Project 609557-EPP-1-2019-1-LV-EPPKA2-CBHE-JP
"Development of practically-oriented student-centred education in the field of modelling of Cyber-Physical Systems / CybPhys of the Program ERASMUS+ EU"

Workshop WS1, WP1: Preparation
MC1: Management meeting

March 10-11, 2020
Belarusian State University
Leningradskaya street 20, room 520, 220030 Minsk, Rep. of BELARUS

Discussions and decisions

WS1: Workshop 1

1. Introduction of new partners and their teams:
New participants from Krivii Rih University and Belarusian Physical Society presented information about their self their institutions.
Decision: take note of the information.

2. Adoption of the agenda of the meeting
A. Zabašta informed participants about Agenda of the Meeting.
Decision: to accept agenda of the meeting.

3. Ex-Ante reports of the partners (WP1)
A. Zhiravecka from RTU informed participants about main directions of the Consolidated Ex-Ante Report.
Decisions: 1) A. Zhiravecka will share a draft of the report among EU partners for feedback.
2) The final version of Ex-Ante report to be ready by March 31th.

4. Survey of stakeholders on requirements for qualification of graduates (WP1)
A. Zhiravecka described the analysis of the survey results carried out in the framework of this WP1. This analysis has shown that the curricula by CPS problematics meets the requirements of modern industry.
Discussion about Matrix of competences and profile of the CPS specialists. Confirmed that partners may use the patterns of their universities.
Decision: 1) conclusion: consolidated draft of the Survey and report with recommendation for curricula to be developed and modernised in the project (RTU) by March 31th
2) Matrix of competences and profile of the CPS specialists will be created in each PC university March 31th.

5. Development and modernizing of curricula (WP2)
Leaders (J. Poutemann, I. Timoshchenko, V. Kazymir, D. Kovalenko, A, Makarevich, A. Hnatov, Zabashta (on behalf of N.Kunicina and Nikolas Flourentzou) have described the

preliminary contents of 9 e-Books to be developed in the framework of WP2. Participants also listed courses which are connected with these books.

Decision: 1) to take into account suggestions expressed on discussion about e-books.
2) leaders of eBooks should agree the contents of their books with other partners to join them to the writing of the books.
3) Coordinator will share a form for each e-book: responsible, co-authors, chapters, deadlines for the chapters.

6. Implementation of innovative ICT based teaching/learning environment (WP3)

Joan Peuteman told about KU Leuven team understanding of the ICT based teaching/learning environment to be developed in the framework of the WP3.

-e-Library demonstration
Igor Timoshenko made e-Library demonstration from BSU site.
-e-archive for the documents
A. Zabašta described e-archive for the project implementation documents, the web-address http://eduphys.bsu.by, where all participants from consortium have own accounts and all info and docs for project implementation
- ICT based teaching/learning approach and methods
J. Peuteman has described ICT based tools, teaching and learning methods

Decision: 1) to take this information into account
2) use e-archive as global archive for all documents for project implementation
3) Igor Timoshenko will give access to partner' representatives to the materials from the project Physics (on request of the partners)

7. Developing the Sharing Modelling and Simulation Environment platform (WP4)

Alexander S. Fedotov had a talk about organization of e-Learning platform and Sharing Modelling and Simulation Environment platform formation.

- e-Learning platform
Alexander S. Fedotov made proposition for concept of building e-Learning platform and described common requirements (account management system, newsfeed and blog, extended Facebook, VK, Twitter, Instagram integration, wiki and search engines), e-learning requirements (possibility of video hosting or embedding videos from popular hostings, support of integration of Jupyter Notebooks to add an interactivity to the courses, course-centered learning management system similar to Moodle or LearnDash), additional features, technical support, hosting and server maintenance.

- SMSE-platform
Alexander S. Fedotov proposed the specifications for the technology that will allow to run scripts and perform virtual practices. All of this can be implemented using Jupyter Notebooks technology.

Decision:1) to take this information into account and to finalize description and structure of e-Learning- and SMSE-platforms by BSU team by March, 31.

8. Quality Assurance (WP5)

Stella K. Hadjistassou from University of Cyprus team via Skype meeting informed participants about the planned activities and tasks in implementation of quality control during the project running with concrete deadlines (main tasks are development of a Quality Assurance

Plan (QAP) with milestones, development of project manual, establishment of quality assurance and monitoring team, follow-up the project progress, take corrective actions, quality assurance setup, assessment and monitoring)

Decision:

      1) Every Partner should inform RTU and UCY about plans and persons who will be responsible from each organization of the Quality Assurance and Monitoring Team (QAMT) and members of the working group for internal quality control activities at each PC-HEIs by

      2) UCY will create a draft of Quality Assurance plan by April 30th.

9. Dissemination, Exploitation and Sustainability of results (WP6)

Anatolijs Zabashta informed participants about the activity in implementation of the WP6 (Dissemination and Exploitation of Results) due to exchanging of RANI by INP BSU as Leader of WP6.

A. Zabašta has demonstrated project home web-page: http://cybphys.rtu.lv/

Partners agreed to use LinkedIn, Facebook, WhatsApp. Facebook group and WhatsApp group chat have been created.

Dmitry Kovalenko (GSU) proposed to take part in some conferences, mostly discussed the possibility of taking part in conference Inter-Academia in September in Gomel.

Decision:1) to take this information into account.

      2) recommend to INP BSU team to discuss in detail the main directions of their activity and inform RTU.

MC1: Management Meeting

10. Partnership agreements. Changes among the members of the consortium.

A. Zabašta informed participants about signed partnership agreements, changing among the members of the consortium, RANI is leaving the consortium, Institute for Nuclear Problems of Belarusian State University – INP BSU will join the consortium.

Decision: 1) to confirm a withdrawal of RANI and incorporation of INP BSU as a new member of CybPhys.

      2) prepare letters with confirmation of changing among the members of the consortium from each partner to RTU. RTU will communicate with EACEA aiming to get confirmation about partnership adjustment.

11. Project accreditation issues in Belarus and Ukraine

A. Zabašta informed participants about the current situation with project accreditation in Belarus and Ukraine. Project accreditation in Belarus is delayed because of changes among the Belarusian members of consortium.

Decision: 1) to take this information into account

12. Project Logo suggestions.

Partners suggest Project Logo for voting. Voting on Logo was organized, winner was selected: MSPU win.

Decision: 1) select MSPU proposition as logo of the project (see on the 1st page of this minutes!)

13. Quality Assurance Plan

According with Stella K. Hadjistassou from University of Cyprus team presentation and propositions, discussed planned activities and tasks in implementation of quality control during the project running with concrete deadlines.

Decision: 1) agree with decisions during discussions about Quality Assurance (WP5) in 1st day (workshop 1)

14. Management plan, reporting and progress monitoring.

A. Zabašta described the tasks to be realized in the framework of planning, reporting and monitoring of the project activity. In particular, A. Zabašta informed participants about deadlines for the partner reports. It was emphasized that low activity in the project realization can lead to the financial penalties.

Decision: 1) to take this information into account

15. Project financial aspects: cost reporting, tenders for the equipment.

A. Zabašta informed participants about financial questions related to the project and information from the seminar in Brussels. Described eligible and ineligible costs, calculation of salaries, travels, cost of stay and tenders procedure for the equipment.

Decision: 1) to take this information into account

16. Meetings and courses in 2020:

A. Zabašta informed participants about next meetings and courses in 2020:

- English language courses for teachers in Brugge: 4 persons from each Partner university (BSU, GSU, MSPU, CNUT, KNAHU, KRNU), 15-19th, June 2020

- WS and MC in Riga, 29-30th, June 2020
- WS and MC in Chernigov, 27-28th, October 2020

Decision: 1) to take this information into account
   - *3) each partner should select the participants for the nearest meetings and courses*
   - *4) due to Covid-19 partners try to minimise potential loss of tickets and hotels reservation.*

17. Further tasks and the next steps

- RTU will share a draft of the Ex-Ante report among EU partners for feedback by March 31th

- A Consolidated draft of the Survey and report with recommendation for curricula to be developed and modernised in the project (RTU) by March 31th (RTU).

- Matrix of competences and profile of the CPS specialist will be created in each PC university for March 31th.

- KU Leuven arrange training on academic English to teaching staff of the partner countries at Brugge: June 15-19th 2020.

- WP4

  - BSU team (Alexander S. Fedotov and other colleagues) taking into account input form colleagues from partner universities will finalize the Concept of the e-Learning and Sharing Modelling and Simulation Environment platforms: March 31th.

- Workshop **WS2:** Workshops for curricula development. First draft of the course books, in Riga. Management Committee meeting – **MC1** will be held in Riga: June 29-30th 2020.

- Workshop **WS3:** Quality Assurance plan with milestones, QA set up, will be held in Chernihiv: October 27-28th 2020.

- UCY will create a draft of Quality Assurance plan by April 30th.

- The content of 9 electronic e-Books is confirmed. Matrix of e-books:

  o All topics – chapters

  o Combination of authors: EU – Ukrainian – Belarusian

  o List of related courses to each book

Project Coordinator: Anatolijs Zabašta, RTU