

## Minutes

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| <b>Meeting</b>         | : Kick-off meeting GirlsTech in Amsterdam   |
| <b>Date</b>            | : 29-11-2016  |
| <b>Participants</b>    | : Katy Malia, Catherine Sezen, Ione Goikolea De Pablo, Juan Eduardo Iriondo Martínez de Morentín, Manuela Guimarães, Teresa Santos, Pia Deveneijns, Mirjam Hensels, Marlies Mast, Manfred Polzin, Jetske Tuinstra, Oliver Kikas, Jüri Puidet, Diana Andone, Radu Vasiu, Riitta Hirsikoski, Marko Kempainen, Martina Jejčič, Egon Pipan, Cocky Booij and Carolien de Neeve |
| <b>Minutes made by</b> | : Marlies Mast  |

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### 1. Welcome and introduction

Cocky welcomes everyone and shows us a short film on VHTO and Girlsday, an international event which takes place in April every year. Last year more than 10.000 girls visited more than 300 companies. The aim is to get more girls to participate every year. VHTO's database 'Spiegelbeeld' (Mirror Image) contains over 2.000 female professionals.

Manfred welcomes everyone. He gives an introduction to how the project came about. It is a mixed group. Some are members of Innotecs. We took the map and the ranking of the participation of girls in the STEM VET programmes and the STEM labour markets in different countries and found some wellknown partners in the selected countries and invited other partners from the Innotecs network. All countries will be visited within the next two years.

#### *Introduction of all partners:*

**AoC (United Kingdom): Katy** teaches mechanics at Gateshead college in the North East of England. She feels strongly about getting females to participate in mechanics. Gateshead college is doing 'female only' courses, but it doesn't work out. The participation of girls is quite low. At level 1 there's one female student. There are 56 students altogether in level 1, there's one female student (of 27 students in total) in level 2. There are 6 girls in Engineering.

**Catherine:** The AoC represents 95% of vocational and academic colleges in England. They represent over 300 colleges. Education is going through a reform, based on the Finnish and the Dutch system. Therefore it's interesting to find out what you're doing in these countries. The emphasis is to get females in non-traditional occupations such as engineering, construction, mechanics, etc.

**CIFP CONSTRUCCIÓN LHII (ERAIKEN) (Spain): Ione** teaches construction at Eraiken. She wants to know how they can introduce women in construction.

**Juan Eduardo:** We were invited through TKNIKA. We are part of public net of beta schools. Our school teaches construction, installation, furniture, etc. The population of females at school is about 20%, in some courses it's half female, half male.

There are 600 pupils in total. **Forave (Portugal) Manuela:** Forave is a VET



school. At the school they teach electronics and mechanics. The problem is that females represent 1% of the classroom. Forave is closely connected to companies, but they don't have enough graduates for the companies. That's why they want to attract more female students.

**Teresa** is responsible for the European projects.

**Hariduskeskus (Estonia): Oliver** teaches information technology. In one of his classes there's only 1 girl of 30 students. In other classes it's not so bad.

**Jüri** manages technical department in his school. The statistics say that the participation of girls in technology in Estonia is 41%. He's not sure if this is correct. 41% is not the case at his school, but he would like this to be the case in future.

**UPT (Romania) Diana** is an industrial robot engineer. She has a PhD in computer science. She is the director of the e-learning centre. She acts in different associations and organisations with the aim of how to introduce technology in a better way in people's lives. In Romania they don't have a problem with girls in technology. This is heavily encouraged in gymnasium, but also in primary school. The problem there is to get women in leadership positions. There's a low unemployment rate. The region is called the Silicon Valley of central and eastern Europe. There's a great demand for specialists, but it's hard to produce so many graduates. Statistics for west-Romania: 43% of women are working in ICT companies.

**Radu** is the president of the senate of the university and an electronic engineer. There are 14.000 students at the university. All technology fields are represented on all levels. There are 40% female students. The dropout rate for girls is lower than for boys. Radu thinks technical studies are not so attractive in many parts of Europe, because it's more difficult. Girls tend to be more dedicated in their studies. At primary school a lot of mathematics, physics and sciences is taught, therefore it comes naturally. Girls also know it's no problem to get a job when they graduate.

Compared with 20 years ago the participation of females in technology is better now in Romania and Estonia. Although in the fifties and sixties it was forbidden not to work. You could only stay at home if you were ill or disabled. Women also worked full-time. A lot of women worked in engineering, because it was a guarantee to get a job. There was a drop in numbers in the nineties, but from then on it got better.

**Sataedu (Finland) Riitta** works as a project manager in student services for a vocational school. Her goal is to take care of participation and equality in her services. She also has coordinating tasks in youth work outside school. She is very interested in gender equality.

**Marko** is head of international affairs. He is also participating in Innotecs. At school there are about 2600 students in total. Balance in girls and boys is 50/50, but the number of boys are higher in technology and girls in care studies. There are some girls in every technical class, so we are on the right track, but the tools which we are using are not the right ones. Families are not making the right decisions. Therefore this project is welcome.

**Šolski center Nova Gorica (Slovenia): Martina** works as a project coordinator. Three of the five schools are technical. At these schools there is a lack of girls. They are here to get ideas how to raise the percentage of girls in the classrooms.

**Egon** is the director of the School center of Nova Gorica. In Slovenia the



situation is the same as in Finland. 20 years ago 10/12 of 30 students were girls. These numbers decreased and now the participation of girls is 5%, maybe even less. He doesn't know why this happened. Maybe companies are reluctant to hire girls.

**VHTO (The Netherlands): Carolien** is project manager at VHTO. She will tell us about the situation in the Netherlands in the afternoon and she'll elaborate on the interventions. Tomorrow she'll introduce us to two of the role models who are participating in activities organised by VHTO.

**National Agency Erasmus+: Jetske** is not participating in the project, but she's coordinating KA2. She is the contact person from the National Agency for project GirlsTech. The National Agency is very interested in this project. It received a very high score from the experts.

**MBO Raad (The Netherlands): Pia** works as a policy advisor. She works on a different number of subjects, such as Life Long Learning, entrepreneurship and technology. She is involved in the Dutch National Technology Pact, which you will hear more about later today.

**Manfred** is a senior policy advisor at the MBO Raad. He is in charge of International relations. He has permanently been involved in projects during the last few years. In GirlsTech he will act as project leader

**Mirjam** works also as a policy advisor for the MBO Raad. She is advising and supporting the technical sections of the VET colleges in The Netherlands. Moreover Mirjam is the secretary of Innotecs, the European network of Technical VET schools.

**Marlies** is the secretary for the internationalisation department of the MBO Raad. She supports Manfred in coordinating project GirlsTech.

Carolien mentions that we can use Twitter: *#girlstech*.

## 2. Innotecs – Mirjam Hensels (see presentation in Sharepoint)

Mirjam tells us about the connection between GirlsTech and Innotecs. She used to work at a hotel school in the southern part of the Netherlands and was part of a network of hotel schools, called EUHOFA (origin in Austria) and a network of tourism schools, called AEHT (origin in Switzerland). When she started working at the MBO Raad she switched to the sector of technology. There wasn't a network of technical schools, so she decided to start a project for setting up this network: Innotecs. During the first conference questions came up about the participation of girls in technology and the idea of GirlsTech was born.

Mirjam invites all GirlsTech partners to become a member of Innotecs. The annual fee is 150 € + entrance fee of 100 €.

## 3. Introduction of Project GirlsTech and distribution of tasks – Manfred (see presentation in Sharepoint)

There's some confusion about the statistics, especially concerning Estonia. This should be investigated. The statistics are from Eurostat and they are a guideline. Maybe Eurostat looked at the high schools. There's confusion about the term 'VET





schools' in different countries.

#### Planning meetings:

Meetings in June: Finland can only do the first two weeks of June. For Romania it's difficult to send people to meetings in June.

Meetings in January: For Romania the first week of February is more convenient due to exams in January.

It's important to have all partners present at the meeting.

Jetske recommends everyone to start early with the dissemination. Start spreading the word!

#### Tasks:

Catherine will take on the quality assessment and will make an evaluation form.

Marko will take care of the website and will link it to the Innotecs website.

Manfred and Mirjam will design a leaflet for the project.

#### Project administration – Marlies – see presentation in Sharepoint:

*Mobility tool+*: [link to Mobility Tool+](#) Login with your Ecas password. All partners have viewing access.

*Extranet*: There are questions about why you have to log in all the time. All members need to log in every time. It's the way the system is designed. Please choose an easy password. If you have problems changing your password, let Marlies know. The helpdesk can change the password for you.

#### **4. Explanation Dutch education system – Manfred (see presentation about Dutch VET in Sharepoint)**

Manfred tells us about the MBO Raad and the Dutch VET system.

#### **5. Initiatives on national level**

*Presentation by Beatrice Boots* (Director Dutch National STEM Platform) (see presentation in Sharepoint). Beatrice tells us about the problem setting in the Netherlands, the skills mismatch and about the case study: public private partnerships in vocational and higher education in the Netherlands.

*Presentation by Wisse Wijnmalen* from the Horizon College (Ambassador "More girls in technical education") (see presentation in Sharepoint) Wisse tells us about why we need Genderfocus in Technical Vocational Education, the Ambassadors Network and the Think Tank "Genderfocus in Technical Vocational Education".

*Presentation by Ans Hekkenberg* (Ambassador of the Technology Pact) (see presentation in Sharepoint) Ans tells us her personal story. She studied physics and



astrophysics at university. She tells us why she first doubted that she could be an ambassador for girls at VET-level and later understood why she was suitable for the job.

- During her university years she experienced that being the only female among males you feel responsible for the group you're representing (females). It would have been much better if there would have been more female students, because the pressure wouldn't only have been on Ans.
- Women are underestimated in this area. Men get better performance reviews.
- It doesn't matter that she is educated on university level and representing VET students, because the experiences are the same for everyone who's underrepresented in a certain field.
- We have to join the forces and stand up for women in STEM.
- Women need to be visible. "You can't be what you can't see." Make sure that there are female experts.

## 6. Energizer

Carolien guides us through a gender-science association test.

## 7. Explanation of instruments 1 to 4 – Carolien (see presentation about instruments and 'Annex 2 instruments' in Sharepoint)

Carolien explains the interventions (instruments) applied by VHTO and the reasons why few girls choose to study technology and IT in the Netherlands.

Manfred notes that there are also role models at this table. Katy is teaching in the automotive sector. Students accept her as a teacher. With apprentices who only come in 1 day a week it is more difficult, but they find out she knows what she's talking about.

Ione is teaching construction. She has worked in building for 7 years. She suffered discrimination at work. The company closed due to the crisis. It's not common to see women on building sites. The problem is created by society. Ione likes helping people, that's why she became a teacher.

Manuela is the director of a technical school. She doesn't have a technical background, but she feels very connected to the subject. The school has worked with technical companies for 27 years. There aren't many girls. Some companies ask for girls in electronics, but in mechanics the conditions are hard. Male workers are sometimes very rude, which makes it hard for females to work with them. Girls work in quality and consultancy, but not the handwork. Companies need to have facilities to receive both genders. They don't often have these facilities, so they prefer male workers. In Portugal the problem is not selection on gender, but having enough graduates to work at companies.

Carolien says that role models and 'frappez toujours' are the most effective instruments in attracting females to technology studies.

Preventing discrimination is an area of concern. There have been projects, but funding has stopped.



Manfred closes the meeting for today.

2<sup>nd</sup> day:

### **Wrap up day 1:**

Everyone sums up what they think is worth considering to implement in their country.

Diana tells us about meet-ups (i.e. <https://www.meetup.com/>). If you organise meetings in schools or at colleges she suggests not to separate the boys from the girls, but make sure you provide more women role models.

Pia points out the document on instruments and talks us through it. Further information on the Gender-awareness training can be found on <http://mindtheproject.eu/>.

### **8. Film on speed dates and round table discussion with VET students and professionals about experiences as role models as well as students**

Manfred introduces two guests: Bente van de Bijl, former VET student currently studying at the university of applied sciences. And Marie Anne Dekkers, who went to the same VET college as Bente. After a two-year break after finishing the VET course (engineering) she went to the university of applied sciences. She worked at an engineering company called Arcadis. Now she runs her own business.

#### Film on speed dates:

Speed dates are a good way to introduce technology to girls. There are lots of professions that girls have no knowledge of. Female role models answer questions asked by girls about these professions. Participation in these speed dates is voluntary. VHTO has organised speed dates at secondary schools since 2005 and at VET colleges since 2008. The group that organises the speed dates is small and it can only be organised at 150 schools per year. The first group (that has started since 2005) participated in the programme 'platform beta technique' and research has shown that more girls in this group choose STEM profiles.

Diana thinks it's very important to teach more maths and science at all levels otherwise everything else is futile. In Romania it's compulsory for students to study maths for 12 years. This is a key factor. In the Netherlands the VO Raad advocates that pupils need to be able to work with their own talents and possibilities. It appears that girls don't understand why they have to do mathematics. If you show them it is a tool they can use, they often choose to study the subject. Even when pupils are not doing well in mathematics you have to motivate them. Their brains will develop. The key is to motivate and trust them.

Marie Anne tells us that at the age of 10 girls lose interest in maths. Teachers tell girls that maths is difficult. They do this in a subtle way. Encouragement and motivation is very important. At the speed dates at VET colleges Marie Anne experiences little motivation. Students question the purpose.

Catherine thinks we have to influence the government and the culture.



Culture is not only schools, but also parents. This has to start when children are very small. It would be helpful if maths remained compulsory on a relatively high level. It stimulates abstract thinking. Pupils shouldn't be able to escape learning maths.

By 2020 science and technology needs to be part of the curriculum in the Netherlands. They're trying to raise the levels in maths and science of students at teacher training colleges. They're also trying to raise the levels of maths at VET colleges. In 2020 it's compulsory to teach technology and science in primary schools.

Diana would like to receive the instructions for the mentors what they should discuss during the speed dates even if it is in Dutch.

Carolien will send the video of the speed dates with the English transcript to Marlies to be distributed.

#### Personal experiences:

Bente joined the mentoring circles, because she thinks sharing experiences is interesting and helpful. She didn't have any negative experiences during her internship, but other students did. At school she did experience discrimination: when she got high grades, she heard remarks that she got these high grades because she is a girl. She was also not taken seriously by older teachers.

It's difficult to recruit girls for mentoring circles. Maybe you can attract girls if you say that during the mentoring circles they can work on self-confidence. Bente says that she thinks this wouldn't have made a difference in her will to participate, but it might have made a difference for other students. Jüri notes that when a girl is the only girl in a class full of boys, she must be self-confident.

Marie Anne does a mentoring programme at work, because she noticed females from the age of 30 stopped working in engineering/technology. At first the reaction was that they didn't need the programme, because they were self-confident enough. They also wouldn't join, because it would be females only. They didn't want to be the outsiders, but they wanted to be part of the guys, which they eventually will never be. It's still important to reach out to this group to encourage them to stay in the career. The programme that Marie Anne runs via the platform 'Dutch Women in Real Estate', is non-profit. She experienced her own difficulties between the age of 20/30 years. There are lots of encouragement programmes until you reach management level. At 20/30 years old, things come together, i.e. family life. If you're on management level it's hard to organise your life and in construction it's even harder. That was the time she started her own business, because she didn't want to negotiate on things she values. Fortunately things are changing. Marie Anne is passionate in keeping women on track. Terms of employment are different for women than for men, because women value different things.

Mentoring circles take place once a month during school time. In Bente's case there was a group of nine girls and two mentors/professionals, but the group size can vary. The fact that Bente is very positive helped the group a lot. It's important to have



the right combination of students.

Bente is not a mentor yet, although she could be if she chose to do that. She is a role model in the speed dating activity and she tells the girls in secondary school about her training and about the choices she made. Her school didn't ask her to become a role model. Teachers didn't take the mentoring circles seriously and she didn't experience enough support from the staff. It was a male dominated environment. Sharing stories was helpful during mentoring circles. It's important to know that you're not the only one. Marie Anne says that storytelling is a very important tool. At other moments the girls don't talk about these things, but the mentoring circles create a safe environment. The quality of the teachers is crucial. Maybe if the teachers did a good job, mentoring circles wouldn't be necessary. Gender awareness among teachers is very important. Carolien wants to achieve the situation that schools organise their own mentoring circles.

Marie Anne values the quality of the relationship with the students. She stays in touch with the students she mentored, but they don't see or contact each other often. If something happens in life, whenever, students can always contact her. They know how to find each other (i.e. via LinkedIn).

### 9. Explanation forms

Mirjam talks us through the reflection form. The questions are related to the instruments. Send the reflection form to Marlies before 20 December 2016. 1 reflection form per country.

Please fill out the dissemination form and send it to Marlies at the end of June 2017, February 2018 and July 2018. The dates are on the form.

Manuela and Teresa will organise the next meeting according to the meeting format. Porto is the airport. It's half an hour by train from Porto to the city where the school is situated.

Catherine will make an evaluation form for the meetings. She will send it to Marlies to distribute it to the partners. The partners will fill it out before 20 December 2016.

The MBO Raad will produce a leaflet.

Manfred closes the meeting.

