Project "Osteosynthesis for Surgical Management of Fractures for Orthopedic Surgeons and Biomedical Engineers"

14-15 May 2015

IBV, Valencia, Spain

Minutes of the project meeting

Participants:

Zoe Dailiana (DOS) Katerina Gronela (DOS) Keti Tokmakova (MUP) Petar Molchovski (MUP) Juan Gómez (IBV) Susana Maranchón (IBV) Carlos Atienza (IBV) Antonio Rubio (IBV) Veronika Andreu (IBV) Slavka Tzanova (TUS) Boyan Stoilov (TUS) Rossen Radonov (TUS) Elitsa Gieva (TUS) Svetozar Andreev (TUS) Nina Spasova (TUS) Evgenia Dimitrova (NSA – external evaluator)

Agenda:

14 May 2015:

Timetable	Agenda	Presenter
10:00-10:15	Welcome, opening of the meeting, setting off the Agenda	IBV
10:15-11:15	Project tasks and results overview	TUS
11:15-11:30	Coffee break	
11:30-13:00	WP1 Management, Interim report	TUS, ALL
13:00-14:30	Lunch	
14:30-16:00	WP1 Management, Financial report. Check of reported and planned expenditures of all partners	TUS, ALL
16:00-17:30	Discussion on the interim report evaluation and the planning of finances	ALL

15 May 2015:

10:00-10:30	WP3 eLearning materials adaptation. The learning environment improvement	IBV
10:30-11:15	WP4 Evaluation and pilot test. Reporting de pilot test results	IBV
11:15-11:30	Coffee break	
11:30-13:00	WP4 Discussion on the pilot test at each institution	ALL
13:00-14:30	Lunch	
14:30-15:00	WP6 Exploitation. Planning the field trial	TUS, ALL
15:00-15:45	WP5 Dissemination	ALL
15:45-15:55	Planning of the last meeting	ALL
15:55-16:00	End of the meeting	ALL

14 May

Opening

Welcome, opening of the meeting by the director of the Healthcare department, Carlos Atienza, presentation on the recent research projects of the department.

WP1. Management

An overview of the tasks from the ToDo list from the previous meeting was done. Overview of the tasks (pilot test results, exploitation - field trial planning, evaluation, dissemination) was made by Slavka Tzanova.

WP1 Management, Financial report. Check of reported and planned expenditures of all partners

The second advance of the project grant was transferred to all partners.

The project co-ordinator together with the PSC checked the occurred and the planned expenditures to the end of the projects of each partner in order to decide if an amendment should be required. The partners from MUP have more travel costs and less other costs. IBV will report less travel costs but 6000 EUR for staff costs more than planned for them. DOS also has more travel costs but the total for the project budget does not change more than 10%.

Maybe some amendment for the other costs could be required.

WP1 Management, Discussion on the remarks from the interim report and decisions for improvement

- "Adaptation according the need analysis" to be explained in details in the final report
- "all 8 modules are included into one course" It is one course
- "it is not clear which modules are relevant for engineers" all modules are relevant for both, engineers and physicians
- "all modules are just in a PDF format with zero interactivity" after each module there are activities and before the modules pre-tests; exercises with FEM for engineers and face-to-face practice with residents and students. For experienced surgeons and designers these modules are used as a performance support system.
- "describe clearly the target group the project is developed for" They are described in the project Summary (second page of the project Web page)
- "ensure all project results are available for download from separate language versions of the website" They are downloadable and that is why they are in PDF format.
- "Ensure e-learning courses are available in all project languages as planned (EN, BG, EL); They are available in all languages. <u>One has to login first with the password and then to change the language</u>
- "Ensure the courses have relevant quality and content to the needs of the target groups" It is proven by the learners' attitude questionnaires
- "describe the content of the course and what is expected at its completion at the front panel of the e-learning platform, etc." - <u>To add a summary and</u> <u>learning objectives on the first page</u>
- "Use in a more adequate way the potential of Moodle (present the modules as pages, include tests, weblinks, internal links, etc.)" There are tests; To include hypertext: Web links, internal links

- "Provide concrete figures for project dissemination and exploitation activities; avoid using common phrases as "many people expressed interest in the products" but provide relevant information (answer the questions who, when, why, are they going to use the products and what a way, etc.) The residents and the engineers will be trained during the field trial; the professionals in medicine and engineering will use them as a performance support system
- "Explain the relation of the results with VET system (national and EU) and how they will contribute to it." - The learning outcomes will contribute to the qualification system description and the credits provided to the ECVET system.
- "More attention should be given on dissemination in Bulgaria, i.e. publications in specialized magazines or other relevant media." The specialised magazines in medicine and engineering publish research results. These are educational and are published in conference proceedings and included in the SCOPUS database.
- "It seems that dissemination has been carried out only by means of presentation at conferences and through the web-page of the Technical University. Further effort is needed to popularize the project and its outcomes (especially at local level), i.e. social media etc. In order to extend its impact." - Newspaper in Greece and publicised in all partners' Web pages in all languages. The conferences are attended by the target users of the courses – professionals. The surgeons and the engineers participating in the project are not users of the social networks but it was decided to develop a page in Facebook which might be useful for the students.

Visit of the Instituto de Biomecánica de Valencia

Social scientific dinner

15 May 2015

WP3 eLearning materials adaptation. The learning environment improvement

Following the suggestions of the evaluator of the Interim report and of the participants in the pilot test, it was decided:

- To add a summary and learning objectives on the first page of the course
- To explain to the trainees the they can change the language only after login with their password.
- To add the credits in the certificate
- To change some questions in the attitudes questionnaire

WP4: Oral evaluation report. Report of the results of the pilot test

Juan Gómez presented the results of the pilot test. 21 participants in a total, 20 – successful on the final test with certificates.

In addition to the online training materials, practical work with medical cases for doctors and design with FEM for engineers was done at DOS, MUP and TUS. Some of the participants in the pilot test from TUS took part in the meeting. They passed successfully the course and they will be tutors in the exploitation stage.

It was decided to add the credits in the certificate for the course.

The external evaluator of the project, prof. Evgenia Dimitrova, made an oral report on the evaluation of the period after the interim report.

- Discussion for improvement:
 - To change some questions, e.g. "What is your profession?" instead "What is your position?". There are assistant and associate professors engineers and physicians, there are also doctors (of science) M.D. and PhD but in the report they are classified as doctors and not engineers;
 - The language can be changed only after login;
 - \circ $\,$ One overview of the final questionnaires was done.
 - 0

WP6 Exploitation. Planning the field trial

The filed trial should start ASAP and it should end before the last project meeting. At least 60 trainees from Bulgaria and Greece should be involved.

In the pilot test, people from external institutions should be involved too and not only residents and MSc students and engineers.

To send the names and e-mail addresses of participants to IBV for creating accounts in the learning environment.

To plan the practice with engineers and doctors in each partner institution.

WP5 Dissemination

Many dissemination activities were reported. The project Web page in all partners' languages is maintained with tables where all results are being published (http://telearn.tu-sofia.bg/OrthoBioMed/index.php), the presentations during the project meetings and the minutes of the meetings as well.

There are Web pages in Bulgaria on the TUS server (the main project Web page); in Greek on the DOS server (<u>http://www.uth.gr/genannounce/2109-20140318-orthobiomed</u>) and in Spanish on the IBV's server (<u>http://orthobiomed.ibv.org</u>) and for the meeting in Valencia in Spanish: <u>http://www.ibv.org/es/noticias-actualidad/show_new/76/4516</u> and in English: <u>http://www.ibv.org/es/noticias-actualidad/show_new/76/4517</u>.

IBV has published also special news for the project activities as well: <u>http://tecnologia-</u>

sanitaria.ibv.org/index.php/es/proyecto/show_proyect/10/347

News item in the Interempresas web are published as well. Interempresas is an association of medical and hospital equipment:

http://www.interempresas.net/Medico-hospitalario/Articulos/114089-El-IBV-participara-en-3-nuevos-proyectos-de-formacion-financiados-por-la-Comision-Europea.html

On 17/10/2014 the Larissa's newspaper published information on the project activities and the collaboration of the four institutions from Bulgaria, Greece and Spain within the Leonardo da Vinci programme. It is also published in the electronic newspaper on 15/10/2014:

(http://www.eleftheria.gr/index.asp?cat=27&aid=81841#.VEQO2L7tUmk)

Slavka Tzanova presented the project on the 9th International Technology, Education and Development Conference (INTED 2015) in Madrid:

Tzanova S., Daliana Z., Tokmakova K., Atienza C., European Project for Education in Osteosynthesis for Surgical Management of Fractures for Orthopedic Surgeons and Biomedical Engineers, 9th International Technology, Education and Development Conference (INTED 2015), Madrid, Spain, March 2-4 2015, pp. 6350-6355.

Next meeting will be in Plovdiv in September. The dates TBD.

To do list:

- 1. *WP1:* To explain how exactly the described equipment is used in the project activities.
- 2. *WP2:* To explain how the contents were adapted to the needs of DOS, MUP and TUS according to the need analysis.
- 3. *WP3:* To add a summary and learning objectives on the first page; to include hypertext: Web links, internal links.
- 4. *WP4:* To send the report from the Pilot test to Slavka
- 5. *WP6:* To perform the field trial until 15th September 2015 with at least 20 people from each partner's institution (TUS, MUP, DOS) IBV will create accounts for the users.
- 6. *WP5:* To publicise the project in Facebook, in Linkedin. To translate the project Web page in Greek. To continue with the dissemination activities: publications, leaflet, demo DVD, dissemination workshop in Plovdiv.