MINUTES of the second meeting of partners in the project titled "Recognition of needs and creation of the professional training in the area of preparation and management of infrastructure construction projects financed by the European Union".

Vilnius Gediminas Technical University (VGTU), 7-8 July 2005,

The following participants took part in the meeting:

- Prof. Dr hab. Romualdas Ginevičius, Rector, VGTU,
- Prof. Dr Povilas Vainiūnas, Dean of Faculty of Civil Engineering, VGTU,
- Dr inż. Andrzej Minasowicz Promoter, Warsaw University of Technology, WUT,
- Prof. Dr hab. inż. Leonas Ustinovicius VGTU,
- MSc. Darius Migilinskas VGTU,
- President Mieczysław Grabiec Stowarzyszenie Inżynierów Doradców i Rzeczoznawców, SIDiR, Poland
- Prof. Jose Teixeira, University of Minho, UMINHO, Portugal
- Dr Eugenio Pellicer Polytechnic University of Valencia, PUV, Spain
- Dr inż. Paweł Nowak Director, Polish British Construction Partnership, PBCP, Poland
- MSc. Stanisław Więckowski Director, PBCP.

Project Advisory Board Members were present (at 8th July 2005):

- Director Saleem Akram Director, The Chartered Institute of Building, UK,
- Kevin Sheridan Vice President, AEEBC (Association Building Surveyors and Construction Experts), Brussels, Belgium,
- Vladislavas Kutut Director, Lietuvos Paminklai, Lithuania.

Invited guests of Seminar from Universities and industry:

- Dr. Romualdas Tamošaitis, Director, VGTU, Lithuania,
- Dr. Jurgita Antucheričienė VGTU, Lithuania,
- Dr Bogdan Ciupek University of Economy, Katowice, Poland,
- Dr Tomasz Błaszczyk University of Economy, Katowice, Poland,
- Dr. Jonas Šaparauskas VGTU, Lithuania,
- MSc. Darius Kalibatas VGTU, Lithuania.

At the 7th July 2005 the meeting was open by Prof. Dr Povilas Vainiūnas, Dean of Faculty of Civil Engineering, VGTU. He welcomed participant and present the Faculty. Than The Promoter presented schedule for the meeting (attached) and short information about the LdV project, work packages and main expected results.

The national results of the questionnaires were presented by VGTU, PUV, PBCP and UMINHO. Prof. Jose Teixeira presented aggregate report from the questionnaire, covering results from all participating countries. The most important answers for the future of the project came from Contractors companies and local authorities. Responders have chosen the following areas of management, as the most important for their national construction industries (percentage shows number of answers):

ID	Subject	Contractors	Gov. Agencies
1	Planning and Scheduling	15%	12%
2	Cost Estimating and Cost Management	14%	15%
3	Quality in Construction	11%	9%
4	Procurement and Contract Conditions	10%	11%
5	Health and Safety Management in Construction	11%	9%

During discussion on the questionnaire results Partners have chosen the above mentioned subjects as base for the future manuals for managerial courses.

After the break PUV, VGTU, WUT and PBCP presented the set of procedures – Phases, Stages and Steps of investment project for infrastructure projects financed from EU. Partners and invited guests discussed the phases and General Law influencing the construction industry in Lithuania, Spain, Portugal and Poland.

On the 8th July 2005 the meeting was open by prof. Leonas Ustinovičius and the Promoter – Dr. Andrew Minasowicz.

The phases of the project were finally accepted, as well as range of the national legal regulation to be written for each phase.

The contents of the manual were decided and responsibility for the manual preparation was divided between Partners.

Partners discussed also other work packages and agreed dates for the next meetings. Partners decided also the deadlines for future steps of the project for each WORK PACKAGE.

During the day the four official presentations were took place, including the special presentation of Rector of VGTU:

- Prof. Dr Hab. Romualdas Ginevičius, Rector of VGTU presented main activities of the University and underlined the importance of the LdV project results for Lithuanian and European construction industry.
- Director Saleem Akram of Chartered Institute of Building, UK, (Project Advisory Board) presented the Institute, the development of British construction industry over the last ten years and new research work conducted at CIOB in the area of management in construction.
- Vice President Kevin Sheridan of AEEBC (Association Building Surveyors and Construction Experts), Brussels, Belgium, (Project Advisory Board) presented the Association, issues connected with accreditation of courses and certification of managers in EU, all connected with new proposed professional title: EURMC European Manager in Construction.
- Prof. Leonas Ustinovičius VGTU, presented the recent research works conducted at Department of Construction Technology and Management at Civil Engineering Faculty of VGTU.

DURING THE TWO DAYS MEETING PARTNERS AGREED AND DECIDED THAT:

1. WORK PACKAGE I - the internet site of the project will be prepared and maintained, the results of the project will be added in relevant time, hyperlink from Partners websites to main project website at Warsaw University of Technology were added and will be updated regularly: www.il.pw.edu.pl/~iipbiz/leonardoIV/index.html

Partners confirmed the names of Senior Experts from European Construction Industry appointed to Project Advisory Board:

- SALEEM AKRAM – Director, The Chartered Institute of Building, UK,

e-mail: sakram@ciob.org.uk

- JOAQUIN CATALÁ – Prof. of Polytechnic University of Valencia e-mail: jcatala@cst.upv.es

- VLADISLAVAS KUTUT – Director, Lietuvos Paminklai, Lithuania.

e-mail: lietuvospaminklai@sala.lt

- KEVIN SHERIDAN – Vice President, AEEBC (Association Building Surveyors and Construction Experts), Belgium, e-mail: sheridankc@eircom.net

- 2. WORK PACKAGE II the final, aggregate results for the questionnaire will be prepared by UMINHO by 31st July 2005 and circulated to all Partners. WUT will pass the questionnaire results to Project Advisory Board Members for assessment.
- 3. WORK PACKAGE III the "Phases, Stages and Steps" table (see example in the attachment 1), showing the phases of investment project will be filled with main information about the legal regulations influencing construction industry (f.e. EU Directives and General Law, like Building Codes, Procurement Law, etc. relevant for each country). The national reports will be prepared for Valencia meeting 27th October 2005 and aggregate report (see example in the attachment 2) will be prepared by PUV.
- 4. WORK PACKAGE IV for this most important package it was agreed that:
- the extended, one manual, in the form of "SEGREGATOR" (loose cards, easy for extension, addition, preparation of "tailored" course) will be prepared,
- the manual will be prepared by all Partners in ENGLISH (some translation into national languages will be added later for training purposes), in MS WORD, with use of the document template: "ldvmanag.dot" (giving the rules for edition of the texts, graphs, etc.), prepared by PBCP on 20th July 2005, and send by e-mail to all partners,
- the manual will consist of four CHAPTERS:
 - PROCUREMENT and CONTRACT CONDITIONS in CONSTRUCTION,
 - PLANNING and SCHEDULING in CONSTRUCION,
 - COST ESTIMATING and COST MANAGEMENT in CONSTRUCTION,
 - QUALITY and HEALTH and SAFETY MANAGEMENT in CONSTRUCTION,
- the manual will address only EU funded projects
- the manual will present information in global, general scale,
- the manual will cover all stages of the infrastructure project, from preconstruction to handing over and start up,
- the manual will consist elements relevant to three participants of the project: CLIENT, ENGINEER / CONSULTANT / DESIGNER and CONTRACTOR,
- the chapters will consist of appr. 40 pages, with number of exercises and case studies,
- the answers to exercises, as well as methodology of the course will be presented in the Teachers Manual

- the chapter dealing with costs will show information about needed input (information) and expected outputs of cost estimating and cost management without addressing the tools necessary for direct calculations,
- the chapter dealing with planning and scheduling will deal with time planning with some chosen elements of cash flow, related to the EU infrastructure projects,
- the work package is supervised by the Promoter, who will Revised the materials to avoid overlaps.

Partners agreed the following distribution of tasks (preparation of relevant manuals) and manuals contents:

WUT	SIDIR	PBCP	UMINHO	PUV	VGTU
Procureme and Tendering parts of Planning a Scheduling	+ Conditions and Procurement and and	Quality Management	Cost Estimation and Cost Management	Health and Safety Management	Planning and Scheduling
Chapter 1 Chapter 2	_	Chapter 4	Chapter 3	Chapter 4	Chapter 2
MAIN REVISIN	G				

CHAPTER 1. PROCUREMENT AND TENDERING + CONTRACT CONDITIONS:

- General introduction (EU)
- Public Procurement Law in Partners countries (help needed from PT, ES, LT). Short description
- Criteria set for Client and Contractor (help needed from PT, ES, LT)
- Types and forms of tenders
- Tender selection criteria
- Transparency procedures and appeal system
- Set of additional requirements for Structural funds
- Application procedures for Structural funds
- Contract conditions according to FIDIC (help needed from PT, ES, LT). Types of FIDIC books, participants, management procedures, taking over, dispute resolution
- Case studies

NOTICE: Each chapter will consist of exercises + case studies

CHAPTER 2. PLANNING AND SCHEDULING:

- General introduction, criteria and preferences (EU)
- Standards and legal regulations influencing (related to) planning and scheduling
- Modelling of (calendar plans) time line
- GANTT chart
- Network diagrams
- Flow diagrams (resource= man and machines power)

- Evaluation of time lines
- Optimization of time line
- Programming equipment for scheduling
- Case studies

NOTICE: Each chapter will consist of exercises + case studies

CHAPTER 3. COST ESTIMATION AND COST MANAGEMENT:

- General introduction (EU)
- Types of Cost and Cost classification
- Cost estimating procedures in project life cycle
- Establishing the Cost Plan
- Relating Cost to Budget and Cash Flow forecasting
- Cost monitoring and Cost Control systems
- Cash Flow analysis
- Budgetary Control and Variance analysis
- Cost Time trade off
- Case studies

NOTICE: Each chapter will consist of exercises + case studies

CHAPTER 4. QUALITY MANAGEMENT + HEALTH AND SAFETY MANAGEMENT:

- General introduction, criteria and preferences (EU)
- Standards and legal regulations influencing (related to) quality and health and safety
- Documentation and certification procedures for quality
- Documentation and certification procedures for health and safety
- Quality for works and services
- Health and safety for works and services
- Case studies

NOTICE: Each chapter will consist of exercises + case studies

- the content of the manual and chapters will be confirmed (adjusted) by all Partners before 22nd July 2005,
- some help to SIDIR and WUT in preparation of the chapter connected with procurement is needed from all Partners SIDIR will prepare the first draft of tender procedures description for partners before 31st July 2005. All Partners will present some information about their "national procedures in tendering" (according to the layout suggested by SIDIR) for the meeting in Valencia 27-28 October 2005,
- the methodology for the courses will be prepared by PBCP / WUT, and discussed at the meeting in Valencia 27-28 October 2005,
- the first draft of the chapters will be prepared by all Partners for the Valencia meeting 27-28 October 2005,

<u>5. WORK PACKAGE V</u> – the first assumptions for Internet Platform will be prepared by PBCP for discussion at the meeting in Valencia **27-28 October 2005**,

<u>6. WORK PACKAGE VI</u> – the test courses assumptions will be discussed in Valencia. Partners will target February 2006 (or March 2006 as the latest) as the months for test courses in Partners countries.

7. WORK PACKAGE VII – dissemination of the project idea and results.

- all Partners will write information about the project at their websites, the promoter will display minutes from partners meetings and first results of the project (the questionnaire results),
- all Partners will inform about the LdV project at their seminar, conferences and meetings with industry,
- PUV will organize the seminar for construction manager from Spain (with some elements of Focus Group for Spanish and questionnaire recognizing contents of the manual),
- PBCP / WUT will prepare publication for CIOB Construction Magazine and for Conference in Athens in September 2005, and the AEECB conference in Warsaw in October 2005, partners will prepare the Focus Group for Polish managers and questionnaire recognizing contents of the manual,
- SIDIR will put some information about the project in their periodic magazines,
- UMINHO will prepare the relevant paper for local journal in Portugal, and will prepare the Focus Group for Portuguese managers and questionnaire recognizing contents of the manual
- VGTU is supervising the dissemination activities, will facilitate the common Partners publication in professional magazines in Lithuania ("Civil Engineering and Management") and will prepare Focus Group for Lithuanian managers and questionnaire recognizing contents of the manual

Partners agreed the following dates of meetings:

- VALENCIA 27-28 October 2005
- PORTO 23-24 February 2006
- WARSAW 25-26 May 06 together with final dissemination Conference.