

# Project CENEAST 9<sup>th</sup> Meeting | MINUTES

Meeting date | time 10/11/2014 9:00 AM | Meeting location Moscow State University of Civil Engineering, Moscow

Meeting called by Prof Alevtina Balakina

Prof PhD DrSc Arturas  
Kaklauskas

Type of meeting 9<sup>th</sup> project meeting

Facilitator Igor Pichugin

Note taker Lina Peciure

## Attendees

Alevtina Balakina, MGSU

Zinaida Ivanova, MGSU

Igor Pichugin, MGSU

Michael Eichner, MGSU

Nina Danilina, MGSU

V. Gagarin, MGSU

Arturas Kaklauskas, VGTU

Jurga Naimavičienė, VGTU

Saulius Raslanas, VGTU

Lina Pečiūrė, VGTU

Massimo Bianchi, UNIBO

Irene Lill, TUT

Emlyn Witt, TUT

Nikolai Siniak, BSTU

Sergei Shavrov, BSTU

Dzimitry Safonchyk, YKSUG

Nikolai Vatin, SPbSPU

Valeriy Beley, KSTU

Andrey Nikishin, KSTU

Petr Dorokhov, KSTU

Andrey Safonov, MSIU

Irene Tkachenko, MSIU

Anatoly Martynenko, MSIU

Leonid Maryushin, MSIU

Konstantin Palaguta, MSIU

Volodymyr Prokopenko, NTUU KPI (online)

Irina Porunkova, NTU KhPI (online)

Nataliia Samoilenko, NTU KhPI (online)

## AGENDA TOPICS: 1<sup>ST</sup> MEETING DAY

### 1. Structure and Objectives of the 9<sup>th</sup> meeting

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The objectives of the 9<sup>th</sup> meeting are:

- Teaching and training activities: presentations on the module topics (WP3).
- Participation on the International scientific conference “Integration, Partnership, and Innovations in Construction Sciences and Education” (WP5).
- Discussions on the integration of prepared BSc/specialists, MSc and PhD modules in Russian, Ukrainian, Belarusian and other countries’ universities (WP2).
- Intelligent Library, the Intelligent Tutoring System and the Intelligent Knowledge Assessment System inter-university integration (WP3).
- Peer review procedures of the modules (WP4).
- Preparation of the new ERASMUS+ project application.

### 2. WP3. Training of students

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**Time allotted** | 10/11/2014 09:00–10:30 | **Agenda topic** Short course | **Presenter** Prof. Arturas Kaklauskas, Project coordinator

*Discussion: Prof. Arturas Kaklauskas presented his lecture on the topic “Application of Intelligent and Biometric Technologies in Construction and Real Estate”.*

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**Time allotted** | 10/11/2014 11:00–12:00 | **Agenda topic** Short course | **Presenter** Assoc. Prof. Zinaida Ivanova

*Discussion: Assoc. Prof. Zinaida Ivanova presented her lecture on the topic “Sociological methods for sustainable urban design”.*

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**Time allotted** | 10/11/2014 12:00–13:00 | **Agenda topic** Short course | **Presenter** Prof. Massimo Bianchi

*Discussion: Prof. Massimo Bianchi presented his lecture on the topic “Beyond the Social Network Analysis for sustainable evolution of urban networks. A model of organizational analysis”.*

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**Time allotted** | 10/11/2014 14:00–15:00 | **Agenda topic** Short course | **Presenter** Nina Danilina

*Discussion: Nina Danilina presented her lecture on the topic “Sustainable urban planning”.*

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**Time allotted** | 10/11/2014 15:00–16:00 | **Agenda topic** Short course | **Presenter** Anatoly Martynenko

*Discussion: Anatoly Martynenko presented his lecture on the topic “Smart Built Environment”.*

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**Time allotted** | 10/11/2014 16:30–17:30 | **Agenda topic** Short course | **Presenter** Leonid Maryushin

Discussion: *Leonid Maryushin presented his lecture on the topic “Rational use of water resources in the city and water pollution minimization”.*

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**Time allotted** | 10/11/2014 17:30–17:30 | **Agenda topic** Short course | **Presenter** Konstantin Palaguta

Discussion: *Konstantin Palaguta presented his lecture on the topic “Smart House”.*

## **AGENDA TOPICS: 2<sup>ND</sup> MEETING DAY**

### **2. WP3. Training of students**

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**Time allotted** | 11/11/2014 09:00–10:00 | **Agenda topic** Short course | **Presenter** Emlyn Witt

Discussion: *Emlyn Witt presented his lecture on the topic “Construction investments”.*

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**Time allotted** | 11/11/2014 10:00–11:00 | **Agenda topic** Short course | **Presenter** Prof. Valeriy Beley

Discussion: *Prof. Valeriy Beley presented his lecture on the topic “Technologies for the use of wind energy”.*

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**Time allotted** | 11/11/2014 11:15–12:00 | **Agenda topic** Short course | **Presenter** Petr Dorokhov

Discussion: *Petr Dorokhov presented his lecture on the topic “Improvement of the energy effectiveness of the heating systems”.*

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**Time allotted** | 11/11/2014 12:00–13:00 | **Agenda topic** Short course | **Presenter** V. Gagarin

Discussion: *V. Gagarin presented his lecture on the topic “Energy saving and thermal protection of the buildings”.*

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**Time allotted** | 11/11/2014 14:00–14:30 | **Agenda topic** Short course | **Presenter** Assoc. Prof. Volodymyr Prokopenko

Discussion: *Assoc. Prof. Volodymyr Prokopenko presented his lecture on the topic “Energy Audit” via Skype.*

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**Time allotted** | 11/11/2014 14:30–15:00 | **Agenda topic** Short course | **Presenter** Irina Porunkova, Natallia Samoilenko

Discussion: *Irina Porunkova and Natallia Samoilenko presented their lecture on the topic “Environmentally sustainable cities development” via Skype.*

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**Time allotted** | 11/11/2014 15:00–16:00 | **Agenda topic** Short course | **Presenter** Dzimityr Safonchyk

Discussion: *Dzimityr Safonchyk presented his lecture on the topic “Building materials based on waste of the Republic of Belarus”.*

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**Time allotted** | 11/11/2014 16:00–17:00 | **Agenda topic** Short course | **Presenter** Assoc. Prof. Nikolai Siniak, Assoc. Prof. Sergey Shavrov

Discussion: Assoc. Prof. Nikolai Siniak, Assoc. Prof. Sergey Shavrov presented their lecture on the topic “Land resources sustainable development”.

## AGENDA TOPICS: 3<sup>RD</sup> MEETING DAY

### 3. WP5. Dissemination

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**Time allotted** | 12/11/2014 09:00–18:00 | **Agenda topic** International scientific conference “Integration, Partnership, and Innovations in Construction Sciences and Education”

Discussion: The International scientific conference “Integration, Partnership, and Innovations in Construction Sciences and Education” was held in Moscow State University of Civil Engineering. Project partners participated in the conference.

## AGENDA TOPICS: 4<sup>TH</sup> MEETING DAY

### 4. WP2. Module specifications and teaching materials. WP3. Module integration. WP5. Dissemination

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**Time allotted** | 13/11/2014 09:30–09:45 | **Agenda topic** Welcome speech | **Presenter** Assoc. Prof. Zinaida Ivanova, Prof. Arturas Kaklauskas

Discussion: Welcome speech to the project partners.

**Time allotted** | 13/11/2014 09:45–10:45 | **Agenda topic** Presentation of the module handbook | **Presenter** Nina Danilina

Discussion: Prof. Arturas Kaklauskas and prof. Alevtina Balakina discussed how to integrate the presented module to open source system. Additional teaching materials should be collected (videos etc.). Partners are waiting for the links.

Prof. Nikolai Vatin asked what will be the teaching language, the final decision was made – Russian.

After a discussion, what distance methods will be used, the e-materials, videos, games, etc. were decided to add according to VGTU example.

The prepared modules should be integrated to other universities, not only project partners. **The TEMPUS project CENEAST module list and proposals for the module sharing was circulated to all project partners. They have to fill it in and send back. Every partner is responsible for its module. The matrix is shown in the Annex II.**

**Time allotted** | 13/11/2014 11:15–11:30 | **Agenda topic** Module integration | **Presenter** Prof. Arturas Kaklauskas

Discussion: Prof. Arturas Kaklauskas led the discussion on students training and module integration..

**Time allotted** | 13/11/2014 11:30–12:15 | **Agenda topic** Presentation of module handbook | **Presenter** Prof. Michael Eichner

Discussion: Prof. Michael Eichner presented MGSU activities and the prepared module. The ideas for the module sharing: the presented module could be first integrated in MGSU. As the module is prepared in English, Prof. Irene Lill from TUT agreed that it is possible to integrate it to TUT study programmes. Prof. Alevtina Balakina confirmed that they have a lot of materials in English and German.

*Four main things have to be discussed:*

- 1. Integration to existing study programmes*
- 2. Upload and integration to the Moodle system*
- 3 Use of prepared and existing intelligent systems and games*
- 4. Possibilities to develop the distance learning without lecturers.*

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**Time allotted** | 13/11/2014 12:15–12:40 | **Agenda topic** Ideas for the further module development | **Presenter** Prof. Arturas Kaklauskas

*Discussion: Prof. Arturas Kaklauskas presented the calculating systems used by best world universities. He proposed to include them to the prepared modules. Another proposal is the integration of best practice to the modules. Video translations of the lectures could be made and used as project results dissemination.*

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**Time allotted** | 13/11/2014 12:40–13:30 | **Agenda topic** Module integration in NTU “KhPI” | **Presenter** Irina Porunkova

*Discussion: Irina Porunkova discussed the application of the modules in practice and their integration in the existing programs for a long-term.*

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**Time allotted** | 13/11/2014 16:30–18:00 | **Agenda topic** Discussion on the new ERASMUS+ project application | **Presenter** Prof. Arturas Kaklauskas, All

*Discussion: Partners decided to continue their collaboration and to prepare the new project application for ERASMUS+ call on the topic Built Environment, Climate Change and Disaster Resilience. The deadline for the application is 10/02/2015.*

*Distribution of the tasks:*

- 1. Cosmic technologies - MSIU*
- 2. Climate Change*
- 3. Big Data and Text Analytics – Russian and Ukrainian universities*
- 4. Quality Control – Tallin University of Technology*
- 5. Project Management*
- 6. Budget and effectiveness*
- 7. Rationality*
- 8. Climate change and disasters – Moscow Universities*
- 9. Partner role in the project – every institution is responsible for its role and input to the project*
- 10. Target Groups: Engineers, BSc, MSc, PhD students*
- 11. Sustainability – responsible university – SPbSPU, Elena Nikonchuk*
- 12. Indicators – responsible university – VGTU*
- 13. Sort term results / Long term results*
- 14. Dissemination – Responsible universities – NTU “KhPI”, NTUU “KPI”, SPbSPU*
- 15. Open access*
- 16. WP distribution: Implementations; Upgrading (UoH); Evaluation; Monitoring (KSTU, TUT).*

*The application form will be sent to all the partners. Partners should decide and invite the associations from Germany, Russia and Estonia to participate in the new project.*

*Main tasks: to prepare the summary and choose the priorities, to decide who will prepare the application and who will be the project coordinator.*

**General Conclusions:**

- The prepared modules should be integrated to other universities, not only project partners. **The TEMPUS project CENEAST module list and proposals for the module sharing was circulated to all project partners (Annex II). They have to fill it in and send back until the next project meeting.***



**ANNEX I: 9<sup>TH</sup> MEETING AGENDA**

# Tempus Project CENEAST: Reformation of the Curricula on Built Environment in the Eastern Neighbouring Area

## 9<sup>th</sup> PROJECT MEETING AGENDA

Moscow State University of Civil Engineering (MGSU)

Time / Location	Content	Chairman/ Speaker
Monday, November 10, 2014 Venue: MGSU, 26, Yaroslavskoye shosse		
Short course: “Principles of sustainable growth under formation of living environment in architectural, urban planning, engineering and social and humanitarian aspects”, Day 1		
9.00 - 10.30	Application of Intelligent and Biometric Technologies in Construction and Real Estate	Kaklauskas A. (VG TU)
10.30 - 11.00	<i>Coffee Break</i>	
11.00 - 12.00	Sociological methods for sustainable urban design	Ivanova Z. (MGSU)
12.00 - 13.00	Beyond the Social Network Analysis for sustainable evolution of urban networks. A model of organizational analysis.	Bianchi M. (Universitet Bolonga)
13.00 - 14.00	<i>Lunch Break</i>	
14.00 - 15.00	Sustainable urban planning	Danilina N. (MGSU)
15.00 - 16.00	Smart Built Environment	Martynenko I. (MSIU)
16.00 - 16.30	<i>Coffee Break</i>	
16.30 - 17.30	Rational use of water resources in the city and water pollution minimization	Marjushin L. (MSIU)
17.30 - 18.30	Smart House	Palaguta K. (MSIU)
Tuesday, November 11, 2014 Venue: MGSU		
Short course: “Principles of sustainable growth under formation of living environment in architectural, urban planning, engineering and social and humanitarian aspects”, Day 2		
09.00 – 10.00	Construction investment	Witt E. (TTU)
10.00 - 11.00	Technologies for the use of wind energy	Beley V. (KSTU)
11.00 - 11.15	<i>Coffee Break</i>	
11.15 - 12.00	Improvement of the energy effectiveness of the heating systems	Dorohov P. (KSTU)
12.00 - 13.00	Energy saving and thermal protection of the buildings	Gagarin V. (MGSU)
13.00 - 14.00	<i>Lunch Break</i>	
14.00 - 15.30	Building materials based on waste of the Republic of Belarus	Safonchyk D. (YKSYG)
15.30 - 17.00	Land resources sustainable development	Siniak N., Shavrov S. (BGTU)
Wednesday, November 12, 2014		

Venue: MGSU		
<b>International scientific conference “Integration, Partnership, and Innovations in Construction Sciences and Education”</b>		
09.00	<i>Transfer from Cosmos Hotel</i>	
09.30 – 10.00	Registration of the conference participants.	MGSU
10.00 – 10.30	Opening ceremony.	All
10.30 - 12.30	Plenary session.	All
12.30 – 13.30	<i>Lunch Break</i>	
13.30 – 18.00	Work of the conference sections. Section 1: Architecture and town planning.	All
18.00 – 20.00	<i>Dinner. Informal discussion of the Conference.</i>	
Thursday, November 13, 2014 Venue: MGSU		
08.30	<i>Transfer from Cosmos Hotel</i>	
09.00 – 10.30	WP2: Module specifications and teaching materials. Possibilities to integrate the prepared BSc/specialists, MSc and PhD modules in Russian, Ukrainian, Belarusian and other countries' universities.	All
10.30 – 11.00	<i>Coffee Break</i>	
11.00 – 13.00	WP2: Module specifications and teaching materials. Possibilities to integrate the prepared BSc/specialists, MSc and PhD modules in Russian, Ukrainian, Belarusian and other countries' universities.	All
13.00 – 14.00	<i>Lunch Break</i>	
14.00 – 15.30	WP3. Development of e-interuniversity networked system. Possibilities of the Intelligent Library, the Intelligent Tutoring System and the Intelligent Knowledge Assessment System inter-university integration.	VGTU, All
15.30 – 16.00	<i>Coffee Break</i>	
16.00 – 17.00	WP3. Development of e-interuniversity networked system. Integration of the BSc/specialists, MSc and PhD modules to the Intelligent Systems.	VGTU, All
17.00 – 19.00	Free time	
19.00 – 22.00	<i>Dinner. Informal discussion of project issues.</i>	
Friday, November 14, 2014. Venue: MGSU		
08.30	<i>Transfer from Cosmos Hotel</i>	
9.00 – 10.30	WP4. Monitoring and Reporting of Results. Peer review procedures of the modules.	All
10.30 – 11.00	<i>Coffee Break</i>	
11.00 – 13.00	MGSU tour	All
13.00 – 14.00	<i>Lunch Break</i>	
14.00 – 15.30	Discussion about the Erasmus+ program possibilities.	All
15.30 – 16.00	Discussion and actions for the next meeting. General summing up. Closing of the meeting.	All



## ANNEX II: MODULE SHARING

### TEMPUS project CENEAST module list and proposals for the module sharing

Module	Responsible University	Module Specifications in Russian	Module Specifications in English	Handbook	In which university will be integrated	Teaching method
<b>BSc</b>						
Renewable Energy	KSTU with NTUU "KPI"	+ RU	+ EN	+ RU		
Energy Efficiency in Engineering Systems	KSTU with NTUU "KPI"	+ RU	+ EN	+ RU		
Energy Audit	NTUU "KPI"	+ RU	+ EN	+ RU		
Construction Materials for Sustainable Built Environment	YKSUG	+ RU	+ EN	+ RU		
Sustainable Urban Design	MGSU	N/A	+ EN	+ RU		
Green Built Environment	MGSU	+ RU	+ EN	+ EN		
Energy Efficiency in Built Environment (deleted)	MSIU	-	-	-		
Advanced construction technologies for energy efficient buildings	SPbSPU	+ RU		+ RU, teaching		

				materials missing		
Project management in construction and construction site management	SPbSPU	+ RU		+ RU, teaching materials missing		
<b>MSc</b>						
Environmentally sustainable cities development	NTU "KhPI" with NTUU "KPI", MSIU and VGTU	+ RU	+ EN	+-		
Green Built Environment	MGSU	+ RU	+ EN	+ EN		
Sociological methods used for sustainable urban development	MGSU with UNIBO and TUT	N/A	+ EN	+ RU		
Human safety, natural and technogenic problems in the 21 <sup>st</sup> century	NTUU "KPI" with USAL, NTU "KhPI" and SPbSPU			-		
<b>Building Information Modeling (additional)</b>	SPbSPU	+ RU		-		
<b>Sustainable Real Estate Market Development (additional)</b>	BSTU	N/A	+ EN	+ RU, preliminary		
Smart House	MSIU	+ RU		+		

				RU, teaching materials missing		
Smart Built Environment	MSIU	+ RU		+ RU, teaching materials missing		
Construction Investments	TUT	+ RU	+ EN	+ EN		
Restoration of Cultural Heritage (additional)	V. Kutut	+ RU	N/A	N/A		
Introduction to Specialty (additional)	V. Bolshakov	+ RU	N/A	N/A		
<b>PhD</b>						
Integrated analysis of the built environment life cycle	VGTU with BSTU	+ RU	+ EN	+ RU		
Resilience Management (additional)	USAL	-	+ EN	+ EN		

Ideas for the module sharing (with TEMPUS partners, with universities not involved in TEMPUS project, personal contacts, distance learning possibilities, etc.)

