



Erasmus Plus – Key Action 203

**Geo tools for Modernization and Youth employment: MY GEO**

**Project no. 2018-1-IT02-KA203-048195**

A European Multilateral Project

## **WP4: Evaluation of results of the mobility cycles**

---

---

<b>Author(s) partner :</b>	<b>Luc Zwartjes</b> (Coord UGent)
<b>Due date of deliverable :</b>	Month 24 (May 2021)
<b>Version :</b>	V1
<b>Dissemination Level :</b>	Public

**Abstract:** This document integrates the information of the first mobility cycle of students from four universities: UGent (Coord), UDED, Padova and Zaragoza. This results allow us to improve the second cycle of mobility in order to adjust to a better acquisition of skills by students.

**With the support of the Lifelong Learning Programme of the European Union**

This project has been funded with support from the European Commission. This report reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



## Content

1	My Geo Mobility .....	3
2	Before the mobility .....	4
2.1	Research & focus group .....	4
2.2	Formalization of the My Geo agreements .....	8
2.3	Public call and selection of the participants first cycle of mobility .....	9
2.4	Public call and selection of the participants for the second cycle of mobility .....	9
3	After the 1 <sup>st</sup> cycle mobility .....	10
3.1	Evaluation by the students.....	10
3.2	Evaluation by the companies .....	10
3.3	Recommendations for the second cycle .....	11
4	After the 2 <sup>nd</sup> cycle mobility .....	12
4.1	Situation due to Covid-19.....	12
4.2	Evaluation by the students.....	12
4.3	Recommendations after the second cycle .....	12
5	Recommandations for a successful mobility .....	14
6	Annexes.....	16
6.1	Results evaluation students of the 1 <sup>st</sup> mobility.....	16
6.1.1	After 2 weeks.....	16
6.1.2	After 1 month .....	18
6.1.3	After 6 weeks.....	19
6.1.4	End traineeship.....	21
6.2	Results evaluation students of the 2 <sup>nd</sup> mobility.....	24
6.2.1	After 2 weeks.....	24
6.2.2	After 1 month .....	25
6.2.3	After 6 weeks.....	26
6.2.4	End traineeship.....	27
6.3	My Geo agreements.....	29
6.3.1	Document for the companies – version 1 <sup>st</sup> mobility .....	29
6.3.2	Document for the companies – version 2 <sup>nd</sup> mobility.....	36
6.3.3	Document for the students – version both mobilities.....	44

# 1 My Geo Mobility

WP4 My Geo mobility intends to promote the collaboration between HEI and companies in the identification of key competences related to the use of GIS and effectively requested by the labor market. When we look at the Geospatial Technology Competency Model framework - developed through a collaborative effort involving the Employment and Training Administration (ETA), the GeoTech Center, and industry experts – we see 3 building block levels:

- in blue the occupation related competences
- in yellow the industry related competences
- in red and grey the foundational competencies, including workplace competencies. And developing these competencies is the core ambition of the traineeships.

## FOCUSING ON WORKPLACE COMPETENCIES

**Teamwork:**  
Working cooperatively with others to complete projects.

**Creative Thinking:**  
Recognizing, exploring, and using a broad range of ideas and practices.

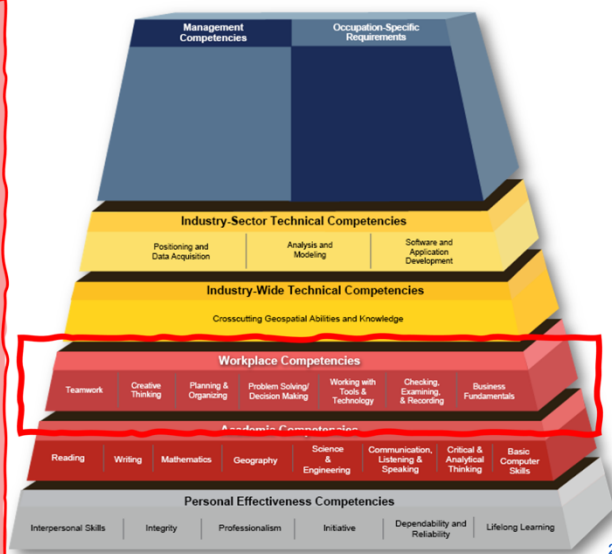
**Planning and Organizing:**  
Planning and prioritizing work to manage time effectively and accomplish assigned tasks.

**Problem Solving and Decision Making:**  
Applying critical-thinking skills to solve problems by generating, evaluating, and implementing solutions.

**Working with Tools and Technology:**  
Selecting, using, and maintaining tools and technology to facilitate work activity.

**Checking, Examining, and Recording:**  
Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic format.

**Business Fundamentals:**  
Knowledge of basic business principles, trends, and economics.



The development of the mobility is closely related to the development of the MOOC for students. In fact the content of the MOOC for students is derived from a survey done at different companies to detect the exact needs on content, skills and competencies needed at the company.

For this purpose WP3 consists of different stages

- A1: research especially what is the stage GIS in the companies
- A2: a focus group on mobility and GIS
- A3: formalization of My Geo agreements
- A4: public call and selection of participants first cycle of mobility
- A5: first cycle of mobility
- A6: evaluation report of first cycle of mobility (this report)
- A7: public call and selection of participants second cycle of mobility
- A8: second cycle of mobility
- A9 evaluation report on second cycle of mobility
- A10: collection of GIS use experiences in Mobility and publication in the platform

This report collects and analyses all feedback from as well the students as the companies during both mobility cycles.

## 2 Before the mobility

### 2.1 Research & focus group

A first step was to analyse the supply and demand for the mobility. This means:

- getting to know what the companies expect from the internship
- getting to know what the universities (students) can offer.

A survey was used and send to the 4 companies & 4 universities.

For the universities a first set of questions dealt with curricula of the universities:

- most universities aimed education level of the students taking part in the mobility as part of the master level studies
- each university has an internship in the education program, but for 2/4 it is obligatory, 2/4 voluntary
- the number of credits is also different: most have a system of 6 credits per month, depending if it is part of the obligatory internship or if it is an optional part (like Ghent University: 12 credits for basic – 2 months, 5 extra credits for the optional 1 month).

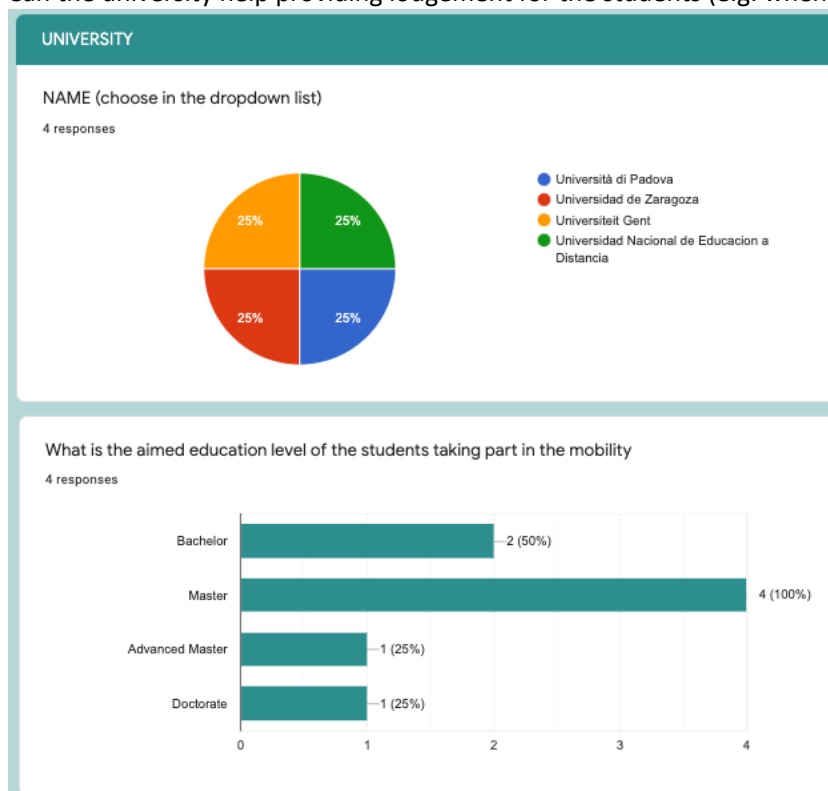
For practical questions – as all of the universities have experience with internships in their country or abroad the insurance is regulated via the university.

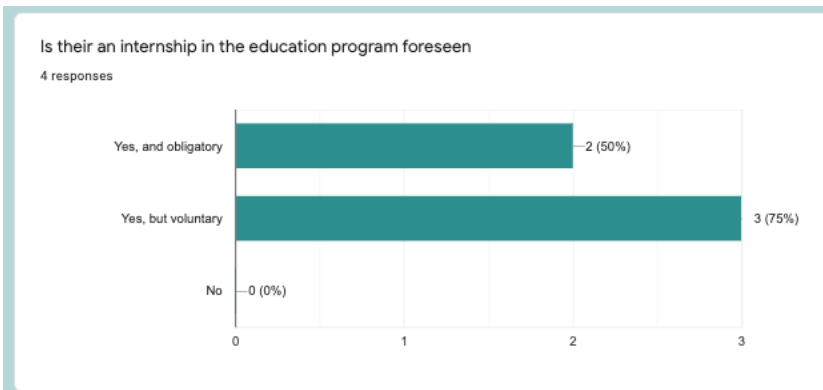
For lodging finally some can help looking for dorms (especially if the internship is in the summertime).

If yes on the previous question: how many credits and how long (min - max)

How is insurance regulated for internship?

Can the university help providing lodgement for the students (e.g. when in holiday period)





If yes on the previous question: how many credits and how long (min - max)

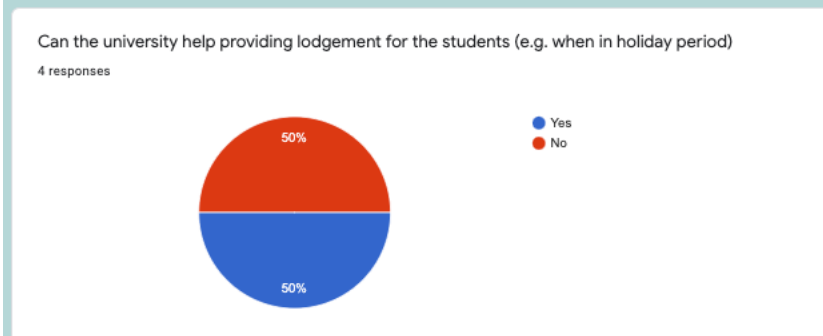
4 responses

- depending from 6 to 18, from 1 month to 3 months
- 12 ECTS
- Depends on hours around 6 credits per month
- depends of the master: geomatics: 12 SP, geography 5 SP (+ 5 optional course points)

How is insurance regulated for internship?

4 responses

- Is in charge at University
- INCLUDED IN THE ENROLMENT FEES
- The fee of the university registration includes an insurance
- insured via the university



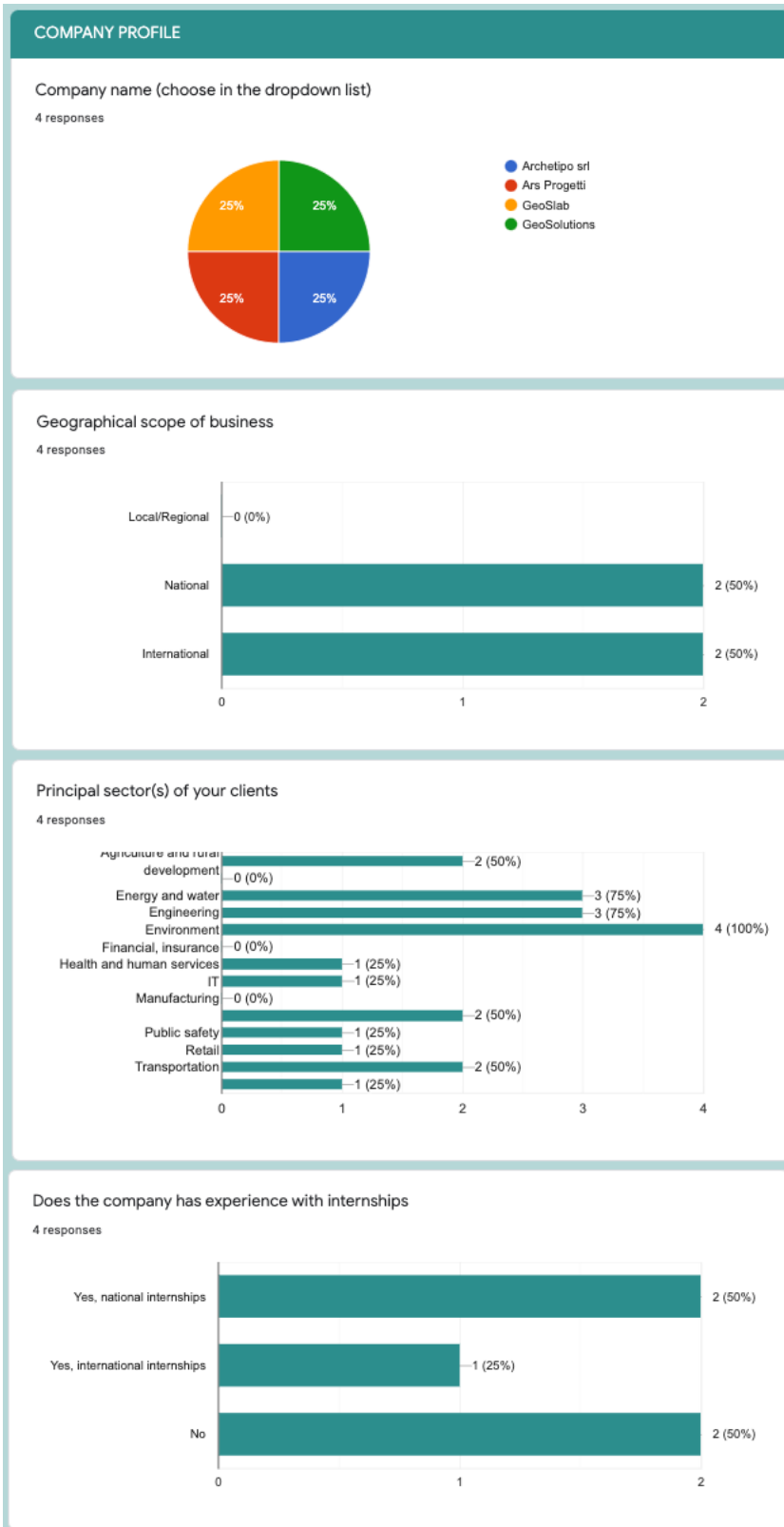
If yes: please describe

3 responses

- It is better in private market, prices are the same, in any case the secretary of Master in GIScience can help in finding lodgement
- CERBUNA DORMITORY (<https://alojamiento.unizar.es/>)
- in summertime there might be places available at student dorms

The companies were inquired about the company profile:

- 2 companies work international, two national
- the sectors the companies are working in is very broad, but the sectors 'energy and water', 'engineering' and 'environment' are most common.
- for 2 of the 4 companies this is their first experience with internships.



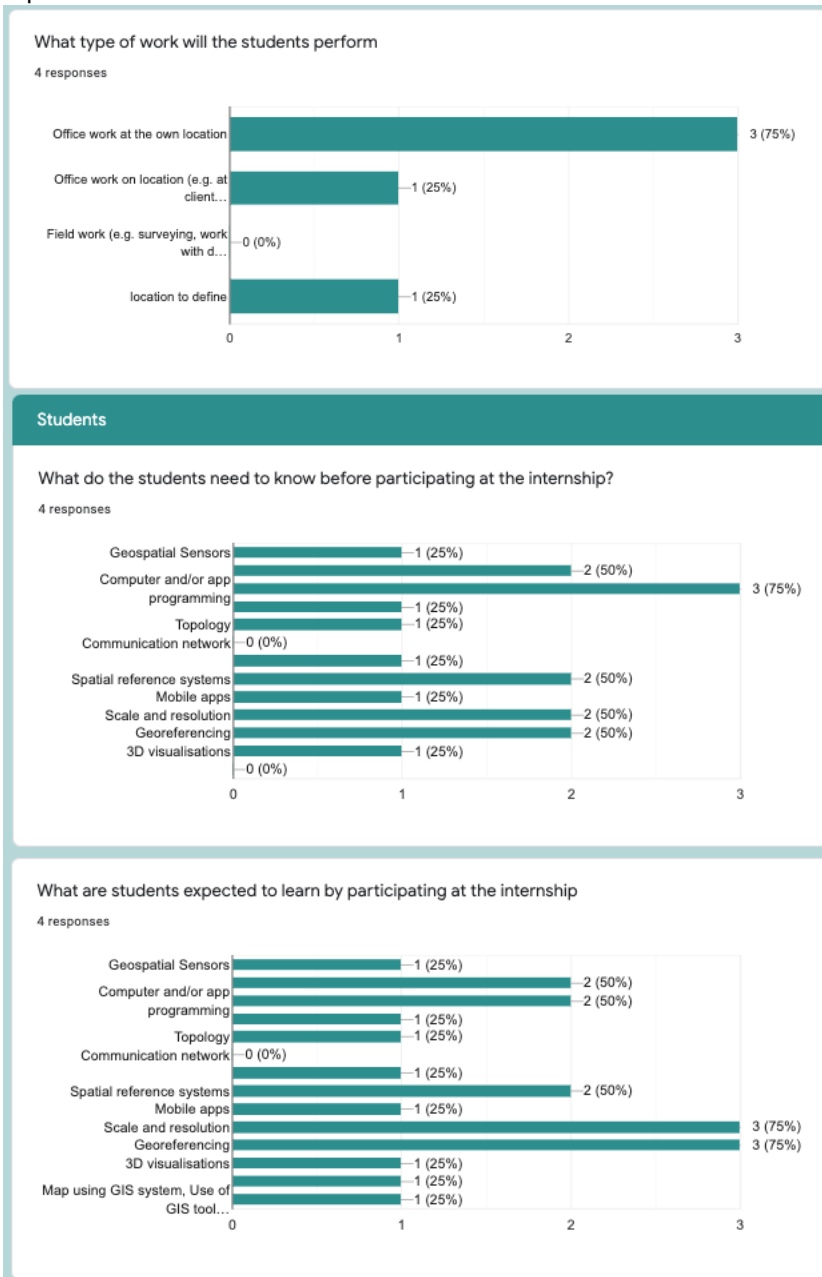
According to the responses the students will have to work mostly at the office, but might also need to work on location.

Supervision will in most cases be done with a two mentors system:

- a project's mentor or dedicated consultant (e.g. the responsible of the development group) for the overall coaching and monitoring
- a personal mentor or teamleads (e.g. the responsible of human resources at the company).

The companies also filled in what students need to know before participating at the internship. Most important is knowledge of computer and/or app programming, followed by cartography & graphic representations, spatial reference systems, scale & resolution, georeferencing.

During the internship the students will gather most experience in the fields of scale & resolution, and georeferencing, followed by computer and/or app programming, and cartography & graphic representations.



The results of this small survey were shared with the responsible partner in the project for the development of the MOOC for the students, as these responses show what accents certainly will need to be implemented in the MOOC.

A focus group inside Ghent University and with online aid from the other partner universities and the companies involved helped to clear the most important aspects of the training:

- 1) As these trainings (although a test for the project) involve the students in their current education program there will be a double set of agreement documents needed:
  - on the one hand the official university-depending documents for the traineeship
  - on the other hand the documents we will develop and test in this first period of exchanges
- 2) The requested skills and knowledge before the start of the training need to be communicated very clear to the students who will take part at the traineeship.
- 3) There must be a good and complete mentorship inside the companies and – although there's not really a budget for it – the responsible person at the university will visit at half-time of the traineeship the company and students.
- 4) A periodic evaluation needs to be done inside the company together with the students
- 5) The students need to perform a periodic evaluation (every 2 weeks) about the internship.

## 2.2 Formalization of the My Geo agreements

The outcome of the survey and the focus group provided the creation of 2 documents for the internship

The learning Agreement My Geo Mobility traineeship ((see Annex 4.2.1) consists of 4 parts:

- 1) The personalia of the trainee, sending institution and receiving institution
- 2) Information to be filled in by the company and university before the mobility. This consists of
  - a. The traineeship programme at the receiving organisation, including: the programme; the knowledge, skills and competencies required before the traineeship & what will be acquired during the traineeship → this information is derived from the survey; monitoring plan; evaluation plan & language competence.
  - b. Info from the sending institution, including: type of traineeship (voluntary, embedded in the curriculum); insurance policy
  - c. Info from the receiving institution, including: location of the workplace, insurance (if not by the sending institution); risk analysis on the type of work
- 3) Information to be filled in by the receiving institution during the mobility. This includes the detailed programme with day and month schedule, monitoring and evaluation plan per period
- 4) Information to be filled in after the traineeship, including: the final detailed programme overview; knowledge, skills and competencies acquired and evaluation of the trainee.

The Periodic evaluation My Geo Mobility traineeship ((see Annex 4.2.1) consists of 4 parts:

- 1) The personalia of the trainee, sending institution and receiving institution
- 2) Evaluation after 2 weeks. This focuses on: an evaluation to what extend the knowledge, skills and competencies as mentioned essential before the mobility was correct; a brief video message (+ short transcript) about the first two weeks on reception at the company, supervision so far, atmosphere at the company, location and accessibility. The video message will to be uploaded on a platform so that I can be used for the evaluation.
- 3) Evaluation after 4 weeks. This focuses on: an evaluation to what extend the knowledge, skills and competencies as mentioned to be acquired by the mobility was correct; a brief video message (+ short transcript) about the internship half-time, pointing to what extend the trainee has the feeling to what extend the aimed knowledge, skills and competencies are already achieved.
- 4) Evaluation after 6 weeks. This focuses on: to what extend was the risk analysis – as mentioned by the company – correct; a brief video message (+ short transcript) after six weeks focusing on how valuable the trainee considers the work to be done & to what extend being part of the team.
- 5) A final evaluation at the end of the traineeship. This focuses on: a final evaluation to what extend the knowledge, skills and competencies as mentioned to be acquired by the mobility was correct; a brief video message (+ short transcript) about the internship, including a total



evaluation on the traineeship (did it reach the expectations, how was the supervision, what skills have you learned – outside the ones mentioned in the traineeship and what needs to be improved for the second round).

The completed evaluation form will be uploaded to the same platform where the video diaries are posted.

### 2.3 Public call and selection of the participants first cycle of mobility

Each of the four universities launched a public call inside their university/faculty/department to gather interested students for the internship. This was done in two stages at most universities: via a mailing/message and via a face-to-face presentation of the project and the traineeship.

After this call students could apply for the training. For this they had to send a motivation letter and short CV. A team within the university decided - if necessary - who was selected.

After that, a meeting was convened with the students and those responsible for the university, on the one hand for the practical arrangements (travel, accommodation, finances) and on the other hand to view the substantive objectives and assignments (such as the periodic evaluation).

In this first round in total 9 students took part at the traineeship:

- 3 students from the University of Padua went to GeoSolutions in Belgium (Ghent) during the months of June and July 2019.
- 2 students from Ghent University went to GeoSlab in Spain (Zaragoza) during the months of June and July 2019
- 2 students from the University of Zaragoza went to Archetipo in Italy (Padua) during the months of June and July 2019
- 2 students from the University of Distance Learning (UNED) went to Ars Progetti in Italy (Rome) during the months October – December 2019.

### 2.4 Public call and selection of the participants for the second cycle of mobility

Starting from November 2019 the call for students of the four universities to take part at the second mobility cycle was launched.

Each university selected 2 students, this was finished by end of February 2020.

But due to Covid-19 all arrangements were disturbed:

Some mobilities could take live – but with the students not being able to work inside the offices of the Company, this was the case for

- students of UGent who did their traineeship at Archetipo 24 July 2020 to 18 September 2020
- students of UNED who did their traineeship at Geosolutions 5 October to 4 December 2020
- students of UNIZAR who did their traineeship at Ars Progetti 19 November 2020 – 18 January 2021

The mobilities of both students from UNIPD was completely virtual: they could not travel to Zaragoza so this was replaced by online meetings and working from home 1 June 2020 to 30 July 2020.

## 3 After the 1<sup>st</sup> cycle mobility

### 3.1 Evaluation by the students

An outprint of the periodic evaluation by the students can be found in Annex 6.1.

Overall the students were very happy with the traineeship. The supervision, the fact to take part at the work in a 'real' atmosphere, the possibility to use theoretical knowledge in a real working area, contact with colleagues, reception at the company and a nice place for the internship are things they liked a lot. One student summarizes it perfectly: "It has been a great experience because we have learned new things about GIS and remote sensing, both things so important to our training. On the other hand, we have applied great part of our knowledge on help the company. It has reached my expectations."

The supervision, support by the company and more precisely the tutor assigned to them, has been enormously appreciated by the students. "I can't say anything wrong of the supervising. We always got a good explanation of the planning and the tasks we had to do. If we had a question, we have always had the opportunity to ask. If I have to evaluate my supervisors, I only can say: crucial and brilliant."

For some traineeships there was some disappointment about the fact that the traineeship was not always what they expected. In one company the intention was to go through the entire process of work, from start-up, field work (which takes several weeks), processing and cleaning of the data (which is sometimes monotonous work) and only then the real processing in GIS or app applications. As a result the first month was evaluated rather negative by them, especially as it didn't correspond really with the required knowledge, skills and competencies as indicated by the company. One explanation for this is that the level of the students was not good enough compared to what was required and the company was thus obliged to adjust the traineeship.

Another point made in another company was that – besides the indicated necessary knowledge, skills and competencies – extra knowledge of specific software and computing skills was needed. As a result the first two weeks were taken by self-study, which they would have preferred to do beforehand.

Also in some companies the students felt as not really being part of the company. This due to the fact that they were or working on a totally separate project or even to the fact that it felt for some students as if it was more working for the university then for the company.

A problem that arose for almost every student was the location of the lodging compared to the location of the company. This resulted in long commuting times (between ½ h to 1 h travel, twice a day), and the public transportation is not always that good. Of course the students pointed out themselves that it is not always easy to find an affordable place to stay in cities like Rome.

### 3.2 Evaluation by the companies

The companies were really satisfied by the level of the students, their enthusiasm and sense of initiative. Overall the theoretical and practical knowledge of the trainees was satisfactory. In some companies there were some gaps detected, but the fact that the students were willing to learn if needed extra programming skills or software was something that the companies appreciated.

A problem some companies mention is the fact that 2 months is too short because of the learning curve (technical tools).

Also the administration is something that companies would like to see much more efficiently. The idea that one document that has to be completed in several stages of the project is not user-friendly.

Also the administration of timesheets (specific as this is part of a project) was time consuming.

### 3.3 Recommendations for the second cycle

#### Administration for companies

The paperwork for the companies needs to be simplified. Therefore, the document (Annex 4.2.1) is being reworked and divided into two parts:

- a part to be completed and submitted before the training
- a part that must only be completed and submitted at the end.

The first part will be adjusted to fit the remarks of the students:

- Make it clearer to the students what the work will all consist of - and that this sometimes also means a lot more boring or less challenging work (“It is maybe more interesting to inform the potential candidates with the actual project and their planning. It was difficult for me to make the decision to participate and I think this could be easier to convince a student”)

The detailed programme will be adjusted

- A more precise list of knowledge, skills and competencies, supplemented with an overview of the specific programs and software that will be used, including a link to online courses so that students do not have to use training time (“It would probably be better to decide what will the internship be about some time before leaving, so that the students can prepare themselves by following some online courses before starting their mobility”).

This will have to be connected to the MOOC for students.

#### Task for the students

From the side of the company: try to create a task that is really part of the company, and not an isolated project, so that the student becomes more integrated in the company.

From the side of the students: they must be better prepared by the sending institution (university) that a traineeship is a realistic workplace based learning and as a result all aspects of the work (also more boring aspects) will be part of the job.

#### Time of the traineeship

As well some companies as some students mention that an internship of 2 months is too short.

## 4 After the 2<sup>nd</sup> cycle mobility

### 4.1 Situation due to Covid-19

Because of Covid-19, problems arose for mobility, both in terms of time and timing and location. In the end, all 'mobilities' went ahead, but for some it was a virtual move, for others it was on location but without real access to the companies.

### 4.2 Evaluation by the students

An outprint of the periodic evaluation by the students can be found in Annex 6.2.

Despite Covid-19, the students have nothing but praise for the way the companies handled the internship.

The support and supervision was perfect in each of the companies, especially because in each company there was at least one employee as a contact person to whom the students could always turn with questions or problems.

"The support of the team is total. Whenever we have a doubt or need help with any task, any member of the team gives us a hand almost immediately."

A number of companies organised weekly meetings, which was much appreciated by the students. "The scheduled meetings ... have continued regularly, without ever becoming trivial.

Especially because of the pandemic, which made physical meetings in the companies impossible, technological replacements were necessary: skype meetings to get in touch with the company made students feel somewhat apart from the team.

The assessment of the assignments was not equally positive for all students. Some had the feeling (also through the many contacts with the company) that they were doing really valuable and important work. This was actually confirmed by some: "We are carrying out really useful and important activities.

Practically all the maps, reports and materials we produce are being included in official documents. This shows that our work is being valued by the company."

Other students had the impression that "nowadays our job here is not the most useful for them, but probably in the future it could be useful to get new clients and projects."

Still other students thought that the company did not really involve them fully: "Hopefully, we will be involved in the next and final weeks with some valuable tasks, because now I've got the feeling that we are just involved with minor things."

The difference in opinion of the students is very much related to regular meetings with the company on the one hand, but also to meetings with the clients of the company they work for. The students in the latter case were very enthusiastic.

The students consider the internship not only useful for the geo-ICT skills that were learned: "Our starting level was so low and now, of course, we are not experts, but we can say that we have experience and we understand how to work in these areas."

Other skills were also addressed: "Other useful skills we gained are flexibility and working independently, next to the practice of different languages", "I also learned a lot of soft skills ...: to communicate, ... teamwork, collaboration and some personal skills".

Concerning the accommodation, the students were very satisfied. The location was good to excellent, and the spacious accommodation was a plus considering the amount of time spent there.

### 4.3 Recommendations after the second cycle

#### For the students

- make the trainees as aware as possible of the activities and dynamics within the company

- make sure that the requirements of knowledge and skills as demanded by the companies are fulfilled.

**For the sending institution:**

- Study the possibility that both the institution of origin and the company of destination look for or offer accommodation to the students.

**For the companies**

- Weekly meeting to discuss all the results. Evaluation is necessary to learn from it. This also allows to make considerations about the internship and to provide the opportunity to discuss more difficult topics. This could for example happen with a few key questions. In this way, a schedule can be made so the students know what to do the following week, the results of the work of the students can be discussed and potential problems can be communicated.
- At the beginning of the internship, to indicate which skills the student already had, so that there could be anticipated on them. This way, most can be achieved from the traineeship for both parties, although it must be taken into account that indicating your skills is not that easy and that it is not easy to be interpreted .
- If certain skills were achieved, the students could be deployed in the real processing of the company. In this period, I sometimes felt guilty for giving them more work, but maybe there was this possibility to help.

**Time of the traineeship**

Most students mention that an internship of 2 months is too short to reach a good project whereby students are really actively involved in a project of the company: "two months is a very tight time to reach all the objectives foreseen in the training program".

## 5 Recommendations for a successful mobility

From the two cycles, the following issues emerge for a successful traineeship

### 1) From the companies' side:

- State very clearly before the start of the traineeship what knowledge, skills, techniques they need to know, so that there could be anticipated on them, indicate it in the document A (see Annex 6.3.2).
- Also mention (if possible) which software they will be using, possibly the company has an (online) training about some specific software or techniques that can be studied by the student before the traineeship.
- Make sure the students have a contact person in the company whose task it is to assist them with everything.
- Ensure very regular and effective communication: ideally, there should be a weekly meeting to discuss all the results. Evaluation is necessary to learn from it. This also allows to make considerations about the internship and to provide the opportunity to discuss more difficult topics.
- Make it very clear in advance what the work will be during the traineeship: it is best to draw up a full plan. If certain skills were achieved, the students could be deployed in the real processing of the company.
- Determine well in advance what the possibilities are. In (post) periods of COVID-19 this is even more important, this can also be seen as an opportunity to test new things. Most likely, working from home will be increasingly involved in similar situations in the future.
- Students greatly appreciate being part of the team in all aspects, therefore
  - if possible give them working space in the company
  - make sure they are involved in informal moments (e.g. Fridays)
  - make sure they do an assignment that is meaningful for the company, and not an additional task that makes students feel second-rate
  - contact for their assignment with the company and the clients makes them feel part of the company again.
- As the Company knows the location best it might be useful to advise lodging locations close to the venue.

### 2) from the university's side

- State very clearly what they have to do in advance
- Help administration with clear forms. After the first cycle of traineeships, these have been improved (see Annex 6.3.2), this includes also the obligatory security and health risk analysis.
- Clearly go over the conditions with the students, based on the information from the company
  - what prior knowledge, skills, techniques are required
  - how to link this to the training
- Clear communication with the company, including a visit by the internship supervisor from the university.
- Clear communication with the students, this via the document and video messages (see Annex 6.3.3)
- A good intake interview whereby the student shows his/her interest and motivation for the traineeship
- A good evaluation after the traineeship: what have you learned, what was beneficial for you.

## 3) From the students' side

- Check very well why you want to do the internship: what is the added value you want to achieve (for yourself, for the training, job opportunities ...)
- Get to know the company well: what does the company offer, what area do they work in, what does the internship entail ...
- Check very carefully the required knowledge, skills and techniques that have been set out and, if necessary, study up on them
- Take part at the intake interview whereby you show your interest and motivation for the traineeship in that company.
- Have an open attitude towards the company: want to engage and integrate into the company and its culture
- Have a professional attitude in contacts with the company and possibly the clients.
- Register carefully the document with the 2-weekly evaluation & video diary (see Annex 6.3.3)
- Take part at the evaluation after the traineeship.

A platform that helps communicate between companies offering traineeship on the one hand and students looking for traineeship on the other hand might be developed.

## 6 Annexes

### 6.1 Results evaluation students of the 1<sup>st</sup> mobility

#### 6.1.1 After 2 weeks

##### Skills & competencies

The company indicated knowledge, skills and competencies as required before participating at the traineeship. Is this information correct or are there some in the list that should have been indicated as well

Yes	3
No	5 these were experienced in the first two weeks as being required as well: ..... UML (Unified model language), CityGML, UBM (Unified building model), Smart cities and digital twin We haven't seen any of these topics, only did field work

##### Video diary 1

###### 1) How was the reception at the company

The reception at the company was great, fantastic.

Susana welcomed us and introduced us to the staff of the company. Everyone was very friendly and interested in our arrival. She gave us a tour at the company and introduced ourselves with the other employees so that we feel at home.

The reception was good. Our teacher, Maria, introduce us and that helped me to feel comfortable.

Then, Antonio from Archetipo, showed us what kind of projects they do and how we can face our master thesis.

Everybody welcome us kindly, but we almost don't collaborate with other fellow employees, just share space and coffees. The

###### 2) Is the location of the company easily accessible

Unfortunately, none of the company headquarters is near our flat and they're both a little hard to reach. We have to take many public transports to get to the company's main headquarter, in Antwerp. The other location (in Merelbeke) is nearer, but it still takes almost an hour to get there.

The company is easily accessible with the bus (approximately 30 minutes, frequency of 10 minutes) GeoSLab is easy accessible by buslane 36. The frequency of the public transport in Spain is way better than we are used to in Belgium. The zone of the fieldwork where we are working is in the historical centre of Zaragoza

Not at all. It takes us 45 minutes to arrive there on foot and 30 in public transport. Therefore we have bought a bike.

The location of the company is outside of the city of Padova and we have to take a bicycle to get there. It takes approximately 20 minutes to arrive from the center of the city.

To find accommodation for 2 months in the city of Rome is quiet difficult. I spent one whole week here searching a room in a good place.

The company is located on the outskirts of Rome. Rome has in my opinión inefficient public transport, so it very is important to live near the company or live near to good transport connection so as not to waste too much time traveling.

###### 3) Were you properly instructed at the start, it was clear what your assignment / training will entail

On our first day at the company we had a meeting in which we defined the main points of our assignment and since then we had some other briefings

The next day we met the researchers of GEOT. They were kind and explained us a little bit about their projects and what we were going to do for the next month. Our internship is separated in multiple tasks. The first three weeks we will do field work and later we will postprocess our data. We learned to work with QField, an app that makes it possible to create and adapt layers offline. Our area of interest consists the city centre so we get to know the city very well.



Yes, as I said Maria helped us, and Antonio explained us what we were going to do. The training was distributed the first day that we arrived to the company by weeks. There was a time when we did not know what to do because we have finished our task, but whenever we asked we were assigned another task. The second week the "TFM project" was assigned to us. The work environment is good, the colleagues are friendly and help solve any problem. Before the scholarship I already had work experience with GIS software.

*4) Are you well supervised, is it easy to get support when needed?*

We are well supervised and many kind people help us if we have any questions or issues. Every week there is a meeting with Ondrej (from GEOT) so we can evaluate and upload the data. The fieldwork is well introduced. We got all the equipment we need to work with at the first workday and got accompaniment of Ondrej and Jorge from GEOT to learn more about the operation of the Q-field app and the meanings of the answers. All the information we needed was told at the beginning. Yes, the first two weeks we have been learning how they work (software, methodology...). They give us data and ask to do exercises for training and answer our questions.

*5) What is the atmosphere like, cooperation with fellow employees*

We haven't had the opportunity to meet many fellow employees yet, because we worked on our own. Everyone is very helpful and in case there are any problems we can contact multiple people for help. We got everyone their phone numbers to contact someone if there was a problem but haven't had any big problems yet the contact with our supervisors during our meeting moments are very pleasant. The atmosphere is very fine and everyone is willing to help despite the fact that they are not used to speak in English. As we are doing field work we have not much contact with the employees. The project we got (the total development of the map) is very interesting but the field work didn't give us a lot of collaboration with the other employees. The atmosphere is Good because you can ask and obtain an answer immediately and kindly from them.

*6) Have you already learned something / needed to learn something in these first two weeks.*

The main difficulty consists in the complexity of our task. Since we have to approach fields that are quite new to us, it is hard to see clearly the final target of our work. But on the bright side, we had the opportunity to explore some new fields from scratch and to learn many new concepts in just two weeks. In these two weeks I started to have an overview of the concept of smart cities and digital twin. I learned what UML (unified model language), cityGML, UBM (unified building model) languages are, and I discovered LIM (Landscape Information modelling). This last one concerns the UML languages applied in the environmental field (including the geological one, of greatest interest for me). I specially have learned about the different kind of drones and their functions. Also how to organise the methodology from planning the flight to processing the data. The training was distributed the first day that we arrived to the company by weeks. There was a time when we did not know what to do because we have finished our task, but whenever we asked we were assigned another task. The second week the "TFM project" was assigned to us. Yes, I have learned about how to use Qgis, because in the Master's we are used to use ArcGis, and I have learned different tools related with remote sensing with drones such as Pix4D. I have learned too the process to detect anomalies on a photovoltaic system. I'm learning a lot about G.I.S. program practical applications, and a bit about AutoCAD, ACCESS and even Adobe Illustrator.

### 6.1.2 After 1 month

#### Skills & competencies to be acquired at the end of the internship

These are the knowledge, skills and competencies the company indicated as to be acquired by the end of the traineeship:

Have you had to deal with these in the first month of your internship?

Yes	5
No	2

#### Video diary 2

##### 1) How would you evaluate the internship so far?

The topics we dealt with are different from the ones I was expecting.

In the last two weeks we mostly took online courses about Unified Modelling Language and database design. We also drew a first draft of our own UML scheme for a 3D City Model. Therefore we acquired a lot of new knowledge and we also put it into practice.

I really like the internship, I must say that I and my colleagues are very followed, and the model of a smart city is starting to take shape, starting from information about the underground to then connect with the world around us, in particular the all types of infrastructure

The first month we only did field work. It was nice to start with but I think that one month was too long. Although I liked it very much the main reason that I came to Zaragoza to do this internship was to learn more about a company that operates in the Geomatics sector. Right now I have the feeling that I am doing an internship at GEOT (the research group of the University of Zaragoza) and not at GeoSlab. They are very friendly but it's not more than a working place for us to do a job that isn't related to what they do at the company.

Unfortunately, none of the indicated competencies were applied at the office. The project of mapping the historical centre of Zaragoza will be finished at the end of this week and we will get another task to map the emotional value of the city. It is very interesting, but it also won't be associated with any skills we must gain this two month's in Zaragoza

The internship is being nice. I'm reaching my expectations learning many things about remote sensing with UAV and applying what I have been learning in the master and degree, specially the theoretical content.

For me it's being a great experience because I am learning new things very interesting such as image acquisition with drones and these things are related with the masters. In addition, I think it is so useful have this experience on a company environment to complement the knowledge of the masters and give some use to the tools that we have learned. The fact that is in another country is too a very positive thing because you have to leave your confort zone and learn a new language.

The internship in ARS Progetti is going right: we are acquiring and practicing several technical competencies about GIS, in order to make draft-maps that help to understand the vast amount of diverse data that they have got. Specially me, because my grant pal is a learned person, I learn a lot from him too. Even if sometimes the work is a bit repetitive, I'm gaining new skills and improving the ones I already have. And I love it.

After several weeks at ARS Progetti I can say I am satisfied with the scholarship, as we are working on a very interesting project in the city StoneTown World Heritage.

##### 2) Have you the feeling you already learned/gained the extra competencies as listed above?

We haven't used any proper GIS tool so far, even though databases are of course related to GIS. But, the main goal of our work is to test our UML model on a GIS software, to see if it actually works and what can be improved. So I know that eventually we are going to use GIS tools too.

Surely in this month we have learned many concepts regarding UML languages and class diagram construction. In fact we have tried to build a model of a smart city starting from a class diagram and trying to build and interpret the relationships between the individual classes.

In these days we are studying and trying to understand how to transform our model into a real database, so I hope that next time I can tell you more about this smart city database.

Unfortunately beside the app QField we didn't learn anything new. The job they gave us is not challenging for us. I know that I have less skills than they wanted us to have but they said in advance not to worry about it.

I'm open to have some challenges to learn the subject of app programming, store technology etc. I'm aware of my knowledge about this subject, but it is possible to learn a lot within a month.

Except topology, I think that I have improved all the listed competencies, especially about photogrammetry. In the master I just learnt a bit of how it works and now I have to understand it better because it is necessary to process data and create orthophotos.

I think I have learned most of these extra competencies of the list because we have had to acquire images, georeference it and process it with different software like Metashape (to generate orthophotos) and QGIS (to generate maps). We have learned all this process, going to the field and working at the office.

Really I'm reaching my expectations learning a lot of things about GIS programs (different programs than I was used to manage), and applying what I had learnt in my studies.

Before starting the scholarship I already had knowledge in GIS, so I learned little in the use of this technology. However, I find it very interesting and practical to see the organization of a project of this magnitude.

### *3) Are you well supervised, is it easy to get support when needed?*

Positive feedback on all the supervision and support we get here at GeoSolutions and for that I especially want to thank Rombout, who always looks after us, despite being very busy.

All three of us are all well followed, and the company has given us the opportunity to take specific online courses for our.

It is important to say that we have the maximum we can get of supervising. We are able to contact several persons when we have our questions and the relationship with Susana, Ondrej, Rafael and Luc.

I'm convinced we can have a solution for the problem of the competencies

Yes, Antonio and Salvatore from Archetipo explain us every detail and that makes easier to understand new things for me like photogrammetry and the use of new software like Pix4D.

We are well supervised, and we can get help only with asking someone of the Archetipo workers.

Our tutor, Silvia, has gone a bunch of days to work in another project in Milano, but we talk and chat with her almost every day about each task to do. Here in Italy it is very common to do video conferences through Whatsapp or Skype: this situation is normal if we note that a large amount of the information in Italy is non verbal communication. Silvia explains us every detail, making easier to understand the project.

My supervisor, Silvia Grava. She is very efficient and although she has been away from the office for several days, in Milan

### 6.1.3 After 6 weeks

#### **Video diary 3**

#### *1) Do you feel that you are doing valuable tasks inside the company or are you just involved with minor things?*

I can't tell how valuable will be our work in the company. We are working on a completely new project and we are doing it from scratch. I think that when the project will be finished it will be useful for the company. But at the moment we are working on our own and we don't know much about the other projects of Geo Solutions.

After finishing the field work and postprocessing of the data they had to think of some new tasks to give us. We got some indexes to calculate and evaluate about our data. After we had finished also that part we got some extra indexes and some small extra things we could do with the data which we are doing right now. So I don't really have the feeling that this part is something valuable for them but more something to keep us busy.

Regarding my work within the company, I am observing that the project involves several people within the company and has been very positively evaluated so far. Our tutors are very happy with the output achieved so far.

At the beginning of the office job, I felt that I was doing really useful tasks to get conclusions of the current project. We used the GIS-tools to evaluate the information that are otherwise impossible to

overview. It is also a very big area where we did the project so we felt the value of our job. We got really interesting results of this data. That part was the first whole week of August.

We are mainly focused on our thesis projects. However, we also have helped in other tasks. Especially with solar panels projects.

We are focused on the project of the TFM but we make some tasks related with solar panels.

OK. According to the company we're doing a very useful job for the office, even though I'm not fully skilled in all the tasks and tricks about QGIS and ACCESS programs yet (I would love, but I'm still learning). I feel very satisfied of what we are doing in the company, and how they are taking advantage of our skills and strenghts, exploiting our different backgrounds.

In my opinion we are doing fundamental tasks. Although they are a bit repetitive, because we are make simple analysis with the GIS.

2) *Do you feel as being part of the team, meaning: are you also taking part at meetings, contacts with clients ...?*

Since ours is an independent project, we have taken part only in meetings regarding our work and we haven't had the opportunity to work with many colleagues or to meet any client of the company. But I really enjoyed working together with the few colleagues we have met. I have no complaints about anyone here at Geo Solutions, because everyone has been very kind to us.

I don't really feel like saying that I'm part of the team, in the sense that we're definitely involved in a very large and complex project, which can be (I suppose) very useful for the company for commercial purposes. For the rest, we have not yet participated in real meetings and we have not had contact with customers until now.

Because we are doing some tasks for GEOT which are not related to what they do at GeoSlab, it's not possible to feel a part of the team. I don't really know what the employees are doing and they have no idea of what we are doing.

By doing the job of GEOT inside the company of GEOSLAB, I did not felt the connection between our 'real' colleagues (the ones from GEOT).

Tomorrow the 21 of August, we will finally work at the part where the company of GEOSLAB is working on. I really look forward to this part and maybe this will help us to finally get our knowledge in mobile apps.

Yes, I feel integrated in the company. We have met other people that are working with them (from university and different companies). This have been a chance to keep learning more things.

Yes, I feel integrated with the team because they all are open people and good professionals. We take park on several field days, helping with the process of assembling the drones and the equipment. We take part too at the Drone day in Padova, where we attended to several conferences at the Univesity and take part on the activities organized.

I feel integrated in the company, meeting other collaborators who are working wirh ARS Progetti (interns and extern collaborators). Also, Silvia invited us to attend a congress on remote sensing and geolocation technologies, here, in Rome, next week. I think I will learn a lot, and will meet interesting people.

We participated in several meetings to organize the work. Although our role is testimonial, because logically we do not make decisions about the project.

3) *How is the lodging and the city you are staying?*

The only downside, as I said in one of my previous videos, is the distance between our house and the location of our internship. Anyway, on the bright side, we are doing a lot of sport, since it takes half an hour by bike to get there.

Regarding the accommodation, I have to say that it is very beautiful, the house is very nice and functional. The only negative point is that it is very far from the workplace. We are talking about 8/9 kilometers by bicycle and we often arrive sweaty both in the morning at the office and at home when we return. But in any case we cannot complain altogether.

Our residency is on 25 minutes from the city by bus and 35 minutes from the company. So the location is not ideal. The biggest advantage of our residency is the swimming pool and the meals every Monday

until Friday. On the other hand we do miss an air-conditioning and a fridge. Zaragoza is a beautiful city with beautiful culture and nature so it was very nice to explore this city.

The residence Ramon Pignatelli where we are staying at is not the most ideal location to get to the office but I understand the difficulties to get a room for two months. The advantage of our residence is the swimming pool and the meals that are included from Monday to Friday so we don't have to go out often. Unfortunately there is no air conditioning or fridge at the residence to cool down in these hot temperatures. But except that I'm very happy with the lodging.

I'm fine. I like the city and the place we live. I can practise sport, which is important to me. Also visit other nice cities.

The house is far away from the work but is located in a peaceful neighbourhood and the city of Padova is very cool, with nice places to practice sport and meet people.

I'm exhausted, and delighted.

Like all the big cities of Europe, life in Rome is expensive. Especially rent a good price a house. However, I think the biggest problem in this city is the transport. We spend a lot of time travelling because public transport does not work well. I don't understand because never arrive in time the bus.

#### 6.1.4 End traineeship

##### Skills & competencies to be acquired at the end of the internship

The company listed this knowledge, skills and competencies as to be acquired by the end of the traineeship. Have you finally had to deal with these?

Yes	6
Not used all from the list	2
No, other been touched	2

#### Video diary 4

1) *How would you (almost final) evaluate the internship? Did it reach your expectations, Why (not)?*

At the end of my internship within the My Geo Mobility I can say that I'm overall pleased by this experience.

The work we actually did was not the one I was expecting. I personally found it quite distant from my field of studies. Because we didn't focus on geographical tools, but we mostly used programs related to database design and construction.

The internship at the company geosolution was very productive, it allowed me to expand my knowledge both for the use of GIS and for the use of other software that I did not know two months ago, software for the construction of UML diagrams, such as DB designer FORK, useful for building a script necessary for creating a database in postgres.

The internship was definitely interesting and I had a nice time in the city but it was not what we expected it would be. My main reason to do this internship was to get in touch with a Geomatics company and to learn more about computer and app programming, mobile apps and store technology because those were the topics we were going to see.

Only the last week when we started with some programming we learned new things about geojson files and how they are implemented in the viewer with the possibility to add a specific style to the data

If I can evaluate the internship, I would say that the last part could be longer compared with the other items because with this item we learned some of the skills that were described before we started.

Sometimes I had the feeling the tasks we got was just an activity to keep us busy and nothing more.

We haven't seen anything about mobile apps which was something that I was looking forward to and the part about computer programming and data formats was limited (one week).

I evaluate it positively. It was a good chance to apply what I have been learning in the master, keep learning new things and gain experience in another country. So it reached my expectations, I have been working with remote sensing and GIS. In addition, I have learned many things about drones, sensors and its applications.

It has been a great experience because we have learned new things about GIS and remote sensing, both things so important to our training. On the other hand, we have applied great part of our knowledge on help the company. It has reached my expectations.

Overall, I evaluate the internship very positively. It has been a great opportunity to apply what I have been learning at the University and to learn a lot of new things, meeting gorgeous people and gaining various experience in another country. It reach my expectations, of course.

After the two months of internship I consider it has been a very positive experience on a professional and personal level.

2) *How would you evaluate the supervision, the support*

I am fully satisfied with the supervision provided to us by Rombout and the other colleagues. They have always been super available for any doubts and clarification.

I can't say anything wrong of the supervising. We always got a good explanation of the planning and the tasks we had to do. If we had a question, we have always had the opportunity to ask.

The supervision was also fine. Maria from Zaragoza helped us with every dude. Antonio from Archetipo has been explaining new things for us and checking our work.

All the workers at this company have been available to resolve any doubt at any time. They filled out our documents when we asked for it and in general, they behaved very well with us.

If I have to evaluate my supervisors, I only will can say: crucial and brilliant. Silvia from A.R.S. Progetti (Italy) helped us with every doubt, explaining us each task, and guiding us, in a kind and precise way. On the other hand, Julio (from UNED, Spain), wrote us mails several times, and came to check the intership issues and the company adequation.

Since I started working in the company, my work has been supervised by Silvia Grava, and I really feel lucky, because Silvia is a great professional who has always been aware of the work I was doing.

3) *Have you the feeling that you gained extra insight, skills and knowledge as listed above?*

I improved my skills with geographic tools such as QGIS, but also learned some ict skills almost from scratch. And, of course, discovered the world of 3D visualisation, which I knew nothing about.

Regarding the skills acquired, we have achieved the planned and learned to use some of the previously mentioned programs. Surely it was a good "test field" to train with the MYSQL language and the PGAdmin, Qgis and ArcScene interface.

I now got the knowledge of how a geojson file is working and how you can construct it easier by programming. This was a very nice learning process.

I think that the list show correctly what I have improved. I would like to highlight the experience of working with drones too. I think that is an interesting platform for remote sensing.

Yes, I learned lots of new things related with these skills, such as handle new software related with photogrammetry and 3d representation or use new geospatial sensors (thermal) and process this kind of data with all the necessary steps like acquisition, georeferencing and mapping.

The work I have done has allowed me to acquire new knowledge in GIS, especially in the last week.

4) *Have you the feeling you learned other skills (beside the geo-ict related ones)? If so can you describe which?*

The most important challenge that we have been to face was the communication. I think that I have improved my communication skills understanding Italian and talking in English.

Yes, I learned other interpersonal skills to communicate with the company and some Italian too. I have also learned how to fly with drones, how is the whole process to make a project and how is the organization of a start-up company like Archetipo.

In summary, I have learned a lot, and I have met wonderful people. This is being a great experience in my life, and I think this grant will boost my job prospects.

In this period of time I have learned other skills that I consider important for future work, for example project management and data analysis.

5) *What would you adjust in a next round: what could be done to improve the traineeship?*

It would probably be better to decide what will the internship be about some time before leaving, so that the students can prepare themselves by following some online courses before starting their mobility. We spent some time here acquiring the knowledge we needed to do the work. But that part can be done online before leaving, to save time.

Perhaps a "pre-internship" should be designed better, in the way that the student dealing with this "journey" should have some previous knowledges about the GEO ICT, so it would be useful to provide the student with basic knowledges of UML and INSPIRE and/or OGC standards, so they will not spend much time searching for these topics.

I think the most important adjust that is necessary for next year is that the topics which the company indicates as where you will be in touch with and the topics which you actually been in touch with at the end of the internship are the same. Furthermore it's important to realize that students who do an internship want to learn different new things so that the intention is not to make the work too easy. Finally I think it's important that students have the feeling that there work is somehow valuable for the company, by example if there is a specific final end product that has to be finished at the end of the internship.

It is maybe more interesting to inform the potential candidates with the actual project and their planning. It was difficult for me to make the decision to participate and I think this could be easier to convince a student.

I think that it would be difficult to improve the traineeship. However, in the context of the project, it could be interesting to know what the partners from the other universities have been doing in their companies.

I think it can be improved by the way of having more help or time to search for accommodation and weigh the scholarship according to the cost of living in each country.

It's pretty difficult to improve this traineeship. Really. Perhaps, if the company is as far from everything (shops, supermarkets, public transport, down town) as ARS Progetti, to do only a part-time of working hours would be an advantage in order to save time (to have time!) to go shopping (groceries for every lunch, dinner and breakfast), to do home works, and to record videos, by the way.

One of the aspects that I think should be improved from the internship it is the duration. In my opinion two months is a very short time.

## 6.2 Results evaluation students of the 2<sup>nd</sup> mobility

*Due to Covid-19 the mobility with GeoSlab (Zaragoza) was virtual: the students worked in Padua and had remote contact.*

*Also the other mobilities were affected: students going to Padua (Archetipo), Ghent (Geosolutions) & Rome (Ars Progetti) were (almost) not allowed to go to the offices and had to spend most of the traineeship in their lodging, whereby most contact with the companies was remote.*

### 6.2.1 After 2 weeks

#### Skills & competencies

The company indicated knowledge, skills and competencies as required before participating at the traineeship. Is this information correct or are there some in the list that should have been indicated as well

Yes	6
No	0

#### Video diary 1

##### 1) How was the reception at the company

On our first day were very well received at the company. We started the week Italian style: at the bar, with a coffee. Everyone was very friendly and we felt very welcome

The arrival at the company was very good. Silvia Grava, our supervisor during the period we will be in the company, introduced us to all the staff, who were interested in our background and the work we were going to do during these two months.

##### 2) Is the location of the company easily accessible

During the first meeting, we were informed that, due to the current corona-crisis, it would not be possible for us to work in the company's office, which meant that on the days without fieldwork, we would have to work from home on different assignments.

The company, ARS Progetti is located in the EUR district, which was not too far from our accommodation. If the buses worked properly (which is not usual) in 35 - 40 minutes we could reach the office.

##### 3) Were you properly instructed at the start, it was clear what your assignment / training will entail

It was clear to us how the following weeks would be organised, although there wasn't a detailed schedule yet.

On the first day, we were explained what the project we were going to work on was going to be, as well as what our specific work would consist of.

Of course, the presential support would have helped to solve faster the problems that a student can run into, but thanks to the willingness of all GeosLab's members and to the communication tools, we had no difficulties

##### 4) Are you well supervised, is it easy to get support when needed?

In general the supervision is good: we can always ask questions and they will always try to help us as well and quickly as possible.

We made the most of the communication tools and the right attitude both on the side of the company and on the students was absolutely determinant to catch up with the assignments of the project.

Every Friday we have other meeting to explain and present all our job of the week with rombout and Alanda and they told to us what is going to be our task for the nest week.

##### 5) What is the atmosphere like, cooperation with fellow employees

The atmosphere in the company is very good, they are very helpful in every way. This results in a good cooperation. I immediately felt at home with the team.



One of the negative aspects of the work is that we only cooperate with the three people who are working with us on our project. With the rest of our colleagues, we only meet for coffee or at lunch time.

The working atmosphere in the office is very good. From the first day, the colleagues welcomed us very well and their treatment of us was exquisite.

6) *Have you already learned something / needed to learned something in these first two weeks .*

During these first two weeks I already learned some different skills: by doing the assignments I'm learning to use the software Agisoft Metashape, which I think will be very useful in the future. During the fieldwork we already learned to measure ground control points by using a GPS, we learned a lot about different types of drones, sensors and different apps that are used and today we had our very first flying tests!

## 6.2.2 After 1 month

### Skills & competencies to be acquired at the end of the internship

These are the knowledge, skills and competencies the company indicated as to be acquired by the end of the traineeship:

Have you had to deal with these in the first month of your internship?

Yes	3
No	0

### Video diary 2

1) *How would you evaluate the internship so far?*

The internship has been very good. We are working as GIS technicians in different projects, elaborating all the materials requested by our partners. In addition, we are seeing that the materials we produce are later included in official documents, which shows that the work we are doing is useful.

When we have some problems with the work we can ask whatever we need and all of them are always ready to help us. Always we have a main meeting to present our work.

2) *Have you the feeling you already learned/gained the extra competencies as listed above?*

Yes, of course we are learning the competences listed above. We have worked a lot on georeferencing and mapping, as we have to work with both concepts almost every day.

I am sure and thrilled to say that my QGIS skills are good. On the other hand, although I tried to prepare properly, I was informed that I had to study programming only fifteen days before the traineeship and unfortunately at such short notice my knowledge level could not have been enough. In fact, during the python formation, I got a knot to run Anaconda but thanks to Javier's availability and the communication tools, I finally created my own web page where we could see our cooperatives' list and its map example.

We have been working on possible software's to use on a smart city project and we have started with GIS programs to. We are using QGIS and it is my first time using it. Also, considering that we are just a beginners, Geosolutions gave to us a login to have acceses in a platform when we can find a lot of the courses to learn how to use QGIS

At the same time, other part to consider is that we are learning a lot about the differences between countries when we are working with technology.

3) *Are you well supervised, is it easy to get support when needed?*

As I mentioned in the previous message, we are perfectly supervised by the three or four people who work with us on the different projects. Whenever we need something, they are always available to solve it, so in that sense we are very happy.

The support of the team is total. Whenever we have a doubt or need help with any task, any member of the team gives us a hand almost immediately.

The scheduled meetings with Susana and Javier have continued regularly, without ever becoming trivial. They are really trying to make us feel like we are physically there.

I want to conclude with a very positive assessment of the Geo Solutions internship so far. I have been able to review GIS concepts, and learn new ones in the interface of QGis its latest version.

### 6.2.3 After 6 weeks

#### Video diary 3

1) *Do you feel that you are doing valuable tasks inside the company or are you just involved with minor things?*

As the current restrictions decreed by the Belgian government are not expected to change until mid-December. Therefore, it is difficult to know if we are involved in real aspects or projects of the company, and therefore important. My opinion is that we are in a possible project, investigating the market possibilities and developing some possible business ideas, which GeoSolutions will subsequently evaluate its viability.

I think that nowadays our job here is not the most useful for them, but probably in the future it could be useful to get new clients and projects.

Surely our two projects were not activities at the top of the company's priorities, which bring an immediate gain and involve interaction with a client.

The feeling of being useful to the company is greater every day. The people in the team make us notice the value of our work. Many of our maps and the products we generate are used to produce final reports, and/or are delivered to the client.

We are carrying out really useful and important activities. Practically all the maps, reports and materials we produce are being included in official documents. This shows that our work is being valued by the company.

Hopefully, we will be involved in the next and final weeks with some valuable tasks, because now I've got the feeling that we are just involved with minor things.

We are doing something valuable for the company. However the main feeling these last few weeks is that we are not really contributing to anything useful.

2) *Do you feel as being part of the team, meaning: are you also taking part at meetings, contacts with clients ...?*

I do feel somewhat like part of the GeoSolutions team at the moment. And I would like to have the possibility that you can count on me if my business idea seems good enough to be implemented and that I have any option in the current market, since initially the idea will have been mine.

First of all, I would like to highlight that everybody is always aware of us and trying to help us. However, considering the situation we are not living and enjoying a real life in an office. We don't have information about what are they working on or the projects they are developing and we don't know the clients.

Becoming part of the team while working remotely and on projects that did not require great collaboration with other employees, is not an easy task.

From day one, we feel part of the group. We take part in many of the meetings via Skype, and in case this is not the case, communication with the rest of the people involved in the different projects is direct and fluid.

Although everyone in the company is very friendly, welcoming and helpful (any questions we had during the two weeks at home were answered via whatsapp), the working from home makes us outsiders.

Again, this is probably due to the coronacrisis, but it would have been interesting to take part in meetings or to be able to have contact with clients.

3) *How is the lodging and the city you are staying?*

Finally, the accommodation in the city of Ghent is being very good. We have been very lucky jointly renting the apartment where we are staying. It is very spacious and sunny. And although it is not sunny

every day, it has a lot of natural light and that is appreciated when you have to work from home. In addition, it is very well located,

We can say that it is well located and well connected both to work and to the city centre. Fortunately, it is quite complete, so it has allowed us to carry out the quarantine that we had to do during 10 days of Christmas as best as possible

The apartment meets all wishes. It's large enough to live in and work comfortably.

we are very lucky to have a good and spacious apartment, with workstations from the university, which makes working from home very comfortable. Additionally, we are surrounded by friendly neighbours and thanks to the MyGeo-project we already made some friends here.

#### 6.2.4 End traineeship

##### Skills & competencies to be acquired at the end of the internship

The company listed this knowledge, skills and competencies as to be acquired by the end of the traineeship. Have you finally had to deal with these?

Yes	3
Not used all from the list	2
No, other been touched	0

#### Video diary 4

1) *How would you (almost final) evaluate the internship? Did it reach your expectations, Why (not)?*

My final evaluation on this internship is very good, since it has been a very nice and grateful experience both, personally and professionally. I would never have imagined that I would learn so much about these concepts.

In this way I would like to highlight that the experience has reached my expectations and even they have been exceeded. It was a really nice opportunity and now we are a little bit sad because the time flies and we can't believe how fast these two months have passed.

I am full of enthusiasm and satisfaction to be able to show everyone the work I have done at the GeosLab company.

The amount of fieldwork we took part in (which is the most interesting for me) was only limited. I know however that this is due to the limited number of fieldwork projects due to the coronacrisis and the strict rules concerning the number of people on the field

2) *How would you evaluate the supervision, the support*

This achievement would not have been possible without the help, advice and support from the Geo Solutions staff. Their training schedule has been very adequate and they have been adapting it to the evolution that we were carrying out every week.

During the whole internship we have been perfectly supervised and supported by both Silvia, our trusted person related to the project, and Laura, the leader of the project we were working on. They have always solved all our doubts and supervised our work, advising us on what to improve or modify. About the support, BRAVO! I could ask any questions and they said I could always send them an email later if I had any questions (Ex. For my report or thesis). This created the warm feeling of being accepted in the company.

The supervision on the field was very good, we received a lot of information, could ask and try everything we wanted. Also when working from home we could always ask for help

3) *Have you the feeling that you gained extra insight, skills and knowledge as listed above?*

I have the pleasant feeling of having learned many things in a very short time and all of them are very new to me. The knowledge that I have acquired has been many and varied.

Our starting level was so low and now, of course, we are not experts, but we can say that we have experience and we understand how to work in this areas.

From a technical point of view, to be honest, I have not gained many skills, as I have just come out of a very complete master's degree in this subject.

For me it was useful to learn to work with the different computer programs. This really is a useful skill I gained. I

4) *Have you the feeling you learned other skills (beside the geo-ict related ones)? If so can you describe which?*

In addition to the skills of the GIS sector, I can say that I have had an important experience in telematic working methods. And considering the historical moment we are living, I think it is one of those extra skills that could be very appreciated in the future in workplaces.

I have been able to learn what is required of a cartography in the professional world, especially in the field of urban planning.

It has also given me first-hand knowledge of the difficulties that exist when it comes to obtaining the data and information with which we work.

But I also learned a lot of soft skills like I said before in those weeks in Italy. By soft skills I mean to communicate, problem solving with Agisoft Metashape, teamwork, collaboration and some personal skills

I gained some extra skills because I had my first dig on a very important excavation.

Other useful skills we gained are flexibility and working independently, next to the practice of different languages.

5) *What would you adjust in a next round: what could be done to improve the traineeship?*

From my point of view, two months is a very tight time to reach all the objectives foreseen in the training program

In any case, a suggestion for the next round is to try to make the trainees as aware as possible of the activities and dynamics within the company, even if they do not have to work directly on every active project.

I would study the possibility that both the institution of origin and the company of destination look for or offer accommodation to the students, since looking for accommodation in a city that you do not know and in a language that you do not use either is something really complicated.

- Weekly meeting to discuss all the results. Evaluation is necessary to learn from it. This also allows to make considerations about the internship and to provide the opportunity to discuss more difficult topics. This could for example happen with a few key questions. In this way, a schedule can be made so the students know what to do the following week, the results of the work of the students can be discussed and potential problems can be communicated.
- At the beginning of the internship, to indicate which skills the student already had, so that there could be anticipated on them. This way, most can be achieved from the traineeship for both parties, although it must be taken into account that indicating your skills is not that easy and that it is not easy to be interpreted .
- To determine well in advance what the possibilities are. In periods of COVID-19 this is even more important, this can also be seen as an opportunity to test new things. Most likely, working from home will be increasingly involved in similar situations in the future. Things that can be added here that must be considered:
  - Processing 'live' work or work with data from old projects.
  - Knowing the basics of one field or obtaining good knowledge about one field.
  - Giving them easy works or more difficult ones. Here it's possible to respond to the results.
  - Doing it by yourself or with a lot of help. I actually think they did this very well! We tried by ourselves but there was the possibility to have contact.
- If certain skills were achieved, the students could be deployed in the real processing of the company. In this period, I sometimes felt guilty for giving them more work, but maybe there was this possibility to help.

### .3 My Geo agreements

#### 6.3.1 Document for the companies – version 1<sup>st</sup> mobility

#### 1 Personalia

Trainee	Last name(s)	First name(s)	Date of birth	Nationality <sup>i</sup>	Sex [M/F]	Study cycle <sup>ii</sup>	Field of education <sup>iii</sup>
Sending Institution	Name	Faculty/ Department	Erasmus code <sup>iv</sup> (if applicable)	Address	Country	Contact person name <sup>v</sup> ; email; phone	
Receiving Organisation/Enterprise	Name	Department	Address; website	Country	Size	Contact person <sup>vi</sup> name; position; e-mail; phone	Mentor <sup>vii</sup> name; position; e-mail; phone

**2 Before the mobility**

*Table A - Traineeship Programme at the Receiving Organisation/Enterprise*

**Planned period of the mobility: from [month/year] ..... to [month/year] .....**

**Traineeship title: My Geo mobility Traineeship ...**

**Number of working hours per week: ...**

**Detailed programme of the traineeship:**

**Knowledge, skills and competencies required before participating on:**

- Geospatial Sensors
- Cartography / Graphic representation
- Computer and/or app programming
- Photogrammetry
- Topology
- Communication network
- Store technology (incl. data formats)
- Spatial reference systems
- Mobile apps
- Scale and resolution
- Georeferencing
- 3D visualisations
- Augmented Reality / Virtual reality
- Other: ...

**Knowledge, skills and competences to be acquired by the end of the traineeship (expected Learning Outcomes):**

- Geospatial Sensors
- Cartography / Graphic representation
- Computer and/or app programming
- Photogrammetry
- Topology
- Communication network
- Store technology (incl. data formats)
- Spatial reference systems
- Mobile apps
- Scale and resolution
- Georeferencing
- 3D visualisations
- Augmented Reality / Virtual reality
- Other: ...

**Monitoring plan:**

The beneficiary will be regularly monitored by the Sending Institution per email and with online tools provided by the EC. In case the trainee carries out his traineeship for research thesis purposes, he/she will be also supervised by a professor who will monitor the student training programme and that the research results are met. The HO will appoint a mentor to monitor the beneficiary during his/her traineeship experience. The student will receive a direct report. The direct report will support the student both on practical issues as with the subject. Geosolutions has what we call a "Geo Academy" which is supervised by a dedicated consultant She would do overall coaching & mentoring. We also have Team leads within the specific branches of consultancy. These teamleads can also monitor & follow up on the interns projects.

**Evaluation plan:**

- Professional competences and skills acquisition and improvement
- Foreign language improvement
- Personal and professional development
- Research results if it's the case
- Guidance for future career

The level of **language competence**<sup>viii</sup> in \_\_\_\_\_ [indicate here the main language of work] that the trainee already has or agrees to acquire by the start of the mobility period is: A1  A2  B1  B2  C1  C2  Native speaker

### Table B - Sending Institution

Please use only one of the following three boxes:<sup>ix</sup>

1. The traineeship is **embedded in the curriculum** and upon satisfactory completion of the traineeship, the institution undertakes to:

Award .....10. ....ECTS credits (or equivalent)*	Give a grade based on: Traineeship certificate <input type="checkbox"/> Final report <input type="checkbox"/> Interview <input type="checkbox"/>
Record the traineeship in the trainee's Transcript of Records and Diploma Supplement (or equivalent).	
Record the traineeship in the trainee's Europass Mobility Document: Yes <input type="checkbox"/> No <input type="checkbox"/>	

2. The traineeship is **voluntary** and, upon satisfactory completion of the traineeship, the institution undertakes to:

Award ECTS credits (or equivalent): Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please indicate the number of credits: ....
Give a grade: Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please indicate if this will be based on: Traineeship certificate <input type="checkbox"/> Final report <input type="checkbox"/> Interview <input type="checkbox"/>
Record the traineeship in the trainee's Transcript of Records: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Record the traineeship in the trainee's Diploma Supplement (or equivalent).	
Record the traineeship in the trainee's Europass Mobility Document: Yes <input type="checkbox"/> No <input type="checkbox"/>	

3. The traineeship is carried out by a **recent graduate** and, upon satisfactory completion of the traineeship, the institution undertakes to:

Award ECTS credits (or equivalent): Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please indicate the number of credits: ....
Record the traineeship in the trainee's Europass Mobility Document ( <i>highly recommended</i> ): Yes <input type="checkbox"/> No <input type="checkbox"/>	

### Accident insurance for the trainee

The Sending Institution will provide an accident insurance to the trainee (if not provided by the Receiving Organisation/Enterprise): Yes <input type="checkbox"/> No <input type="checkbox"/>	The accident insurance covers: - accidents during travels made for work purposes: Yes <input type="checkbox"/> No <input type="checkbox"/> - accidents on the way to work and back from work: Yes <input type="checkbox"/> No <input type="checkbox"/>
The Sending Institution will provide a liability insurance to the trainee (if not provided by the Receiving Organisation/Enterprise): Yes <input type="checkbox"/> No <input type="checkbox"/>	

### Table C - Receiving Organisation/Enterprise

The Receiving Organisation/Enterprise will provide financial support to the trainee for the traineeship: Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, amount (EUR/month): .....
The Receiving Organisation/Enterprise will provide a contribution in kind to the trainee for the traineeship: Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please specify: ....	
The Receiving Organisation/Enterprise will provide an accident insurance to the trainee (if not provided by the Sending Institution): Yes <input type="checkbox"/> No <input type="checkbox"/>	The accident insurance covers: - accidents during travels made for work purposes: Yes <input type="checkbox"/> No <input type="checkbox"/> - accidents on the way to work and back from work: Yes <input type="checkbox"/> No <input type="checkbox"/>
Information on emergency procedures, first aid etc. is provided at intake; Yes <input type="checkbox"/> No <input type="checkbox"/> First aid station on the work floor: Yes <input type="checkbox"/> No <input type="checkbox"/>	
The Receiving Organisation/Enterprise will provide a liability insurance to the trainee (if not provided by the Sending Institution): Yes <input type="checkbox"/> No <input type="checkbox"/>	
The receiving organisation will provide supervision: <input type="checkbox"/> Always <input type="checkbox"/> Most of the time <input type="checkbox"/> Sometimes <input type="checkbox"/> never	
The Receiving Organisation/Enterprise will provide appropriate support and equipment to the trainee.	
Upon completion of the traineeship, the Organisation/Enterprise undertakes to issue a Traineeship Certificate within 5 weeks after the end of the traineeship.	
<b>Location where traineeship will take place:</b>	

### Risk analysis

Type of workstation activities <input type="checkbox"/> Office work at location of the company <input type="checkbox"/> Office work on location (e.g. at clients) <input type="checkbox"/> Field work (e.g. surveying, work with drones ...) <input type="checkbox"/> Other (specify) .....	
Night work: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Shift work: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Working on/with a screen:	<input type="checkbox"/> no	<input type="checkbox"/> less than 4 hours/day	<input type="checkbox"/> 4-8 hours/day
Working at heights (> 2 m):	<input type="checkbox"/> yes	<input type="checkbox"/> no	
Nature of traineeship activities:			
a. High rhythm:	<input type="checkbox"/> yes	<input type="checkbox"/> no	
b. Repetitive activities	<input type="checkbox"/> yes	<input type="checkbox"/> no	
c. High mental stress	<input type="checkbox"/> yes	<input type="checkbox"/> no	
d. Aggression & emotion	<input type="checkbox"/> yes	<input type="checkbox"/> no	
Operating machinery	<input type="checkbox"/> yes	<input type="checkbox"/> no	
If yes: what kind			
Contact with chemical agents (dust, gases, vapours ...):	<input type="checkbox"/> yes	<input type="checkbox"/> no	
If yes: what kind			
Contact with special groups:	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no	
If yes: what type			
Contact with physical agents (e.g. noise, sharp objects ...):	<input type="checkbox"/> yes	<input type="checkbox"/> no	
if yes: what kind			

By signing this document, the trainee, the Sending Institution and the Receiving Organisation/Enterprise confirm that they approve the Learning Agreement and that they will comply with all the arrangements agreed by all parties. The trainee and Receiving Organisation/Enterprise will communicate to the Sending Institution any problem or changes regarding the traineeship period. The Sending Institution and the trainee should also commit to what is set out in the Erasmus+ grant agreement. The institution undertakes to respect all the principles of the Erasmus Charter for Higher Education relating to traineeships (or the principles agreed in the partnership agreement for institutions located in Partner Countries).

Commitment	Name	Email	Position	Date	Signature
Trainee			<i>Trainee</i>		
Responsible person <sup>xi</sup> at the Sending Institution					
Supervisor <sup>xii</sup> at the Receiving Organisation					



### 3 During the Mobility

	<b>Table A2 - Exceptional Changes to the Traineeship Programme at the Receiving Organisation/Enterprise</b> (to be approved by e-mail or signature by the student, the responsible person in the Sending Institution and the responsible person in the Receiving Organisation/Enterprise)	
Planned period of the mobility: from [month/year] ..... till [month/year] .....		
Traineeship title: My Geo mobility Traineeship ...	Number of working hours per week: ...	
Location of the training:		
Normal day schedule: - morning start at ... - Noon break ... - evening finished at ...		
Overview of the 2 months schedule: indicate weekend & (possible) holidays (e.g. national holiday)		
Detailed programme of the traineeship period		
Knowledge, skills and competences to be acquired by the end of the traineeship (expected Learning Outcomes):		
Monitoring plan:		
Evaluation plan:		



**Learning Agreement  
My Geo Mobility Traineeship  
<name company>**

**Student's name**  
**Academic Year 20.../20...**

**4 After the Mobility**

*Table D - Traineeship Certificate by the Receiving Organisation/Enterprise*

**Name of the trainee:**

**Name of the Receiving Organisation/Enterprise:**

**Sector of the Receiving Organisation/Enterprise:**

**Address of the Receiving Organisation/Enterprise [street, city, country, phone, e-mail address], website:**

**Start date and end date of traineeship: from [day/month/year] ..... to [day/month/year] ....**

**Traineeship title:**

**Detailed programme of the traineeship period including tasks carried out by the trainee:**

**Knowledge, skills (intellectual and practical) and competences acquired (achieved Learning Outcomes):**

**Evaluation of the trainee:**

**Date:**

**Name and signature of the Supervisor at the Receiving Organisation/Enterprise:**

---

**Nationality:** Country to which the person belongs administratively and that issues the ID card and/or passport.

**Study cycle:** Short cycle (EQF level 5) / Bachelor or equivalent first cycle (EQF level 6) / Master or equivalent second cycle (EQF level 7) / Doctorate or equivalent third cycle (EQF level 8).

**Field of education:** The [ISCED-F 2013 search tool](http://ec.europa.eu/education/tools/isced-f_en.htm) available at [http://ec.europa.eu/education/tools/isced-f\\_en.htm](http://ec.europa.eu/education/tools/isced-f_en.htm) should be used to find the ISCED 2013 detailed field of education and training that is closest to the subject of the degree to be awarded to the trainee by the sending institution.

**Erasmus code:** a unique identifier that every higher education institution that has been awarded with the Erasmus Charter for Higher Education (ECHE) receives. It is only applicable to higher education institutions located in Programme Countries.

**Contact person at the sending institution:** a person who provides a link for administrative information and who, depending on the structure of the higher education institution, may be the departmental coordinator or will work at the international relations office or equivalent body within the institution.

**Contact person at the Receiving Organisation:** a person who can provide administrative information within the framework of Erasmus+ traineeships.

**Mentor:** the role of the mentor is to provide support, encouragement and information to the trainee on the life and experience relative to the enterprise (culture of the enterprise, informal codes and conducts, etc.). Normally, the mentor should be a different person than the supervisor.

**Level of language competence:** a description of the European Language Levels (CEFR) is available at:

<https://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr>

**There are three different provisions for traineeships:**

1. Traineeships embedded in the curriculum (counting towards the degree);
2. Voluntary traineeships (not obligatory for the degree);
3. Traineeships for recent graduates.

**ECTS credits or equivalent:** in countries where the "ECTS" system is not in place, in particular for institutions located in Partner Countries not participating in the Bologna process, "ECTS" needs to be replaced in all tables by the name of the equivalent system that is used and a weblink to an explanation to the system should be added.

**Responsible person at the sending institution:** this person is responsible for signing the Learning Agreement, amending it if needed and recognising the edits and associated learning outcomes on behalf of the responsible academic body as set out in the Learning Agreement. The name and email of the responsible person must be filled in only in case it differs from that of the Contact person mentioned at the top of the document.

**Supervisor at the Receiving Organisation:** this person is responsible for signing the Learning Agreement, amending it if needed, supervising the trainee during the traineeship and signing the Traineeship Certificate. The name and email of the Supervisor must be filled in only in case it differs from that of the Contact person mentioned at the top of the document.

6.3.2 Document for the companies – version 2<sup>nd</sup> mobility

**DOCUMENT A: BEFORE THE INTERNSHIP**

**1 Personalia**

Trainee	Last name(s)	First name(s)	Date of birth	Nationality <sup>xiii</sup>	Sex [M/F]	Study cycle <sup>xiv</sup>	Field of education <sup>xv</sup>
Sending Institution	Name	Faculty/ Department	Erasmus code <sup>xvi</sup> (if applicable)	Address	Country	Contact person name <sup>xvii</sup> ; email; phone	
Receiving Organisation/Enterprise	Name	Department	Address; website	Country	Size	Contact person <sup>xviii</sup> name; position; e-mail; phone	Mentor <sup>xix</sup> name; position; e-mail; phone

**2 Information on the mobility**

*Table A - Traineeship Programme at the Receiving Organisation/Enterprise*

**Planned period of the mobility: from [month/year] ..... to [month/year] .....**

<b>Traineeship title: My Geo mobility Traineeship ...</b>	<b>Number of working hours per week: ...</b>
---	--

**Detailed programme of the traineeship:**

- Knowledge, skills and competencies required before participating on:**
- Geospatial Sensors
  - Cartography / Graphic representation
  - Computer and/or app programming
  - Photogrammetry
  - Topology
  - Communication network
  - Store technology (incl. data formats)
  - Spatial reference systems
  - Mobile apps
  - Scale and resolution
  - Georeferencing
  - 3D visualisations
  - Augmented Reality / Virtual reality
  - Other: ...

- Knowledge, skills and competences to be acquired by the end of the traineeship (expected Learning Outcomes):**
- Geospatial Sensors
  - Cartography / Graphic representation
  - Computer and/or app programming
  - Photogrammetry
  - Topology
  - Communication network
  - Store technology (incl. data formats)
  - Spatial reference systems
  - Mobile apps
  - Scale and resolution
  - Georeferencing
  - 3D visualisations
  - Augmented Reality / Virtual reality
  - Other: ...

**Monitoring plan:**  
 The beneficiary will be regularly monitored by the Sending Institution per email and with online tools provided by the EC. In case the trainee carries out his traineeship for research thesis purposes, he/she will be also supervised by a professor who will monitor the student training programme and that the research results are met. The HO will appoint a mentor to monitor the beneficiary during his/her traineeship experience. The student will receive a direct report. The direct report will support the student both on practical issues as with the subject.  
 Geosolutions has what we call a "Geo Academy" which is supervised by a dedicated consultant She would do overall coaching & mentoring. We also have Team leads within the specific branches of consultancy. These teamleads can also monitor & follow up on the interns projects.

- Evaluation plan:**
- Professional competences and skills acquisition and improvement
  - Foreign language improvement
  - Personal and professional development
  - Research results if it's the case
  - Guidance for future career

--	--	--	--	--	--	--	--	--	--

The level of **language competence\*\*** in \_\_\_\_\_ [indicate here the main language of work] that the trainee already has or agrees to acquire by the start of the mobility period is: A1  A2  B1  B2  C1  C2  Native speaker

**Table B - Sending Institution**

*Please use only one of the following three boxes: <sup>xxi</sup>*

4. The traineeship is **embedded in the curriculum** and upon satisfactory completion of the traineeship, the institution undertakes to:

Award .....10. ....ECTS credits (or equivalent) <sup>xxii</sup>	Give a grade based on: Traineeship certificate <input type="checkbox"/> Final report <input type="checkbox"/> Interview <input type="checkbox"/>
Record the traineeship in the trainee's Transcript of Records and Diploma Supplement (or equivalent).	
Record the traineeship in the trainee's Europass Mobility Document: Yes <input type="checkbox"/> No <input type="checkbox"/>	

5. The traineeship is **voluntary** and, upon satisfactory completion of the traineeship, the institution undertakes to:

Award ECTS credits (or equivalent): Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please indicate the number of credits: ....
Give a grade: Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please indicate if this will be based on: Traineeship certificate <input type="checkbox"/> Final report <input type="checkbox"/> Interview <input type="checkbox"/>
Record the traineeship in the trainee's Transcript of Records: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Record the traineeship in the trainee's Diploma Supplement (or equivalent).	
Record the traineeship in the trainee's Europass Mobility Document: Yes <input type="checkbox"/> No <input type="checkbox"/>	

6. The traineeship is carried out by a **recent graduate** and, upon satisfactory completion of the traineeship, the institution undertakes to:

Award ECTS credits (or equivalent): Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please indicate the number of credits: ....
Record the traineeship in the trainee's Europass Mobility Document ( <i>highly recommended</i> ): Yes <input type="checkbox"/> No <input type="checkbox"/>	

**Accident insurance for the trainee**

The Sending Institution will provide an accident insurance to the trainee (if not provided by the Receiving Organisation/Enterprise): Yes <input type="checkbox"/> No <input type="checkbox"/>	The accident insurance covers: - accidents during travels made for work purposes: Yes <input type="checkbox"/> No <input type="checkbox"/> - accidents on the way to work and back from work: Yes <input type="checkbox"/> No <input type="checkbox"/>
The Sending Institution will provide a liability insurance to the trainee (if not provided by the Receiving Organisation/Enterprise): Yes <input type="checkbox"/> No <input type="checkbox"/>	

**Table C - Receiving Organisation/Enterprise**

The Receiving Organisation/Enterprise will provide financial support to the trainee for the traineeship: Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, amount (EUR/month): .....
The Receiving Organisation/Enterprise will provide a contribution in kind to the trainee for the traineeship: Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please specify: ....	
The Receiving Organisation/Enterprise will provide an accident insurance to the trainee (if not provided by the Sending Institution): Yes <input type="checkbox"/> No <input type="checkbox"/>	The accident insurance covers: - accidents during travels made for work purposes: Yes <input type="checkbox"/> No <input type="checkbox"/> - accidents on the way to work and back from work: Yes <input type="checkbox"/> No <input type="checkbox"/>
Information on emergency procedures, first aid etc. is provided at intake: Yes <input type="checkbox"/> No <input type="checkbox"/> First aid station on the work floor: Yes <input type="checkbox"/> No <input type="checkbox"/>	
The Receiving Organisation/Enterprise will provide a liability insurance to the trainee (if not provided by the Sending Institution): Yes <input type="checkbox"/> No <input type="checkbox"/>	
The receiving organisation will provide supervision: <input type="checkbox"/> Always <input type="checkbox"/> Most of the time <input type="checkbox"/> Sometimes <input type="checkbox"/> never	
The Receiving Organisation/Enterprise will provide appropriate support and equipment to the trainee.	
Upon completion of the traineeship, the Organisation/Enterprise undertakes to issue a Traineeship Certificate within 5 weeks after the end of the traineeship.	
<b>Location where traineeship will take place:</b>	

**Risk analysis**

Type of workstation activities <input type="checkbox"/> Office work at location of the company <input type="checkbox"/> Office work on location (e.g. at clients) <input type="checkbox"/> Field work (e.g. surveying, work with drones ...) <input type="checkbox"/> Other (specify) .....	
---	--

Night work: Yes <input type="checkbox"/> No <input type="checkbox"/>
Shift work: Yes <input type="checkbox"/> No <input type="checkbox"/>
Working on/with a screen: <input type="checkbox"/> no <input type="checkbox"/> les than 4 hours/day <input type="checkbox"/> 4-8 hours/day
Working at heights (> 2 m): <input type="checkbox"/> yes <input type="checkbox"/> no
Nature of trainingship activities:
e. High rhythm: <input type="checkbox"/> yes <input type="checkbox"/> no
f. Repetitive activities <input type="checkbox"/> yes <input type="checkbox"/> no
g. High mental stress <input type="checkbox"/> yes <input type="checkbox"/> no
h. Aggression & emotion <input type="checkbox"/> yes <input type="checkbox"/> no
Operating machinery <input type="checkbox"/> yes <input type="checkbox"/> no If yes: what kind
Contact with chemical agents (dust, gases, vapours ...): <input type="checkbox"/> yes <input type="checkbox"/> no If yes: what kind
Contact with special groups: <input type="checkbox"/> yes <input type="checkbox"/> no If yes: what type
Contact with physical agents (e.g. noise, sharp objects ...): <input type="checkbox"/> yes <input type="checkbox"/> no if yes:what kind

By signing this document, the trainee, the Sending Institution and the Receiving Organisation/Enterprise confirm that they approve the Learning Agreement and that they will comply with all the arrangements agreed by all parties. The trainee and Receiving Organisation/Enterprise will communicate to the Sending Institution any problem or changes regarding the traineeship period. The Sending Institution and the trainee should also commit to what is set out in the Erasmus+ grant agreement. The institution undertakes to respect all the principles of the Erasmus Charter for Higher Education relating to traineeships (or the principles agreed in the partnership agreement for institutions located in Partner Countries).

Commitment	Name	Email	Position	Date	Signature
Trainee			<i>Trainee</i>		
Responsible person <sup>xxiii</sup> at the Sending Institution					
Supervisor <sup>xxiv</sup> at the Receiving Organisation					

---

<sup>1</sup> **Nationality:** Country to which the person belongs administratively and that issues the ID card and/or passport.

<sup>1</sup> **Study cycle:** Short cycle (EQF level 5) / Bachelor or equivalent first cycle (EQF level 6) / Master or equivalent second cycle (EQF level 7) / Doctorate or equivalent third cycle (EQF level 8).

<sup>1</sup> **Field of education:** The [ISCED-F 2013 search tool](http://ec.europa.eu/education/tools/isced-f_en.htm) available at [http://ec.europa.eu/education/tools/isced-f\\_en.htm](http://ec.europa.eu/education/tools/isced-f_en.htm) should be used to find the ISCED 2013 detailed field of education and training that is closest to the subject of the degree to be awarded to the trainee by the sending institution.

<sup>1</sup> **Erasmus code:** a unique identifier that every higher education institution that has been awarded with the Erasmus Charter for Higher Education (ECHE) receives. It is only applicable to higher education institutions located in Programme Countries.

<sup>1</sup> **Contact person at the sending institution:** a person who provides a link for administrative information and who, depending on the structure of the higher education institution, may be the departmental coordinator or will work at the international relations office or equivalent body within the institution.

<sup>1</sup> **Contact person at the Receiving Organisation:** a person who can provide administrative information within the framework of Erasmus+ traineeships.

<sup>1</sup> **Mentor:** the role of the mentor is to provide support, encouragement and information to the trainee on the life and experience relative to the enterprise (culture of the enterprise, informal codes and conducts, etc.). Normally, the mentor should be a different person than the supervisor.



**DOCUMENT B: AFTER THE INTERNSHIP**

**1 Personalia**

<b>Trainee</b>	<b>Last name(s)</b>	<b>First name(s)</b>	<b>Date of birth</b>	<b>Nationality<sup>xxv</sup></b>	<b>Sex [M/F]</b>	<b>Study cycle<sup>xxvi</sup></b>	<b>Field of education<sup>xxvii</sup></b>	
<b>Sending Institution</b>	<b>Name</b>	<b>Faculty/ Department</b>	<b>Erasmus code<sup>xxviii</sup> (if applicable)</b>	<b>Address</b>	<b>Country</b>	<b>Contact person name<sup>xxix</sup>; email; phone</b>		
<b>Receiving Organisation/Enterprise</b>	<b>Name</b>	<b>Department</b>	<b>Address; website</b>	<b>Country</b>	<b>Size</b>	<b>Contact person<sup>xxx</sup> name; position; e- mail; phone</b>	<b>Mentor<sup>xxxi</sup> name; position; e-mail; phone</b>	

## 2 Evaluation of the Mobility

*Table D - Traineeship Certificate by the Receiving Organisation/Enterprise*

<b>Name of the trainee:</b>
<b>Name of the Receiving Organisation/Enterprise:</b>
<b>Sector of the Receiving Organisation/Enterprise:</b>
<b>Address of the Receiving Organisation/Enterprise</b> [street, city, country, phone, e-mail address], <b>website:</b>
<b>Start date and end date of traineeship:</b> from [day/month/year] ..... to [day/month/year] ....
<b>Traineeship title:</b>
<b>Detailed programme of the traineeship period including tasks carried out by the trainee:</b>
<b>Knowledge, skills (intellectual and practical) and competences acquired (achieved Learning Outcomes):</b>
<b>Evaluation of the trainee:</b>
<b>Date:</b>
<b>Name and signature of the Supervisor at the Receiving Organisation/Enterprise:</b>

---

<sup>1</sup> **Nationality:** Country to which the person belongs administratively and that issues the ID card and/or passport.

<sup>1</sup> **Study cycle:** Short cycle (EQF level 5) / Bachelor or equivalent first cycle (EQF level 6) / Master or equivalent second cycle (EQF level 7) / Doctorate or equivalent third cycle (EQF level 8).

<sup>1</sup> **Field of education:** The [ISCED-F 2013 search tool](http://ec.europa.eu/education/tools/isced-f_en.htm) available at [http://ec.europa.eu/education/tools/isced-f\\_en.htm](http://ec.europa.eu/education/tools/isced-f_en.htm) should be used to find the ISCED 2013 detailed field of education and training that is closest to the subject of the degree to be awarded to the trainee by the sending institution.

<sup>1</sup> **Erasmus code:** a unique identifier that every higher education institution that has been awarded with the Erasmus Charter for Higher Education (ECHE) receives. It is only applicable to higher education institutions located in Programme Countries.

<sup>1</sup> **Contact person at the sending institution:** a person who provides a link for administrative information and who, depending on the structure of the higher education institution, may be the departmental coordinator or will work at the international relations office or equivalent body within the institution.

<sup>1</sup> **Contact person at the Receiving Organisation:** a person who can provide administrative information within the framework of Erasmus+ traineeships.

<sup>1</sup> **Mentor:** the role of the mentor is to provide support, encouragement and information to the trainee on the life and experience relative to the enterprise (culture of the enterprise, informal codes and conducts, etc.). Normally, the mentor should be a different person than the supervisor.

6.3.3 Document for the students – version both mobilities

**1 Personalia**

<b>Trainee</b>	<b>Last name(s)</b>	<b>First name(s)</b>	<b>Date of birth</b>	<b>Nationality<sup>xxxii</sup></b>	<b>Sex</b> [M/F]	<b>Study cycle<sup>xxxiii</sup></b>	<b>Field of education<sup>xxxiv</sup></b>
<b>Sending Institution</b>	<b>Name</b>	<b>Faculty/ Department</b>	<b>Erasmus code<sup>xxxv</sup></b> (if applicable)	<b>Address</b>	<b>Country</b>	<b>Contact person name<sup>xxxvi</sup>; email; phone</b>	
<b>Receiving Organisation /Enterprise</b>	<b>Name</b>	<b>Department</b>	<b>Address; website</b>	<b>Country</b>	<b>Size</b>	<b>Contact person<sup>xxxvii</sup></b> name; position; e-mail; phone	<b>Mentor<sup>xxxviii</sup></b> name; position; e-mail; phone

<b>Planned training period</b>
Planned period of the mobility: from [month/year] June 2019 to [month/year] July 2019

## 2 Evaluation after 2 weeks internship

### 2.1 Skills & competencies

These were the knowledge, skills and competencies indicated as required by the company before participating at the traineeship:

- Geospatial Sensors
- Cartography / Graphic representation
- Computer and/or app programming
- Photogrammetry
- Topology
- Communication network
- Store technology (incl. data formats)
- Spatial reference systems
- Mobile apps
- Scale and resolution
- Georeferencing
- 3D visualisations
- Augmented Reality / Virtual reality
- Other: ...

Is this correct or are there some in the list that should have been indicated as well

- Yes, this is correct
- No, these were experienced in the first two weeks as being required as well: .....

### 2.2 Video diary & message n° 1

Please make a brief video message (one for each trainee) with following information/evaluation:

- 7) How was the reception at the company
- 8) Is the location of the company easily accessible
- 9) Were you properly instructed at the start, it was clear what your assignment / training will entail
- 10) Are you well supervised, is it easy to get support when needed?
- 11) What is the atmosphere like, cooperation with fellow employees
- 12) Have you already learned something / needed to learned something in these first two weeks

Name the video 'Geosolutions1 – your name' and upload the video into <https://tinyurl.com/>...

Prepare this also a short text, not more than one page, and write it down on the next page

*message n° 1*

**(write in this frame your text, not more than 1 page)**

**Don't forget to save the file and save it for the moment on your computer**

### 3 Evaluation after 4 weeks internship

#### 3.1 Skills & competencies to be acquired at the end of the internship

These are the knowledge, skills and competencies the company indicated as to be acquired by the end of the traineeship:

- Geospatial Sensors
- Cartography / Graphic representation
- Computer and/or app programming
- Photogrammetry
- Topology
- Communication network
- Store technology (incl. data formats)
- Spatial reference systems
- Mobile apps
- Scale and resolution
- Georeferencing
- 3D visualisations
- Augmented Reality / Virtual reality
- Other: ...

have you had to deal with these in the first month of your internship?

- Yes
- No, from the indicated list these have not been touched yet: .....
- No, other have been touched: .....

#### 3.2 Video diary & message n° 2

Please make a brief video message (one for each trainee) with following information/evaluation:

- 4) How would you evaluate the internship so far?
- 5) Have you the feeling you already learned/gained the extra competencies as listed above?
- 6) Are you well supervised, is it easy to get support when needed?

Name the video 'Geosolutions2 – your name' and upload the video into <https://tinyurl.com/...>

Prepare this also a short text, not more than one page, and write it down on the next page

*message n° 2*

**(write in this frame your text, not more than 1 page)**

**Don't forget to save the file and save it for the moment on your computer**



**4 Evaluation after 6 weeks internship**

**4.1 Risk analysis**

The company indicated following risk analysis for your traineeship – adjust if you think things are not correct

Type of workstation activities

- Office work at location of the company
- Office work on location (e.g. at clients)
- Field work (e.g. surveying, work with drones ...)
- Other (specify) .....

Night work: Yes  No

Shift work: Yes  No

Working on/with a screen:  no  less than 4 hours/day  4-8 hours/day

Working at heights (> 2 m):  yes  no

Nature of traineeship activities:

- a. High rhythm:  yes  no
- b. Repetitive activities  yes  no
- c. High mental stress  yes  no
- d. Aggression & emotion  yes  no

Operating machinery  yes  no

If yes: what kind

Contact with chemical agents (dust, gases, vapours ...):  yes  no

If yes: what kind

Contact with special groups:  yes  no

If yes: what type

Contact with physical agents (e.g. noise, sharp objects ...):  yes  no

if yes: what kind

**4.2 Video diary & message n° 3**

Please make a brief video message (one for each trainee) with following information/evaluation:

- 4) Do you feel that you are doing valuable tasks inside the company or are you just involved with minor things?
- 5) Do you feel as being part of the team, meaning: are you also taking part at meetings, contacts with clients ...?
- 6) How is the lodging and the city you are staying?

Name the video 'Geosolutions3 – your name' and upload the video into [https://tinyurl.com/...](https://tinyurl.com/)

Prepare this also a short text, not more than one page, and write it down on the next page

*message n° 3*

**(write in this frame your text, not more than 1 page)**

**Don't forget to save the file and save it for the moment on your computer**

### 5 Evaluation after 8 weeks internship

#### 5.1 Skills & competencies to be acquired at the end of the internship

These are the knowledge, skills and competencies the company indicated as to be acquired by the end of the traineeship:

- Geospatial Sensors
- Cartography / Graphic representation
- Computer and/or app programming
- Photogrammetry
- Topology
- Communication network
- Store technology (incl. data formats)
- Spatial reference systems
- Mobile apps
- Scale and resolution
- Georeferencing
- 3D visualisations
- Augmented Reality / Virtual reality
- Other: ...

have you finally had to deal with these?

- Yes
- No, from the indicated list these have not been touched yet: .....
- No, other have been touched: .....

#### 5.2 Video diary & message n° 4

Please make a brief video message (one for each trainee) with following information/evaluation:

- 6) How would you (almost final) evaluate the internship? Did it reach your expectations, Why (not)?
- 7) How would you evaluate the supervision, the support
- 8) Have you the feeling that you gained extra insight, skills and knowledge als listed above?
- 9) Have you the feeling you learned other skills (beside the geo-ict related ones)? If so can you describe which?
- 10) What would you adjust in a next round: what could be done to improve the traineeship?

Name the video 'Geosolutions4 – your name' and upload the video into <https://tinyurl.com/...>

Prepare this also a short text, not more than one page, and write it down on the next page

message n° 4

(write in this frame your text, not more than 1 page)

**Don't forget to save the file, rename it with your name  
and upload it to the same folder: <https://tinyurl.com/y5hxwysm>**

- <sup>xiii</sup> **Nationality:** Country to which the person belongs administratively and that issues the ID card and/or passport.
- <sup>xiv</sup> **Study cycle:** Short cycle (EQF level 5) / Bachelor or equivalent first cycle (EQF level 6) / Master or equivalent second cycle (EQF level 7) / Doctorate or equivalent third cycle (EQF level 8).
- <sup>xv</sup> **Field of education:** The [ISCED-F 2013 search tool](http://ec.europa.eu/education/tools/isced-f_en.htm) available at [http://ec.europa.eu/education/tools/isced-f\\_en.htm](http://ec.europa.eu/education/tools/isced-f_en.htm) should be used to find the ISCED 2013 detailed field of education and training that is closest to the subject of the degree to be awarded to the trainee by the sending institution.
- <sup>xvi</sup> **Erasmus code:** a unique identifier that every higher education institution that has been awarded with the Erasmus Charter for Higher Education (ECHE) receives. It is only applicable to higher education institutions located in Programme Countries.
- <sup>xvii</sup> **Contact person at the sending institution:** a person who provides a link for administrative information and who, depending on the structure of the higher education institution, may be the departmental coordinator or will work at the international relations office or equivalent body within the institution.
- <sup>xviii</sup> **Contact person at the Receiving Organisation:** a person who can provide administrative information within the framework of Erasmus+ traineeships.
- <sup>xix</sup> **Mentor:** the role of the mentor is to provide support, encouragement and information to the trainee on the life and experience relative to the enterprise (culture of the enterprise, informal codes and conducts, etc.). Normally, the mentor should be a different person than the supervisor.
- <sup>xx</sup> **Level of language competence:** a description of the European Language Levels (CEFR) is available at: <https://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr>
- <sup>xxi</sup> **There are three different provisions for traineeships:**
1. Traineeships embedded in the curriculum (counting towards the degree);
  2. Voluntary traineeships (not obligatory for the degree);
  3. Traineeships for recent graduates.
- <sup>xxii</sup> **ECTS credits or equivalent:** in countries where the "ECTS" system it is not in place, in particular for institutions located in Partner Countries not participating in the Bologna process, "ECTS" needs to be replaced in all tables by the name of the equivalent system that is used and a weblink to an explanation to the system should be added.
- <sup>xxiii</sup> **Responsible person at the sending institution:** this person is responsible for signing the Learning Agreement, amending it if needed and recognising the credits and associated learning outcomes on behalf of the responsible academic body as set out in the Learning Agreement. The name and email of the Responsible person must be filled in only in case it differs from that of the Contact person mentioned at the top of the document.
- <sup>xxiv</sup> **Supervisor at the Receiving Organisation:** this person is responsible for signing the Learning Agreement, amending it if needed, supervising the trainee during the traineeship and signing the Traineeship Certificate. The name and email of the Supervisor must be filled in only in case it differs from that of the Contact person mentioned at the top of the document.
- <sup>xxv</sup> **Nationality:** Country to which the person belongs administratively and that issues the ID card and/or passport.
- <sup>xxvi</sup> **Study cycle:** Short cycle (EQF level 5) / Bachelor or equivalent first cycle (EQF level 6) / Master or equivalent second cycle (EQF level 7) / Doctorate or equivalent third cycle (EQF level 8).
- <sup>xxvii</sup> **Field of education:** The [ISCED-F 2013 search tool](http://ec.europa.eu/education/tools/isced-f_en.htm) available at [http://ec.europa.eu/education/tools/isced-f\\_en.htm](http://ec.europa.eu/education/tools/isced-f_en.htm) should be used to find the ISCED 2013 detailed field of education and training that is closest to the subject of the degree to be awarded to the trainee by the sending institution.
- <sup>xxviii</sup> **Erasmus code:** a unique identifier that every higher education institution that has been awarded with the Erasmus Charter for Higher Education (ECHE) receives. It is only applicable to higher education institutions located in Programme Countries.

---

<sup>xxix</sup> **Contact person at the sending institution:** a person who provides a link for administrative information and who, depending on the structure of the higher education institution, may be the departmental coordinator or will work at the international relations office or equivalent body within the institution.

<sup>xxx</sup> **Contact person at the Receiving Organisation:** a person who can provide administrative information within the framework of Erasmus+ traineeships.

<sup>xxxi</sup> **Mentor:** the role of the mentor is to provide support, encouragement and information to the trainee on the life and experience relative to the enterprise (culture of the enterprise, informal codes and conducts, etc.). Normally, the mentor should be a different person than the supervisor.

<sup>xxxii</sup> **Nationality:** Country to which the person belongs administratively and that issues the ID card and/or passport.

<sup>xxxiii</sup> **Study cycle:** Short cycle (EQF level 5) / Bachelor or equivalent first cycle (EQF level 6) / Master or equivalent second cycle (EQF level 7) / Doctorate or equivalent third cycle (EQF level 8).

<sup>xxxiv</sup> **Field of education:** The [ISCED-F 2013 search tool](http://ec.europa.eu/education/tools/isced-f_en.htm) available at [http://ec.europa.eu/education/tools/isced-f\\_en.htm](http://ec.europa.eu/education/tools/isced-f_en.htm) should be used to find the ISCED 2013 detailed field of education and training that is closest to the subject of the degree to be awarded to the trainee by the sending institution.

<sup>xxxv</sup> **Erasmus code:** a unique identifier that every higher education institution that has been awarded with the Erasmus Charter for Higher Education (ECHE) receives. It is only applicable to higher education institutions located in Programme Countries.

<sup>xxxvi</sup> **Contact person at the sending institution:** a person who provides a link for administrative information and who, depending on the structure of the higher education institution, may be the departmental coordinator or will work at the international relations office or equivalent body within the institution.

<sup>xxxvii</sup> **Contact person at the Receiving Organisation:** a person who can provide administrative information within the framework of Erasmus+ traineeships.

<sup>xxxviii</sup> **Mentor:** the role of the mentor is to provide support, encouragement and information to the trainee on the life and experience relative to the enterprise (culture of the enterprise, informal codes and conducts, etc.). Normally, the mentor should be a different person than the supervisor.