

Higher engineering training for environmentally sustainable industrial development
543966-TEMPUS-1-2013-1-BE-TEMPUS-JPCR
HETES

MINUTES OF THE 1ST COORDINATION MEETING

Venue: KU Leuven – CAMPUS GENT (KAHO Sint-Lieven), Faculty of Engineering Technology,
Gebroeders De Smetstraat 1, Belgium, Gent

Dates: February, 05 – 07 2014

Participants: **BELGIUM**

Katholieke Universiteit Leuven

Mr. Lieven De Strycker

Mr. Philippe Saey

Mr. Jan Cappelle

Mr. Geert De Lepeleer

Volvo Cars Gent

Mr. Rudi Van Sande

UNITED KINGDOM

Buckinghamshire New University

Mr. Florin Ioras

SPAIN

Universidad de Granada

Ms. Blanca Delgado-Márquez

SWEDEN

Kungliga Tekniska Högskolan

Ms. Olga Kordas

Ms. Kateryna Pereverza

UKRAINE

Donetsk National Technical University

Mr. Oleksandr Troyanskyy

Mr. Volodymyr Kochura

National Metallurgical Academy of Ukraine

Mr. Volodymyr Shatokha

Mr. Andriy Petrenko

Mr. Yuriy Frenkel

Ivano-Frankivsk National Technical University of Oil and Gas

Mr. Oleg Karpash

Mr. Maksym Karpash

Sevastopol National Technical University

Mr. Yevgen Pashkov

Mr. Andrey Falaleev

Kryvyi Rih National University

Mr. Yaroslav Shramko

Ms. Lyudmyla Kruhlenko

Ministry of Education and Science of Ukraine

not available

Ukrainian Research & Technology Center of Metallurgy Industry

not available

I. PERFORMED ACTIVITIES

- 1 Self-presentations of the participants and their roles in the project.
- 2 Overview of the objectives and methodology of the HETES project, details of activities to be performed during the entire project and deliverables to be produced.
- 3 Presentations of the project partner institutions with the emphasize on the experience in the project theme and inputs to the project.
- 4 Detailed planning of activities and deliverables for the period from February 2014 to June 2014 and setting the dates for the meetings in the 2nd bi-annual period.
- 5 Detailed overview of the eligibility conditions for Tempus activities, requirements to the financial documentation and discussion of the administrative issues.
- 6 Overview of the tasks and activities for quality control and presentation of QC tools to be applied in HETES project.
- 7 Summarising the results of coordination meeting and drafting the Minutes of the meeting.

ACTIVITIES FOR FEBRUARY – JUNE 2014

WP1 “TRAINING COURSE ENVIRONMENTALLY SUSTAINABLE INDUSTRIAL DEVELOPMENT FOR MSC, PHD PROGRAMMES” (DEC 2013 – AUG 2015)

This workpackage and its activities are designed to learn the European experience and practice in addressing the environmentally challenges by curriculum. In particular, Ukrainian partners will learn the practices of EU universities, analyse and summarise the obtained experience in the Brochure (indicative title “Training engineers for sustainable development: EU experience”). Based on the achieved knowledge UA partners will define the learning outcomes for study programmes and skills & qualifications of graduates necessary to ensure the environmentally sustainable development of industry in Ukraine. Based on the established requirements each Ukrainian university must:

- develop the content of 1 new course for MSc and 1 new course for PhD Programme
- make the selective update of other existing courses with new disciplines that will address the current environmental issues.

Recommendation for Ukrainian partners:

- to start development of the new courses from the beginning of the project;
- to consider which existing courses require update as soon as possible;
- to involve to the project activities, including mobility, staff who capable of delivery the established outcomes.

Agreed time schedule for activities:

Activity 1.1. Study of best EU practices in higher engineering education reform towards sustainable development demands

Dates for study visits to EU partners:

- visit to Royal Institute of Technology – from 17/03/2014 to 21/03/2014 (working days)
**deadline to provide the passport details for Invitation Letters is [13/02/2014](#)*
- visit to University of Granada – from 24/03/2014 to 28/03/2014 (working days)
**deadline to provide the passport details for Invitation Letters is [13/02/2014](#)*
- visit to Buckinghamshire New University – from 12/05/2014 to 16/05/2014 (working days)
**deadline to provide the passport details for Invitation Letters is [28/02/2014](#)*
- visit to Catholic University Leuven – from 26/05/2014 to 30/05/2014 (working days)
**deadline to provide the passport details for Invitation Letters is [28/02/2014](#)*

Each Ukrainian university partner is able to assign 2 persons for each study visit, Energostal and Ministry can assign 1 person for each study visit. Participants of study visits must arrive on Sunday prior the start of the working week and go back on Saturday or Sunday. The project will reimburse the visa cost, actual travel costs and daily allowance of 900 Euro as maximum.

It is highly recommended that prior to the study visits UA staff learn relevant issues via the sources available, including the web resources of EU partners, in order to be prepared for the study visits. If there are some questions of special interest to learn during the study visits, the UA partners are very welcomed to inform the Coordinator not later than 2 weeks prior to the start of the visits.

Activity 1.2. Elaboration of Brochure "Training engineers for sustainable development: EU experience"

Brochure must be based on the experience obtained during the study visits to EU partners.

The following distribution of topics has been agreed:

- NMAU – Introduction, general editing, summary
- DonNTU– Institutional issues
- IFNTUOG – Skills, qualifications and learning outcomes
- KNU – Role of practical training
- SevNTU – Partnership with enterprises

It is expected that each partner will write up to 5 pages of text on the assigned topic. All images used in the text must be provided as high quality graphic files.

Deadline for delivery the chapters by each partner – July 31 2014.

Activity 1.3. Definition of skills, qualifications and learning outcomes

Skills and qualifications, needed to address demands of environmentally sustainable industrial development, will be defined and learning outcomes established with respect to following distribution of the directions of study:

- DonNTU – Non-ferrous metallurgy
- IFNTUOG - Energy
- KNU - Mining
- NMAU - Ferrous Metallurgy
- SevNTU – Mechatronics (Automation)

Partners can propose substitution of these directions not later than April 30, 2014.

Partners must be ready to present their vision for the development of new courses and selective update of existing courses on the 2nd Coordination Meeting (June 11 – 12, 2014).

The deadline to deliver final document with description of skills, qualifications and learning outcomes was shifted from initially planned June 30, 2014 to July 31, 2014, owing to late commencing of the project.

Activity 1.4. Development of the content of new course for MSc, PhD Programmes

Following vision for the structure of new discipline (Master level) was discussed:

Target: to equip students with knowledge demanded by environmental challenges and needed to compete in future carbon-constrained economies,

Course is structured in 3 modules:

1st module

- to raise environmental and climate change awareness,
- to introduce international initiatives and economic tools for sustainable development – e.g. Clean Development Mechanism of UN FCCC, EU Emissions Trading System etc.
- to avoid narrow outlook on environmental problems by introduction to interdisciplinary tools such as Life-Cycle Assessment

2nd module

- Introduction to ongoing industry-specific initiatives in EU (e.g. ULCOS - ultra-low CO₂ steelmaking, <http://www.ulcos.org>) and non-EU countries (e.g. COURSE50 in Japan (CO₂ Ultimate Reduction in Steelmaking Process by Innovative Technology for Cool Earth 50, <http://www.jisf.or.jp/course50>).

3rd module

interdisciplinary team project aimed to develop environmentally-driven technological innovations, involving students of different majors

Following recommendations are discussed for PhD level

- taught module will be designed focusing on environmental challenges and interdisciplinary research tools for assessing environmental sustainability and industry-specific context of sustainable development;
- interdisciplinary seminars.

Content (descriptive) of the new courses must be provided by each Ukrainian university partner by September, 30 2014. This output must be available prior to the Workshop and NTO monitoring visit and any delays are not allowed.

Activity 1.5. Development of the course materials

Each university partner has financial resources under the “printing and publishing costs” allocated to publish the teaching tutorials needed to deliver the new course and teach the updated courses. Teaching tutorials must be ready by January 31, 2015 (to be discussed in details on the 2nd coordination meeting).

Activity 1.6. Selective update of existing taught disciplines

The new and updated courses must be ready for teaching from the 2015/2016 academic year (September 2015, to be discussed in details on the 2nd coordination meeting).

WP 4 “DISSEMINATION & SUSTAINABILITY” (entire lifetime of the project)

Activity 4.1. Launching and updating the project website

The website of the project is expected by the end of March 2014 (NMAU is responsible).

Activity 4.2. Development of info-leaflets

The dissemination leaflets must be developed each 6 months, the 1st issue of leaflet is due by May 31, 2014 (NMAU is responsible).

Activity 4.3. Promotion of project’s activities in regional and national press and TV

Each Ukrainian project partner is encouraged to disseminate the project activities through any of possible dissemination channels (press, TV, internet), the sufficient awareness of the project objectives among the university staff must be ensured. Partners must always use the logo of Tempus programme and logo of the project (will be developed in soon time) in any publication material, the support of the project by EU must always be mentioned.

Partners are asked to provide the Coordinator with a copy of any dissemination material.

Activity 4.4. Arrangement of workshop

The workshop will be arranged at the Kryvyi Rih National University on October 23 – 24, 2014 (working days). This workshop will be coincided with the field monitoring visit from National Tempus Office in Ukraine (October 24 is allocated for this activity). Each project partner must attend this event, details will be discussed on the 2nd coordination meeting.

WP 5 “QUALITY ASSURANCE” (entire lifetime of the project)

Both internal and external quality control measures are planned in HETES project and appropriate instruments were presented on the kick-off meeting. Project Administrators at each Ukrainian project partner are responsible for the performance of the QC activities.

Internal Quality Assessment Reports – must be provided semiannually by each Ukrainian project partner, 1st report is due by May 31, 2014. Partners should use the template for internal QC reports that will be provided by Coordinator.

External Quality Assessment Reports – must be provided at the end of each project year, 1st report is due by September 30, 2014 (prior to the monitoring visit). Partners should use the template for external QC reports that will be provided by Coordinator.

For more details on QC measures please refer to the slides of the kick-off meeting.

**some updates on QC activities may be introduced in the nearest time*

WP 7 “MANAGEMENT” (entire lifetime of the project)

Activity 7.1. Day-to-day administration

All communications between project partners will be provided via e-mail. The details and requirements to the administrative and financial documentation are provided in the presentations of the kick-off meeting and partners are asked to strongly follow the given instructions.

In the nearest time the Coordinator (grantholder) will offer to sign the Partner Agreement to each project partner, all financial details and responsibilities will be clearly described therein.

Activity 7.2. Coordination management

Coordination management will be ensured via the semiannual Coordination Meetings. The 2nd coordination meeting will be held at the University of Granada and is scheduled for June 11 – 13, 2014 (11-12/06 will be the main working days).

Each project partner is able to nominate 1 person (exception of 2 persons for Coordinator and National Coordinator) to attend the 2nd Coordination Meeting. Participants must arrive to the venue on Tuesday 10/06/2014 and go back on Saturday or Sunday. The project will reimburse the visa

cost, actual travel costs and daily allowance of 718 Euro as maximum (for 5 days). Dates for the 2nd Coordination Meeting are fixed and from now partners are encouraged to start planning of this mobility. Passport details for Invitation Letters must be provided by 31/03/2014.