



Co-funded by the
Erasmus+ Programme
of the European Union



Development of practically-oriented student-centred education in the field of modelling of Cyber-Physical Systems – CybPhys

609557-EPP-1-2019-1-LV-EPPKA2-CBHE-JP – ERASMUS+ CBHE

**MC and WS meeting
May 04-06th 2022**

Anatolijs Zabashta,
Project coordinator
Riga Technical University

Agenda for July 4th

- Project progress
- WP4: Developing the Sharing Modelling and Simulation Environment platform
 - ✓ SMSE manual and staff training
- WP3: Implementation of innovative ICT based teaching/learning environment
- WP6: Dissemination
 - ✓ General status and opportunities

Agenda for July 5th

- WP2: Development and modernizing of curricula
 - ✓ Implementation of new developed courses in Ukraine
 - ✓ Second courses training report
- WP5: Quality assurance
 - ✓ Feedback from stakeholders on new developed courses
 - ✓ Opportunities and difficulties: situation in Ukraine

Agenda for July 6th

- Further tasks and next steps
- Continuation of the project

Project progress

- Ukrainian partners continue the education process online
- Dissemination: papers about CybPhys for conferences:
 - A.Hnatov: Implementation of the double degree master's program on the example of the Erasmus project CybPhys – ENERGYCON 2022
 - J.Peuteman, Realizing a pedagogical, technical, cultural, and linguistic immersion course for Ukrainian professors, INTED 2022
 - J.Peuteman, REALIZING A CYBER-PHYSICAL SYSTEMS ORIENTED STUDENT TRAINING FOR UKRAINIAN STUDENTS, XXXI International Scientific Conference Electronics - ET2022.
 - A.Zabasta, Implementing the practically-oriented curricular in the field of Cyber-Physical Systems: a case study of the School for Ukrainian students, ICL 2022.
- We have received a letter of termination of participation of four Belarusian partners from EACEA (June 2nd).
- RTU sent a confirmation about termination and sent a suggestion about partners responsibilities (June 28th)
- Probably EACEA will prepare adjustments to the Grant Agreement.
- I sent questions about adjustments to the budget at the beginning of June to our PO. She promised to ask the legal department.

WP4: Developing the Sharing Modelling and Simulation Environment platform

The next steps WP4

- A Plan for SMSE development and acquisition by all partners is needed
- Which activities could we implement by the end of the project?

WP3: Implementation of innovative ICT-based teaching/learning environment

- General status
- Student training in the EU: opportunities
- Connection WP3 and WP4

The next steps WP3

- Which activities concerning innovative teaching methods & electronic environment should we implement by the end of the project?
- Any workshop on innovative teaching methods & electronic environments by the end of the project?
- Anything more?

The next steps WP6 Dissemination

- A new version of the dissemination Plan by
- Bilateral agreements
- Update folders of e-Library:
 - Dissemination and Exploitation Plan and Report
 - Press-releases
 - Webpages Screenshots. Social media.
 - Kryvyi Rih National University and another partner's folders
 - Communication Reports
 - Etc.
- Which activities could we implement on behalf of CybPhys in warfare conditions?
- Please, send your materials for publishing at <https://cybphys.rtu.lv/> !

WP2: Development and modernizing of curricula

- ✓ Implementation of new developed courses in Ukraine
- ✓ Second courses training report

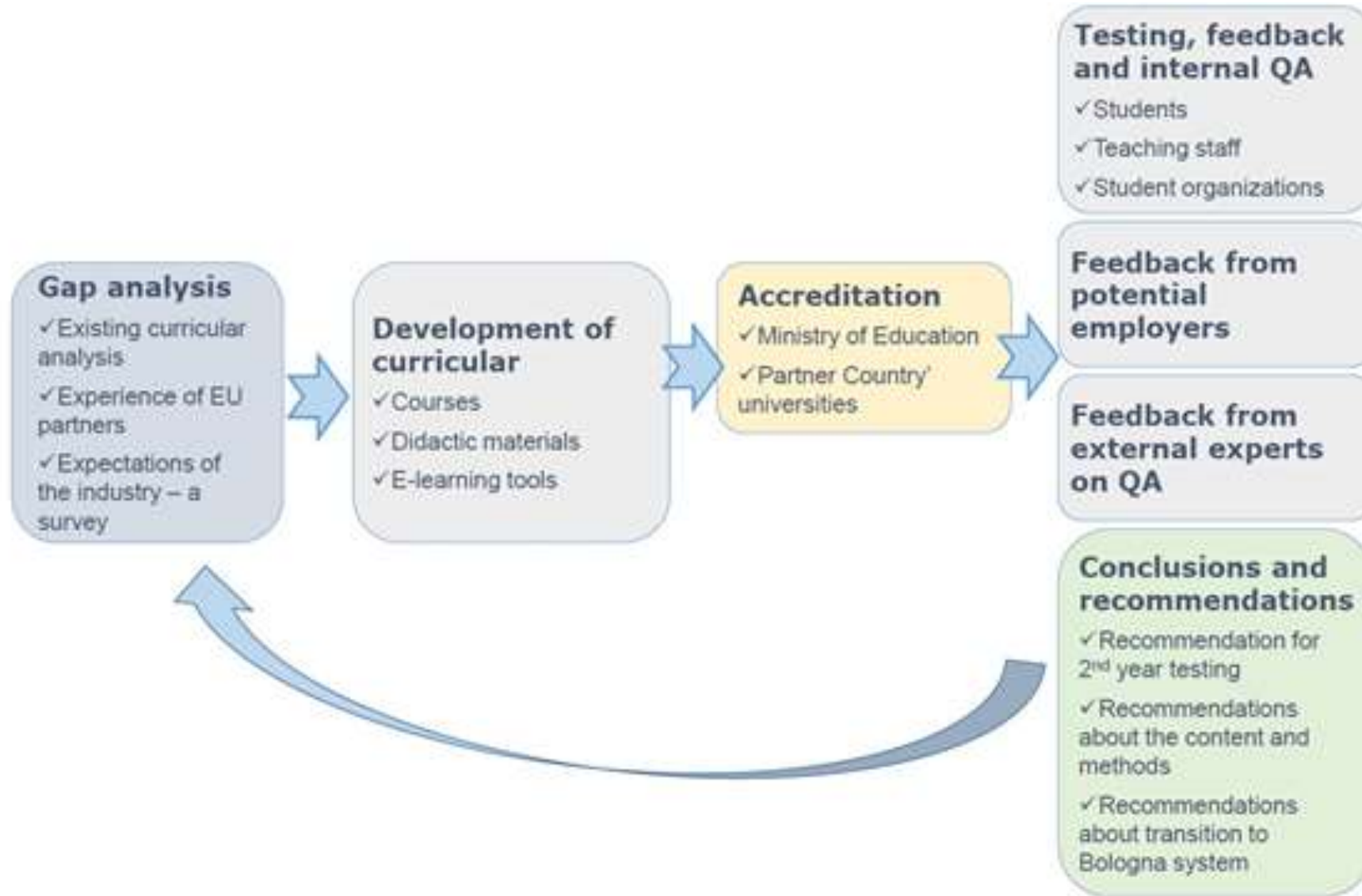
The next steps WP2

- Continuation of the students' education process
- Is it possible to train student groups in new courses? Is it possible to create a 2nd **Testing report**?
- Accreditation of new and modernized courses and programs
- To publish evidence about curricula development and accreditation in the e-Library

Method of new curricula testing with feedback from teaching staff, students, students organizations, and entrepreneurs (professional associations, enterprises, etc.) involved in student teaching and curricula enhancement

(covered 2.8; 5.5 and 6.4 of the QAP)

Sustainability Report with recommendation



- The overall approach aims to make sure the curricula are developed and adjusted according to the stakeholders' needs in CybPhys.
- It should be implemented in five stages:
 - Gap analysis (is done in WP1)
 - Development of new curricular (WP2-4)
 - Accreditation (WP2)
 - Testing and obtaining feedback from stakeholders (WP2 and 5)
 - Analyses, final adjustments, and planning for sustainability of CybPhys (WP6)

The suggested method getting a feedback from the stakeholders

- We suggest conducting a survey of experts on the quality of curriculum preparation, and courses/laboratory study programs *after the partners will finish testing the curriculum.*
- Each Ukrainian university arranges a survey of its stakeholders.
- For the review, a questionnaire for the evaluation of *courses and laboratory study programs* is proposed
- A questionnaire includes two types of questions.
 - One type of question included *information about experts* (age, position, professional experience in education, science and industry, gender, etc.).
 - The *second list of questions included information concerning the expert's opinion on the quality of study programs and courses* and suggestions for improving study programs.

Methods for obtaining of a feedback

- For **each expert**, depending on the experience in the field of education, might be offered **several approved courses**/laboratory study programs.
- The questionnaires, together with the approved programs and courses description, should be sent to experts by e-mail (or any other means) and the answers from them should be received.
- A face-to-face interview also might be arranged.
- The analysis of the results of answers to questions should be presented in the **form of two tables**.
- **Comments** on the programs and courses, which might allow us to tune the programs after the testing is over, are welcomed.

Methods for obtaining of a feedback

- **Questionnaire** of the peer review of experts **by courses/laboratory works study programs** from professional NGOs, research scientific institutes, enterprises, and universities
- **Summary** Table of the answers "yes" and "no" to the questions in questionnaires **for courses/laboratory** study programs (and comments)
- **Summary** Table of **professional experience of participants** in the survey
- **Summary** report is based on the results of peer review of tested curricula and courses/laboratory study programs – short report

Prolongation of the project by May 14th of 2023

Prolongation of the project: pros and cons - 1

- **Safety** of the Ukrainian partners is crucial
- Continuation of the students' education process? Is it possible to train students groups in new courses?
- Accreditation of new and modernized *courses* should be done by partner' universities.
- Accreditation of new programs was postponed by one year.
- Student's education for a Double degree diploma in RTU – KhNAHU will start in September
- Second **courses training report** will be elaborated in July - August (2-month delay)
- Which **dissemination** activities could we implement on behalf of CybPhys in warfare conditions, but which must be postponed?

Prolongation of the project: pro and cons - 2

- Partners will prepare and accredit additional new/ modernized courses useful for CybPhys project
- [Sustainability Report](#) with recommendations from main stakeholders
- **Budget of Ukrainian partners is frozen now and is not used due to the war.**

Cons

- Team members would go away to other jobs and responsibilities
- Less motivation of EU partner, since staff budget would be exhausted
- In case of continuation of warship Ukrainian partners will not be able to travel to EU countries.
- Risk that partners would delay and postpone planned activities, because “we have plenty of time”.



Андрій Гнатов



Anatoljjs Zabašta



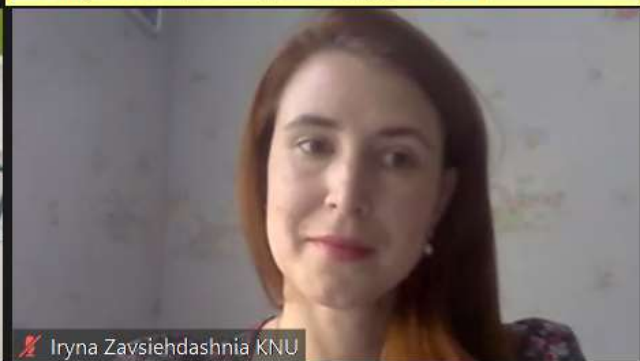
Serhii Ruban (Kryvyi Rih National University)



Dmytro Horval



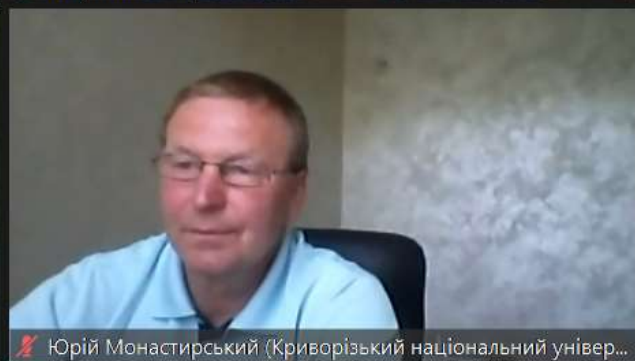
Volodymyr Kazymyr



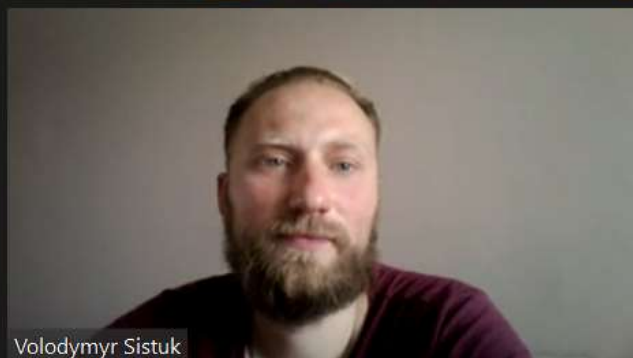
Iryna Zavsiehdashnia KNU



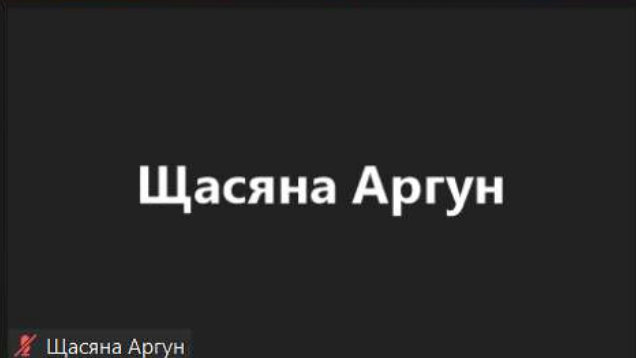
Oleksandr Drozd



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Volodymyr Sistuk



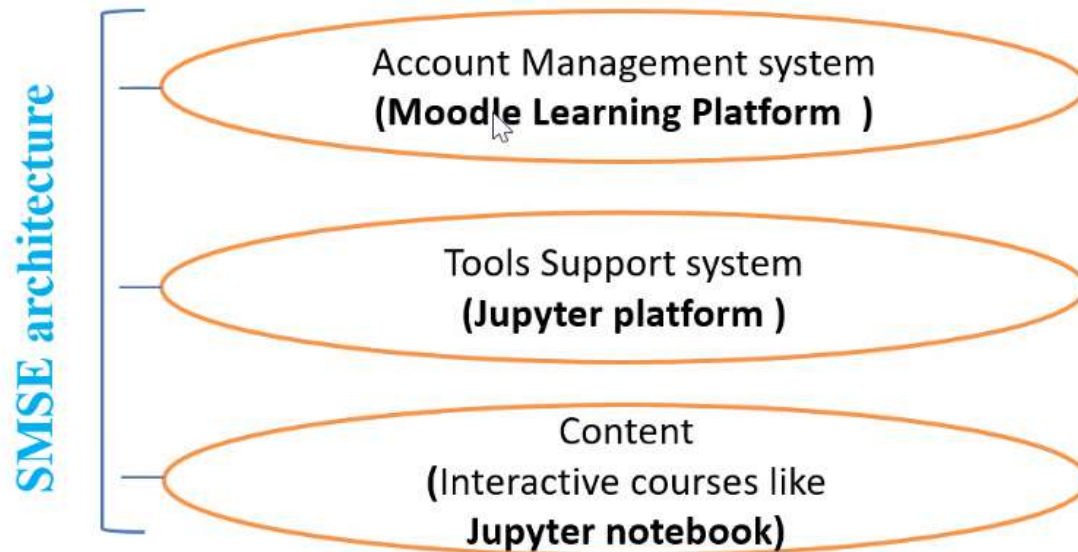
Щасяна Аргун



Stella Hadjistassou

SMSE architecture

Main idea and task – embedding Jupyter platform to Moodle





Андрій Гнатов



Anatolijs Zabašta



Serhii Ruban (Kryvyi Rih National University)



Dmytro Horval



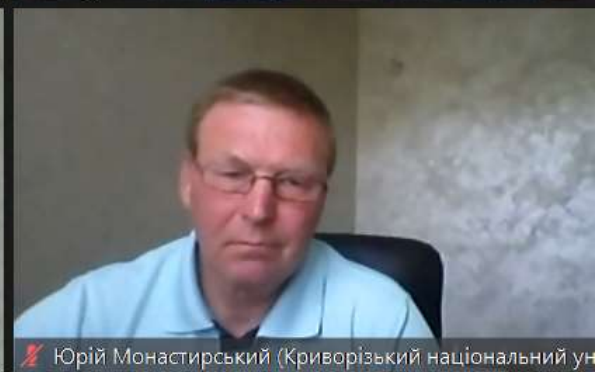
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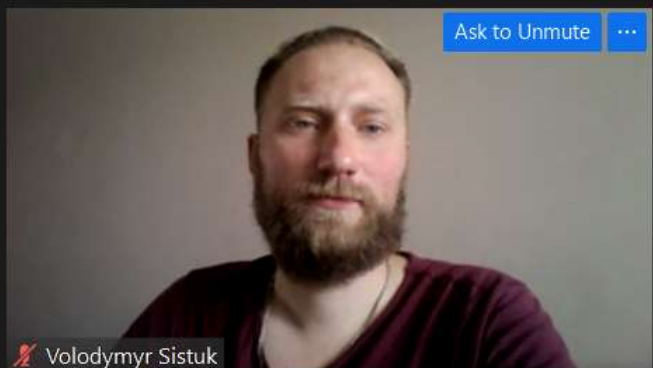
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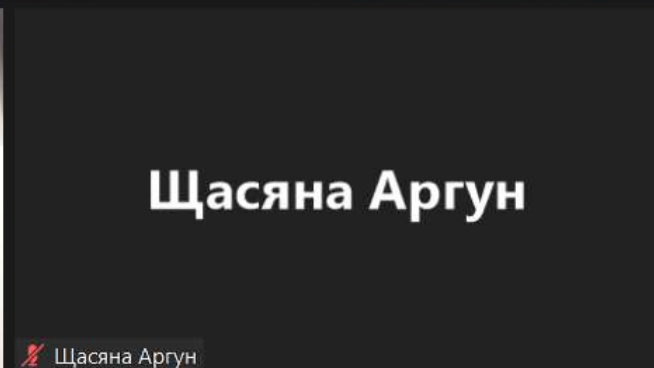
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Volodymyr Sistuk



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Erasmus+ KA2 Capacity Building in Higher Education

«Development of practically-oriented student-centred education in Cyber-Physical Systems modelling» «CybPhys»

Official number: 609557-EPP-1-2019-1-LV-EPPKA2-CBHE-JP

WP 2 «Development and modernizing of curricula»

Leader: Kharkiv National Automobile and Highway University

**Presented by:
Professor Andrii Hnatov**

Meeting 04-05.07.2022

A vertical list of Zoom meeting participants. From top to bottom: Iryna Zavsiehdashnia K... (muted), Anatolijs Zabašta, Serhii Ruban (Kryvyi Ri... (muted), Oleksandr Drozd, Andrii Hnatov (highlighted with a yellow border), and Щасяна Аргун (muted). A dropdown arrow is visible at the bottom of the list.

Thank you for your
questions!