

FUTURE LEARNING IN VOCATIONAL EDUCATION USING INNOVATIVE DRONE TECHNOLOGY

2023-2-TR01-KA220-VET-000179391

21-22 OCTOBER TPM MINUTE in MACHEDONIA

(This document is organized according to the flow of the meeting)

21.10.2024 MONDAY

MORNING SESSION

Welcome Speech of Kumonova Mayor and the principal of DSU-RCSOO KIRO BURNAZ, the host partner

PARTICIPANTS

- DARICA ILCE MILLI EGITIM MUDURLUGU (E10004161 - TR)
PINAR SANCAKTUTAN
MEHMET EMİN UĞUR
HARUN YENİŞAN
- GEBZE TEKNİK UNIVERSİTESİ (E10098910 - TR)
SELÇUK TOPRAK
ALİ LEVENT YAĞCI
ÇİĞDEM BALÇIK
BANU ÇETİN
- GAZİANTEP SU VE KANALİZASYON İDARESİ GENEL MÜDÜRLÜĞÜ(E10304790 - TR)
EREN ÇİFTÇİ
AHMET ÖZTÜRK
- STREDNA PRIEMYSSELNA SKOLA STAVEBNA – EPITOIPARI SZAKKOZEPISKOLA (E10185315 - SK)
KATARİNA KUCEROVA
ONDREJ HANZLIK
- TRAINING 2000 PSC (E10131468 - IT)
ELMO DE ANGELIS
SARA CABONI
- SUCESSOS CRIATIVOS, LDA (E10249450 - PT)
FATİMA PAİS
- DSU-RCSOO KIRO BURNAZ, (E10004806-MK)
SILVANA JOSIFOVSKA TASIJK
FROSINA STOJANOVSKA
VIOLETA SIMONOVSKA
SASHO STEFANOVSKI
ALEKSANDRA DIMKOVSKA
SUZANA STOSHIKJ

PRESENTATION OF PARTNER ORGANIZATION

Each project team introduced the partner organizations with the created ppts. All ppts were uploaded on the project drive file.

PRESENTATION OF THE PROJECT

Introduction of the general concept of the project. The coordinator gave a speech on the objectives of FLIGHT.

- to prepare VET teachers and students for the future of work by providing them with the skills and knowledge desired to create, program, operate and maintain drones.
- To align VET education with the requirements of industry 4.0 by integrating drone technology into the curriculum and preparing students with relevant skills and knowledge.
- To empower vet teachers and students with high-quality essential skills, competencies, and resources, preparing them to harness the opportunities presented by the integration of drone technology in various industries, fostering their proficiency and innovation in this emerging field.
- To enhance vet education by harnessing the potential of drones to save lives during disaster scenarios, optimize agricultural and construction processes, monitor the environment, and contribute to efficient water distribution management.

The main results were gone through to discuss some details among partners.

- FLIGHT Kit (commercial drones and partnership-built drones for assembly)
- FLIGHT Training Program - (2 sessions during 5 days each and involving)
- FLIGHT Local Replication Workshops of the training (5 WP attended by 100 participants)
- Handbook for FLIGHT KIT in 6 languages.
- FLIGHT Resource Center with resources and lesson plans (at least 70)
- Best Practices of FLIGHT Project: Documenting successful project strategies.
- FLIGHT Final Event: Showcasing project achievements to stakeholders (attended by 120 participants)

- Lecture from prof. Violeta Simonovska „TYPES OF DRONES AND THEIR APPLICATION“

WORK PACKAGES

Introduction and WP1: Work package n°1 Project Management

As the starting date of FLIGHT was delayed by the Turkish National Agency, The Gantt Chart, added to the application form was also decided to be updated accordingly. The new Gantt Chart will be overviewed by the all-partner organizations and uploaded to the project's drive file. DIMEM will upload till 15th November.

Under this work package; the tasks and responsibilities discussed and confirmed below;

DIMEM(TR)

- Management and Financial Plan (until the beginning of December 2024)
- Agenda, attendance list, photo and Minutes of the online meetings (on going)

GASKİ(TR)

- Risk Plan responsible (until the beginning of December 2024)
-

T2000(IT)

- Quality Assurance **which has been ready since August and decided to be expanded with the comments of all partners** and Evaluation leader (until the beginning of December 2024)
- Evaluation of all activities (meetings, training and deliverables) (on going)

DRKB(MK)

- Green Tips document responsible (until the beginning of December 2024)
- Check page 46 of the application form

SPS(SK)

- Communication manual (until the beginning of December 2024)

MANAGEMENT AND ADMINISTRATIVE ISSUES

ALL PARTNERS - Keep all the boarding passes on Drive.
Timesheets (model will be available soon)
After each activity all certificates should be on drive
The pictures could be added to the right drive folder.

Another Lecture from prof. Sasho Stefanovski "Modern technologies and use of drones in agriculture. Drones and Macedonian agriculture" was made.

Work Package 2 – Strengthening VET Teacher Competencies for FLIGHT

The decided tasks and responsibilities are;

- Kick OFF meeting – on going
- DIMEM(TR), GTU(TK) and SC(PT) - Requisites of FLIGHT KIT
After kickoff- 3 partners will schedule an online meeting to specify the technical parts of drones.
- DIMEM(TR), GTU(TK) and SC(PT) - Development of FLIGHT KIT
- DIMEM(TR) - Acquisition of the FLIGHT KIT
(The FLIGHT KIT will be ready All partners will take it back home)

DIMEM(TR) - FLIGHT - Training Part I

Presentation of the drones
How to work with the drone

Training I must be done by May 2025.

For Training I - 12-16 May 2025.

Training Part 1	
Partner	Participant
DIMEM(TR)	4
DRKB(MK)	4
SC(PT)	2
SPS(SK)	4
GTU(TK)	2
T2000(IT)	4
GKM(TK)	2

T2000(IT) – FLIGHT - Training Part I

Each Organization will work on the expert areas of their profile like below;

SPS(SK) - Drone Applications in Construction
GTU(TK) - Drone Applications in Disaster Response
T2000(IT) - Drone Applications in Environmental Protection
GASKI(TK) - Drone Applications in Enhancing Water Supply
DRKB(MK) - Drone Applications in Agriculture

Training Part 2	
Partner	Participant
DIMEM(TR)	4
DRKB(MK)	4
SC(PT)	2
SPS(SK)	4
GTU(TK)	2
T2000(IT)	4
GKM(TK)	2

Training II - 17-21 Nov 2025.

1- Handbook for FLIGHT KIT and translations

To be defined in detail

Will include the content of the presentations of the training sessions

Each partner should contribute **with 10 pages**

2- Custom Drone specifications will be decided by DIMEM, GTU and SC **until February 15, 2025**

3- 12 DJI drones 12 custom drones should be purchased according to the application form. The budget allocated is 900 Euros for DJI drones and 1600 Euros for Custom drones. The total budget is 30.900euro but also it was discussed especially by the professors from GTU and experts from SP & vet teachers from DIMEM to expand the specifications and the application. It has been decided to send an informatory email to ask about the purchase of drones in terms of changing prices and needs.

4- FLIGHT - Local Replication WK

7 Local Replication Workshops will be organized (at least 1 for each partner)

With at least 25 participants each

Attendance list and photos will be uploaded at most 1 week after on our project's Google drive and website.

5- WP online evaluation meeting

During the online meeting before the attendance list, minute and evaluation was collected and for the new ones it was also decided to be completed and saved online.

6- Schedule the trainings

The first training which will be held in Darıca was confirmed to be held **in May 2025** after the specifications of drones will be decided, guides and manuals will be ready. Then the drones will be bought according to the suggestion of the Turkish National Agency.

The possible dates are **12-16 May 2025**.

7- Pilot the drones

License required in each country (A1 and A2). (Free license in Turkey)

Option to purchase the training software (under management budget)

<https://www.velocidrone.com/shop> (about 5€ per license)

Each organization will search about the criteria, certificates, regulations or any legal documents to fly drones.

Work Package 3 – Inspire, Develop and Achieve: FLIGHT RESOURCE CENTER Projects

- Designing FLIGHT RESOURCE CENTER (all partners)

Document with the definition of the overall structure of the FLIGHT RESOURCE CENTER, categories and classifications (meta elements), the guidelines to create contents and/or projects and a Template to submit a project as well the translations.

- Development of projects for FLIGHT RESOURCE CENTER

Each partner will be responsible for creating at least 10 projects identifying the objective, the materials and devices, video and text tutorials and the final product.

All projects will be translated in all partners languages.

<https://scied.ucar.edu/teaching-box/drones> (some examples)

Each should focus on the expertise area of each partner.

- Meeting – monitoring - SPS(SK)
Fine tuning the resource center.
- Delivery of FLIGHT RESOURCE CENTER
All Project needs to be ready.
SC(PT) will be responsible for putting all the projects on the website.
- Definition and implementation of a promoting strategy of FLIGHT RESOURCE CENTER
Each organization will organize one event to promote FLIGHT RESOURCE CENTER with at least 30 participants. The attendance list and photos will be uploaded to the convenient drive file. Totally 7 events will be held.
- Good Practices report

SC(PT) will create the template for collecting the best practices using FLIGHT RESOURCE CENTER

All the partners will identify 2 FLIGHT BEST PRACTICES

10 pages per partner describing the results of those practices.

The presentation about the specifications of Drones and also the good practices was made by Prof Ali Levent Yağcı.

Work Package 4 – FLIGHT Communication, Dissemination and Exploitation

DIMEM (TR) –

Visual Identity Manual / The templates of manuals like certificates, newsletters, lists etc. will be ready till **the beginning of December.**

GTU (TR) –

Social Media Responsible,

Social media accounts like facebook, Instagram will be created by GTÜ till 30 October.

Dissemination Plan (**until the beginning of December 2024**)

GASKİ(TR) –

Exploitation plan (**until the beginning of December 2024**). The sample will be sent by DIMEM and GTÜ.

SC(PT) –

Setting up the Website (hosting, domain and configuration) (**until the beginning of December 2024**)

DIMEM(TR) –

At least 10 online meetings will be organized. (During the project)

GTU(TR) -

Final Event (2 participants per partner)

DRKB(MK) - Newsletters coordinator - Template will be provided (1/2 pages)

ALL PARTNERS –

Partners will save screenshots of the content they share about the project on social media and websites to the drive.

ALL PARTNERS –

The project will be presented at Erasmus Days in 2025

- Launch of the project – DIMEM(TR)
- Online meetings – DIMEM DIMEM(TR) – at least 10
- Meeting in North Macedonia - DRKB(MK)
- Technical requirements of the FLIGHT KIT – SC(PT)
- Presentation of FLIGHT KIT - GTU(TR)
- Training Part I - DIMEM(TR)
- Training Part II - T2000(IT)
- Dissemination of the Training – all partners should create 1
- Delivery of FLIGHT RESOURCE CENTER – SC(PT)
- Definition and implementation of a promoting strategy of FLIGHT RESOURCE CENTER - all partners should create 1
- Final Event - GTU(TR)

Others issues discussed,

Training2000 - A link will be sent for kick off evaluation until Wednesday and then it will be reported.

ALL PARTNERS - Official communication will be via email, urgent communication will be via Whatsapp.

Partner formal logos will be uploaded to create the visual identity manuals and templates **till the end of October.**

The missing partners' teams will be completed **till the end of October.**

GTU(TR) - Google group has been created for instant communication.

Newsletters- At least 10 during the project to disseminate the activities.

NEXT MEETING

On 23 December at 10 am (CET), an online meeting will be organized. The link will be sent at least 2 days ago.

FLIGHT
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