



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



**ERASMUS +
HIGHER EDUCATION CAPACITY BUILDING**

**Erasmus+ Project
New and Innovative Courses for Precision Agriculture
(NICOPA)**

**Minutes of the Kick-Off Meeting
Technische Universität Berlin
Berlin, Germany
04-05 March 2019**

ERASMUS+

Project: New and Innovative Courses for Precision Agriculture

(NICOPA)

MINUTES OF THE KICK-OFF CONFERENCE

Berlin, March 04-05, 2019

Overview of the conference content carried out:

- Presentation of the project coordinator on the current research in the target field of Remote Sensing and Application of Earth and Environment related PA
- Presentation of the Partner Countries' representatives on the current research in the field of precision agriculture
- Presentation of European Partners;
- Clarification of project activities and their implementation;
- Establishing of Project Management Board (PMB) and Internal Evaluation Board (IEB);
- Appointment of regional project coordinator and local coordinators in the Partner Country;
- Presentation of target universities: universities' profiles and existing curricula to update/plans to develop new curricula
- Financial management of the grant (based on the Guidelines for the Use of the Grant);
- Workshop on quality assurance system
- Workshop on dissemination and exploitation strategy of the consortium
- Partnership agreements preparation.

Special session was conducted where presentations of each consortium partner took place; key roles/activities and responsibilities in the project of each consortium partner were determined.

The detailed discussion of the project plan implementation took place as well; key activities and expected project results were clarified, such as: organization of project trainings at EU universities and master classes at target universities, purchase and installation of equipment, establishment of PASENSO, sustainability and dissemination plan of the project, quality assurance strategy, financial management of the grant, budget expenditures regulations.

PMB and IEB were formed; Regional project coordinator were appointed in the Partner Countries, as well as local coordinators of every partner country university.

The partner universities presented the existing curricula of relevant disciplines that are to be updated.

Resolution:

1. Until 12th April 2019 each partner university has to:
 - Develop its own internal plan of activities to meet the project's objectives (based on the project's work plan). Establish a working group (min. 5 persons) of the project and appoint a responsible person for each Work package. Send a scan of the adopted plan and the working group table approved by the target university's rector/vice-rector (signed, stamped) to a.starikow@ecm-space.de.
 - Compose a list of the faculties/departments involved into the project. Compose a list of stakeholders involved in project activities.
 - Develop a list of criteria for the selection of teachers for trainings in European universities.
 - Assign a responsible person for signing a contract regarding equipment delivery; and another responsible person for licence and new software installation
2. PMB and IEB were created (see Table 1, 2 in Appendix).
3. Each consortium participant has to send a signed partnership agreement to the Coordinator (KATU) until 24th May 2019: 1 scan via email; 3 hard copy (signed and stamped) to KATU
4. Each target university should create its own specified plan of the dissemination and sustainability of the project based on the "NICOPA Dissemination, Sustainability and exploitation strategy" draft and send them to ECM until 30th April 2019. The plan should deliver the definition of "target groups" and "dissemination channels".

Recommendations for the dissemination plan:

- to create a publication plan (i.e., 1 publication every 3 months); publication can be in local or national media channel; Website of the university; social media; every publication should contain a link to the project website www.nicopa.eu; every publication (or link to it) should be sent to a.starikow@ecm-space.de. Each university should assign a "blogger" who will be responsible for publications.
 - to schedule local meetings for sustainability and dissemination of information about the project (i.e., one event per 3 months); the schedule for each year should be developed by the regional coordinator
 - to define a group of related universities and non-academic partners involved in the project activity, to create a database of organizations interested in the project;
 - once a year to conduct an information conference inviting local universities and non-academic partners.
5. In the upcoming month, each partner university has to conduct a dissemination meeting on project activities for students, teachers and administrative staff of the university incl. top management. Press-release and photos from the event should be sent to a.starikow@ecm-space.de

6. Internal quality assurance plan should be developed by each Partner university until 12th April 2019 on the basis of the QA plan of the project developed by ECM

7. P1-P4 (EU partners) should prepare a list of topics for theoretical and practical/laboratory classes, curricula description for each disciplines incl. ECTS (see Tab. 3 in information management package), recommended teaching materials (literature, text books etc), presentations in .ppt for each of the topics until 30th April 2019. Teaching materials should be sent to a.starikow@ecm-space.de. Materials will be posted on the project website for downloading by partners.

7.1. Not later than 3 months before the start of trainings, topics of trainings should be agreed between partners. Responsible: hosting university

7.2. Till April 16, 2019 each target university has to send the approved list of selected participating teachers for the first training (Berlin) to a.starikow@ecm-space.de

7.3. EU partners send teaching material to the partner countries in advance of the teachings.

- The EU Universities are responsible for the content/teaching materials of curricula;
- P2-P4 should develop short summary (list of topics) of curricula they are responsible for and send it to a.starikow@ecm-space.de till April 15, 2019;
- P2 – P4 should develop and transmit draft content and teaching materials to the target universities (P1 and P6 - P13) until 15.05.2019.
- P2 - P4 should prepare a list of topics for theoretical and practical/laboratory classes, curricula description for each disciplines incl. ECTS, the list of the recommended teaching materials (literature, text books etc), presentations in .ppt for each of the topics, deliver all the materials to the target universities (P1 and P6 - P13).
- The EU partners should prepare a draft of curricula descriptions of new core curricula and transferable modules including innovative teaching/ learning facilities and develop syllabi.

8. It is planned to hold trainings for the teachers in European universities in 2019-2020 in accordance with the schedule:

Terms (approximately – will be defined)	Hosting university (city, country)	New Modules	Number of participating teachers from each target university*
19 – 29 August 2019, 10 days	Technische Universität Berlin	<p>TUB:</p> <ol style="list-style-type: none"> 1. Start-up initiatives for future farmers 2. Management Marketing and Decision Making in Precision Agriculture 3. Intensive course to leverage acceptance of the new technologies “in-field” 	3

		<p>CULS:</p> <ol style="list-style-type: none"> 1. Basics of the Precision agriculture 2. Yield sensors for Precision Agriculture 3. Soil physical properties and its measurement 4. Application of Precision Agriculture for crops growing 	
May – June 2020	Agricultural University Plovdiv	<p>AU:</p> <ol style="list-style-type: none"> 1. Using of SENTINEL 1-2-3 imagery for agricultural field monitoring 2. Global Navigation Satellite Systems (NAVSTAR, GLONASS, GALILEO, etc) 3. Basics of the Precision agriculture – characteristics, technologies, economic efficiency, optimal use of resources <p>TalTech:</p> <p>To be defined</p>	3
June 2020, 9 days	Czech University of Life Sciences	Will be defined	3

* A larger number of participants is possible by self-financing

During each training, the coordination meeting is planned to be held.

9. Each target university needs to develop a draft of documents for the establishment of PASENSO. The copy of the documentation should be emailed to ECM (a.starikow@ecm-space.de). Responsible for PASENSO should be assigned. The documents should be approved by the administration of the universities not later than the 30th of April, 2019.

10. Skype meeting of the project's board (PMB) should be organized once every two months. Send contacts of the representatives of PMB (see Table 1 in Appendix) to ECM (a.starikow@ecm-space.de).

11. The next annual consortium meeting will be decided upon during the first training in August 2019.

Project coordinator: Ismail Tokbergenov (KATU)

Project Manager: Arnold Sterenharz (ECM)

Appendix

Table 1.
Project Management Board

Partner #	Organisation Name / Acronym		City / Country	PMB Member	Email
P1	S.Seifullin Kazakh Agro Technical University	KATU Coordina tor	Astana/Kazak hstan	Ismail TOKBERGE NOV	titssp@mail.ru
P2	Technische Universität Berlin	TUB	Berlin / Germany	Prof. Brieß/ Elena EYNGORN	elena.eyngorn@tu-berlin.de
P3	The Agricultural University Plovdiv	AU	Bulgaria/ Plovdiv	Assos. Prof. D. ATANASOV / Prof. Hristina YANCHEVA	d.atanasov@au-plovdiv.bg rector@au-plovdiv.bg
P4	Czech University of Life Sciences	CULS	Czech Republic /Prague	Prof. Frantisek KUMHÁLA	kumhala@tf.czu.cz
P5	ECM space technologies GmbH	ECM	Berlin / Germany	Dr. Arnold STERENHA RZ	Arnold.sterenharz@ecm-space.de
P6	Shokan Ualikhanov Kokshetau State University	KokSU	Kokshetau/Ka zakhstan	Anargul BELGIBAYE VA	anargul.belgibayeva@mail.ru
P7	North Kazakhstan State University Named After	NKSU	Petropavlovsk /Kazakhstan	Kairat KOSHEKOV	kkoshekov@mail.ru

	Manash Kozybayev				
P8	Turkmen Agricultural University Named after S.A. Niyazov	TAU	Ashgabat/ Turkmenistan	Orazmuhammet DURDYEV	odurdyev@gmail.com
P9	The Turkmen State Architecture and Construction Institute	TSITC	Ashgabat/ Turkmenistan	Myradov Yolly	yolly1605tm@mail.ru
P10	Turkmen Agricultural Institute	TAI	Dashoguz / Turkmenistan	Babageldi KURBANOV	baba_kur_83@mail.ru
P11	National University of Uzbekistan	NUUZ	Tashkent / Uzbekistan	Abdumanap NASIROV	aanasirov1962@mail.ru
P12	Tashkent University of Information Technologies	TUIT	Tashkent/ Uzbekistan	Temurbek KUCHKOROV	timanet4u@gmail.com
P13	Tashkent Institute of Irrigation and Agricultural Mechanization Engineers	TIAME	Tashkent/ Uzbekistan	Ilhom ABDURAHMANOV	ilhom.isakovich@gmail.com

Table 2.
Internal Evaluation Board

Partner #	Organisation Name / Acronym	City / Country	PMB Member	Email
P1	S.Seifullin Kazakh Agro Technical University KATU	Astana/Kazakhstan	Ismail Tokbergenov	titssp@mail.ru
P2	Technische Universität Berlin TUB	Berlin / Germany	Elena Eyngorn	elena.eyngorn@tu-berlin.de
P3	Agricultural University Plovdiv AU	Plovdiv, Bulgaria	Prof. Hristina Yancheva	rector@au-plovdiv.bg
P4	Ceska Zemedelska Univerzita v Praze CULS	Prague, Czech Republic	Prof.F.Kumhala	kumhala@tf.czu.cz

P5	ECM space technologies GmbH	ECM	Berlin / Germany	Dr. A.Sterenharz	Arnold.sterenharz@ecm-space.de
----	-----------------------------	-----	------------------	------------------	--

Table 3.
Regional/ Local project coordinators in Partner Country (KZ)

Partner #	Organisation Name / Acronym		City / Country	PMB Member	Email
P1	S.Seifullin Kazakh Agro Technical University	KATU Regional Coordinator	Astana/Kazakhstan	Ismail Tokbergenov	titssp@mail.ru
P6	Shokan Ualikhanov Kokshetau State University	KokSU	Kokshetau/ Kazakhstan	Anargul Belgibayeva	anargul.belgibayeva@mail.ru
P7	North Kazakhstan State University Named After Manash Kozybayev	NKSU	Petropavlovsk/Kazakhstan	Koshekov Kairat	kkoshekov@mail.ru

Table 4.
Regional/ Local project coordinators in Partner Country (TM)

Partner #	Organisation Name / Acronym		City / Country	PMB Member	Email
P8	Turkmen Agricultural University Named after S.A. Niyazov	TAU Regional Coordinator	Ashgabat/ Turkmenistan	Durdyyev Orazmuhammet	odurdyyev@gmail.com
P9	The Turkmen State Architecture and Construction Institute	TSITC	Ashgabat/ Turkmenistan	Myradov Yolly	yolly1605tm@mail.ru
P10	Turkmen Agricultural Institute	TAI	Dashoguz / Turkmenistan	Babageldi Kurbanov	baba_kur_83@mail.ru

Table 5.
Regional/ Local project coordinators in Partner Country (UZ)

Partner #	Organisation Name / Acronym	City / Country	Contact Person	Email
P11	National University of Uzbekistan NUUZ Regional Coordinator	Tashkent /Uzbekistan	Abdumanap Nasirov	aanasirov1962@mail.ru
P12	Tashkent University of Information Technologies TUIT	Tashkent/ Uzbekistan	Temurbek Kuchkorov	timanet4u@gmail.com
P13	Tashkent Institute of Irrigation and Agricultural Mechanization Engineers TIAME	Tashkent/ Uzbekistan	Ilhom Abdurahmanov	ilhom.isakovich@gmail.com