

Kick-off meeting Minutes

Porto, Portugal, 20-21 March 2025

Participants Present at the meeting were representatives from the following institutions:

- **PAZ (BG):** Maria Grancharska and Dessislava Tsokova.
- **BU (TR):** Professor Mehmet Rasit Eskicioglu, Murat Goksin Bakir and Ibrahim Ertugrul Yalcin.
- **GP (EL):** Eirini Tsekou and Konstantina Gkioume.
- **BCS (TR):** Ayca Oztas and Emre Aba.
- **LCT (IT):** Michele Ventura and Nicola Modugno.
- **SC (PT):** Fatima Pais, Ana Albuquerque Barata, Rodrigo Soares and Lois Soares.
- **AEAC (PT):** Manuel Russo, Nuno Gonçalves and Maria Robalo.

Meeting agenda:

- ◆ Introduction.
- ◆ Presentation of the partners.
- ◆ Presentation of the project.
- ◆ Administrative and financial management procedures.

Introduction: Fatima Pais welcomed all the partners and opened the meeting. Ana Barata presented the attendance list for signatures.

Manuel Russo also welcomed the partners and explained that the project funds have been received at their school, but need to go to the Ministry first before they can be able to send them to the other partners. This will most probably happen in the first half of May. This delay is the reason why the coordinator will ask the NA to extend the project for 6 months.

Presentation of partners: The partners presented their respective schools and themselves and exchanged gifts.

Presentation of the project: Fatima Pais gave an overview of the project in terms of partners and objectives.

The main results of the project were listed as follows:

- Exploring Sustainability approaches in secondary education.
- Hydroponics training in Greece, with the help of Athens University.
- Develop IoT and hydroponics kit and AI platform.
- Training in Italy on how to work with the kit.
- Create lesson plans or projects - 10 for each partner.
- Replication and dissemination activities - workshops, Science fairs etc.

Work packages:

- Work package 1 - Project management
- Work package 2 - Capacity building in Hydroponics with AI and IoT
- Work package 3 - IoT Hydroponic kit and AI platform
- Work package 4 - Hydroponic community hub

Work package 1:

Project management tasks. Fatima Pais went through the tasks of all partners. Most of the tasks are finished. The tasks that need to be finished by **31st March** are:

- Management and financial plan - Manuel Russo
- Quality plan - BU (TR)
- Communication Handbook - almost ready - Greece
- Eco-friendly Travel Handbook - BCS (TR)
- Visual identity - Nuno is making templates for all project documents - reports, presentations, attendance lists, certificates etc. All partners must use them.

Newsletter:

Each partner needs to prepare a newsletter for the meeting they host and for the project activities for dissemination purposes. Nino Goncalves is making a template for the newsletter. The first newsletter needs to be ready by **31st March 2025**.

Dissemination:

Erasmus Day (presentation; pictures); Project card on all partners' websites and/or social media, with information on the project and the partners and a link to the project website. Print screen as dissemination activity. Deadline - **31st March 2025**. Check the dissemination plan.

Documents:

- All boarding passes need to be uploaded on Google Drive. If the meeting participants travel by bus or train they must upload the tickets.
- Timesheets model will be available soon.
- After each meeting the certificates must be uploaded on Google Drive.
- Project teams - each partner must do it. There is an example made by Fatima Pais on Google Drive in the WP1 folder. The team needs to include at least three people but there is no maximum number, you can add more. Each partner needs someone to do the accounts, a manager and one more person at least.

BUDGET:

Fatima Pais explained that this project is a lump sum project, where the important thing is to have quality results at the end. The budget is an explanation for the NA how the project results will be achieved but we don't have to spend the exact amounts as given in the budget. The NA won't ask for financial documents but it is better to have the boarding passes uploaded on Google Drive. They may require them in an audit. Timesheets are not necessary but we will have to list the days we worked on the project, so we will make Timesheets.

Each partner will receive funds according to the agreement we signed with the coordinator. Of the total amount assigned to a partner, 40% is given in advance. At the Interim report proof is needed that 70% of the funds received has been spent. After the Interim report the partner receives the next 40%. After the final report and evaluation, if the results are good, then the partner receives the last 20%.

The Interim report is done by the coordinator with contributions from each partner.

The budget is flexible - for example, you are required to bring 2 people to a meeting but if you have enough money you can bring more.

The most important thing is to provide good, quality results at the end.

The partners from Turkey asked that the other partners refer to their country as Türkiye, based on the decision of the United Nations for 26th May 2022.

Work package 2:

This meeting is the kick-off meeting for WP2.

Exploring Sustainability approaches in secondary education Curriculum of Partnership Countries

- SC(PT) and AEC(PT) will create a template (31th March) to be approved by the other partners by the 4th April.
- All school partners will deliver the document filled – 2nd of May.
- BU(TR) will be responsible for supervising the scientific component and the first chapter "Sustainability, Hydroponic and Sustainable Agriculture" (min. 5 pages, 2nd of May).
- SC(PT) will be responsible for the Chapter "Best practices using hydroponic in education" (min. 5 pages, 2nd of May). They need to coordinate with BU(TR).
- We have no intellectual property of the study as it is funded by the EU and is open for everyone.
- All school partners will deliver translations
- We need to deliver and publish the final version on the website at the end of May.

Design the Training "Exploring Hydroponics: Systems, Benefits, and Applications " and replication activities (Structure, Strategies of implementation, Preparation of participants, recognition, Guidelines, Replication)

- Understanding the fundamentals of hydroponics - BU(TR)
- Exploring different hydroponic systems IoT applications BU(TR)
- Introduction AI in hydroponic systems with IoT – SC(PT)
- Aligning hydroponics with STEM and other curriculum areas – SC(PT)
- Sharing experiences AEAC(PT), LCT(IT), GP(EL), BCS(TR) and PAZ(BG)
- SC(PT) and BU(TR) will create all materials to deliver the training.
- All partners will contribute to create the handbook.

Training - Exploring Hydroponics: Systems, Benefits, and Applications (Greece)

- 5 working day + 2 travel days
- 2 participants per partner
- We will need **Europass** certificates for Greece. Manuel can share what he has but all partners must check and make sure we all have them.
- University of Athens is an associated partner of the project and will contribute to the meeting activities.
- The partners discuss the dates for the meeting in Greece. **Greece - 14th-20th July.**
- 14-18 July - There will be a conference in Athens, related to our project subject. The partners discuss which days of the conference to attend. Maria Robalo suggests the last two days (Thursday and Friday). The final decision is as follows:

Monday and Tuesday - project work.

Wednesday -r social and cultural activities.

Thursday and Friday - conference.

On Friday all partners will gather for lunch and wrap-up.

- **Replication Workshops - October 2025**

Organized by the school partners and include not only teachers from the school's partner but will be extended to other schools from the region. The workshops need to be organized in **September or October 2025**, after the meeting in Greece.

20 participants - Agenda, attendance list, photos

All partners should have a strategy for the dissemination workshop before the Training. It can be one strategy for all or each partner could have their own. This will be decided later.

Work package 2 will need to finish by the end of October. Online meeting in October to evaluate WP2.

Work package 3:

- Kick off meeting (Türkiye)

Türkiye - 3rd and 4th November 2025

- Requisites and Developing of Hydroponic Kit
- Creation of the Hydroponic IoT&AI platform
- Guides to install (DIY) the Hydroponic Kit
- Training preparation
- Training Hydroponic Kit - **Italy- 25th- 29th May 2026**
- Local replication and engagement workshops - in September or June if manageable.
- 20 participants - Agenda, attendance list, photos
- WP Evaluation

Each partner will have 2500 euros to buy all the parts for the kit. We need to get invoices for the 2500 euros. We all need to **buy the exact same parts**, not similar ones. There is a company in Portugal that can deliver to all partners. It will be decided later (in Greece at the latest).

We also need to prepare a guide to assemble the kit and prepare the training in Italy.

Before we go to Italy all kits should be assembled.

Fatima suggests that we use computer vision instead of an AI model to collect the data from the kits. She discusses it with BU(TR) representatives. It will be further discussed between them.

Deadlines for WP3 activities will be given later.

Work package 4:

- Kickoff meeting **Bulgaria - 18, 19 March 2027** - agree on common structure for the lesson plans.
- Design of the Hydroponic Community Hub
- Development of projects for the Hydroponic Community Hub. Lesson plans using the kit.
- Delivery of Hydroponic Community Hub
- Online Meeting - monitoring
- Definition and implementation of a promoting strategy of the Hydroponic Community Hub
- Replication and showcase activities
- Final Event - **Portugal (AEAC) - 27-28 May 2027**
- WP Evaluation

Conclusion: Certificates and photos.