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Minutes of DBBT meetings





MINUTES FROM THE MEETINGS HELD IN VISER (BELGRADE) ON 23RD AND 24TH OF MAY 2016

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| Coordinator: | Prof. Dr. Sinisa Ilic, UNIVERSITY OF MITROVICA Faculty of Technical Sciences |
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1st day of the meeting, Monday 23rd May 2016

Registration of participants of the Meeting started at 08:30 in the hall of the School of Electrical and Computer Engineering of Applied Studies (VIŠER). At 09.00, professor dr Slavica Marinković, head of the study program Electronics and Telecommunication from VIŠER, started the meeting with the introduction of the agenda.

Topic: Welcome and introduction

Director of VIŠER professor dr Vera Petrović, officially opened the meeting, making a short introduction on behalf the host institution. She presented briefly 8 study programs of the bachelor level of the studies and 6 study programs of specialist vocational/applied studies. Short film about VIŠER was presented accompanied with promotional TV commercial for this year enrolment.

Topic: WB Partners presentations of existing undergraduate curriculum and DBBT master studies curriculum proposals

At 09.30 a.m. presentation of the new study programs for DBBT from both academic and vocational WB partner institutions started with the presentation of Faculty of Technical Sciences of the University of Priština in Kosovska Mitrovica (UPKM). Professor dr Mile Petrović introduced already accredited curricula from the departments of Electronics and Telecommunication, and the Computer Science and Informatics (for the existing Bachelor studying programs – 240 ECTS), followed by proposal for the master academic study program in accordance to DBBT project goals (60 ECTS, two semesters), detailed proposal will be published on the project website. Bojan Prlinčević, from Higher Technical Professional School in Zvečan (HTPSZ), presented curriculum proposal for the specialist study program (second level of vocational/applied studies with 60 ECTS). Detailed proposal will be published on the project website. Professor dr Igor Krčmar from the Faculty of Electrical Engineering of the University of Banja Luka (UNIBL) presented existing Bachelor studies curricula from the departments of Electronics and Telecommunication, Computer and Informatics, and Power and Industrial systems/Power Engineering and Automation (for the first level of studies - 240 ECTS), followed by proposal of new master study program (for the second level of academic studies – 60 ECTS) with 5 courses, research and master paper, detailed proposal will be published on the project website. From the Faculty of Technical Engineering of the Universtiy of Bihać (UNIBI) dr Alma Oračević presented existing programs for the Bachelor academic studies, followed by proposal of new curricula in DBBT for master degree (60 ECTS) with 8 courses and master paper, detailed proposal will be published on the project website. Professor dr Sonja Krstic from the department of Audio and Video Technologies and professor dr Slavica Marinković from the department of Electronics and Telecommunication, both from VIŠER, jointly presented already accredited study programs for the first (bachelor studies – 180 ECTS) and second level of vocational studies (specialist studies – 60 ECTS), and their relation to DBBT, followed by the proposal for the new master study program (two years, 120 ECTS). Detailed proposal will be published on the project website. Dr Marina Marjanović Jakovljević from the University of Singidunum (UNISI) presented existing Bachelor 4-years study program with 240 ECTS. UNISI presented two courses that will be implemented in existing master study program in accordance with DBBT goals, detailed proposal will be published on the project website. The descriptions of existing and proposed study programs were already exchanged between the members of WP1.



Topic: EU Partners presentation of DBBT master studies curriculum proposals

From the EU countries, representative of the VSB - Technical University of Ostrava (TUO), dr Miroslav Vozňák presented master study programs of his University, which is mainly related to the fields of computer science and less to the telecommunication.

Dr Matevž Pogačnik from the Faculty of Electrical Engineering of the University in Ljubljana (UL), as the chair of WP1, pointed out that he was already involved in reviewing the proposals from WB countries, thus he presented general conclusions and proposals for each master program from all institutions:

- for master programs of UPKM and VIŠER, UL suggested introduction of courses regarding development of web/smart TV interactive applications, intellectual property and legal issues, data protection, advance course of English language for engineers;
- for the master program from UNIBI, UL suggested different name of the courses (DVB-X systems instead of 3D and HD Television) and to separate one joint course of Audio and Video Engineering into two separate courses;
- for the master program from UNIBL, UL suggested introduction of audio and video production related course;
- for the master program of UNISI, UL suggested introduction of course on TV engineering and multimedia system, DVB-X course, audio and video production related course, and one or two courses for audio and video engineering.
- for the specialist program of HTPSZ, UL pointed out the problem of the lack of fundamental, basic level studies in the field of DBBT.

Detailed presentation will be published on the project website.

Professor dr Slobodan Bojanić from the Polytechnic University of Madrid (UPM), pointed out that courses syllabi and names of future DBBT master study programs (tailored for each institution) vary between institutions, and that some harmonization should be considered regarding the DBBT goals in general.

Dr Gholamreza Anbarjafri (Shahab), from the University of Tartu (UT) pointed out the general lack of courses that are connected with the newest trends in modern broadcasting, like: smart TV applications, multi-view broadcasting and HDR imaging.

Topic: Discussion about DBBT curriculum proposals

At 11.30 chair of WP1, dr Matevž Pogačnik (UL), started discussion with general questions that should be addressed through each curriculum: What the industry needs? Who will be the future students for suggested programs? How to deal with the problem of students that did not finish the first level of education in the field of DBBT, or students who come from other institutions. Because of the different backgrounds of future students, solution may be the introduction of greater number of elective courses, which can be hard for institutions' budgets. Dr Miroslav Vozňák (TUO) suggested introduction of computer networks in general, however dr Matevž Pogačnik (UL) expressed his concern that too much computer science related courses may be too hard for the multimedia students. Dr Ranko Babić (UPKM) pointed out that the differences in proposals between institutions must be considered, and that partners from WB countries should take into consideration feedback of representatives of EU countries institutions and re-think the proposals. The new proposals should be sent again to



representatives of EU countries. Dr Gholamreza Anbarjafri (UT) insisted on implementing future technologies, not the current ones, however dr Matevž Pogačnik pointed out that course syllabus should be in accordance with the equipment that is going to be purchased, and that budget for the project cannot support all the technologies dr Gholamreza Anbarjafri (UT) suggested. Dr Miroslav Vozňák (TUO) suggested that overall competencies, and outcomes should be unified as much as possible. Dr Igor Krčmar (UNIBL) said that their master program would be tailored in line with the needs of media and governmental regulating bodies.

Professor dr Branko Dokić from UNIBL invited all participants to visit conference INTEL supported by IEEE to promote the goals of the project.

Klemen Pečnik (UNISI) suggested that artistic components should be implemented in new curricula. Professor dr Vera Petrović (VIŠER) pointed out the current problem with the accreditation of master studies for vocational/applied studies schools, because the bylaws are not yet in accordance with the law that allows accreditation of master studies in Serbia. She announced that she will, together with other directors of schools for vocational/applied studies, seek the support from the Ministry of Education and other governmental bodies. Professor dr Siniša Ilić (UPKM) emphasised that the problem with accreditation of master degrees for vocational/applied studies is a substantial risk for the project and that it was not mentioned or anticipated in the risk table of the project proposal. Dr Matevž Pogačnik said, regarding this problem, that with or without this bylaws VIŠER should apply for the studies. Representatives from UNIBI suggested joint master with VIŠER, however dr Mile Petrović (UPKM) and dr Sonja Krstić (VIŠER) expressed their concern on this idea stating that it would be even harder objective, in legal sense, than to accredit separate study program for VIŠER.

Topic: Tour of the HDTV and Audio studio at VISER

At 15.00, after the lunch break, short technical tour of laboratories and studios of Audio and Video Technologies department was organized.

Topic: Presentation of the equipment procurement specifications

At 15.30, professor dr Mile Petrović presented the draft plan for the purchasing of the equipment for TV studio in UPKM. Detailed list will be published on the project website. The question was raised on justification of implementation of Full HD or 4K video standards. Dr Gholamreza Anbarjafri (UT) suggested implementation of HDR video instead. Professor dr Amela Zeković presented the draft plan for the purchasing of the equipment for the HDTV studio and Telecommunication laboratory in VIŠER. Detailed list will be published on the project website. Professor dr Marina Marjanović Jakovljević presented the draft plan for the purchasing of the equipment for UNSI. Detailed list will be published on the project website.

The representatives of HTPSZ, UNIBL and UNIBI didn't present their proposals for purchasing equipment.

Topic: Discussion about equipment procurement specifications

At 16.00, started an open discussion about equipment procurement specifications. Regarding the proposed software and hardware purchase, Jože Guna (UL) proposed that in general it would be better to purchase fewer number of computers with better performances in order to be more suitable for the audio and video processing and editing. Further consultations will be held before the next meeting;



it was agreed that all partners should send their final lists for the purchase of the equipment by the end of June 2016.

Question of allocation the funds between the budget lines in the equipment heading was raised regarding types of the equipment that are going to be purchased in each institution.

Topic: Conclusions of the first day of the meeting

At 17.15 professors dr Matevž Pogačnik (UL) and dr Mile Petrović concluded the first day meeting summarizing the proposed master degree programs and list of the equipment. The meeting was finished at 17:30.

2nd day of the meeting, Tuesday 24th May 2016

Registration of participants of the Meeting started at 08:00 in the hall of VIŠER. At 09.00, professor dr Slavica Marinković announced the agenda for this day with already agreed changes.

Topic Methodology for the quality control implementation is discussed in the separate meeting of Quality Board and minutes from the meeting is written in the separate document.

Topics: Administrative issues and The project progress and work-plan for the next six months are discussed in the separate meeting of Project Management Committee and the minutes are taken in the separate document.

Topic: Discussion of DBBT project website content

The project web site address is dbbt.pr.ac.rs and prof. Siniša Ilić presented the current content. It was discussed about the modifications that should be implemented.

On the project website two menu items will be added:

- 1) events – with meetings submenus where all relevant documents discussed on the meetings will be published and
- 2) internal - part where only members of the projects can access; heads of working packages can there upload draft materials and other members of the project can download it.

Topic: Conclusion of the two days meeting

- All project WB and EU institutions presented their proposals and a view on new study program,
- It was agreed the dynamic of finishing activities 1.1, 1.2, 1.3 and 2.1 and 2.2
- The new potential risk (on current impossibility to apply for accreditation of Vocational master studies) is identified that should be communicated between coordinator and EACEA,
- For each doubt related to administration of the project to consult EACEA (unit costs, equipment budget lines, etc.)



- Members of WP6 (QB) and WP9 (PMC) will have to review drafts of: 1) Plan for QC and Monitoring and 2) Guidelines on the project management and reporting in order to be approved and published.

Minutes taken by

Vladimir Cerić

Minutes revised by

dr Siniša Ilić