

Ministry of Education and Science
Macedonia
SKILLS DEVELOPMENT AND INNOVATION SUPPORT PROJECT (SDISP)

TERMS OF REFERENCE
for

Consulting services for provision of technical assistance for the development of new competency based curriculums and pertinent modules for innovation and entrepreneurship education in secondary education

1. Background of the Project

The Skills Development and Innovation Support Project (SDISP) project's development objective (PDO) is to improve transparency of resource allocation and promote accountability in higher education, enhance the relevance of secondary technical vocational education, and support innovation capacity in Macedonia. The overall project will support the Government of the Republic of Macedonia's (MOES) initiatives geared to:

- increase graduates' competitiveness on a regional and international level;
- increase labor market relevance of graduates' skills;
- make innovation a source of productivity improvement, competitiveness, increased exportability of goods, and sustained economic growth; and
- increase universities and private enterprises engagement in, and their benefit from, R&D efforts and technology adoption opportunities.

The Project will support interventions which foster education and skills relevant to the job market, and enhance the innovation capacity and activity of firms in Macedonia. It will also address key missing elements of the Macedonian innovation system and ailing aspects of the research sector that are likely to be vital for improving the competitiveness of the enterprise sector and Macedonia's longer term economic growth prospects. It will also help improve absorption of EU funds earmarked for innovation activities.

The Project's direct beneficiaries include students, teaching and management staff from technical vocational education and training institutions who would receive a new curriculum and practical training facilities, as well as training on management, planning, and process improvement capacity ; students and staff of universities, research institutions and enterprises will benefit from: (i) the implementation of quality assurance mechanisms and financing reform in higher education (HE);(ii) grants promoting R&D and innovation; and (iii) technology commercialization, global know-how absorption, and industry- university collaboration fostered by the National Technology Transfer Office (NTTO).

Specific information/background regarding the assignment

It is a well-known fact that innovation and entrepreneurship education helps young people learn organizational skills, including time management, leadership development and interpersonal skills, all of which are highly transferable skills needed in the modern business environment and sought by employers.

Other positive outcomes of innovation and entrepreneurship education include:

- improved academic performance, school attendance and educational attainment
- increased problem-solving and decision-making abilities
- improved interpersonal relationships, teamwork, financial literacy, and public speaking skills
- job readiness
- increased employability skills
- enhanced social psychological development (self-esteem, ego development, self-efficacy)
- Higher academic achievement
- Acquiring basic economic understanding
- Acquiring basic financial concepts

- Acquiring opportunity recognition/ problem solving skills
- Acquiring knowledge of steps in business startup process

Furthermore, the need for a comprehensive reform/modernization of the existing curriculums and pertinent modules for innovation and entrepreneurship education in secondary education comes from the fact that in addition to economic and political globalization, the highly competitive business environment brings about fast changes in the types of opportunities, jobs and content of work in the national economy, therefore, the set of skills that the young persons' needs to obtain in the process of schooling is becoming wider and wider and ranges further away from "classical" subjects.

2. Objective of the assignment

The overall objective of this assignment is to provide technical assistance to the Government of Macedonia and the Ministry of Education and Science (MOES) to reform the existing curriculums and pertinent modules for innovation and entrepreneurship education in secondary education.

More specifically the aim of this assignment is to, while working together with the relevant national agencies, and stakeholders, provide technical assistance for the preparation of methodology for the development of revised curriculums and pertinent modules for innovation and entrepreneurship education in secondary education and pertinent modules and provide assistance in the development of the new modules. In addition, in order to develop entrepreneurial mindset among teaching staff and administration, model of an entrepreneurial school should be developed and piloted.

3. Scope of work

The consultant should perform the following activities:

- Preparatory activities - the Consultant is to review all documentation related to the assignment , including the national strategy for entrepreneurship learning 2014- 2020 , the yearly program of the Government of the Republic of Macedonia in the area of education, Strategy for Vocational Education and Training of Republic of Macedonia and Action Plan 2013 – 2020, Strategy for Innovations of Republic of Macedonia 2012 – 2020, Industrial Policy of Republic of Macedonia 2009 – 2020, National Strategy for Alleviation of Poverty and Social Inclusion 2010-2020, and other related reports delivered through EU/IPA
- Carry out a comprehensive structural and functional needs analysis of the secondary education system with regards to the needs for modernization of the innovation and entrepreneurship education in secondary education system.
- Propose an Implementation Plan with schedule of work, milestones and key performance indicators following the outline of tasks and activities that are part of this TOR.
- Develop the Methodology for the reform of the curriculums and pertinent modules for innovation and entrepreneurship education in secondary education. This activity should be followed by provision of technical assistance to the relevant educational institutions in designing new core curriculums and programs, for the whole duration of the process until the new curriculums are developed.
- Develop a model of an entrepreneurial school
- Develop the relevant training materials and manuals for school managers and teachers
- All other activities necessary to execute the development of the curriculums and pertinent modules for innovation and entrepreneurship education in secondary education

4. Reporting obligations and deliverables

Expected deliverables:

1. Inception report outlining the findings of the documentation and contextual review and the structural and functional needs analysis
2. Implementation Plan with schedule of work, milestones and key performance indicators
3. Methodology for the Development of Competency-Based Curriculum for innovation and entrepreneurship education
4. Report on technical assistance provided to developers of the competency-based curriculum for innovation and entrepreneurship education upon completion of the process of developments of the new reformed curricula
5. Training plan, program and materials
6. Final report with proposed model of an entrepreneurial school

All deliverables shall be prepared in English and Macedonian and will be reviewed and approved by the SDIS Project Director.

5. Required staff and qualifications

The consultant firm shall possess the following relevant qualification and present documents confirming the qualifications:

General company qualifications

The Consultant should be a company with the following qualifications:

- At least 10 years of experience in developing innovation and entrepreneurship related curriculums on different educational levels
- At least 10 years of experience in work related to collaboration between universities and the economy sector,
- At least 10 years of profound experience in Capacity Building and Institutional Building in relevant fields (Creating entrepreneurial environment,, Innovation, Business Start-Up Centers, Establishment of Spin-off, Technology Transfer)

Specific experience related to task:

The Consultant should be a company that meets the following requirements:

- At least one project in the field of preparation and or reform of curriculums and pertinent modules for innovation and entrepreneurship education in secondary education with a budget of 100.000 euro in the last 5 years.
- Experience in the field of development of career services related to increased employability of students.
- Experience related to creation of policy recommendations for the Governmental and local level
- Experience related to development of student companies
- Previous experience in the Balkan countries will be considered as an advantage.

Team Leader/Key Expert 1 in the field of innovation and entrepreneurship education in secondary education (approximately 30 working days spread over a period of 6 months)

The Team Leader/Expert 1 must have the following background/experience, qualifications and skills:

- University degree in the field of social sciences, or equivalent general professional experience of five (5) years above the minimum general professional experience requested below.
General professional experience:
 - Minimum of 15 years of professional experience in the field of innovation and entrepreneurship education
- Specific professional experience:
 - Experience in at least two(2) projects as an expert in the field of innovation and entrepreneurship education

- Experience as a Team Leader in at least two (2) education related projects;
- Experience in the area of innovation and entrepreneurship education in the region (Balkan) would be considered as an advantage.

The Team Leader/Key Expert 1 shall have overall responsibility for the sound management and timely implementation of the project as well as the efficient use of project funds. He/she shall be responsible for planning and supervising all project activities, and carrying out/taking part in the implementation of the activities of the project.

The Team Leader should have the possibility, in consultation with the Consultant's Project Director (to be covered under backstopping), to mobilize backstopping expertise to address unforeseen problems and technical issues.

In addition to his management tasks, the Key Expert 1 shall be responsible for the implementation of the project activities.

Innovation and entrepreneurship education expert(s) (3 persons approximately 50 days in total)

- University degree in the field of economy, management, education or closely related areas;
- At least 10 (ten) years of experience in innovation and entrepreneurship education curriculum development, learning materials development, student companies, etc.
- At least 5 (five) years of experience in international development projects, especially in developing of teaching/learning materials for innovation and entrepreneurship education as well as training curriculum for educational personnel in the domain of innovation and entrepreneurship education, funded by EU or WB;
- Knowledge and experience of TVET developments and trends in the European Union and OECD countries;
- Experience in training of curriculum developers;
- Experience in creating entrepreneurial enabling environment (school, NGOs, administration, etc.)
- Advanced level of English;
- Knowledge and experience of education (and vocational education) systems in the Balkans would be an advantage.

Capacity Building and Training Expert (1 person, approximately 20 working days)

Qualifications and skills:

- University degree in the field of social sciences, or equivalent general professional experience of five (5) years above the minimum general professional experience requested below.
 - Minimum of 5 years of general professional experience in the field of capacity building to Public Administration.
 - Experience as an expert in one project in the field of innovation and entrepreneurship education and/or Life Long Learning and/or curricula development
 - Experience in at least (2) projects as an expert in preparation and/or delivery of training and teaching materials in the field of innovation and entrepreneurship education or related

Contract arrangements

- The duration of contract is estimated to 6 months. Expected commencement of services is Jan 2015
 - It is expected that the consultancy will require 100 staff-days in total for the duration of contract
- The contract will be lump sum. Payments will be based on deliverables/reports