



Tempus158989-Tempus-1-2009-1-BE-Tempus-JPHES
Creation of university-enterprise cooperation networks for education on
sustainable technologies

**Dissemination Conference and
Coordination meeting
Strategic Planning Conference
Novi Sad, RS
22 - 25 October 2012.**



**Tempus158989-Tempus-1-2009-1-BE-Tempus-JPHES
Creation of university-enterprise cooperation networks
for education on sustainable technologies**

**Dissemination conference
&
Coordination meeting**

**Novi Sad, Serbia
22nd - 25th October 2012.**

MINUTES OF THE MEETINGS

Monday, 22nd October 2012.

**Arrival of the participants
Accommodation**

**20⁰⁰ Joint dinner
Restaurant “Zlatiborsko prozorče”**

**Tuesday, 23rd October 2012.
Alltech Serbia, Senta
Dissemination conference**

**The Meeting was attended by
Katholieke Hogeschool Sint-Lieven
Gent, Belgium**

**Geert de Lepeleer
International Relations Officer
coordinator
Chris Van Keer**

**Trier University of Applied Sciences
Institute for Applied Material Flow Management (IfaS)
Birkenfeld, Germany
Miljana Ćosić**

**University of Novi Sad
Faculty of technology
Novi Sad, Serbia
Zoltan Zavargo
co-coordinator
Mile Klačnja**

**University of Nis
Faculty of technology, Leskovac
Milorad Ćakić
local coordinator**

**University of East Sarajevo
Faculty of technology, Zvornik
Radoslav Grujić
local coordinator**

**Tuzla university
Faculty of technology, Tuzla
Midhat Jašić
local coordinator**

**University Ss Cyril and Methodius
Faculty of Technology and Metallurgy
Skopje, The former Yugoslav Republic of Macedonia
Emilija Fidančevska
local coordinator**

**University Goce Delcev
Faculty of Technology
Stip, The former Yugoslav Republic of Macedonia
Vineta Srebrenkoska**

local coordintor

Alltech Serbia, Senta
Representatives and trainees

Sugar Factory, Senta
Representatives

AGENDA

1. **Words of welcome**
Marija Đurđev
Production Manager
Alltech Serbia
2. **Presentation of the factory**
Alltech corporate
Tijana Vujacic
European Brand Manager
Alltech-Serbia
3. **Presentation of the factory**
Waste water menagement
Aleksandar Novakovic
Water Manager
Alltech-Serbia
4. **Presentation of the project**
Geert de Lepeleer
Chris Van Keer
Zoltan Zavargo
5. **Evaluation of courses**
Zoltan Zavargo
6. **Award of Certificates**
Vladimir Erdelji
Research Application and Research Manager
Alltech-Serbia

Lunch

Restaurant "Royal", Senta

Transfer to Novi Sad

Wednesday, 24th October 2012. Chamber of Economy of Vojvodina Dissemination conference

The Meeting was attended by

Katholieke Hogeschool Sint-Lieven
Gent, Belgium

Geert de Lepeleer
International Relations Officer
coordinator
Chris Van Keer

Trier University of Applied Sciences
Institute for Applied Material Flow Management (IfaS)
Birkenfeld, Germany
Miljana Čosić

University of Novi Sad
Faculty of technology
Novi Sad, Serbia
Zoltan Zavargo
co-coordintor
Mile Klašnja
Damjan Tomanek

University of Nis
Faculty of technology, Leskovac
Milorad Cakić
local coordintor

University of East Sarajevo
Faculty of technology, Zvornik

Radoslav Grujić
local coordinator

Tuzla university
Faculty of technology, Tuzla
Midhat Jašić
local coordinator

University Ss Cyril and Methodius
Faculty of Technology and Metallurgy
Skopje, The former Yugoslav Republic of Macedonia
Emilija Fidančevska
local coordinator

Economic Chamber of Commerce of Vohvodina, Novi Sad
Representatives

City of Novi Sad
Representatives

AGENDA

1. Words of welcome

Ratko Filipović
President
Economic Chamber of Commerce of Vojvodina

Geert de Lepeleer
coordinator
Katholieke Hogeschool Sint-Lieven
Gent, Belgium

2. Presentation of project activities

Zoltan Zavargo
co-coordinator
University of Novi Sad, Faculty of technology
Novi Sad, Serbia

3. Presentation of the activities of the Faculty of Technology Leskovac

University of Niš
Milorad Cakić
University of Niš, Faculty of technology
Leskovac, Serbia

4. Presentation of the activities of the Faculty of Technology

Tuzla University
Midhat Jašić
University of Tuzla, Faculty of technology
Tuzla, Bosnia and Herzegovina

5. Presentation of the activities of the Faculty of Technology

East Sarajevo University
Radoslav Grujić
University of East Sarajevo, Faculty of technology
Zvornik, Bosnia and Herzegovina

6. Presentation of the activities of the Faculty of Technology Novi Sad

University of Novi Sad
Mile Klašnjaja
University of Novi Sad, Faculty of technology
Novi Sad Serbia

7. Presentation of the activities of the Faculty of Technology, Štip

University Goce Delcev
Vineta Srebrenkoska
University Goce Delcev, Faculty of technology
Štip, The Former Yugoslav Republic of Macedonia

8. Presentation of the activities of the Faculty of Technology, Skopje

University Ss Cyril and Methodius
Emilija Fidančevska
University Ss Cyril and Methodius, Faculty of technology and metallurgy
Skopje, The Former Yugoslav Republic of Macedonia

9. Strategic Plan for education on sustainable industry

Zoltan Zavargo

Lunch

**University of Novi Sad
Faculty of technology
Coordination meeting**

The Meeting was attended by

Katholieke Hogeschool Sint-Lieven
Gent, Belgium

Geert de Lepeleer
International Relations Officer
coordinator
Chris Van Keer

Trier University of Applied Sciences
Institute for Applied Material Flow Management (IfaS)
Birkenfeld, Germany
Miljana Čosić

University of Novi Sad
Faculty of technology
Novi Sad, Serbia
Zoltan Zavargo
co-coordinator
Mile Klačnja

University of Nis
Faculty of technology, Leskovac
Milorad Cakić
local coordinator

University of East Sarajevo
Faculty of technology, Zvornik
Radoslav Grujić
local coordinator

Tuzla university
Faculty of technology, Tuzla
Midhat Jašić
local coordinator

University Ss Cyril and Methodius
Faculty of Technology and Metallurgy
Skopje, The former Yugoslav Republic of Macedonia
Emilija Fidančevska
local coordinator

Corvinus University of Budapest
Faculty of Food Science
Department of Food Engineering
Budapest, Hungary
Gyula Vatai
External expert

AGENDA

- 1. Words of welcome**
Geert De Lepeeler
- 2. Approval of the Minutes of the meeting in Ohrid, September 2012.**
The Minutes of the Meeting held in Ohrid were approved by all participants.
- 3. Approval of the Reports of the Dissemination conferences in Tuzla and Ohrid**
The Reports of the Dissemination conferences held in Tuzla and Ohrid were approved by all participants.
- 4. Approval of the Minutes of the meeting held in Leskovac, October 2012.**
The Minutes of the Meeting held in Leskovac were approved by all participants.
- 5. SWOT analysis of the courses**

Decision

SWOT analysis of the courses were accepted. The Document is given in the Annex.

- 6. Common evaluation sheet**

Decision

Common evaluation sheet were accepted. The Document is given in the Annex.

**7. Dissemination activities
Certificates and Leaflets**

The common Certificates and Leaflets were distributed to all partners.

Dissemination booklet

The first, short version of the Dissemination booklet was presented by Zoltan Zavargo. The Booklet will be ready till the end of the year.

**8. Sustainability
Strategic Plan for education on sustainable industry
Strategic plan for sustainability of the project**

Decision

One common document Strategic plan for sustainability of the projects outcomes were accepted. The Document is given in Annex.

Academic cooperation agreement

Decision

The final content of **Academic cooperation agreement** were accepted. The Document is given in the Annex.

Agreement on Intellectual property

Decision

The final content of **Agreement on Intellectual property** were accepted. The Editorial board will be established, one per each university. The Document is given in the Annex.

9. Planning the next Coordination meeting

Decision

The next Coordination meeting will be held in Skopje, from 8th till 11th January 2012.

10. Any other business

Preparing the Report

Damjan Tomanek, Zoltan Zavargo, Geert De Lepeleer

Buffet dinner

Thursday, 25th October 2012.

Departure of the participants

ANNEX

SWOT analysis of the courses

Common evaluation sheet

Strategic plan for sustainability of the project outcomes

Cooperation agreement

Agreement on Intellectual property

SWOT analysis of the courses

Strength	Weakness
Established network of universities and enterprises and universities in Balcan region	Macedonian language is least similar with others
Knowledge and experience	Distance between partner universities
Common education origin	
Except Macedonian, language is almost the same	
Competent teaching staff	
Appropriate teaching written material and equipment	
Opportunities	Threats
Great interest from trainees for the courses	Lack of financial support by government and universities
Connections with industry	Not fully developed network with industry
Experience gained from industry	Lack of interest by potential trainees
	Undeveloped industry with low production

Common course evaluation sheet

The common course evaluation sheet is proposed for the future work.

Course: Sustainable technologies		
Course evaluation sheet		
Questions	Answer	
1.	Are the theme of the course interesting/contemporary?	Yes
		Partly
		No
2.	Are the content of the course topics in line with course aim?	Yes
		Partly
		No
3.	Are you satisfied with the Literature for the course?	Yes
		Partly
		No
4.	Does your expectation realized?	Yes
		Partly
		No
5.	Are you satisfied with the readiness of the lectures?	Yes
		Partly
		No
6.	Rapport	Yes
		Partly
		No
7.	Lectures were performed stimulating and innovative?	Yes
		Partly
		No
8.	Attending the lectures significantly enrich your knowledge on sustainable technologies?	Yes
		Partly
		No

9.	Does knowledge gained on the course will be used in your company or study?	Yes
		Partly
		No
10.	During the classes you were actively involved?	Yes
		Partly
		No
11.	During the course/break you asked a question or spoke to the teachers?	Yes
		Partly
		No
12.	Such courses should be organized in the future?	Yes
		Partly
		No
13.	Do you want to be keep informed with similar activities?	Yes
		Partly
		No
Comments/suggestions		

Strategy plan for sustainability of the project outcomes

The project partners recognized the importance of sustainable development, especially related to industry. The sustainable concept of zero emission seems to be answer to both industry and society. The aim of zero emissions is maximum resource productivity and virtually no waste. Creating a zero emission industry is a great challenge for both EU and WB partner countries.

General aims of the project

The general aim of the project is to introduce the concept of sustainable industrial production in the surrounding area of the participating universities, to foster LLL and to improve the university-enterprise cooperation.

Operational aims

To achieve these goals special courses on sustainable industry has been created and held to industry. In this way industry employees have been made susceptible for the sustainability concepts and accordingly train them in the use of sustainable technologies in specified industrial sectors.

Work plan

The following Work plan has been pursued

Year 1. Training of university staff

Year 2. Course development

Year 3. Course development and implementation for industry staff members

Strategic aims of the project

In the future, after the life of the Project, each WB partner university will continue to spread knowledge on sustainable technologies, spread the idea on zero emission concept and strength the link between university and enterprises and WB universities.

In this process the primary trainees will be staff from industry as well as other trainees like graduated students, public services, local administration, etc. The WB partners will provide this value to the trainees by holding courses on sustainable technologies. The trainees can also be involved in the training process with specific tasks in order to improve the level of the courses as well as to foster mutual cooperation on sustainable industry issue.

Strategic Plan for education on sustainable industry

The WB partners core purpose is to help built an environmental friendly industry enhance LLL and continuously improve the related courses at their universities. To achieve this the WB partners will:

1. Propagate effectively the course offer in Serbia, Macedonia and Bosnia-Herzegovina;
2. Continued with the same industry partner/trainees;
3. Have an annual recruitment of appr. 20 students, most of them from industry;
4. Involve as much as possible the teaching staff from partner universities in teaching and updating the courses;
5. Involve the trainees in teaching;
6. Involve the management level and teaching staff of all participating universities dissemination of the course offer;
7. Build an Inter-university network for maintaining a common course offer, sharing the work load and benchmarking "sustainable technology" propagating activities;
8. Build an University-Enterprise network;
9. Build a "University-sector organizations" and "university-chamber of commerce" network.

The following courses is planned to be offered:

1. Course 1
Sustainable technologies in Food industry
2. Course 2
Sustainable technologies in Pharmaceutical and cosmetic industry
3. Course 3
Sustainable technologies and Chemical engineering
4. Course 4
Sustainable technologies and Materials engineering
5. Course 5
Specific course going deeper in certain topics
6. Course 6
Courses tailored to the specific need of industry from the existing topics.

The offered courses are covered with the written material given in five (5) course books:

1. Course book 1
Sustainable technologies
2. Course book 2
Sustainable technologies in Food industry
3. Course book 3
Sustainable technologies in Pharmaceutical and cosmetic industry
4. Course book 4
Sustainable technologies and Chemical engineering
5. Course book 5
Materials engineering

In the future new courses should also be offered which will originate from experience gained from cooperation with industry.

The Chambers of commerce should be the link between university and industry, the source of necessary data on industry in the region and should point out industry needs.

Strategic plan for sustainability of the project

Internal activities in partner universities:

1. General approval by WB university authorities;
2. Signing of Cooperation agreement between all WB partners;
3. Signing of Agreement on intellectual property rights;
4. Development of a joint certificate for all participants;
5. Organization of dissemination conferences;
6. Intra-university information campaign on available course offer and course materials,
7. Drawing up a list (per university) of possible lecturers and cooperators for offering the course modules to industry;
8. Making an inventory of developed course elements/chapters that could be built into the regular courses offer in all participating universities
9. internships in companies;
10. Staff exchange between universities and companies;
11. Enlisting all dissemination activities (via a standard report form);
12. Development of a permanent evaluation form.

External activities:

1. Website updating and maintenance;
2. Publication of project leaflet including practical info;
3. Publication of project booklet;
4. Publishing of course materials;
5. Course overview and course planning on home website of each university + link to the official project website, including possibility to follow tailor-made (parts of the) courses;
6. Communication of course offer and outcomes via journal publication and communication on field related congresses and/or symposia;
7. Personal invitation letter to potential partner industries;
8. Signing of cooperation agreements with industry or/and chambers of commerce;
9. Approval on agreement on creation of university-enterprise networks for education on sustainable technologies from all partner institutions.

Each 6 WB partner universities should have a sustainability plan. Each Sustainability plan can have different accents according to the local situation.

Action plans

Internal actions

1. General approval by WB university authorities
Who: All partners.
Status: Done.
2. Agreement on continued joint cooperation between 6 WB universities
Who: Zoltan Zavargo.
Status: Accepted. To be signed till Coordination meeting in Skopje, Januarz 2013.
3. Agreement on intellectual property rights
Who: Zoltan Zavargo.
Status: Accepted. To be signed by Coordination meeting in Skopje, January 2013.
4. Development of a joint certificate for all participants
Who: Proposed by Novi Sad and Tuzla. Finished and accepted by all partners.
Status: Done. Printed and distributed to all partners.
5. Organization of dissemination conferences
Who: All partners.
Status: Done. Last was in Novi Sad, October 2012.
6. Intra-university information campaign on available course offer and course materials
Who: All partners.
Status: To be done by all partners in December 2012. - January 2013.
7. List (per university) of possible lecturers and cooperators for offering the course modules to industry
Who: All partners.
Status: Proposal till the end of year. To be accepted in Skopje, January 2013.
8. Inventory of developed course elements/chapters that could be build into the regular courses offer in all participating universities
Who: All partners.
Status: Proposal till the end of year. To be accepted in Skopje, January 2013.
9. Internships in companies
Who: All partners.
Status: List for 2011. and 2012. Will be accepted in Skopje, 2013.
10. Staff exchange between universities and companies
Who: All partners.
Status: Done in May - June 2012. Possible exchange in the future on last Coordination meeting in Skopje, January 2013.
11. Enlisting all dissemination activities
Who: All partners should proceed dissemination activities to Zoltan Zavargo.
Status: All dissemination activities are on the web site and should be listed when necessary.
12. Development of a permanent evaluation form
Who: All partners.
Status: Done. Accepted on Dissemination meeting in Novi Sad, October 2012.
13. Design actions for introduction of sustainability concepts in regular courses
Who: All partners.
Status: Proposal till the end of year. To be accepted in Skopje, January 2013.
14. Building data base of alumni
Who: All partners.
Status: Till the end of the year. To be accepted in Skopje, January 2013.

External activities:

1. Website updating and maintenance
Who: Zoltan Zavargo
Status: Done. Will be updated in the future if KaHo will paid in advance 3 years.

2. Publication of project leaflet including practical info
Who: Zoltan Zavargo and other local coordinators
Status: Done. Was distributed to all partners in Novi Sad, October 2012.
3. Publication of project booklet
Who: Zoltan Zavargo and other local coordinators
Status: Written material ready the middle of Decembwer. Publication by the end of the year.
4. Publishing of course offer and program
Who: All partners.
Status: Done by Coordination meeting in Skopje, January 2013.
5. Publishing of course materials
Who: Zoltan Zavargo
Status: Till the end of the year
6. Publishing of course abstracts on website
Who: All partners.
Status: Will be done by Coordination meeting in Skopje, January 2013.
7. Course overview and course planning on home website of each university + link to the official project website, including possibility to follow tailor-made (parts of the) courses
Who: All partners.
Status: Will be done by Coordination meeting in Skopje, January 2013.
8. Communication of course offer and outcomes via journal publication and communication on field related congresses and/or symposia
Who: All partners.
Status: End of the year and 2013.
9. Personal invitation letter to potential partner industries
Who: All partners.
Status: Till the end of the Project.
10. Signing of cooperation agreements with industry or/and chambers of commerce
Who: All partners.
Status: Till the Coordination meeting in Skopje, January 2013.
11. Approval on agreement on creation of university-enterprise networks for education on sustainable technologies from all partner institutions.
Who: All partners.
Status: Till the Coordination meeting in Skopje, January 2013.

ACADEMIC COOPERATION AGREEMENT

Among the following institutions:

University of Novi Sad, Faculty of technology
Novi Sad, Serbia

University of Niš, Faculty of technology
Leskovac, Serbia

University of East Sarajevo
Faculty of technology, Zvornik, Bosnia and Herzegovina

Tuzla university, Faculty of technology
Tuzla, Bosnia and Herzegovina

University Ss Cyril and Methodius, Faculty of Technology and Metallurgy
Skopje, Republic of Macedonia

University Goce Delcev, Faculty of Technology
Štip, Republic of Macedonia

1 PREAMBLE

Recognizing the positive experience and mutual benefits that were gained during the cooperation in the Tempus project "Creation of university-enterprise cooperation networks for education on sustainable technologies" (158989-TEMPUS-1-2009-BE-TEMPUS-JPHES), the above mentioned institutions (hereinafter: institutions) decided to continue cooperation in the future.

Based on previous experience, it is expected that future cooperation will foster and enhance the progress of education and training system at each institution as well as the mutual understanding between academic worlds in the partner countries.

2 OBJECTIVES

The primary aim of the cooperation is to promote sustainability, sustainable technologies and lifelong learning.

The specific objectives of the cooperation are:

- Organization of joint courses, primarily for the staff from industry, on sustainability and/or sustainable technologies matter;
- Exchange of staff;
- Organisation of special training courses for teaching and research staff;
- The exchange of undergraduate and graduate students;
- The exchange of undergraduate and graduate students for summer practices;
- The exchange of information about academic activities and teaching as well as development plans of the Faculties;
- The exchange of publications and other materials of common interest;
- Organisation and participation in scientific conferences and professional meetings.

Generally, Cooperative projects under this Agreement may include any of the academic disciplines of the institutions.

3 IMPLEMENTATION

In order to carry out and fulfil the aims of this Agreement, each institution will appoint a Co-ordinator who shall manage the development and conduct joint activities. The Co-ordinators shall be responsible for the evaluation of activities under this Agreement according to the practices of their respective institutions.

Specific details of any activity shall be set forth in a Supplemental Letter of Agreement (SLOA) which, upon signing by the legal entity (dean or rector) at each institution, shall become an integral part of this general Agreement. The SLOA shall include such items as: the responsibilities of each Party for the agreed upon activity, schedules for the specific activity, budgets and sources of financing and any other items necessary for the efficient achievement of the activity.

4 DURATION, CHANGE AND TERMINATION OF AGREEMENT

This Agreement shall become effective on the date that it is signed by all Parties and shall be valid for a period of five (5) years, but may be renewed or extended by mutual consent.

Any changes to this Agreement shall be subject to the written consent of all Parties in form of Annex.

This Agreement may be terminated by either Party at any time provided that the terminating Party gives written notice of its intention at least six months prior to termination.

Termination of this Agreement doesn't terminate the specific activities set by existing Supplemental Letter of Agreement (SLOA).

5 DISPUTE RESOLUTION

Any dispute arising under the terms of this Agreement shall be referred to an independent academic mediator as agreed by all Parties.

Witnesses participating in a dispute, as the representatives of the intuitions have to provide a written approval for the representation of the institutions.

This Agreement is signed in twelve (12) identical copies written in English, by two (2) copies which belong to each Signatory.

December 2012.

University of Novi Sad Faculty of technology Novi Sad, Serbia	University of East Sarajevo Faculty of Technology, Zvornik Bosnia and Herzegovina	University Ss Cyril and Methodius Faculty of Technology and Metallurgy, Skopje, Republic of Macedonia
_____	_____	_____
Prof. dr Zoltan Zavargo dean	Prof. dr Miladin Gligorić dean	Prof. dr Aleksandar Dimitrov dean
_____	_____	_____
University of Niš Faculty of technology, Leskovac, Serbia	Tuzla University Faculty of Technology, Tuzla Bosnia and Herzegovina	University Goce Delčev Faculty of Technology, Štip, Republic of Macedonia
_____	_____	_____
Prof. dr Jovan Stepanović dean	Prof. dr Amra Odabašić dean	Prof. dr Vineta Srebrenkoska dean

**Agreement on Intellectual property
among
Local coordinators of the Tempus project
158989-TEMPUS-1-2009-BE-TEMPUS-JPHES
“Creation of university-enterprise cooperation networks for education on
sustainable technologies”**

Intellectual property in this Document means the legal rights which result from intellectual common activity carried out in the frame of the Tempus project 158989-TEMPUS-1-2009-BE-TEMPUS-JPHES (herein after Project).

Common intellectual property

The common activities carried out during the life of the Project is treated as common intellectual property, and should be published/presented by indicated all the local coordinators. Other persons can also be indicated but local coordinators should be asked.

Coordination meetings and Workshops

The decisions and conclusions made on the Consortium meetings and Workshops, when published, should be refer to Project and authors from all WB partner universities. The local coordinators should be asked prior final content.

Reports

When publishing or presenting, the reports should refer to Project and local coordinators.

Common results

All outcomes of the Project, like evaluations, when reported or published should refer to authors from each WB partner university.

Courses

The four (4) courses that have been created during the life of the Project can be offered by each partner university. The teachers for the courses can be either from WB partner universities or from only home university.

If any partner organize course the other partners should be informed.

Course books

The five (5) course books are common property and should not be changed prior a permission of all editors/local coordinators.

The topics in the course books are the property of the authors of the topic.

This Agreement on Intellectual property is signed in twelve (12) identical copies written in English, by two (2) copies which belong to each Signatory.

December 2012.

University of Novi Sad Faculty of technology Novi Sad, Serbia	University of East Sarajevo Faculty of Technology, Zvornik, Bosnia and Herzegovina	University Ss Cyril and Methodius Faculty of Technology and Metallurgy Skopje, FYR of Macedonia
_____	_____	_____
Zoltan Zavargo Local coordinator	Radoslav Grujić Local coordinator	Emilija Fidančevska Local coordinator
_____	_____	_____
University of Niš Faculty of technology, Leskovac, Serbia	Tuzla University Faculty of Technology, Tuzla, Bosnia and Herzegovina	University Goce Delčev Faculty of Technology, Štip, FYR of Macedonia
_____	_____	_____
Milorad Cakić Local coordinator	Midhat Jašić Local coordinator	Vineta Srebrenkoska Local coordinator