



# BECK 2nd Coordination and Common Capacity Building Meeting | Minutes

Integrating education with consumer behaviour relevant to energy efficiency and climate change at the Universities of Russia, Sri Lanka and Bangladesh (BECK)

Project number: 598746-EPP-1-2018-LT-EPPKA2-CBHE-JP

**Meeting date** | 27th – 28th June 2019 | **Meeting location** | Ground floor of Joseph Priestley, University of Huddersfield, the UK

**Meeting called by** Prof. Artūras Kaklauskas

**Type of meeting** Coordination meeting

**Chair** Prof. Artūras Kaklauskas

**Note taker** Assoc. Prof. Dr. Laura Tupėnaitė

## Participants

Prof. Artūras Kaklauskas, VGTU  
Prof. Audrius Banaitis, VGTU  
Assoc. Prof. Laura Tupėnaitė, VGTU  
Prof. Dilanthi Amaratunga, UoH  
Prof. Richard Haigh, UoH  
Malith Senevirathne, UoH  
Dr. Nuwan Dias, UoH  
Prof. Irene Lill, TalTech  
Assoc. Prof. Emlyn David Qivitoq Witt, TalTech  
Dr. Nina Danilina, MGSU  
Dr. Andrey Rymarov, MGSU  
Stefan Shvedov, MGSU  
Prof. Nandasiri Weerasinghe, UoR  
Prof. Champa Madhumathi Navaratne, UoR  
H. A. Chamila Priyankara, UoR  
Prof. Marco Pretelli, UNIBO  
Dr. Tommaso Rovinelli, UNIBO  
Dr. Alla Mazina, SPbPU  
Dr. Vladimir Andreev, ASV  
Dr. Zinaida Ivanova, ASV  
Prof. Vladimir Echenique, MSU  
Assoc. Prof. Maria Ulyanova, MSU  
Boris Denisov, MSU  
A.K.M. Mostafa Zaman, PSTU  
Swadesh Chandra Samanta, PSTU  
Md Abubakkor Siddik, PSTU  
Dr. Dhiman Kumer Roy, BU  
Muhammad Risalat Rafiq, BU  
Md. Ilias Mahmud, BU  
Prof. Rangika Halwatura, UoM  
Anuradha Peramunugamage, UoM  
Anupama Gunawardana, UoM  
Wasudha Prabodani, UoM  
Prof. Siri Hettige, UoC  
S.B. Navaratee



## AGENDA

**Meeting date** | 27th – 28th June 2019 | **Meeting location** | Ground floor of Joseph Priestley, University of Huddersfield, the UK

Date /Time	Activity	Speaker
<b>25/26 June</b>	Participants arrival in Huddersfield/Manchester Accommodation	
<b>27 June</b>		
08:30 – 09:00	Registration, tea/coffee	
09:00 – 09:10	Welcome Speech	Prof. Dilanthi Amaratunga, Prof. Richard Haigh
09:10 – 09:30	Plenary session: Climate change adaptation and sustainability	Dr. Nuwan Dias
09:30 – 10:30	WP1: BECK capacity building framework <ul style="list-style-type: none"> <li>Draft framework presentation</li> <li>Discussion</li> </ul>	UoH, UoR, All partners
10:30 – 11:00	Tea/coffee break	
11:00 – 11:45	WP1: Guidelines and accreditation rules for the quality assurance of MOOCs <ul style="list-style-type: none"> <li>Presentation on the guidelines</li> <li>Discussion</li> </ul>	UoH, UoR, All partners
11:45 – 12:00	WP2: Development of New Adaptive MOOC Modules on Consumer's Behaviour Related to Energy Efficiency and Climate Change: Outline of the WP2	BU, UoH
12:00 – 13:00	WP2: Common framework for BECK curricula and common approach to learner-centred and real problem-based teaching and lifelong learning activities – sharing initial ideas	All partners to do a 10 minute presentation outlining their initial views
13:00 – 14:00	Lunch break	
14:00 – 15:00	WP2: Common framework for BECK curricula and common approach to learner-centred and real problem-based teaching and lifelong learning activities – sharing initial ideas	All partners to do a 10 minute presentation outlining their initial views
15:00 – 15:30	WP2: Discussion on the framework report development (D 2.1) and Development of a common approach to learner-centered and real problem-based teaching and lifelong learning activities (D 2.2.)	BU, UoH
15:30 – 16:00	Tea/coffee break	
16:00 – 17:00	WP2: Brain storming on the development of BECK MOOC modules specifications and teaching (learning) materials (D 2.4)	BU, UoH, All partners
18:00	Dinner	
<b>28 June</b>		
08:30 – 09:00	Opening of the second meeting day	
09:00 – 09:30	WP4: Quality assurance: indicators and monitoring	SPbPU, TalTech, UoM
09:30 – 10:30	WP3: Development of the Simulated Big Data Interuniversity Networked Affective Educational Centre	VG TU
10:30 – 11:00	Tea/coffee break	
11:00 – 12:00	WP5: Dissemination and Exploitation Plan, Website	MGSU, UoC, VG TU
12:00 – 12:30	Work Plan and Next Meetings A summary of key actions and priorities for the next 6 months, and planning towards next meetings	VG TU
12:30 – 13:30	Lunch	
	Departure	



## AGENDA TOPICS: 1ST MEETING DAY

### 1. Welcome and opening of the meeting

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**Time allotted** | 27/06/2019 08:30 | **Registration of participants and coffee**

**Time allotted** | 27/06/2019 09:00 | **Agenda topic** | *Welcome and brief instructions* |  
**Presenters** *Prof. Dilanthi Amaratunga, Prof. Richard Haigh, UoH*

**Discussion:** Prof. Richard Haigh officially opened the meeting and introduced the University of Huddersfield. Prof. Dilanthi Amaratunga reviewed meeting agenda.

### 2. Plenary session: Climate change adaptation and sustainability

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**Time allotted** | 27/06/2019 09:10 | **Agenda topic** | Climate change adaptation and sustainability |  
**Presenter** *Dr. Nuwan Dias, UoH*

**Discussion:** Dr. Nuwan Dias discussed the problems caused by climate change and introduced the concept of “climate change adaptation” that leads to sustainability. He also introduced experiences from Horizon 2020 project ESPRESSO (Espresso – systEmic standardisation apPRoach to Empower Smart citieS and cOMmunities); possible synergies with the BECK project have been found.

### 3. WP1: BECK capacity building framework

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**Time allotted** | 27/06/2019 09:30 | **Agenda topic** | WP1: BECK capacity building framework: presentation and discussion | **Presenter** *H. A. Chamila Priyankara, UoR*

**Discussion:** H. A. Chamila Priyankara presented BECK capacity building framework, which was developed by the University of Ruhuna with help of the University of Huddersfield, based on findings from all partners’ reports. He reviewed the context (educational needs, gaps, funding allocation), gaps in policy planning, institutional, organizational and individual (staff) capacities, main needs and gaps in these three levels. Discussion revealed that capacity building framework reflects general problems in education on consumer behaviour relevant to energy efficiency and climate change at partner countries. Part of these problems can be solved in the BECK project by modernizing the curricular with new MOOCs. Prof. Artūras Kaklauskas highlighted that new MOOCs shall be based on expertise and best practices of the participating institutions.

#### Conclusion:

1. Needs and gaps highlighted in the BECK capacity building framework will serve as basis for development of the new MOOCs (WP2).
2. New MOOCs have to reflect know-how of the participating institutions.

### 4. WP1: Guidelines and accreditation rules for the quality assurance of MOOCs

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**Time allotted** | 27/06/2019 11:00 | **Agenda topic** | WP1: Guidelines and accreditation rules for the quality assurance of MOOCs | **Presenter** *Prof. Champa Madhumathi Navaratne, UoR*



**Discussion:** Prof. Champa Madhumathi Navaratne reminded that in order to ensure the quality of adaptive MOOCs, special guidelines and accreditation rules have to be developed and adopted in each participating PC university. For this purpose Manual for Quality Assessment for E-learning (2012) by European Association of Distance Teaching Universities (EADTU) and OpenupEd quality benchmarks will be used. Based on OpenupEd quality benchmarks for MOOCs, partners from Russia, Bangladesh and Sri Lanka have to produce similar quality benchmarks at their universities. Prof. Navaratne in detail described quality benchmarks for MOOCs and explained their application. Prof. Artūras Kaklauskas added that accreditation is necessary for all MOOCs and commented on practices at VGTU. Dr. Alla Mazina additionally shared experiences from SPbPU.

**Conclusion:**

1. To ensure the quality of adaptive MOOCs, special guidelines and accreditation rules have to be developed and adopted in each participating PC university. Rules shall be based on Manual for Quality Assessment for E-learning (2012) and OpenupEd quality benchmarks.
2. Accreditation is necessary for all developed new MOOCs.

## **5. WP2: Development of New Adaptive MOOC Modules on Consumer's Behaviour Related to Energy Efficiency and Climate Change**

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**Time allotted** | 27/06/2019 11:45 | **Agenda topic** | Outline of the WP2 | **Presenter** Prof. Dilanthi Amaratunga

**Discussion:** Prof. Dilanthi Amaratunga outlined WP2: general content, objectives, tasks, deliverables.

**Conclusion:**

New MOOCs shall be based on the findings of BECK capacity building framework and deliverables of WP2: Framework report for the common BECK curriculum and the report on common grounds for teaching and learning. Additionally training of teachers will be organized in Vilnius by VGTU.

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**Time allotted** | 27/06/2019 12:00 | **Agenda topic** | Presentations by partners outlining their initial views on common framework for BECK curricula and common approach to learner-centred and real problem-based teaching and lifelong learning activities | **Presenters** All PC institutions

**Discussion:** Representatives from PC institutions made 10 minutes presentation each on "Identification of the Appropriate Issues for Cross Institutional Module Sharing". Presentations were based on template proposed by VGTU and included: 1. Promoting cross institutional module sharing (1.1. Cross institutional partnerships and collaborations, 1.2. Existing inter-university joint programme and module sharing arrangements, 1.3. Opportunities for module development, sharing and delivery in the BECK project), 2. Readiness of the university for cross institutional module sharing (2.1. Language and culture, 2.2. Administrative constraints, 2.3. Defining common assessment criteria, 2.4. Ability to share resources, 2.5. Intellectual Property, 2.6. Access to state of the art technology, 2.7. Sustainability), 3. Conclusions & Recommendations.

Prof. Irene Lill from TalTech (Estonia) explained the system of ECTS. 1 year of studies – 60 ECTS-credits. Depending on the country, one ECTS credit point can equal on average between 25 and 30 study hours. After discussion it was agreed that PC institutions have to adapt their MOOCs to ECTS system.

Dr. Alla Mazina from SPbPU and Assoc. Prof. Maria Ulyanova from MSU provided additional information on distance learning courses and accreditation requirements at their institutions,



including educational platforms and forms for accreditation. Courses are available at: <https://distant.msu.ru/>, <https://english.spbstu.ru/structure/open-education-center/>. These platforms can also be used for the newly developed MOOCs.

Prof. Rangika Halwatura (UoM) and Prof. Nandasiri Weerasinghe (UoR) explained that accreditation of modules in Sri Lanka is a long and centralized process at country-level. Similar situation is in Bangladesh. Partners will need more time for accreditation of MOOCs.

#### **Conclusion:**

1. All partners from PC institutions already indicated possibilities for cross institutional module sharing. The summary report has to be prepared by BU and UoH to outline a common vision on education and learning outcomes.
2. Partners from Russia will be able to use their distance education platforms and integrate newly developed MOOCs that satisfy quality requirements of the universities.
3. European educational requirements and ECTS system must be used in the BECK project.
4. Partners from Sri Lanka and Bangladesh will need more time for accreditation of MOOCs.

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**Time allotted** | 27/06/2019 15:00 | **Agenda topic** | Discussion on the framework report development (D 2.1) and Development of a common approach to learner-centered and real problem-based teaching and lifelong learning activities (D 2.2.) | **Presenter** Dr. Dhiman Kumer Roy, BU

**Discussion:** Dr. Dhiman Kumer Roy initiated discussion on the development of framework report for the common BECK curriculum (D.2.1) and Development of a common approach to learner-centered and real problem-based teaching and lifelong learning activities (D.2.2.). He explained deliverables and provided insights on content.

#### **Conclusion:**

Partners from PC institutions have to contribute to framework report for the common BECK curriculum (D.2.1) and Development of a common approach to learner-centered and real problem-based teaching and lifelong learning activities (D.2.2.). Reports shall be summarized by the University of Barisal with help of University of Huddersfield. Findings of reports will serve for development of new MOOCs.

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**Time allotted** | 27/06/2019 16:00 | **Agenda topic** | Presentations and brain storming on the development of BECK MOOC modules' specifications and teaching (learning) materials (D.2.4)| **Presenters** All

**Discussion:** Representatives from HEIs made presentations on proposed MOOCs. Presentations were based on template developed by VGTU and included: outline, aims of the module(s), intended learning outcomes, syllabus outline, learning and teaching strategies, evaluation methods, learning materials/resources.

Prof. Artūras Kaklauskas (VGTU) encouraged partners to pay attention on the interactive content of MOOCs, including games, open source video presentations, online calculators, etc. Prof. Irene Lill (TalTech) explained the differences of study levels in terms of learning outcomes.

Dr. Laura Tupėnaitė (VGTU) summarized and presented revised list of proposed MOOCs:



No	Title	Level	Institution
1	Green Energy and Climate Change	BSc	PSTU
2	Renewable Energy Resources, Climate Change and Sustainability	BSc	BU
3	Sustainable Design and Whole Lifecycle	BSc	UoM
4	Green Behaviour and Personality Development	BSc	UoR
5	Urbanization, Climate Change, Displacement and Relocation	BSc	UoC
6	Energy Saving Technologies in Power Supply	BSc	KSTU
7	Land use and energy efficiency	BSc	PSTU
8	Climate Change at Urban and Peri Urban Scale in Tropics: Impacts, Mitigation and Adaptation	MSc	UoR
9	Adapting Buildings and Cities for Climate Change	MSc	MGSU
10	Qualitative and Quantitative Research on Consumer's Behaviour Related to Energy Efficiency and Climate Change	MSc	MGSU
11	Impact of Climate Change on Insurance Market	MSc	MSU
12	Renewable Energy: Resources and Technologies for Potential Countries' Market Players	MSc	SPbPU
13	Engineering Response to Climate Change	MSc	UoM
14	Green Built Environment and Climate Change	MSc	VGUTU
15	Building Design and Greenhouse Gas Emissions	MSc	SPbPU
16	Spatial Urban Planning and Climate Change	MSc	PSTU
17	Simulation of Construction Management Strategies for Energy Efficiency	MSc, PhD	TalTech
18	Risk Management of the Transition to Low Carbon Economy	PhD	MSU
19	Smart City and Analytics	PhD	VGUTU
20	Climate Change Risk Assessment for the Heritage Buildings	PhD	UNIBO
21	The Newest Technologies of Electrical Energy Production, Transmission, and Consumption	PhD	KSTU

### Conclusion:

1. Total number of proposed MOOCs is higher than indicated in Application:

	Planned modules in the Application	Total modules proposed by partners to EACEA	Total modules proposed at the meeting
BSc	7	7	7
MSc	6	11	9
PhD	3	5	5
<b>Total</b>	<b>16</b>	<b>23</b>	<b>21</b>

2. Partners have to fill initial module specifications. The form will be prepared by VGUTU. Also partners will receive filling instructions based on the EU requirements.

3. Learning outcomes shall be based on the Bloom's taxonomy.





## AGENDA TOPICS: 2ND MEETING DAY

### 1. Opening of the second meeting day

**Time allotted** | 28/06/2019 08:30 | **Registration of participants and coffee**

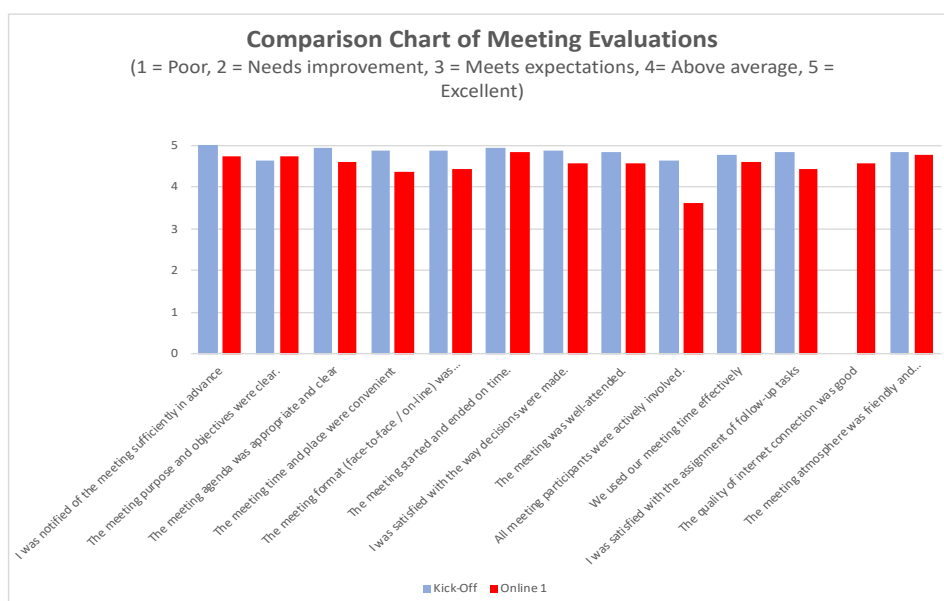
**Time allotted** | 28/06/2019 09:00 | **Agenda topic** | Brief instructions | **Presenter** Prof. Richard Haigh, UoH

**Discussion:** Prof. Richard Haigh opened the meeting and introduced the agenda of the second meeting day.

### 2. WP4: Quality assurance: indicators and monitoring

**Time allotted** | 28/06/2019 09:00 | **Agenda topic** | Quality assurance: indicators and monitoring | **Presenter** Assoc. Prof. Emlyn David Qivitoq Witt, TalTech

**Discussion:** Assoc. Prof. Emlyn Witt presented the analysis of participant meeting evaluations to date. Two coordination meetings (face to face kick-off and online) were evaluated and compared basing on the surveys of participants. In general both evaluations are positive, however, online meeting was evaluated slightly worse compared to the kick-off meeting:



Survey revealed that there were time zone problems for online meeting – chosen time was inconvenient for some countries. This should be improved for future online meetings. Presentation by representative from EACEA was evaluated as very useful. Participants agree that regular online meetings are helpful before face-to-face meetings. Compared to evaluation of the kick-off meeting improvement is achieved in the clarity of the meeting purpose and objectives. The most important area for improvement is (still) ensuring that all meeting participants are actively involved.



Prof. Irene Lill provided additional comments on quality issues. The list of participants (communication infrastructure) must be improved. She also proposed to develop a password protected area for Consortium at BECK website where working documents shall be uploaded.

Partners discussed and agreed to use GoogleDrive tool for uploading presentations from the meetings, photos, other relevant files.

Dr. Alla Mazina highlighted that all working documents shall be shared to the partners before meetings.

#### **Conclusion:**

1. The most important area for improvement of the meetings is ensuring that all meeting participants are actively involved. Presenters/moderators shall pay more efforts to involve participants.
2. The list of participants (communication infrastructure) already improved with the help of UoM.
3. Password protected area for Consortium will be developed by VGTU at the BECK website to upload the most important working documents.
4. GoogleDrive will be used by VGTU for uploading presentations from the meetings, photos, other relevant files.
5. VGTU will share working documents to the partners before meetings.

### **3. WP3: Development of the Simulated Big Data Interuniversity Networked Affective Educational Centre**

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**Time allotted** | 28/06/2019 09:30 | **Agenda topic** | Simulated Big Data Interuniversity Networked Affective Educational Centre | **Presenter** Prof. Artūras Kaklauskas, VGTU

**Discussion:** Prof. Artūras Kaklauskas reminded aim and tasks of WP3 and presented main components of the Simulated Big Data Interuniversity Networked Affective Educational Centre. He also provided the definitions of MOOC and student centered learning. Prof. Kaklauskas reminded that **affective** MOOCs have to be created in frames of the BECK project; therefore biometric characteristics, i.e. body language, emotions of students on education and learning materials will be analysed. He provided some examples from previous projects: detection of body language, emotions expressed in different colours, pupil analysis, video neuroanalytics. Also text mining for development of study materials can be used – a methodology that helps to select the most significant and interesting study materials for each student.

Simulated Big Data Interuniversity Networked Affective Educational Centre will be available in December 2019.

#### **Conclusion:**

Simulated Big Data Interuniversity Networked Affective Educational Centre will be available in December 2019. All partners are responsible for development of affective student-centered learning content.

### **4. WP5: Dissemination and Exploitation Plan, Web-site**

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**Time allotted** | 28/06/2019 11:00 | **Agenda topic** | WP5: Dissemination and Exploitation Plan, Web-site | **Presenter** Stefan Shvedov, MGSU

#### **Discussion:**

Stefan Shvedov reported on WP5 progress. Website of the BECK project is already developed. ASV Board meeting was held on the 5th of June in Krasnoyarsk (Russia). During the meeting Dr.





Vladimir Andreev presented climate change in civil engineering education and so far it was the biggest dissemination event on the BECK project in Russia. Draft of dissemination plan and templates are already available.

Stefan Shvedov distinguished short term and long term dissemination activities to be done. In short term it is envisaged to prepare BECK project brochure and start preparing joint academic publications. Partners discussed content of BECK project brochure. It shall include project aim, specific objectives, main activities, consortium details, link to the project website.

Long term activities include website maintenance (continuous updates with newest information), dissemination through partners' websites, participation in conferences organized at partners' institutions, and publications in proceedings and journals.

Partners discussed possible joint academic publications and participation at conferences. It was decided to link the dates of the future meetings with the dates of conferences and other events. Publications may be published in journals of participating institutions.

### Conclusion:

1. Draft BECK project brochure will be prepared jointly by MGSU and ASV.
2. VGTU is responsible for maintenance and continuous updates of the BECK website.
3. Partners are encouraged to disseminate the project at their local websites.
4. Dates of the future meetings can be linked with the dates of conferences and other events at participating countries.
5. Partners are encouraged to prepare joint scientific publications. Publications may be published in journals of participating institutions. Appropriate acknowledgements with links to the BECK project shall be included.

## 5. Work Plan and Next Meetings

**Time allotted** | 28/06/2019 12:00 | **Agenda topic** | Work Plan | **Presenter** Dr. Laura Tupénaitė, VGTU

Dr. Laura Tupénaitė reminded work plan, key information from EACEA from the 1st online meeting and encouraged discussion on extension of deadlines for WP2 activities and deliverables. After discussion it was agreed to revise terms of WP2 implementation:

Activities		M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18 (interim reporting)
Title		Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20
<b>WP2 Development</b>												
D 2.1	The framework report for the common curricular	1= 1X			4= 4X	4= 4X	3= 3X					
D 2.2	Development of a common approach to learner-centered and real problem-based teaching and lifelong learning activities	1= 1X			4= 4X	4= 4X	3= 3X					
D2.3	Training of teaching staff						1= 1X					
D 2.4	Development of BECK MOOC modules specifications and teaching (learning) materials	2= 2X			4= 4X	4= 4X	4= 4X	4= 4X	4= 4X			
D 2.5	Assessment, recognition and certification of the developed BECK MOOC modules by PC									4= 4X	4= 4X	2= 2X



### Conclusion:

1. WP1, WP3-WP6 activities are in line with the work plan.
2. Terms of WP2 activities are extended. To start delivery on time (September 2020), MOOCs must be developed till January 2020 to have enough time for certification and accreditation at participating institutions.
3. Initial specifications of MOOCs were already presented at the meeting. VGTU will prepare a specification template and share it with partners; they have to fill specifications till the end of September 2019. Initial teaching/learning materials must be prepared till the end of January 2020.

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**Time allotted** | 28/06/2019 12:20 | **Agenda topic** | Next Meetings | **Presenter** Dr. Laura Tupénaitė, VGTU

Dr. Laura Tupénaitė presented revised plan of the next meetings. Changes have been made to balance numbers of the meetings during each project year. The plan was discussed and changes made. Revised plan of the meetings:

#	Location	Length, days	Approx. dates	Exact dates
3	Vilnius	4	November 2019	Starting 11
4	Bologna	3	March 2020	Starting 4-6
5	Moscow	3	June 2020	Starting 29
6	Patuakhali	4	November 2020	Starting 10
7	Colombo	3	March 2021	
8	St. Petersburg	3	May/June 2021	3 <sup>rd</sup> week of May

Next meeting will be held in Vilnius, November 2019. VGTU will prepare visa invitation letters to participants from the PC countries at the end of August 2019.

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