

## Project Presentation

### Contract number

144684-TEMPUS-2008-RS-JPHES

### Project acronym

WBC-VMnet

### Project name

WBC Virtual Manufacturing Network –  
Fostering an Integration of the Knowledge  
Triangle

### Project duration

January 2009 – January 2012

### Programme

TEMPUS IV, DG for Education and Culture

### Thematic priority

Higher education and society

### Project logo



### Strategic objective

Within the knowledge triangle of education, research and innovation in the area of virtual product and process development the proposed TEMPUS project is intended to establish efficient and effective mechanisms and structures of collaboration between key actors for the knowledge triangle throughout the WBC region – HE institutions, enterprises (especially SMEs), research and innovation centers, local and regional authorities. The project will contribute to enhance and modernize HE capacity in the area of virtual manufacturing technologies, as condition for success of renewed Lisbon strategy.

### Specific objectives

1. To set up and equip regional Collaborative Training Centers in four WBC countries
2. To enlarge VMnet network throughout the WBC region, bringing new experts and

members of academia, research, business and governments

3. To develop, assess and implement new regional model for university-enterprise cooperation

4. To modernize and adjust vocational training programme to address the needs of small business and labour market

5. To provide students with opportunity to gain practical experience in industry

6. To raise awareness in the society about necessity of integration of the knowledge triangle for the region prosperity and to ensure quality dissemination of project results.

### Participant(s)

- University of Kragujevac, Serbia
- University of Ljubljana, Slovenia
- University of Padova, Italy
- Institute for Production Engineering, Denmark
- C3M d.o.o, Slovenia
- University of Podgorica, Montenegro
- University of Banja Luka, Bosnia and Herzegovina
- University of Rijeka, Croatia
- Regional Economic Development Agency of Sumadija and Pomoravlje, Serbia
- SCGM d.o.o, Serbia
- ELCON Geratebau d.o.o, Croatia
- METALIK d.o.o, Montenegro
- TRI BEST d.o.o, Bosnia and Herzegovina

### Total cost of the project

720 370 €

### Commission funding

673 370 €

### Technical approach

Based on comprehensive analysis of EU models of university-enterprise cooperation, intensive communication and interviews, project partners and individual experts will develop and assess the new regional model.

In addition, they will undertake all necessary measures and activities for its successful implementation in the region, including communication with policy makers, promotional, disseminating and raising awareness activities, networking of key actors in the knowledge triangle, as well as the development of efficient and effective mechanisms for cooperation.

The last mentioned comprehends the establishment of four Collaborative Training Centres in each WBC, which will have the necessary human resources (retrained trainers and service providers) and equipment/software for the application of VM technologies in product development.

The second collaborative mechanisms will be the enlarged VMnet network throughout the WBC region, supported by communication tools on WEB portal. The portal will provide well-timed information on all important events interesting for network members. Updated systematization of knowledge will be available on WEB portal. The increase in number of VMnet members, for 300 new members and 5 new experts per year, is planned.

The Training/service needs analysis will be undertaken in Serbia, Bosnia and Herzegovina, Montenegro and Croatia, to identify enterprises' needs for advanced trainings and R&D services in the area of product and process development. Also, survey will cover analysis of labour market needs for vocational trainings of unemployed graduates and school leavers in this area. The final goal is to determine knowledge and skills gaps, weaknesses and new competence requirements in regional enterprises, especially SMEs, and labor market.

Teaching material for the developed at least 10 vocational trainings will be redesigned and prepared for setting up at MOODLE platform, supporting e-learning.

All project partners will take part in development of Industrial Fellowship Programme (IFP), establishing sustainable partnerships between universities, enterprises and graduates, leading to mutual benefits.

Project partners will develop sustainable Practical Placement Programme for students, providing them with the opportunity to gain practical experience in industry within the area that is related to their academic studies, and to develop their professional skills.

Established CTC centres and enlarged VMnet network represent the basis for continuation of activities after the project completion. WBC partners will use the equipment of CTC for education of students, vocational trainings, as well as for innovative services in virtual development of products and processes for regional enterprises.

### Expected achievements

- Four Collaborative Training Centres (CTC) are established and equipped in each partner country, whose staff are able to effectively perform In-Service-Training by June 2010
- VMnet network is enlarged throughout the WBC region providing the enhanced collaboration between the leading players in the knowledge triangle
- Model for university-enterprise cooperation developed in consultation with community members and EU partners and validated using up to case studies
- Training/service needs identified and trainers/service providers selected and retrained, by May 2010
- Programme of vocational training, industrial fellowship and student practical placement developed and carry out successfully throughout the WBC region
- Public information, dissemination and raising awareness programme prepared and delivered constantly during the whole project implementation period

### Coordinator contact details

Prof. dr Vesna Mandic  
Mechanical Engineering Faculty  
Sestre Janjic 6  
34000 Kragujevac  
Serbia  
e-mail: [mandic@kg.ac.yu](mailto:mandic@kg.ac.yu)  
tel. +381 34 501 201  
fax. +381 34 501 901  
<http://www.cevip.kg.ac.yu>