



## Minutes

<b>Meeting</b>	: 2nd GirlsTech meeting in Lousado, Portugal
<b>Datum</b>	: 6-2-2017 and 7-2-2017
<b>Present</b>	: Elaine Johnston, Catherine Sezen, Alfonso Cacheiro, Juan Eduardo Iriondo Martínez de Morentín, Manuela Guimarães, Teresa Santos, Mirjam Hensels, Marlies Mast, Manfred Polzin, Mart Ronk, Jüri Puidet, Camelia Ciuclea, Renate Simion, Riita Hirsikoski, Marko Kemppinen, Martina Jejčič, Irena Cetina, Ayla Kruis and Carolien de Neeve
<b>Minutes by</b>	: Marlies Mast

---

### Day 1:

#### 1. Welcome

Manuela opens the meeting and greets everyone at the municipality of Famalicão. She thanks everyone for being here and talks us through the programme. The presentation by Mr. Poças has been cancelled.

Manfred welcomes everyone and thanks Manuela and Teresa for organising the meeting and the municipality for receiving the group. Manfred proposes an introduction round. Below find the introductions by the people who weren't present at the kick-off meeting:

Renate Simion: assistant to Diana Andone: secretary at the long-distance learning centre at UPT.

Elaine Johnston: Deputy Head for STEM at Chichester college and teaches Science.

Irena Cetina: international coordinator for Erasmus+ at SCNG. She's also trying to find some new partners for Erasmus+ projects.

Ayla Kruis: policy advisor at VHTO.

Camelia: secretary at the long-distance learning centre at UPT and 2<sup>nd</sup> year Phd student.

Mart Ronk: works at the technical department of Pärnumaa Kutsehariduskeskus.

Alfonso Cacheiro: secretary and teacher at Eraiken centre.

Manfred mentions the evaluation of the kick-off meeting in Amsterdam. (Report can be found in Sharepoint in the folder of the kick-off meeting.)

- We will introduce Google Forms to reflect and evaluate the meetings.
- The 1<sup>st</sup> instalment has been paid to all partners.
- The 3<sup>rd</sup> meeting will take place in Pärnu on 3 and 4 April (Monday and Tuesday). Jüri will organise rooms at the Hedon Spa Hotel, which also has a conference room. We'll be visiting the school. You can fly to either Tallinn or Riga. Nearest is Tallinn (128 km.), but Riga is quite near too (195 km). There is a



bus connection with Riga.

Thinking about the programme, Catherine would like to know how the school links with businesses. Mirjam adds that it should be in connection with how to attract girls to STEM.

- Please note the dissemination form, which has been distributed (and can be found in Sharepoint). Please write down all your dissemination activities in this form (advice: keep a log) and hand it in before June 15, 2017 for the mid-term report.
- To do for Jüri: send us the programme and a list of instruments 3 weeks in advance of the meeting.

- 2. Video about Forave + Presentation by Manuela Guimarães** (In SharePoint). Forave is a small school (350 students). It has built partnerships with the city council, the companies and local institutions. The school has 20 associated partners (most of them multinational partners). Everything the school does and decides has to make sense for the region. Companies select and recruit in the school. On the website they share vacancies for former students and the Forave network.

Questions: You put a lot of effort in the promotion of polymer processing for girls. Why the specially for these studies? And did you do something to attract girls? Answer: polymer processing is a new course. The coordinator is a woman and the engineers are women. Its important in the polymer industry that there are women working in this area. We still want to attract more women to the automation course. Question: is there a difference between the employability to male and female students? Answer: We think there's no difference. The employability rates are very high.

- 3. Explanation of the Portuguese education system by Teresa Santos.** (Presentation in SharePoint). Pupils cannot drop out before they're 18 years old. Pupils are kept together till 14/15 years old. Problem in the system: students can only go to VET education if they fail the regular course. That means that VET is a negative choice. However, all students can have the same goals, but the ways to get there are different.

- 4. VET education in Portugal. ANESPO, National Association for VET Schools. Presentation by José Luis Presa, President of ANESPO.** (Presentation in SharePoint). ANESPO was founded 27 years ago. Mr Presa explains how VET education is organised in Portugal.

Those countries with a strong system of VET and a strong work-based system have the lowest unemployment rates. Entrepreneurship is important and more and more schools are focussing on this topic.

- 5. VET education in V.N. Famalicão. Presented by Leonel Rocha, representative of the Local Network for Education and Training and the City Hall.** (Presentation in SharePoint). Mr Rocha explains how the municipality works together with schools and how it helps improving education. In 2006 Famalicão started a network with stakeholders and the municipality. They help schools to be high quality schools and organise different programmes to achieve this. Question: Does the municipality have a role in attracting females to technical education? Answer: Yes, that's one of the next goals.

- 6. João Freire, psychologist at A.E.S. D. Sancho** (presentation and video in SharePoint) Mr Freire explains what psychologists are doing in career guidance to tackle gender issues.

Conclusions:

- we need to tackle all issues of exclusion and segregation in a complete and intertwined way in order to let children tell their story in a way that is meaningful. This is hard, because we're fighting against a labour market that doesn't always want critically thinking people. But if we force people to do and think in a way that isn't natural to them this creates problems, because people won't be able to keep up with the developments.

- we don't want to provide test page guidance.

- we focus a lot on life role, life span, the time of life and life themes: the



story people tell about themselves.

Question: How can you adjust the labour market to people's needs? Answer: From the bottom up career development should be integrated as much as other kinds of development. From the top down: if people work with their real skills they're much more valuable for the companies. Try to get companies to look for other ways of promoting the skills that they want.

Question: Are there any plans in Famalicão for doing the experiment of letting children draw people with different jobs? Answer: There are plans for the experiment. There are also plans to reach all schoolyears (all ages) with career guidance.

- 7. António Luís, Director at CENFIM-Trofa, a centre for the Professional Training of the Metallurgical and Metal-Mechanical Industry** (Presentation and video in SharePoint). They have 13 schools all over the country. This sector needs a lot of qualified people, it makes no difference if they are male or female. Traditionally there are more males than females in this sector. For example, welders need to be strong guys, however, we can use ladies in computer and precision work. Nowadays companies are more open to hiring females. Currently there are 2, 3 or 4 females per 20 males.

CENFIM promotes internationalisation. We send students to different countries and also receive students from other countries. It should be easy for English speaking girls from abroad to find an internship in Portugal. People that are interested in organising internships at CENFIM are welcome to contact Mr Luís.

- 8. César Silva, Representative of the Training Department at CITEVE, centre of Technology for Textile and Clothing Industry.** (video in SharePoint)

The centre is funded and owned by textile companies and the government. It's a non-profit organisation. The centre also provides training and coaching to students. 60% of the participants of the training are female. In the textile centre itself the number is higher: there are 10-15% male employees and 85-90% are females. Specialization maintenance is 'only male'. The employment rate is high in this sector.

- 9. João D'Oray (Order of the Engineer) representative of the VET school E.P. Aveiro. Project Engine4F: Engineer for the Future.** (Presentation in SharePoint) It's an Erasmus+ project coordinated by Aeva (Partner of INNOTECS). The outline of the project can be found in the PowerPoint presentation. 6 countries and 10 partners are involved. The aim is to promote STEM subjects in order to have more Portuguese engineers in Portugal. In Portugal engineers often come from abroad. Students take part in a European competition. Each team needs to include at least one girl. In this way they promote mixed teams or even all girl teams. During the years of the project they collect examples to show other schools how to promote these subjects. Students choose different subjects in the 8<sup>th</sup> grade when they are 13-14 years old.

In the activities the organisation involves women engineers to be an example.

- 10. Rui Silva, Head of Engineering and Technology at Lusíada University.** (Presentation in SharePoint) There is no special policy for gender regarding admission to the university. In the faculty overall 20% of the students doing an Engineering degree are female. The national average is 55%. These figures haven't changed significantly for the last 25 years. In the Bachelor studies in Engineering and Industrial Management, Civil Engineering and Electronics and Informatics Engineering the percentage of females is lower than the national average (exact figures in the presentation.) Mr Silva found the same figures at three universities in the countryside. This may be caused by the distance from the urban centres. The national percentage of females in engineering are surprisingly high. There are hardly any differences in the employment opportunities for male and female students. Cultural inheritance is probably one of the most important reasons for the low representation of females at this university. This is an industrial area and the levels of education here are lower than in other regions, which may have an influence on the careers of the children. There are also a lot of part time students.



Many women tend to be more responsible for and involved in the family. Mr Silva thinks it's important to provide more women role models.

- 11. Filomena Soares and Celina Pinto Leão, WiE (Women in Engineering), University of Minho.** (Presentation in SharePoint). WiE is an affinity group of IEEE (Institute of Electrical and Electronics Engineers), an international organisation. Internationally WiE was founded in 1994 and in Portugal it started at the university of Minho in 2010. The idea to start this group came from one of the female students. WiE promotes females to follow a STEM career. What do they do: They try to change the stereotypes in engineering, try to make high school students see that engineering is for women too, try to share the achievements of women in engineering and try to get girls to follow STEM careers. 'Wie can do anything'. Activities: meetings/discussions with women who have or had careers in engineering, once a month they organise Coffee in an hour in Fnac (a bookshop), an informal meeting to discuss different topics, they distribute electronic newsletters, organise national meetings at schools or at companies. There are also international meetings.

How can WiE contribute to GirlsTech? IEEE has a star-programme that aims to encourage girls in STEM careers and it gives students information about a STEM future and courses. The Portuguese section has a network of around 20.000 students per year (university level students). For example: the University of Minho organises competitions for younger children (also girls) in which they learn how to programme robots (among other things).

## **Day 2:**

### **Statistics (Carolien de Neeve)**

In Amsterdam we already discussed that international comparison of statistics is difficult, because of different levels of (VET) education. In SharePoint you can find the percentages overall for every country regarding the share of females in technical studies on VET level. Behind that sheet (in the same document) are the sheets of educational clusters. With these numbers you can look at the statistics of your country more closely.

### **Tour around the school – Forave**

- 1. Carlos Conçalves, Director of Human Relations at Continental Tires.** (Presentation in SharePoint) Mr Conçalves tells us about women in the industry. He starts with showing a short film. Nowadays companies are able to attract women by using nice visuals on safety and software.

During the last few years they have observed a greater integration of women in the workforce and mutual value and recognition between women and the industries, but there are still some differences in representation of numbers.

Mr Conçalves shows us another film with more diversity in people. Emotions become more and more important, the head and the heart.

The first female supervisor came on the shop floor in Continental Mabor in 2010. Now there are 9 female operators and 4 female supervisors. There is change, but it is a long journey. In Portugal the man is still the head of the family.

Diversity is becoming more important in the future of Continental. There is a commitment to attracting and retaining VET female interns and employees, as happens for all employees. There is a growing number of female temporary workers (with prospected integration in the company). Internal recognition of female employees is very important.

Flexible working hours are a possibility at Continental: sabbatical is an option, not only for studying. At this moment someone works 2 days in the company and 3 days at home, however, this is not possible on the shop floor. There is flexibility in changing shifts.

If there is a job opening and a woman and a man apply who have the same qualifications, no difference will be made between them. The best performer will get the job. There is no special effort put into comprising



a diverse selection committee. It's thought to be more important to have a multidisciplinary selection committee.

- 2. Ana Duarte, 27 years old. (Continental Tires) Testimony** (Presentation in SharePoint). The family and cultural background are very important for the next steps in someone's life. Ana was the first female trainee at Continental Tires in Lousado. She thinks it's very important also to have experience on the shop floor to understand the processes well. At first the men were surprised that she wanted to get her 'hands dirty'. It took time to earn people's trust, but after four months she felt she was part of the team. Now, if she needs something she knows who she can speak to.

Question: What can be done in education in order to make it more attractive for women to choose technology? Answer: It should start in school. Students should have more contact with industries and companies during their studies. It's important to show women who are working there. Students should learn from their experiences.

- 3. Isabel Cardoso, Sales Manager (Portugal and Spain) at Evonik, 30 years old.** (Presentation in Sharepoint). She loved science and chemistry from a young age. She was influenced by her father, who had links to the textile companies. During her work at the textile company she liked to help the workers at the plant, which gave her a lot of experience. Isabel kept studying doing marketing and improving her language skills. Life Long Learning is very important. It's important to have a family that supports you and understands your ambitions.

Being female you need to prove more than men that you have talent, knowledge and intelligence. Diversity within the company is important. Women are greater analysers of problems and go deeper into details. They have the advantage that they not only think with the mind, but also with the heart. Women are good at build healthy relationships between people.

Question: How can you be a role model for VET students? Answer: Isabel agrees with Ana that the interaction between schools and companies is important for students to understand the reality of things. Organise open events, try to reach young people and get them to open their minds and create more interest. Communication is a key factor.

Ana thinks it's important to change the parents' minds that it's all right to go to Vocational Education and that you can have a good career afterwards.

- 4. Manfred and Manuela close the meeting** and thank the Forave team for organising the meeting.

