p> <p>Number of projects with Completed design (CD) including all technical specifications, bills of quantities and procurement documentation.</p> <p>Number of Teaching Spaces Rehabilitated</p> <p>Number of Teaching Equipment Units installed.</p> <p>Increase in student numbers utilising teaching spaces and equipment</p> <p>Launch of Service Tender to recruit full Project Management Unit</p> <p>Number of Projects Reviewed from University Teaching Infrastructure Project Pipeline</p> <p>Number of Projects supervised from University Teaching Infrastructure Project Pipeline</p> <p>Number of Project Planning Schedules benchmarks realised</p> <p>Number of Projects completed meeting full design standards and procurement demands</p> <p>Launch of Service Tender to recruit full Project Management Unit for R&amp;D Initiative</p> <p>Number of Projects supervised and completed from R&amp;D Infrastructure Initiative</p>	<p>Contracting documentation for works and supplies</p> <p>Monthly and Quarterly Reports from the Service contractors (supervision)</p> <p>Inspection reports of rehabilitated Teaching Spaces</p> <p>EC Project Monitoring Reports</p>	<p>The Ministry of Finance, the Ministry of Education and the Ministry of Science and Technological Development improve national resource planning and increase financial allocation for education and research by improving the budget planning process</p> <p>Universities are committed to participation in Tempus Programme and FP7, and adjust their curricula to labour market needs</p> <p>Ensured cooperation and coordination of competent educational/research institutions and organisations in this project</p>

Activities	Means & Costs	Assumptions
<p><b>Selection and Implementation of Priority Teaching Infrastructure and Supply Projects</b></p> <p>Project selection from Teaching Infrastructure Pipeline that meet priorities including impact on labour market, projects with full feasibility analysis and completed contracting and procurement documentation. (Up to 20 projects)</p> <p>Implementation of projects that rehabilitate Teaching Spaces</p> <p>Supply of new Teaching Equipment Units</p> <p><b>Technical Assistance to support implementation of Teaching Infrastructure Projects</b></p> <p>Review of tendering dossiers and contracting documentation</p> <p>Support to tendering and contracting process</p> <p>Supervision of works and supply contract implementation on time and under budget</p> <p>Support to all reporting requirements as under EU standards</p> <p><b>Technical Assistance to supervise implementation (Project Management Unit) of 200 MEURO R/D Infrastructure Initiative (EIB)</b></p> <p>Review of tendering dossiers and contracting documentation</p> <p>Support to tendering and contracting process</p> <p>Supervision of works and supply contract implementation on time and under budget</p> <p>Support to all reporting requirements as under EU/EIB standards</p>	<p>2 x Service contracts 1 and 2 M EUR</p> <p>Works and supplies contracts 22 million M EUR</p>	<p>CARDS 2006 PPF is used for project preparation under the Higher Education Teaching Infrastructure Programme</p> <p>Commitment by Universities with and objective specification of their needs, terms and conditions, prioritisation criteria, maintenance programme and preparation of the relevant tender documentation on a transparent, accountable basis</p> <p>Universities have committed budgets for operational costs of rehabilitated teaching spaces and equipment</p>



**ANNEX II: amounts (in M€) Contracted and disbursed by quarter for the project**

<b>Contracted</b>	<b>N+4Q</b>	<b>N+5Q</b>	<b>N+6Q</b>	<b>N+7Q</b>	<b>N+8Q</b>	<b>N+9Q</b>	<b>N+10Q</b>	<b>N+11Q</b>	<b>N+12Q</b>	<b>N+13Q</b>	<b>N+14Q</b>	<b>N+15Q</b>	<b>N+16Q</b>	<b>N+17Q</b>	<b>Total</b>
Contract 1	2.00														<b>2.00</b>
Contract 2	1.00														<b>1.00</b>
Contract 3				22.00											<b>22.00</b>
<b>Cumulated</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>
<b>Disbursed</b>															
Contract 1	0.40		0.23		0.24		0.23		0.24		0.23		0.23	0.20	<b>2.00</b>
Contract 2	0.20		0.12		0.11		0.12		0.11		0.12		0.12	0.10	<b>1.00</b>
Contract 3				2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20		<b>22.00</b>
<b>Cumulated</b>	<b>0.60</b>	<b>0.60</b>	<b>0.95</b>	<b>3.15</b>	<b>5.70</b>	<b>7.90</b>	<b>10.45</b>	<b>12.65</b>	<b>15.20</b>	<b>17.40</b>	<b>19.95</b>	<b>22.15</b>	<b>24.70</b>	<b>25.00</b>	<b>25.00</b>

## **ANNEX III**

### **Description of Institutional Framework**

The authority of the Ministry of Education is regulated by the Law on Ministries and its work is organized in eight sectors (Sector for Pre-School and Primary Education, Sector for Secondary Education, Sector for Higher and University Education, Sector for Pupil and Students Standard, Sector for Inspectoral and Overseeing Activities, Sector for Education Development and International Education Cooperation, Sector for Normative and Legal Matters and Harmonization of Regulations, Sector for Financial Matters), and 19 school directorates (whose role is the expert and pedagogical overview and support to institutions in the area of professional improvement and space planning).

In order to provide and improve quality and development, and monitoring of the education system, the Law on Education System Basis provides for establishment of the Institute for Education Improvement, and Institute for Education Quality and Evaluation.

In order to establish the direction and quality improvement of pre-school, primary and secondary education, a 42 member National Education Council was formed, including the president, and the members are appointed by the National Assembly of the Republic of Serbia for a six-year mandate. The Council also decides on general basis of pre-school programme, curricula and plans for primary and secondary education and upbringing, and basis of upbringing programme

The National Higher Education Council has 16 members and is appointed by the National Assembly. It monitors the development of higher education and its compatibility with the European and international standards and suggests to the Ministry the higher education policy etc.

The Accreditation and Quality Control Commission that has 15 members (three from each education/scientific, or education/artistic field) from different areas, and they are appointed by the National Council. The Commission suggests to the National Council the standards for issuance of work permission, standards and procedure for accreditation of the higher education institutions and study programmes etc.

The Socioeconomic Council of the Republic of Serbia has 18 members (Government of Serbia, representative trade unions, and representative employer associations have six members each) and it was founded in 2005. The Council is in charge of education, especially professional education, and among other things, it discusses issues of development and improvement of the collective negotiation, employment policy, and education and professional training.

The National Scientific and Technological Development Council has 17 members and is established in accordance with Law on Science and Research. It is assigned by the minister of science and technological development to prepare National Strategy of Scientific and Technological Development in accordance with European and international standards.

## ANNEX IV

### Reference to laws, regulations and strategic documents:

The activities in the area of pre-school, primary and secondary education are regulated by the **Law on the Basis of Education System** which has, in a unique way, regulated the foundations of the pre-school, primary and secondary education related to education goals, methods and conditions of implementing the activity, types of programmes, establishment, work, financing and overview of institutions work in the area of education, authority of the management body, management, expert and advisory bodies of the institutions, conditions of work for teachers, kindergarten teachers and expert associates and work/legal status of the employees.

**Law on higher education** that regulates the higher education system has brought Serbia closer to the European higher education system. Following this law, much secondary legislation was passed that regulate relations within higher education institutions.

Scientific and research activity in Serbia is financed in accordance with the **Law on Scientific and Research Activity**. The Law envisages budgetary funds for research extended exclusively through science-research and development projects, and financing of other expenditure related to the field of science – through special programmes stated in the Law. As different from other countries, budget funds intended for scientific and research activity can only be allocated to science-research organizations registered in the Ministry of Science and Technological Development provided that they meet defined requirements.

**Law on Innovation Activity** encourages the creation of an innovative system that encompasses education, scientific and development research, and development and work of innovative companies. The national innovation system should enable the transfer of knowledge into economy and society, development of technological innovations in industry as well as development and work of new innovative companies. It is necessary to develop an innovation-oriented chain that links all important subjects when it comes to the creation of new and internationally competitive innovative products and services. It has to ensure realization of creative ideas with as little waste of time and resources as possible.

## ANNEX V

### Details per EU funded contract (\*) where applicable:

<b>Contract 1.1</b>	<b>Description</b>	<b>Cost Estimates (EUR m)</b>
<b>CONTRACT 1.1 Technical assistance</b>	TA for Contract 1.1 will be a long term service contract to supervise the implementation of projects under the R&D Infrastructure Initiative which will be funded through a 200 mEUR EIB loan Arrangement.	<b>2.0</b>

<b>Contract 2.1</b>	<b>Description</b>	<b>Cost Estimates (EUR m)</b>
<b>CONTRACT 2.1 Technical assistance</b>	TA for Contract 2.1 will be a long term service contract to supervise the selection and implementation of projects under the Higher Education Teaching Infrastructure Programme. The projects will be identified and assessed for selection by the CARDS 2006 funded Project Preparation Facility	<b>1.0</b>

<b>Contract 3.1</b>	<b>Description</b>	<b>Cost Estimates (EUR m)</b>
<b>CONTRACT 3.1 Works and Supplies Contracts</b>	The number and scale of works and supplies contracts will depend on the selection and readiness of priority projects from the Higher Education Teaching Infrastructure Programme. There may be limited number of works contracts but with a series of lots. With supply contracts the focus will be on having a limited number of large contracts in order to benefit from economies of scale. The projects and technical specifications which will be identified and assessed by the 2006 PPF for selection, will be reviewed by the technical assistance under contract 2.1 prior to launch of contracting.	<b>22.0</b>