Project Final Report

2023-1-CZ01-KA121-VET-000117584

BETWEEN

The Sending Organization

Gymnázium a Střední průmyslová škola elektrotechniky a informatiky Frenštát p. R., p. o.

The Intermediary Organisation

Euromind Projects SL

AND

The Host Organization

Dronetools S.L.

Training Programme Dates:

19-11-2023 - 02-12-2023

EUROMIND AS PROJECT PARTNER

1. Profile Description

euroMind is an international training consultancy and VET provider with headquarters in Seville and Úbeda in Andalusia (Spain).

euroMind as a training provider delivers vocational education trainings, general and job-related language courses, VET training-related workshops and study visits, workshops on culture, lifestyle and customs of EU countries as well as classes on skilful and effective job search in the EU.

It promotes and delivers trainings for teaching staff and secures work placements and exchange activities for VET students and graduates enabling at the same time young people and professionals to make the most out of opportunities of competencies & skills development offered by European educational programmes.

euroMind in partnership with Andalusian vocational colleges and companies delivers school based vocational trainings for students of different educational fields, such as: CNC, automation, electricity, renewable energy sources, plumbing, industrial and graphic design, 3D design, ICT, electronics, administration.

euroMind as a VET provider works in partnership with a wide array of private companies in almost all the sectors, such as tourism, business administration, medicine, fashion, hairdressing, health & beauty, physiotherapy, marketing, media, advertising, public relations, tourism, IT, social work, logistics, nursing, construction, geodesy, analytics etc.

2. euroMind experience and expertise

The euroMind possesses extensive experience and expertise in the field of European mobility projects preparation and management which allows it to assist Spanish vocational colleges and governmental institutions with the preparation of project applications, finding trustworthy and competent host partners in Europe for their project participants, teaching and HR staff.

Over last 3 year euroMind has participated as a receiving – host partner in over 60 mobility projects with the participation of a total of 1800 persons: students from technical and vocational schools, university students, graduates, unemployed and teaching and HR staff. These projects involved partners from Poland, Great Britain, Czech Republic, Slovakia, Germany, Portugal, Turkey, Croatia, Italy, Greece, Bulgaria, Lithuania, Latvia, etc. The full list of projects including numbers and titles is available on the euroMind website: www.euromind.es in the Gallery.

euroMind is also responsible for the participants' linguistic, socio-cultural and practical preparation and also, if necessary, for the project administration and management issues.

euroMind has been participating as a sending and host organization in more than 100 projects including Leonardo Partnership, Erasmus Placement and Leonardo Mobility – PLM, VETpro and IVT and Erasmus + projects.

euroMind monitors that all the required documentation is prepared and submitted on time at every stage of the project lifecycle and makes sure that all the partners carry out their responsibilities.

euroMind participates in seminars organised by ECVET team regarding the use of system of transfer of competences and skills in the vocational training. euroMind experts have extensive knowledge in the field, hence they are able to train their partners on how to make use of this system in their projects.

euroMind has an impressive network of partner companies from different economic sectors. More than 800 entities both private and public cooperate with euroMind in Ubeda, Seville and Malaga. This extensive activity is a perfect guarantee that all the students received by euroMind will be successfully placed.

PROJECT PARTICIPANTS' LIST

Participants' Name	Placement Sector
Tomáš Harabiš	Electric Programmer (Drones)
Daniel Ševeček	Electric Programmer (Drones)
Roman Lubij	Electric Programmer (Drones)
Rudolf Sekáč	Electric Programmer (Drones)
Tomáš Hronek	Electric Programmer (Drones)
Tomáš Jemelík	Electric Programmer (Drones)
František Voksa	Electric Programmer (Drones)

TRAINING PROGRAMME

Host Organization: **Dronetools S.L.**

Tutor's name: Jorge Juan Gutiérrez Riego/Octavio Perez Lagares

1. Description of the host organization

Dronetools S.L. is a manufacturing company of RPAs (Remotely Piloted Aircraft systems). In their workshops, they mould carbon fiber, aluminum and plastic with the latest technology to create the pieces that make up a flying platform, with precision standards of the aeronautical industry. They design the RPAs specifically for each client, which involves; using 3D parametric software, manufacturing the prototype, and doing flight tests. Moreover, the company specializes in industrial mechanization, microelectronics, robotics, design and control systems, and is equipped with such tools as: machining centre, industrial CNC cutting machine, high-precision fusion modelling 3D printing machines, cubic vacuum baking oven, insertion press, Hyundai Wia numerical control lathe, and CNC milling machine.

2. Description of the training programme and objectives

The training program is The training program is divided into 3 stages in accordance with the length of the trainees stay in the host company

1st Stage
- Getting to know the company tutor and the team
- Getting familiar with the company structure, premises, rules, health and safety procedures
- Getting familiar with the company affairs and projects
- Getting familiar with the extent of the company's business activity: local, regional, national or international
- Providing a brief overview of the tasks and projects the trainee will get involved in
- Getting familiar with the work stand
- Getting to know the programs and applications used by the company
- Getting to know the system of working, timetables and work culture
- Starting to perform job-related tasks gradually

After the internship
- Completing training diaries regularly, in particular, taking notes of the tasks delivered and the progress made
- Taking part in Spanish language activities with the aim of breaking the language barrier and improving communication as well as expanding the sector related vocabulary
- Taking part in dissemination activities, the aim of which is to promote the internship on a local, regional and national level (preparation of PowerPoint presentations, Facebook fan page, or a short

movie depending on preferences)

- Cultural activities involving getting to know Spanish customs, culture, and language

2nd Stage

- The trainee will gradually be introduced to more demanding and more complex tasks that require more responsibility. The trainee will be developing their professional skills further as well as slowly taking up new tasks

- Performing job-related tasks assigned to the trainee depending on a daily workload, customers' needs, new projects and tasks coming in

After the internship

- Completing training diaries regularly taking notes of the tasks delivered and the progress made

- Taking part in dissemination activities, the aim of which is to promote the internship on a local, regional and national level (preparation of PowerPoint presentations, Facebook fan page, or a short movie depending on preferences)

3rd Stage

-The trainee will be given more responsibilities and tasks depending on their development and performance review. During the last week of his or her work placement, the trainee should be able to carry out all the tasks envisaged for him or her in the program.

- Performing job-related tasks assigned to the trainee depending on a daily workload, customers' needs, new projects and tasks coming in

After the internship

- Completing training diaries regularly taking notes of the tasks delivered and the progress made

- Taking part in dissemination activities, the aim of which is to promote the internship on a local, regional and national level (preparation of PowerPoint presentations, Facebook fan page, or a short movie depending on preferences)

- Roundup: sharing experiences, presentation of dissemination activities and handing out certificates

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- getting familiar with the company structure, premises, rules, health and safety procedures

- getting familiar with the company affairs and projects

- getting familiar with the extent of the companys business activity: local, regional, national or international

- providing a brief overview of the tasks and projects the trainee will get involved in

- getting familiar with the work stand

- getting to know the programs and applications used by the company

- getting to know the system of working, timetables and work culture

- starting to perform job-related tasks gradually

After the internship:

- completing training diaries regularly, in particular, taking notes of the tasks delivered and the progress made

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- cultural activities involving getting to know Spanish customs, culture and language

2. Main responsibilities & tasks carried out during the training

- Preventing potential accidents that may happen during the assembly

- Welding process with tin before putting it into practice on the assembly

- Building a drone from scratch

- Completing the drone

- Using Arduino with JAVA, from Eclipse and knowledge of API

- Creating a joystick to control the drone flight. Multimeter presentation on LCD screen

- Controlling a drone using different types of movements, flight modes, configuration, etc

- Testing the drone and connection of the transmitter to the receiver

- Calibrating the drone and outdoor flight

Tomáš Harabiš

Tutor's final note

6 (Excellent)

Participant's opinion about his personal & professional development

Hi, my name is Tomáš Harabiš, and I am from the Czech Republic. I study at the secondary technical school of electrical engineering in Frenštát pod Radhoštěm. Even though I am graduating this year, I was really looking forward to this Erasmus experience. Both the stay in Seville and the day spent in Granada were amazing. The best part was the long walks in the winding streets of the city and the food!!! The local people are very nice and helpful at any time; they even tried to help us even though we did not understand each other very well. The architecture of Spain, especially in Seville, was breathtaking. I have improved my skills with modeling programs and in many other areas, from communication in a foreign language to cooperation in a group, etc. I really liked it here, and I will definitely come back sometime.

Daniel Ševeček

Tutor's final note

6 (Excellent)

Participant's opinion about his personal & professional development

Hello, my name is Daniel Ševeček. I am from the Czech Republic. I am in the high school Gymnázium a Střední průmyslová škola elektrotechniky a informatiky. I am finishing my fourth year of electrical engineering this year. I am very excited about my internship here. Seville is a beautiful city full of things to see. I would definitely like to live here for a while because Seville has really charmed me. I learned punctuality and how to work in a team; it also helped me to improve my English. I learned how to work in Cut2D and FreeCAD, build and wire a drone correctly. I learned how to set up motors or calculate the ideal drone build. The whole internship here has been a huge benefit and has given me a lot for the future. Why would I recommend Erasmus+? It is a great opportunity to learn something, to get to know a new country, its culture, sights, and nature. Plus, it is a great reality and a huge benefit for the future.
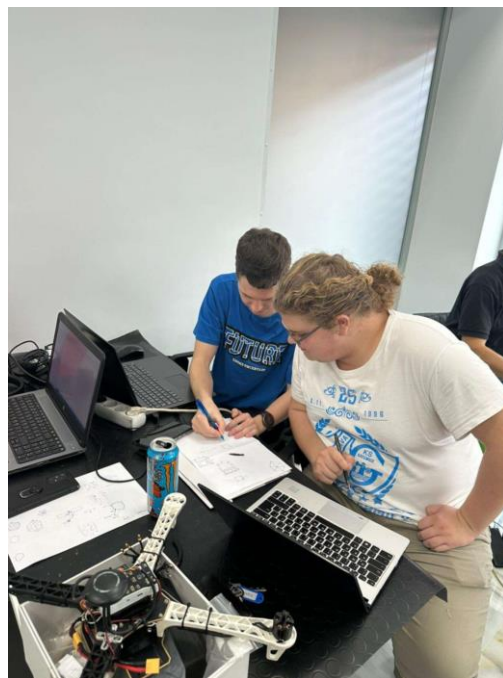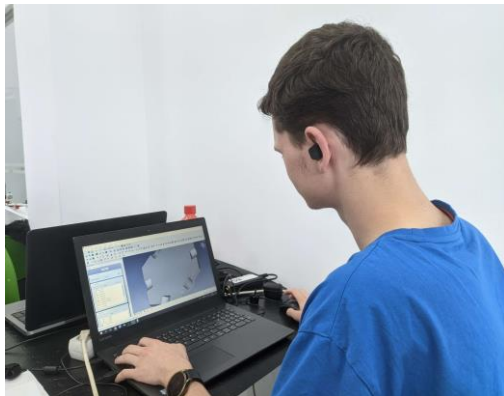
Roman Lubij

Tutor's final note

6 (Excellent)

Participant's opinion about his/her personal & professional development

Hello, I am Roman Lubij! I am a student of electrical engineering at a moderately sized school in Frenštát, "Gymnázium a Střední průmyslová škola Frenštát pod Radhoštěm". So far, I really like the internship at DroneTools; it has taught me how to use CAD software for some more advanced things than what I have used it for so far. Also, I learned how to build drones (and that it is not too hard!) and calibrate them, which is definitely handy. I would like to build my machine eventually. Seville is definitely a nice city in which I could see myself living for a year or so. And why would someone want to take part in the Erasmus+ project? It definitely culturally enriches us, lets us learn new skills, and do cool stuff!

Rudolf Sekáč

6 (Excellent)

Participant's opinion about his personal & professional development

Hello, my name is Rudolf Sekáč. I am from the Czech Republic, specifically a town named Kopřivnice. I am currently studying IT at Gymnasium a Strední prumyslová skola elektrotechniky a informatiky, Frenstat pod Radhostem. At the moment, I am in Sevilla for an Erasmus internship with Dronetools. During the internship, we have covered a wide range of topics related to drone design, including 2D and 3D CAD design, mission simulations, and drone calibration. The lecturer has been exceptionally helpful and friendly.

In my free time, I have been exploring the city. I have visited some amazing places like Plaza de Toros, the cathedral, and Torre del Oro. Sevilla is a beautiful city, and public transport makes it easy to reach almost any destination.

So, why consider participating in an Erasmus project? It offers the opportunity to experience life in a different country, immerse yourself in a new environment, and learn about a different culture and language. Working in a foreign company provides a unique perspective compared to working in your home country. Plus, you will create lasting memories along the way.
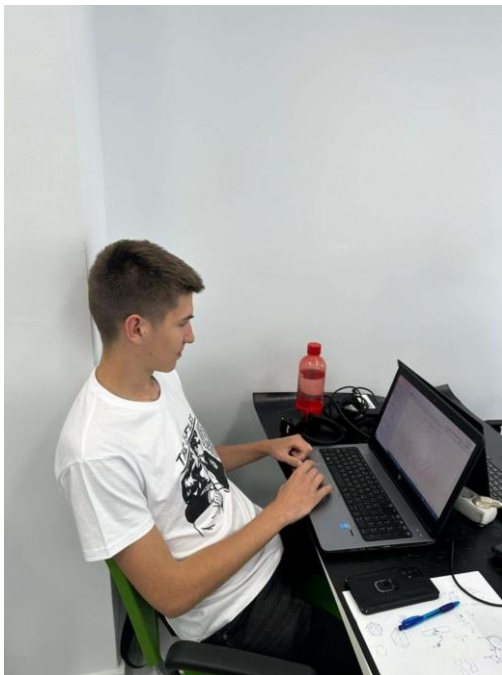
Tomáš Hronek

Tutor's final note

6 (Excellent)

Participant's opinion about his personal & professional development

Hey, my name is Tomáš Hronek. I am from the Czech Republic. Currently, I am in the fourth and my last year of studying at Gymnázium a Střední průmyslová škola elektrotechniky a informatiky, Frenštát pod Radhoštěm, příspěvková organizace. Yeah, it is a long name. I study IT, but that will not probably tell you much. So, how did I enjoy staying in Seville? Very much; the city and its surroundings are beautiful. Many sights like memorials, cathedrals, ruins of Italica just a few kilometers from the city. Everyone I met was nice. Now what have I learned so far in DRONETOOLS? I have brushed up my skills with 2D and 3D design of parts in FreeCAD and Cut2D for the drone that we were building. We learned how to set up drone control, calibrate it, and program it. The lecturer was nice and explained everything so everyone would understand, even if you have not worked with anything like that before. Last, why should you try Erasmus+? I mean it is free, you will go to another country and meet people, experience the culture. On top of that, you will always learn something new!
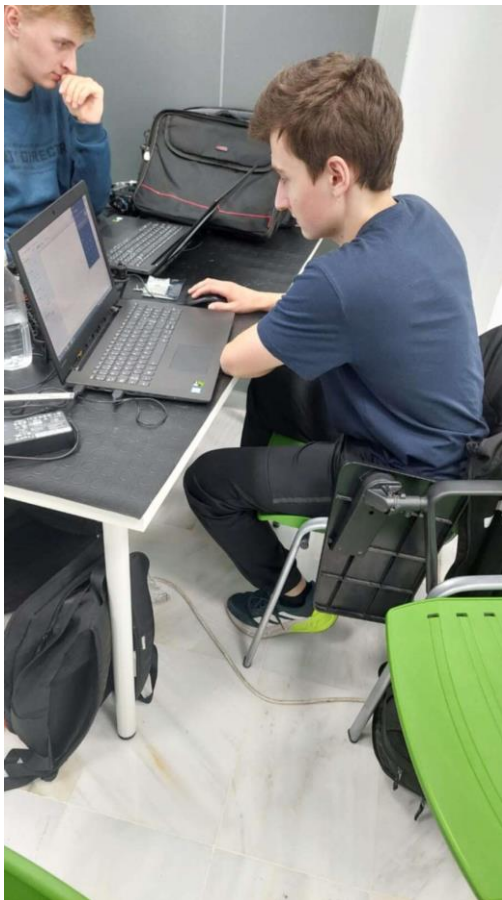
Tomáš Jemelík

Tutor's final note

6 (Excellent)

Participant's opinion about his personal & professional development

Hello! My name is Tomáš Jemelík, and I'm from the Czech Republic. Currently, I am finishing my fourth year of studying at the secondary industrial school called Gymnázium a Střední průmyslová škola elektrotechniky a informatiky in Frenštát pod Radhoštěm. More specifically, I study information technologies. I really enjoyed my stay here! I was stunned by the beauty of Seville, and I hope that one day I will come back. What I liked the most was the architecture of the city. I learned to be more independent and practiced my English at Dronetools. We learned the basics in FreeCAD and Cut2D, so now we are able to use these programs. I also got closer to other students. This internship is definitely going to benefit me in the future. Why should someone take part in Erasmus+? It's definitely worth it! You will have a chance to explore another country and gain work experience

František Voksa

Tutor's final note

6 (Excellent)

Participant's opinion about his personal & professional development

Hello, my name is František Voksa. I am from the Czech Republic. Currently, I am studying the last year of high school in Frenštát pod Radhoštěm, called Gymnázium a střední průmyslová škola elektrotechniky a informatiky Frenštát pod Radhoštěm. I am studying information technologies. I honestly really enjoyed my stay here in Seville because it is an awesome city with lots of great places, and I would love to come back someday. People here are also very kind. In Drone tools, we used Cat2d and FreeCAD for drawing drone stuff. So, I practiced these CAD programs and quite enjoyed it. Our mentor is very helpful and will assist whenever needed. I also practiced my skills in English. I think I have made some new friends here. Why should someone take part in Erasmus+? There is no reason not to try it because you cannot lose anything; you can only gain something, either experience or memories. You can visit beautiful places and meet new people.

PROJECT MANAGEMENT

1. Mobility Project Preparation & Induction

Before the arrival of your trainees in Spain, euroMind provided them with the pre-arrival guide, including useful information, local transport & social life, emergency numbers.

euroMind has also arranged Skype meeting with the participants in order to get to know them and to interview them.

After the Skype interview, euroMind created a Facebook group to which all the selected participants were invited, together with their Teachers. This way euroMind Coordinator had constant contact with the target group already before their arrival in Spain.

euroMind took responsibility for preparing Learning Agreements individually for each participant and made sure that all the parties involved signed all the necessary documents.

On the first day after the arrival, euroMind organized the welcome session during which the participants got to know the euroMind team, were reminded about the programme agenda, accommodation rules and dissemination strategy options.

Later on, the participants were taken for a walk around the neighborhood to get to know the area and find out where banks, mail box, workplace, supermarkets, bus station are.

2. Monitoring

In order to make sure that the objectives of the Learning Agreement were going to be achieved and that the participants would be fully integrated in the companies' work culture, the monitoring was delivered by all of the parties involved in the project.

euroMind assigned a Mentor for the group of participant who was responsible for the introduction of the participants to the host organisation. During the training the Mentor delivered monitoring visits to the host organisation in order to revise the tasks of the trainees, their progress as well learn from the first hand the level of satisfaction of both the participants and the training centre Tutor.

The Mentor in cooperation with the Tutor carried out the evaluations of the trainees in the middle and at the end of the training.

After obtaining the results of the half-way through evaluation, the Mentor met the participants to give them the results of this evaluation. The least favourable results were discussed with the

participants in private so that both the Mentor and the trainees had the comfort of sharing the information and exchanging the opinions and finding solutions to some problematic issues.

The Tutor from the host organisation was responsible for helping, informing and guiding and supervising the work done by the participants. The tutor had regular meetings with the participants in order to assess their progress during the training.

euroMind at the end of the programme during the goodbye session handed out evaluation sheets to the participants so that they could assess their stay in Spain, training programme, as well as the work of the euroMind.

euroMind was also available to the participants 24/7 in case of emergency.

3. Communication

EuroMind takes good care of successful communication between host organizations and trainees. Each evaluation of work is aimed at improving the quality of cooperation. Each party is thoroughly checked and assessed and the necessary improvements are introduced. Moreover, euroMind mediates in this tutor-trainee collaboration by translating and solving language-connected complicated matters.

4. Dissemination strategy

euroMind took active part in the process of preparing and dissemination results of the project together with the sending organisation and participants.

While the trainees were in Spain, euroMind involved them in a number of activities the aim of which was to make students monitor and collect all the information related to the progress of their work placements and stay in Spain. The materials produced by the participant would be then used as tools for disseminating results by the school in their country and by the partner in Spain.

The participants could work in groups or individually. On the first day they needed to decide on the form or forms of recording their professional experiences.

As a rule the whole group needed to create a Facebook fun page as it is an effective and quick means of accessing large numbers of people. What is more, it is a form that appeals to young people as they can share their experiences instantly and receive instant feedback, too. The fan page is always linked to the euroMind's Facebook fan page. The sending organisation was also asked to do the same thing.

This way the material produced by the trainees reached bigger audiences and was more effectively disseminated.

euroMind also disseminates the project at a local level. It organises language and cultural exchanges between the international trainees and students from local vocational colleges. During those meetings both Spanish and International students are involved in a number of activities the aim of which is to get to know each other, share experiences related to work experiences and in general their stay in Spain. The students also exchange information about their countries and cultures.

5. Certification

To validate the acquired skills, the trainees, at the end of their stay, received complete proof of their participation in the project by means of several methods of recognition:

- Training Certificate

- Europass Mobility Certificate

Cultural activities, Andalusian cities & places visited during the programme

<u>Walk around Seville city center:</u>

Seville is the artistic, cultural, and financial capital of Andalusia in the southern region of Spain. The city is a historical masterpiece full of monuments, gardens and flamenco festivals. The city reflects the harmony between different Christian, Jewish and Muslim cultures and religions. As Seville is the capital and the largest city of the autonomous community of Andalusia, it is easy to get lost here, however thanks to the tour organised by euroMind´s team, the trainees were able to admire the city safely and in a pleasant atmosphere. The euroMind coordinator helped the trainees understand the city from a historical and artistic point of view, but also gave them some shopping and eating tips. The group were shown the best places where they could go and grab something to eat, drink and have fun or just relax and hang out.

Granada:

Granada is the city of three religions and cultures: Judaism, Christianity and Islam. The great variety of stunning landscapes and views that Granada has to offer since the city is located at the foot of a mountain range called Sierra Nevada. Among the most interesting places to see, we can mentione: The Albaicín district (with the Mirador de San Nicolas), Plaza Nueva square (St Annes Church), The Acaicerí market, Bib Rambla Square, the Cathedral, the Alhambra and the Generalife views, and also the Sacromonte district where gitanos (gipsies) built up their houses in caves. But the highest praise deserves the Alhambra, a fortified palace complex on the UNESCO World Heritage List.

SUMMARY OF THE PROJECT

euroMind team did their best in order to deliver the best professional and cultural experience to the trainees of the project being always ready to help, give advice and solve any problems or doubts.

The trainees were fully satisfied with their training. They gained much needed professional experience abroad which is highly appreciated and sometimes even specifically asked by today's employers.

We have no doubt that our trainees will use their new knowledge and experience at their current work in their home country or increase their chances at the labour market and dazzle their future potential employers.

Moreover, the trainees learnt the basics of the Spanish language were able to work in a multi-cultural environment and proved themselves with the ability to work individually as well as in a team.

euroMind team was extremely satisfied with the trainees' involvement in the project and personal interest in whatever they participated in.

This project was very successful and we hope to realize other successful projects with Gymnázium a Střední průmyslová škola elektrotechniky a informatiky Frenštát p. R., p. o. in the future.

SEVILLA, 02-12-2023

Carlos Hoyo de la Torre

Director