



Erasmus+

Educational for Drone (eDrone)

(Project Number 574090-EPP-1-2016-1-IT-EPPKA2-CBHE-JP)

WP3, D3.8

CIA Deployment

Deliverable Type	Report
Result	Report
Date of Delivery	
Author(s)	University of Evry – University Paris Saclay
Reviewer	
Review date	
Reviewer	
Review date	





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Versioning and Contribution History

The following is the *document control* for revisions to this document.

Version	Date	Reason	Modified by

Please include here also information on: when was the concept note submitted, when was feedback received, etc.





Project Number: 574090-EPP-1-2016-1-IT-EPPKA2-CBHE-JP

Project Acronym: eDrone

Result: WP3 – eDrone courses deployment and set-up

Deliverable number and title: D3.8 – CIA Deployment

Type of deliverable: Report

Required date of delivery: 25/07/2020
Date of last version delivery:
Work package: WP3 – eDrone courses deployment and set-up
Lead responsible partner: University of Evry
Responsible person: Said MAMMAR
Other cooperating partners: CAA, ACAPOL, SAUM, APA, ASUE, NPUA, BTSU, ISU, TSU, BSU
Total number of pages:

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Introduction / Foreword

The deployment will span 5 months. The workload that the attendees will be assigned will be quantified in ECTS. The educational components successfully completed will be included in the Transcript of Records attached to the Diploma Supplement. The course will be organized in 3 modules, comprising frontal lessons, e-learning lessons, home assignments, visits, team projects, intermediate evaluations and final exams. Frontal lessons, intermediate and final exams will take place at HEIs in the involved Partner Country. The VET activities will be focused also to give to the attendees a practical education in the application of specialized equipment and a first-hand experience on design and implementation of systems for drones.

1. Type of lessons delivered and material used (frontal, e-learning, home assignment, labs...)

ARMENIA

The lessons of CIA courses consist of lectures and practical lessons at the OED laboratory in Armenia. During the lessons the teachers use several materials: books, e-books, lecture notes, also purchased equipment available at the OED laboratory. The "Unmanned aerial vehicle training" course modules are as follows:

- Module I. Drone structure and aerodynamics
- Module II. Drones avionics
- Module III. Drone equipment for measurement and monitoring
- Module IV. Piloting Techniques
- Module V. Processing of measurement data
- Module VI. Laws and regulations
- Module VII. Drone service
- Module VIII. Civil applications

BELARUS

Trainers conduct frontal lessons, laboratory work, field work, and perform independent tasks. Materials used: published textbooks, presentations, videos. They are available on the Moodle platform. edurfe.bsu.by.

Updated and new developed courses listed in section D 3.3.





GEORGIA

During the first addition of CIA courses the trainers delivered frontal lessons, labs, field works. Among the used materials were presentations, videos. They are available on Moodle Platform. e-course.tsu.ge

- Course Modules
- Module I – Technologies and Architecture
- Module II – Civil applications
- Module III – Regulation for Drone
- Module IV – Entrepreneurship

MOLDOVA

During the four editions of CIA courses the teachers delivered frontal lessons, labs, tests, practical demonstrations etc. Among the used materials were presentations, videos, hand book – all of them are on the [MOODLE](#) Platform

2. Type of evaluations

ARMENIA

Written exams and practical work.

BELARUS

Oral exams, credits, presentations, group projects.

GEORGIA

During CIA courses the following evaluation forms has been used

- group works;
- Presentations;
- Practical Works could not be assessed as the laboratory works have been postponed, because of Pandemic.

MOLDOVA

During the CIA courses had been used several types of evaluations:

- self-assessment tests



- short tests
- practical activities evaluations
- final tests.

https://drive.google.com/drive/u/1/folders/1_iWUFFHyuy2fMYNfz67I6zDA8_ThU-6q

3. Description of the lab equipment used

ARMENIA

#	Description	Qty	Remarks	Reasons of the change
1.	Լիցքավորիչ ISDT 600 վտ / Charger ISDT 600 Watt	2	<p>Մուտքային լարում՝ DC8-32V / 0-30A Ելքային լարում՝ 0-30 Վ Լիցքավորման հոսանք՝ 0,1-25,0 Ա Ապալիցքավորման հոսանք՝ 0,1-5,0 Ա Առավելագույն լիցքավորումը՝ 600W Առավելագույն ապալիցքավորման հզորությունը՝ 20W Հաշվեկշռման հոսանք՝ 1.5 Ա / cell Հաշվեկշռային բջիջներ. 2-6S Լիցքավորվող մարտկոցները-ին: Տեսակները՝ LiFe / Lilon / LiPo / LiHv 1-6S, NiMH / Cd1-21S, Pb 3-12S USB՝ 5V / 2.1A</p>	<p>The item was included in the approved list, the technical specifications are only changed</p> <p>Input: DC8-32V/0-30A Output Voltage: 0-30V Charge Current: 0.1-25.0A Discharge Current: 0.1-5.0A Max Charge Capacity: 600W Max Discharge Capacity: 20W Balancing Current: 1.5A/cell Balance Cells: 2-6S Supported Batt. Types: LiFe/Lilon/LiPo/LiHv 1-6S, NiMH/Cd1-21S, Pb 3-12S USB: 5V/2.1A</p>



2.	Հեռակառավարման վահանակ - Futaba 14 SG / Remote control -Futaba 14 SG	2	<p>Փոխանցման հաճախականությունը՝ 2.4 ԳՀց հաճախականությամբ ժապավեն</p> <p>Համակարգ: FASSTest14CH, FASSTest12CH, FASST MULTI, FASST 7CH, S-FHSS</p> <p>անջատիչ</p> <p>Էլեկտրասնուցում՝ 6.0V</p> <p>HT5F1800B NiMH մարտկոց</p> <p>R7008SB ընդունիչ (FUTL7675);</p> <p>Ընդունման հաճախականություն՝ 2.4 ԳՀց</p> <p>FASSTest համակարգ</p> <p>Էլեկտրաէներգիայի պահանջ՝ 3.7 - 7.4V (լարման միջակայք 3.5 - 8.4V)</p> <p>Ընթացիկ արտահոսք՝ 75 մԱ</p> <p>Լարման լրացուցիչ պորտ՝ 0 - 70 Վ DC</p> <p>Չափսերը՝ 0,98 x 1,9 x 0.56 "(24.9 x 47.3 x 14.3 մմ)</p> <p>Քաշը՝ 34.5oz (980 g)</p>	<p>The reason is the the new and upgraded hardware and best combination of quality/price on the Armenian market</p> <p>Transmitting Frequency: 2.4GHz band</p> <p>System: FASSTest14CH, FASSTest12CH, FASST MULTI, FASST 7CH, S-FHSS switchable</p> <p>Power Supply: 6.0V HT5F1800B NiMH battery</p> <p>R7008SB Receiver (FUTL7675);</p> <p>Receiving Frequency: 2.4GHz FASSTest system</p> <p>Power Requirement: 3.7 - 7.4V (voltage range 3.5 - 8.4V)</p> <p>Current drain: 75mA</p> <p>Extra Voltage Port: 0 - 70V DC</p> <p>Size: 0.98 x 1.9 x 0.56" (24.9 x 47.3 x 14.3mm)</p>
3.	Տվյալների հաղորդիչ՝ Dragonlink (տվյալների անընդհատ փոխանցման ապահովում ակեհավարով) / Data transmitter- dragonlink (antenna assuring constantly receiving information)	2	<p>Հաղորդիչի մոդուլային լարում՝ 5 - 18 վոլտ (2-4 բջջային LiPo)</p> <p>Հաճախություն՝ 433 MHZ -</p> <p>Հաճախության դադարեցում</p> <p>ARS լայնությունում:</p> <p>Բնորոշ միջակայք. 40 կմ</p> <p>հեռավորության վրա</p> <p>օգտագործվող ակեհավաքների</p> <p>օգտագործմամբ</p> <p>Քաշը՝ 90 գրամ</p> <p>Երկարությունը՝ 79 միլիմետր</p> <p>Լայնությունը՝ 60 միլիմետր</p> <p>Հաստությունը՝ 15 միլիմետր</p>	<p>The item was included in the approved list, the technical specifications are only changed.</p> <p>The reason is the the new and upgraded hardware</p> <p>Transmitter Module</p> <p>Voltage: 5 - 18 Volts (2-4 cell LiPo)</p> <p>Frequency: 433 MHZ -</p> <p>Frequency Hopping in ARS Band.</p> <p>Typical Range: 40 KM Using Supplied Antennas</p> <p>Weight: 90 Grams</p> <p>Length: 79 Millimeters</p> <p>Width: 60 Millimeters</p> <p>Thickness: 15 Millimeters</p>
4.	Ընդունիչ Dragonlink / Dragonlink Receiver	4	2 watt	<p>The item was included in the approved list, the technical specifications are only changed.</p> <p>The reason is the the new and upgraded hardware</p>
5.	Cube autopilot Carrier Board	3	ProfiCNC	<p>The reason is the the new and upgraded hardware and best combination of quality/price on the Armenian market. These hardwares are more fit for OED Laboratory at NPUA further activity (sustainability)</p>
6.	Cube autopilot Mini Board	3	ProfiCNC	
7.	Cube autopilot V2.1	6	ProfiCNC	
8.	Վիդեո հաղորդիչ - ընդունիչ HD / Video transmitter – Receiver HD	2	Video transmitter - Receiver HD, HD Link	<p>The reason is the the new and upgraded hardware and best combination of quality/price on the Armenian market. These</p>



9.	Գիմբալ + վահանակ + HD տեսախցիկ / Gimbal+Controller + Camera HD	2	Yuneec CGO3	the Armenian market. These hardwares are more fit for OED Laboratory at NPUA further activity (sustainability)
10.	Շարժիչ T-Motor U3 / Motor T-Motor U3	30	Tmotor U3	The item was included in the approved list, the technical specifications and quantity are only changed
11.	Շարժիչ T-Motor	30	ESC ALPHA 40A LV	The item was included in the approved list, the technical specifications and quantity are only changed
12.	Պրոպելլեր - T-Motor 12", զույգ, ածխածնային / Propeller- T-Motor 12" Pair Carbon	20	t-motor ածխածնային մանրաթել / Carbon fiber	The item was included in the approved list, the technical specifications and quantity are only changed
13.	Crazyflie 2.0 Nano Quadcopter Kit	10	Crazyflie 2.0 Nano Quadcopter Kit	
14.	RioRand Crazyradio 2.4Ghz nRF24LU1+	10	RioRand Crazyradio 2.4Ghz nRF24LU1+	
15.	Մոնիտոր	1	Մոնիտոր Dell P2715Q 27"	
16.	Yuneec H920 + 18x խոշորացնող տեսախցիկի գիմբալ / Yuneec H920 + 18x Zoom Camera gimbal	1	Հեքսադրոն (ԱԹ-Մ) ամբողջությամբ, 18x խոշորացման տեսախցիկով, 2x հեռակառավարման վահանակներով, տուփ / Hexa Drone full with 18x zoom camera, 2x remote control, box	The item was included in the approved list, the technical specifications are only changed

17.	Raspberry Pi3+	2	Broadcom BCM2837B0, Cortex-A53 (ARMv8) 64-bit SoC @ 1.4GHz 1 GB LPDDR2 SDRAM 2.4GHz և 5GHz IEEE 802.11.b / g / n / ac անլար LAN, Bluetooth 4.2, BLE Գիգաբիթ Ethernet ավելի քան USB 2.0 (առավելագույն թողունակությունը 300 Մբ/վրկ) Ընդլայնված 40 փին GPIO վերնագիր Լիարժեք չափի HDMI 4 USB 2.0 պորտ CSI ֆոտոխցիկի պորտ ՝ազնվամուրու խցիկի միացման համար DSI ցուցադրման պորտ ՝Raspberry Pi էկրանային էկրանների էկրանին միացնելու համար 4 թևային ստերեո ելք և կոմպոզիտային վիդեո պորտ Միկրո SD պորտ ՝ձեր	<p>Broadcom BCM2837B0, Cortex-A53 (ARMv8) 64-bit SoC @ 1.4GHz 1GB LPDDR2 SDRAM 2.4GHz and 5GHz IEEE 802.11.b/g/n/ac wireless LAN, Bluetooth 4.2, BLE Gigabit Ethernet over USB 2.0 (maximum throughput 300 Mbps) Extended 40-pin GPIO header Full-size HDMI 4 USB 2.0 ports CSI camera port for connecting a Raspberry Pi camera DSI display port for connecting a Raspberry Pi touchscreen display</p> <p>The reason is the the new and upgraded hardware and best combination of quality/price on the Armenian market. These hardwares are more fit for OED Laboratory at NPUA further activity (sustainability)</p>
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18.	Quad Frame	3	<p>Նյութ՝ ամխածնային մանրաթել 20 մմ կանգնակ Մարտկոցի կախուն պահոց Մարտկոցի վերին տեղադրում Ճկուն թևեր Մեկ թևի հեշտ փոխարինում 16x16 շարժիչի տարածություն Քաշը՝ 130 գ</p>	The item was included in the approved list, the technical specifications are only changed
19.	Հեքսաշրջանակ / Hexa Frame	3	<p>6-առանցքով հեքսակոպտեր ԱԹ-Մ շրջանակ</p>	These hardware are more fit for OED Laboratory at NPUA further activity (sustainability)
20.	Հեռակառավարման վահանակ դռոնների համար / Joystick for Drones	2	Logitech 315	These hardware are more fit for OED Laboratory at NPUA further activity (sustainability)

#	Description	Qty	Remarks	Reasons of the change
1.	Developer kit	2	<p>Nvidia JETSON NANO</p>	Small computer that lets OED students run multiple neural networks in parallel for applications like image classification, object detection, segmentation, and speech processing. All in an easy-to-use platform that runs in as little as 5 watts. These hardware are more fit for OED Laboratory at NPUA further activity (sustainability)
2.	Հեքսադրոն / Hexa Drone	1	<p>Հեքսադրոն / Hexa Drone Yuneec typhoon H</p>	Advanced aerial photography and videography platform. Instead of out of production DJI Phantom 4. Has best combination of quality/price on the Armenian market. These hardware are more fit for OED Laboratory at NPUA further activity (sustainability)



3.	Ռոբոտի կոմպլեկտ / Robot kit	4	DJI RoboMaster S1	Game-changing educational robot built to unlock the potential in learner. IT provides trainees with an in-depth understanding of science, math, physics, programming, and more through captivating gameplay modes and intelligent features. Will be useful for further drone training. These hardware are more fit for OED Laboratory at NPUA further activity (sustainability)	The item was included in the approved list, the technical specifications are only changed. The reason is the the new and upgraded hardware
4.	FabPro 1000 Full 3D տպիչ / FabPro 1000 Full 3D Printer	1	Mixer, LC3DPrintBox, 1Year warranty	The item was included in the approved list, the technical specifications are only changed. The reason is the the new and upgraded hardware	
5.	CO2 լազերային դանակ / CO2 Laser cutter	1	լազերային դանակ / Laser cutter 90x60x20	Will be used for construction and production of drone's airframes etc. in OED laboratory by trainees. These hardware are more fit for OED Laboratory at NPUA further activity (sustainability)	
6.	Notebook	2		The item was included in the approved list, the technical specifications are changed	
7.	PC & monitor	2		The item was included in the approved list, the technical specifications and quantity are changed	



8.	Տպիչ, սկաներ, պատճենահանման սարք / Printer, Scanner, Xerox	1	Combo machine	The item was included in the approved list, the technical specifications are changed
9.	Թվային զոդման կայանք / Solder station	2	Թվային զոդման կայանք	The item was included in the approved list
10.	Լաբորատոր արժեքընթերցիչներ / laboratory accessories (Combo 2.5mm, 3mm)	1	Լաբորատոր արժեքընթերցիչներ (Combo 2.5mm, 3mm)	The item was included in the approved list
11.	Մարտկոց / Battery	6	Մարտկոց Lipo 4S 5000mah	The item was included in the approved list, the technical specifications and quantity are only changed
12.	մալուխներ, եռակցված լարեր, տափակաբերան արցաններ, պտուտակահան, մեխանիկական մանեկներ, տափօղակներ, պտուտակներ, նախատիպային պլատաներ / Tools for Lab e.g.cables, solder wires, pliers, screwdriver, mechanical nuts, washers, screws, boards for prototyping	1	մալուխներ, եռակցված լարեր, տափակաբերան արցաններ, պտուտակահան, մեխանիկական մանեկներ, տափօղակներ, պտուտակներ, նախատիպային պլատաներ	The item was included in the approved list
13.	Փորագրիչ մեքենա / Engraver Machine	1	3D CNC 3 Axi	It is intended for the manufacture of various parts. It works with materials: wood, wax and plastic to create models and patterns, plexiglass, solid ABS plastic, PCB and printed circuit boards. These hardwares are more fit for OED Laboratory at NPUA further activity (sustainability)

BELARUS

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GEORGIA

List of the Equipment will be used during the lab works. As it was noted, the first Course in Practical use of drones has started in February 2020 and very soon the Pandemic has started and the country was in lockdown, therefore the lab works could not be held. The next course we announced August 2020, and we held the theoretical part virtually in zoom, hoping that in the mid of October we could invite our students in the Laboratory, but because of the worsening situation regarding Pandemic We were not able. But the below Listed items will be used during the lab work:

Item	Qty	Description
Flight controller	6	HX4-06057 (Cube & Here 2 (Pixhawk 2.1 Standard)
Frame	6	Hobbyking™ HMF X240 Quadcopter Frame Kit



Belarusian
Civil Aviation Authority

Brushless Motor	24	MultiStar Viking 1308- 4100KV (Brushless Outrunner Drone Racing Motor (CW) – (CCW)
ESC	24	Turnigy Multistar 32bit 12A Race Spec ESC 2~4S (OPTO)
Propellers for built multirotor	30	Lumenier 5x3.5 - 2 Blade Propeller (Set of 4 - Black) 2x CW and 2x CCW
RC Transmitter + receiver	6	Turnigy 9X 9Ch Transmitter w/ Module (AFHDS 2A system) Turnigy iA6C PPM/SBUS, 8CH 2.4G AFHDS 2A Telemetry Receiver
Battery fo RC Transmitter	6	ZIPPY Flightmax 2500mAh Transmitter Pack (Futaba/JR)
Battery for built multirotor	12	Turnigy 1300mAh 2S 20C Lipo Pack (w/XT60)
Charger	2	Turnigy P606 LiPoly/LiFe AC/DC Charger (EU Plug
Wireless telemetry link	6	Wireless telemetry link - HolyBro Transceiver Telemetry Radio Set V2 (433mhz)
Arduino UNO	6	Arduino UNO - starter kit
IMU	6	IMU - MPU-9250
Ultrasound	6	Ultrasound - HC-SR04
GPS	6	GPS - NEO6M
Pro multirotor for payloads	1	DJI Matrice 600 Pro
Other laboratory accessories	1	soldering station Baku 702.
	1	cables 40 x 1 Pin Female To Female Jumper Cable Set. Length: 120mm. Pin Spacing: 1mm;
	1	096-JGO SCREWDRIVER 38 PCS HKSD0338;
	1	Digital multimeter 890D
3D printer	1	Anycubic 3D-171 Upgraded Full Metal I3 Mega 3D PRINTE
3D printer filament	10	1.75 mm PLA/ABS/PET or photopolymers
3D Scanner	1	EinScan SE Desktop 3D Scanner
Infrared camera	1	FLIR-duo thermal camera
Multispectral camera	1	Parrot Sequoia
Laser scanner Phoenix aerial systems	1	RPLIDAR A2M8 + Barrel connector
Environmental monitoring platform	1	Flying laboratory SOWA
Back-UPSs	2	Tripp Lite / AVRX750UD
External HD	1	Seagate Basic / STJL5000400
Computer for office	2	Dell OptiPlex 3070 MT/octacore i7 8 GB RAM,
Monitor	2	Dell 24 Monitor - E2420H
Netbooks	2	Dell Vostro Notebook 3590 / N2068BVN3590EMEA01_200
computers for work in classroom	4	Dell Precision 3630 octacore i7 16 GB RAM, NVIDIA Quadro P1000 GPUs/Dell 27 Monitor- E2720H
Tablet	1	Samsung / Galaxy Tab Active 2 LTE 16GB / SM-T395
Netbooks	2	Dell Vostro Notebook 3590 / N2068BVN3590EMEA01_200
computers for work in classroom	4	Dell Precision 3630 octacore i7 16 GB ram, NVIDIA Quadro P1000 GPUs/Dell 27 Monitor- E2720H
Pix4Dmapper Professional drone-mapping	1	Create maps from images taken by drones: Pix4D drone mapping & photogrammetry software tools with a flight app, desktop, and cloud platforms, perpetual software license

MOLDOVA

In order to attain the adequate competences and skills both theoretical and practical courses were developed in the CIA courses. For practical courses we are used three tip of equipment and software:

Item	Description
OED teaching and didactical equipment	
2 Netbook	ASUS 14.0" S410UN, Intel Core i7, 1.80GHz, 8Gb DDR3 RAM, 500Gb HDD, Intel HD 4400 Graphics, Card Reader, Wi-fi N, BT4, HDMI
Server	DELL, PY TX2550 M4 Tower, CPU 8 core, min freq. 3,0 GHz, SmartCach 20 Mbm Ram 64 Gb HDD 5TB
2 Back-UPS	Out: 230V, Transfer time ~6ms, selftest, 4 IEC 320 C13
External HD	4TB USB3.0
Visual classroom system	Projector ACER 116517ABD, projection screen, accessories, magnetic & marker whiteboard
Computer for office	ACER, CPU Intel Core i7 3,0 GHz, MB LGA S-1155, RAM 8 GB DDR3, HDD 500 Gb, DVD-RW, Graphic
3 Multifunctional printers	2 b&w MFP Lexmarc MX 310dn (printer+scanner+copier) for the eDrone Laboratory and OED office, and 1 color MFP Lexmarc MX 410dn (printer+scanner+copier) for the eDrone Laboratory, LAN+Wireless support
Wireless router	Wireless VOIP ADSL2+ Modem Router
Tablet	Octacore Quad 1.9 GHz, 3GB RAM Internal storage 16 GB, 4GLT and Wifi iPad Pro 11 inch +Celular 256GB Space Gray



2 Tablets	Samsung Galaxi Tab S2 9.7
4 computers for work in classroom	ACER Nitro 50-600 with 27" Big Screen Monitors BenQ GW2765HE QHD 1440P IPS LED, NVIDIA GeForce 750M GPUs
Drone and drone applications equipment	
Flight controller	Ardupilot Mega 2.6-2.8: Accelerometer, Magnetometer, Barometer, GPS, compas, microSD slot or DataDash chip on board
Frame	F450 frame: 4 motors, D=450-500mm, m=250-400gr.
Arduino Starter Kit	Kits for building drone projects
2 Multicopters	DongYang D800-X4, RC
HC-SR04 Ultrasonic Range Finder	Ultrasonic distance sensor
24 XK Allen X250 quad-Copter 250 Racer (Mode2)	2.4GHz Transmitter, LiPoly battery
Brushless Motor	KV 2000, Idle current 1A, m=30-40gr.
ESC	Con. Cur = 25-30A, programming card, m=8-15gr.
Propellers	R=8", carbon fibre
Transmitter	16 channels, USB, card slot, 2.4 GHz
Receiver	5 Ghz, m=6gr.
Battery	3S (11.1V), 2000mAh; Phantom 4 Series Battery 15.2V 5350mAh, Intelligent Flight Battery for DJI Phantom 4, DJI Phantom 4 Pro, DJI Phantom 4 Pro V2.0, DJI Phantom 4 Advanced Drone, Li-Polymer





Charger	Out: 0.1-6A, 2-20V, Temp. sensor, 10 charger profiles
Wireless telemetry link	433mHz
Other accessories laboratory	Cables, soldering station, solder wires, pliers, screwdriver, mechanical nuts, washers, screws, boards for prototyping
3D printer	DaVinci 3D Printer 1.1 Plus, WIFI, camera monitoring, SLA/ FDM (?), 200x200x200 mm3, Layer 0.1mm
3D scanner	3D scanner Ciclop Estop Laser
3D printer filament	1.75 mm PLA/ABS/PET or photopolymers
Camera	GoPRO HERO compatible, HD FPV 1080p
Multispectral camera	Multispectral Survey camera Survey 3W
Infrared camera FLIR camera	FLIR Vue Pro R
Laser scanner Phoenix aerial systems	LiDAR 3D mobile scanner, RP LiDAR A3
Environmental monitoring platform	Flying laboratory SOWA, model SmartCity SOWA, environment monitoring platform
Other sensors platform	Environment monitoring sensors set
Phantom 3 Professional	DJI Phantom 4 Pro drone
Drone bench	Drone bench for drone testing DronesBench Index (IDB)

List of the Software:





Item	Description
Pix4Dmapper Professional drone-mapping	Create maps from images taken by drones: Pix4D drone mapping & photogrammetry software tools with a flight app, desktop, and cloud platforms, perpetual software license
Flight simulation software	Flight simulation of different drone models and in different weather and landscape conditions

All equipment and software were bought with the support of eDrone Project and the equipment is registered in the inventories of Moldova State University and located in the OED of MSU.

4. New partners

ARMENIA

Associated partner:

- Aviatraining company

Other partners/collaborators:

- Civil Aviation Committee
- Instigate Robotics
- Whiz code academy
- UNDP in Armenia
- “Locator” CJSC
- “Armenia Airways”
- “Arnap” foundation

BELARUS

- Belarusian State Academy of Aviation
- Belarusian State Agrarian Technical University
- Republic Production Unitary Enterprise “Precise Electromechanic Factory “
- Institute of Experimental Botany of National Academy of Sciences
- Closed Joint Stock Company “Aviation Technologies and Systems”



GEORGIA

The Project eDrone has given us the possibility to create a learning environment and laboratory for usage drones. So, new possibilities, to create new actors in industry. The Module Entrepreneurship has been created to support and encourage new ideas commercialization; all these circumstances open the interests for collaboration.

Besides the associate Partners:

- Copter
- Georgia's Civil Aviation Agency;

We developed new collaborations with

- WeScan Georgia
- Mymobile Plus Ltd.

MOLDOVA

The eDrone project established a platform for collaboration with a wide range of institutions: private, governmental and individuals interested in the project topic.

P8 ACAPOL collaborated with 3 companies SRL ICEVO Consulting; INGEOCAD (Institute of Geodesy, Technical Prospecting and Cadastre); MOLDSILVA). Those companies are mostly Middle-size and big industrials. 2 among them accepted the collaboration that are SRL ICEVO Consulting; INGEOCAD (Institute of Geodesy, Technical Prospecting and Cadastre), they are associate partners in this Project -Educational for eDrone.

P9 MSU collaborated with 6 companies SRL „Moldavskie novosti”, SRL „Jurnal TV”, SRL „Cristalion Plus”, „Pro TV”, SRL ICEVO Consulting; INGEOCAD (Institute of Geodesy, Technical Prospecting and Cadastre). All of them are SME. All these companies are in touch with Moldova State University: the employees from these entities attended the CIA courses during the first and second editions. 2 companies accepted a proposal for collaboration and valued it SRL ICEVO Consulting; INGEOCAD (Institute of Geodesy, Technical Prospecting and Cadastre), they are associate partners in the eDrone project. Another 4 entities help the project team to promote the project results in the mass media.

P10 SAUM At the beginning of the project, P10 eDrone team visited several agricultural companies that may serve as beneficiaries of eDrone project activities: Crama Domnească Ltd, Dîngenarul Ltd, Glia-Vito ltd, SC Agro Girla ltd, S.C. Nova-Geea ltd, Vindex-Agro ltd, Vivaj-Agro ltd.

In order to promote the eDrone project and ensure its sustainability, PAA has established scientific collaboration relationships with several public and private authorities in the country: Ministry of Agriculture and Food Industry, Ministry of Transport and Road Infrastructure, Agency of Tourism, Moldsilva Agency, S.I. Geodesy, Technical Prospects and Cadastre “INGEOCAD”, S.I. Institute for Development and Forest Research.





We can mention that the eDrone project became for the Moldovan partners a true platform for collaboration with the above mentioned enterprises and other public entities, interested in drone technology and regulation. Around the Office for Education for Drone, created at MSU with the support of the Erasmus+ project, the eDrone Moldovan partners teams develop events, new projects, etc.

