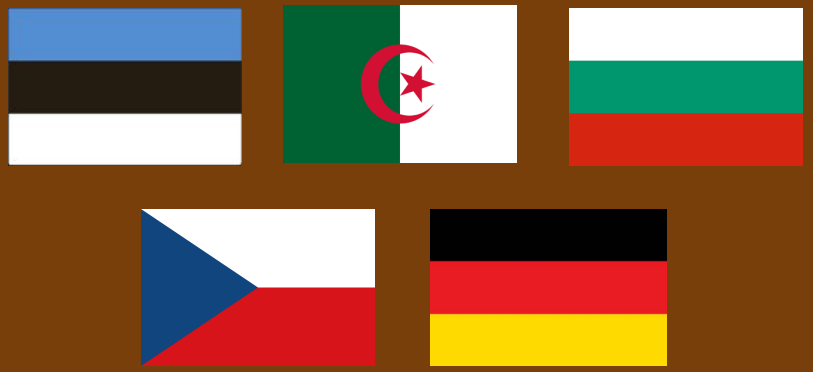
CUPAGIS

Kick-Off Meeting
18-19 February 2019
Tallinn, Estonia



New Curricula in Precision Agriculture Using GIS Technologies and Sensing Data

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

Joint Project: Capacity Building in the Field of Higher Education
ERASMUS+ 2018

www.cupagis.eu

CUPAGIS FACTS

Reason for cooperation:

Modernization of curriculum by developing innovative courses and methodologies using ECTS, the two-cycle system and the recognition of degrees

Selection results of Call 2018 EAC/A05/2017

874 applications received
147 (16,82%) proposals recommended for funding

Budget size

998.953,- EUR

Project duration:

3 years

Target countries / priorities

•This application addresses priorities in curricula reform: ALGERIA

•Agricultural sector

Consortium size:

11 organisations

Project type:

Joint project, national

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

BOLOGNA PROCESS

EUROPEAN
Higher Education Area

bologna
process

Official sources:

- Standards and Guidelines for Quality Assurance in the European Higher Education Area 2015 (ESG) ➢ ECTS User's Guide 2015
- National standards/law of education of partner countries

PROJECT OBJECTIVES

- To improve the quality of higher education and enhance its relevance for the labour market and society, the level of competences and skills in HEIs by developing new and innovative education programs; support the modernisation and internationalisation of the HE in precision agriculture in the targeted Universities in DZ through innovation of two-cycle curricula

- To bring the HEIs of the PC closer to the Labour Market

- To analyse the educational needs in precision agriculture through problem and job analysis and review the current curricula
- To update the current curricula in precision agriculture;
- To develop, implement and accredit new curricula including ECTS

MAIN GOALS

9 Core Curricula

- Remote Sensing and Application of Earth and Environment related PA 2.
- Optimizing computer vision algorithms and real-time implementations.
- Using of SENTINEL 1-2-3 imagery for agricultural field monitoring
- Global Navigation Satellite Systems (NAVSTAR, GLONASS, GALILEO, etc.)
- Web technologies (Agro SDI, Geo-portals, Geo-services, Geo-analytical systems)
- Basics of the Precision agriculture – characteristics, technologies, economic efficiency, optimal use of resources
- Yield sensors for Precision Agriculture
- Soil physical properties and its measurement
- Application of Precision Agriculture for crops growing

3 Transferrable Curricula

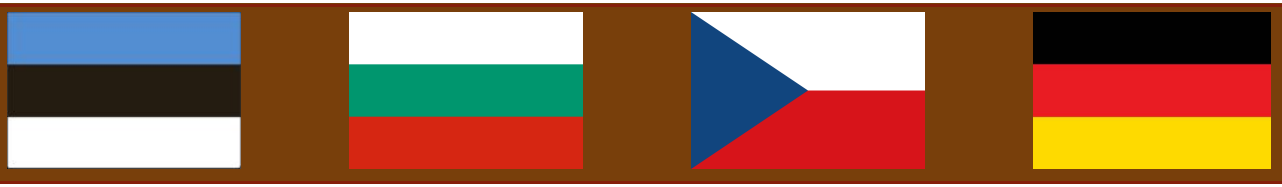
- Start up initiatives for future engineers
- Management and Decision Making in Precision Agriculture
- Intensive course to leverage acceptance of the new technologies “in-field”

Updated current curricula in the target field

Linking to the labor market:
Establishing PASENSO

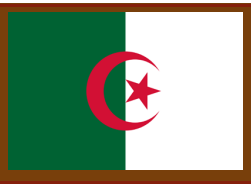
New supporting learning environment
Joint web based platform;
PAGIS; VCR

LIST OF EU PARTNERS



Tallinn University of Technology	www.ttu.ee	Tallinn, Estonia
Technical University of Berlin	www.tu-berlin.de	Berlin, Germany
Agricultural University Plovdiv	www. au-plovdiv.bg	Plovdiv, Bulgaria
Czech University of Life Sciences	www.czu.cz	Prague, Czech Republic
ECM space technologies GmbH	www.ecm-space.de	Berlin, Germany

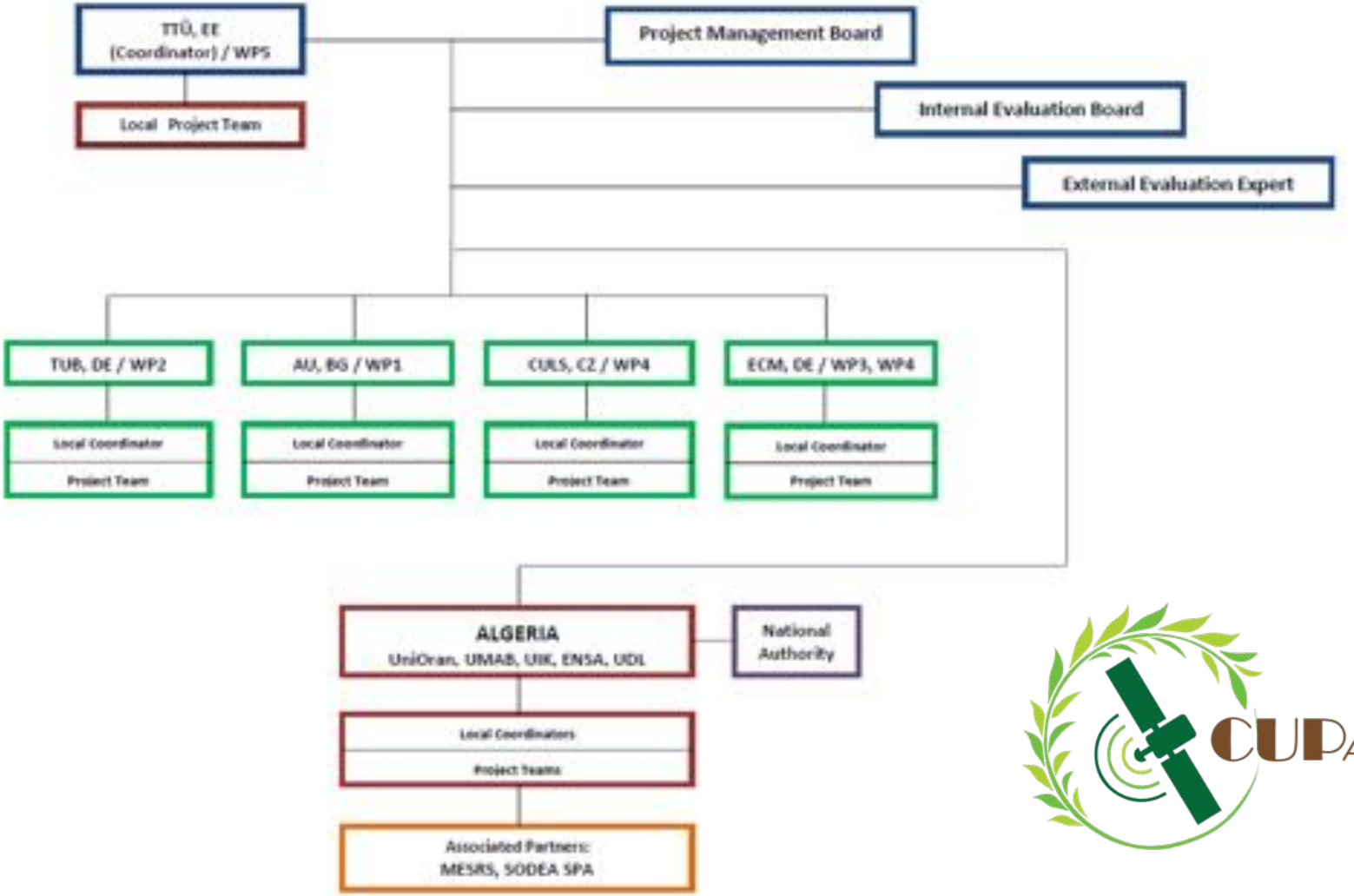
LIST OF PARTNERS - TARGET UNIVERSITIES



ALGERIAN UNIVERSITIES

Djillali Liabes University	www.univ-sba.dz	Sidi Bel Abbès, Algeria
Université d'Oran1 Ahmed Ben Bella	www.univ-oran1.dz	Oran, Algeria
Ibn-Khaldoun University Tiaret	www.univ-tiaret.dz	Tiaret, Algeria
Universite de Mostaganem	www.univ-mosta.dz	Mostaganem, Algeria
Ecole Nationale Superieure D'agronomie	www.ensa.dz	Mostaganem, Algeria

ORGANIGRAM CUPAGIS



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WORK PLAN ACTIVITIES

Activities		Start	End
Ref.nr/ Sub-ref nr	**Title**		
1.1 Prep.	Review of the current curricula for BA/MSc in target area in PC HEIs. Guideline and plan for revising existing courses	15.11.2018	30.04.2019
1.2 Prep.	Agreement on instructional strategy and guidelines for BA/MSc curricula design including the use of new Educational Technologies	15.11.2018	31.03.2019
2.1 Dev.	a) Prepare a set of new core curricula and transferable modules inclusive innovative teaching/ learning facilities; develop syllabi; b) adopt on institutional level c) accredit on national level	a) 01.12.2018 b) 01.10.2019 c) 01.10.2020	a) 31.03.2020 b) 31.05.2020 c) 31.08.2021
2.2 Dev.	Prepare a set of documentation for PAGIS and VCR; purchase the equipment incl. software; install the equipment	a) 01.02.2019 b) 01.03.2019	a)30.09.2019 b)31.05.2020

WORK PLAN ACTIVITIES

2.3 Dev.	a) Casting criteria for participants and retraining program for academic teachers. b) Retrain academic teachers in new curricula using innovative teaching/ learning facilities and agreed instructional strategies	a)01.01.2019 b)01.09.2019	a)31.03.2019 b)31.08.2020
2.4 Dev.	To update the current BA/MSc curricula/create updated programs in the target area according to the Bologna requirements and the new developments	01.04.2019	30.09.2020
2.5 Dev.	a)Master Classes in new curricula b) Pilot operation of PAGIS and VCR	a) 01.09.2020 b) 31.05.2020	a)30.05.2021 b) 14.11.2021
2.6 Dev.	Pilot teaching of updated/new curricula/modules/courses	01.09.2020	14.11.2021

WORK PLAN ACTIVITIES

3.1 Quality	The Quality assurance strategy/Q Plan of each PC university including internal/external Quality evaluation/reports according to Q Plan	15.11.2018	14.11.2021
4.1 Diss.	Project DISS& EXP /communication plan using a Set of Promotional Materials; Dissemination Events, Joint WEB based platform, “CUPAGIS+” Agreement	15.11.2018	14.11.2021
4.2 Diss.	Full media coverage of the project activities inclusive developing and maintenance of Joint WEB based platform	15.11.2018	14.11.2021
4.3 Diss.	Develop a set documentation on PASENSO with stakeholders support /purchase /install equipment /establish	01.02.2019	30.04.2020
4.4 Diss.	a)Staff training PASENSO b) Pilot operation of PASENSO c) Establishing Regional /International PASENSO network	a) 01.04.2020 b) 01.04.2020 c) 01.04.2020	a) 31.10.2020 b) 14.11.2021 c) 30.04.2021

WORK PLAN ACTIVITIES			
4.5 Diss..	Refresh training courses for graduates in PASENSO	01.09.2020	31.08.2021
4.6. Diss..	International BA/ MSc Summer Schools*	01.06.2020	31.07.2021
5.1. Manag	Management of the project including Project management online, daily project administration and coordination	15.11.2018	14.11.2021
5.2. Manag	Coordination meetings	15.11.2018	14.11.2021

MILESTONES 2019 - 1st project year

1. **Review of the current curricula for BA/MSc in target area in PC HEIs:**
   Till 30.04.2019

2. **Delivery of a set of teaching materials (resp. EU partners) for development of new curricula and modules in PC HEIs:**

   Till 30.04.2019
   Deadline for the rest of the materials: 31.08.2019

3. **Prepare a set of documentation for PAGIS and VCR in PC HEIs**

   TIII 30.09.2019

MILESTONES 2019 - 1st project year

4. **Select teachers to participate in training programs in EU universities according to the selection criteria**

   Till 31.08.2019

5. **EU universities develop training programs/schedule of trainings**

   Till: 01.03.2019

6. **Develop quality assurance plan and dissemination plan**

   Till: 01.03.2019

2nd project year - Milestones

1. Develop set of new core curricula and transferable modules inclusive innovative teaching/ learning facilities; develop syllabi; adopt them on institutional level

2. Retrain academic teachers in new curricula using innovative teaching/ learning facilities and agreed instructional strategies; Staff training for PASENSO

3. To update the current BA/MSc curricula/create updated programs in the target area according to the Bologna requirements and the new developments

4. Start of master-classes in new curricula /pilot operation of PAGIS and VCR
5. Purchase the equipment incl. software; install the equipment

3rd project year - Milestones

1. Adopt the set of new core curricula and transferable modules inclusive innovative teaching/ learning facilities at the national level

2. Continuation of Master Classes in new curricula /pilot operation of PAGIS and VCR

3. Start on 1 September 2020: Pilot teaching new/modernized curricula/operation of PAGIS and VCR / Refresh training courses for graduates in PASENSO

WORK PLAN - Quality Control (WP3)

Leader of WP3 - ECM

Internal evaluation:
This system includes development of templates for reporting implementation of project activities. A report template should be developed every six months by ECM and sent to consortium partners with the indication of deadlines for the completion of reports and presentations.

ECM analyzes them and reports the results of the analysis to the partners. The analysis takes into consideration compliance of the implemented activities of partners with the work plan of the project activities and the LFM.

ECM reports to the project coordinator and local coordinators and together with them develops recommendations for each of the partners.

External evaluation: will be carried out by a selected external expert; the expert will work on sub-contract basis

WORK PLAN - Dissemination & Sustainability (WP4)

- Schedule for publications developed by each partner
- Activities by PASENSO
- Involvement of representatives from stakeholders and universities outside the consortium
- “CUPAGIS Plus" agreement

•Conferences & workshops
•Project web portal
•Involving stakeholders
•Finding and attracting sponsors
•Commercialization of results

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WORK PLAN - Project Management (WP5)

Project Management Board (PMB) – Project Council - will be formed as a strategic decision-making body inclusive one representative from each consortium member who at the same time will operate as local coordinators in their institutions. The local coordinator will lead the special formed Local Project Team (LPT) of his institution.

Coordination meetings: International, regional and local/hosting coordination meetings.

Daily project administration and coordination: project management, administration and coordination will be carried out by the coordinator and project manager (ECM)

BUDGET

PROJECT COSTS		€
I	Staff costs	399.288,00
II	Travel costs	80.005,00
III	Costs of stay	179.160,00
IV	Equipment	298.500,00
V	Subcontracting	42.000,00
PROJECT FINANCE		**998.953,00**

STAFF COSTS

Purpose

To cover the costs of staff necessary for the achievement of project results and on the condition that their salary for the same tasks is compensated only once.

- **Administrative** or **academic** tasks:
  - → Curricula development/implementation
  - → Project administration/management
  - → Dissemination

Contractual rules

- A duly filled in, signed and stamped joint declaration (Annex 1 of these guidelines) for each person employed in the project
- Time-sheets (the date, number of hours worked on these dates, tasks performed (short description).
- Proof of payment if staff is remunerated by the project directly (full-time, part-time, occasional or top-up of regular salary (i.e. bank transfer)
- Employment contract

TRAVEL COSTS

Required documents

To cover the costs of travel of staff for mobility:

- teaching/training assignments, retraining of staff, master classes
- update of courses
- short visits for coordination and planning
- dissemination
- based on unit costs/principle of the "triggering event"
- prove that activities have been **actually and properly** implemented
- expected outputs have been produced but they will not have to **justify the costs actually incurred**.
- flexibility in the way they manage the funds
- necessary for the implementation of the activities concerned

DISTANCE CALCULATOR

Distance band	Unit cost per participant
Between 100 and 499 KM	180 EUR
Between 500 and 1999 KM	275 EUR
Between 2000 and 2999 KM	360 EUR
Between 3000 and 3999 KM	530 EUR
Between 4000 and 7999 KM	820 EUR
8000 KM or more	1100 EUR

EQUIPMENT

Purpose

- to cover the costs of equipment directly relevant to the project's objectives such as:
  - books, e-books;
  - PAGIS and VCR: PC Pool & Interactive Learning Room; Lab equipment; Software set;
  - PASENSO: PC, HD-Projector, MFD, Software;

Contractual rules

The equipment must:

- be exclusively universities usage and integrated into study process
- be recorded in the inventory of the institution where it is installed
- Upon prior approval of the coordinator

THANK YOU FOR YOUR ATTENTION!

ENGINEERING CONSULTING AND MANAGEMENT FOR SPACE TECHNOLOGIES

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