



„Women in Surveying” CLGE theme of the Year 2021

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WHY EU AND SOCIETY?

- Women represent more than half of the population, but only 17% of them are active in information and communication technology (ICT) studies and careers in the EU
- Only 36% of them are science, technology, engineering and mathematics (STEM) graduates.
- Even though more women graduate from universities, they earn on average 16% less than men do, and only 8% of CEOs of the EU's largest companies are women.
- One in three women in the EU has been subject to physical and/or sexual violence.

That is why we need to talk about gender mainstreaming and do everything we can to improve this issue.



WHY CLGE?

STATEMENTS:

- The representation of women in surveying, in many countries, is significantly lower in relation to men,
- Female don't choose this occupation because of the stereotype that it is „male“ occupation,
- There is a frequent disparity in the salaries of women and men in surveying and an unequal starting position for male and women surveyors
- There is a lack of women in leadership positions and a lack of surveyors who would be a role model for young people to choose this profession.

This is why we wanted to take a closer look what is going on in some CLGE member state



WHY CLGE?

1. Because of the:

- gender stereotypes and inequality in surveying
- salary gap in surveying,
- non equal starting position for female and male surveyors

2. Because of the:

- lack of women in leading position in surveying
- lack of women role models in surveying

3. Because women often:

- feeling like they are not good enough
 - don't use their full potential in business
 - don't use their feminine way of doing business
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VISION

To change the surveying sector and perspective of women in surveying through education, empowerment of women and entrepreneurship.



GOALS

1. To educate the women surveyors in non surveyors field such as: marketing, sales, communication, project management, entrepreneurship and self awareness,
2. To educate women surveyors in field of new technologies in STEAM industry
3. To define gender equality program policies in public and private sector
4. To define a program of mentoring and networking
5. To raise awareness about women surveyors
6. To encourage young women to become surveyors



ANALYSIS

- **9 countries:** Sweden, Russia, Turkey, Lithuania, Italy, Latvia, Ireland, Montenegro, Croatia
- **7 questions**
 - Tell us something about surveying in your country
 - Is there gender gap in surveying
 - How many chartered/licensed women surveyors
 - How many associate women surveyors
 - How many women surveyors
 - How many are owners of surveyors company?
 - How many are CEO or members of a board at surveyors company?
- **6 suggestions**
 - How do you see education of women in non surveyors field?
 - How do you see education of women in surveyors field?
 - Define and explain 3 main topics for gender equality program policies in public sector as a view from your country.
 - How would you define a program of mentoring and networking for women in surveying in your country?
 - How would you raise awareness about women surveyors in your country?
 - How would you encourage young women to become surveyors?
- **Most Important:** underline the gender stereotypes and biases, which affect the early perception of professions and therefore professional vocations in your country



Public / private sector

	Public Sector	Private sector
Sweden	+	-
Russia	+	+
Turkey	+	+
Lithuania	+	+
Italy	+	+
Latvia	+	+
Ireland	+	+
Montenegro	+	+
Croatia	+	+



How many chartered/licensed surveyors are women

Country	Data
Sweden	<ul style="list-style-type: none">- 62% of the cadastral surveyors are women (253 out of 423)- only 24 % of the measurement engineers are women. The Director General for the National Land Survey is a woman
Russia	There is no precise statistics on the number of women in the surveying. With the total number of surveyors estimated as 26 000, the number of women surveyors can be assumed as 16 000, which roughly corresponds to 60 %.
Turkey	3326 female members registered in UCTEA Chamber of Survey and Cadastre Engineers
Lithuania	21,56 % are licensed women surveyors (330 out of 1530)
Italy	Approximately 10-15%
Latvia	<p><i>only the certificates were counted not the surveyors, one person can own more than one certificate.</i></p> <ul style="list-style-type: none">- 28,78 % of all certificates belong to women (234 out of 813)- 51,78 % of certificates in land management belong to women (87 out of 168)- 18% of certified geodesy surveyors are women (68 out of 378),- 29,58 % of women are involved in cadastral work (79 out of 267)
Ireland	507 Chartered women surveyors which incorporates all survey disciplines. There are also surveyors who are not chartered and do not hold membership of SCSi. It includes all professional disciplines and is not merely limited to geomatics.
Montenegro	15 licensed women surveyors who all work in private sector
Croatia	23,75 % (265 out of 1116 active members that are chartered geodetic engineers)



Women in surveying Italy

- **Results of a survey on gender growth forecast in the five-year period 2019-2023:**
 - 2019: women 9.501; men: 86.174
 - 2020: women 9.768; men: 87.534
 - 2021: women 10.044; men: 88.915
 - 2022: women 10.327; men 90.318
 - 2023: women 10.618; men: 91.744
- ***This analysis showed that, while the male component of the profession prevails, the female component has a faster growth trend.***
- **The same growth trend is also found in the breakdown by gender of the total number of members in the Register:**
 - in 2014, the female component was 9.38%,
 - 2015 it was 9.47%,
 - 2016 it was 9.59%,
 - 2017 it was 9.69%,
 - 2018 it was 9.82%.
- **The projections for 2019-2023 above seem to confirm that the growing trend is higher than the estimated average annual rate of 1.7%.**
- In the last five years, **half of the 110 territorial Colleges have elected a new President;** the male component is clearly predominant, **but the female percentage reaches 10%: there are 11 women Presidents of the College** – an increase in comparison to the previous round – in a group consisting of people aged 40-60.



Women in surveying Latvia

- Only certificated (regulated) private surveyors can perform geodetic surveys in Latvia. There are **three types of certificates** in Latvia: land management, cadastral work and geodesy (including geodetic networks and construction work). It is not necessary for one to be a member of an association or any other organization to become a surveyor.
 - Since State Land Service (National Cadastral Office) stopped with field surveying, it has become more of a female organization. This is probably connected to the quite small, but very stable salaries in the public sector in Latvia.
 - In Latvia, women can take leading positions in state institutions, universities or companies without any issues (or problems).
 - In fact, there are **several women in leading position, such as the director of State Land service of Latvia, the head of the Geodetic Department at the Latvian University, and the head of the Latvian Association of Surveyors.** This is mostly connected with personal qualities not gender itself.
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Women in surveying Ireland

- Surveying in Ireland is multidisciplinary [there are 13 different types of surveying – covering land, property and construction] and cross sector.
 - members who practice in both the public and the private sectors.
- Membership data for the Society at the time of this survey showed that female members (Fellows, Professionals, Associates) was at 20% of total membership. The regression analysis of the survey data found that there is **equal pay for equal work** – as is legally required.
- According to the survey results, the profile of women in our sector shows that there is **less participation in senior roles**. The SCSi believes that all members and firms should seek to encourage more diversity of backgrounds for all staff including on boards and leadership teams.
- Making our careers **as attractive as possible** for future talent is a primary focus for SCSi. Looking at recent data of new members to SCSi, we are seeing slight increases in the proportion of female participation in surveying, **with new female members representing 28% of the total intake** compared with a 80:20 male: female ratio of existing members.



NO EXACT DATA

- How many women surveyors are entrepreneurs?
- How many are owners of surveyors company?
- How many are CEO or members of a board at surveyors company?



How do you see education of women in non surveyors field?

1. It is very necessary for women to study ***in the management, networking, accounting***, etc, especially other than the field of surveying.
2. I think non surveyors field such as: ***marketing, sales, communication, project management, entrepreneurship and self awareness must be included in university geodesy mandatory lectures program***. And of course it can be prepared as special courses which can graduate all who are interesting in.



3 main topics for gender equality program policies

- In every area of education or business, women need encouragement and education. In order for women to be more represented in any activity and profession, ***the state support is needed, in addition and also to provide services to women who have children and families.***
- Public administration in Lithuania must ensure the implementation of the ***principle of equality and non-discriminatory provisions*** in all draft laws, legal acts, programmes and other measures to ensure equal opportunities. Gender mainstreaming requires the ***preconditions of political will***, the ***competence of politicians and civil servants*** as well as ***awareness on the importance of gender mainstreaming and efficient state funding to achieve these goals.***
- As the three main topics for the gender equality program we would select the ***equal pay, maternity rights and protection, and development of entrepreneurial skills among women surveyors.***

- ***Equality, Transparency, Equal pay for equal work***



Define a program of mentoring and networking for women in surveying

- Presently the SCSIs are in the process of developing a peer mentoring programme for women in surveying and they are very supportive of women
- There have been initial discussions about networking women surveyors in Russia; no practical steps have been taken. As a pivotal point ***we would welcome any targeted support program for women in surveying.*** Promotion of women should include the visualization of women in the surveying - to replace the old-school image of a man in a hardhat with a tripod.
- These trainings should be taken at the school, especially in particular, these subjects should be given in addition to engineering education in the undergraduate program
- To establish project Women for Women is Surveying



Women in Surveying Mentorship programme Ireland



Women In Surveying Mentorship & Leadership Development Programme

- provides mentees with mentorship as well as leadership training.
- *Mentors are experienced surveyors, male and female, that are willing to act as mentors to female surveying mentees, using experience and accomplishments from their own careers to support, challenge and guide their mentees.*
- *A mentee should take advantage of the mentorship relationship to share their experiences, ask career questions and gain from the insight of their more experienced mentor.*
- **Benefits Of Becoming A Mentee**
 - Becoming **encouraged and empowered** in your personal development
 - Identifying and creating plans to **achieve career goals**
 - Pinpointing and correcting gaps in **professional skills and knowledge**
 - Building and maintaining a **broader perspective on career options** and opportunities
 - Receiving **advice from a senior role model**
 - Expanding your **professional network**
 - Increasing your **confidence**



How would you raise awareness about women surveyors in your country?

- More information in social media, on professional meetings, conferences, in university.
- Women are not seen as the face of the surveying profession
- We need a **strong public awareness campaign** about the importance of surveying /geodesy including the image of women as bearers of these activities.
- Project of presenting women who work in surveying with their interviews in which they talk openly about this profession



How would you encourage young women to become surveyors?

- Education and surveyor leaders examples,
- Improving working conditions and secure a friendly environment for women
- To be more on social media and speak about benefits of being a surveyor

- Ireland:
 - “Day in the Life” schools programme – Surveyors visit their school/local school to share information about their career in surveying.
 - Profiles of various types of surveyors developed for a Transition Year booklet with a strong focus on diversity.
 - Talks provided by SCSi Members – both men and women at career events for students and teachers including the Institute of Guidance Counsellors Conference, the School Summit, Higher Options Conference and Options West.
 - Regular promotional activity in national and local media promoting the value of the profession.
 - Accreditation of 3rd level university courses – SCSi require that all accredited course providers show evidence that they are committed to diversity.



Underline the gender stereotypes and biases which affect the early perception of profession

- ***Why there is no gender gap in Sweden***: mostly because we got free or subsidized childcare for everyone, which makes it easier for every woman to have her own career. Equal housework is also becoming more common.
- Major stereotypes are linked to a ***pay gap, social responsibilities during a maternity leave, parental duties***.
 - It is worth mentioning also that the field work is largely seen as men's domain.
- The gender stereotypes and biases that affect the early perception of professions and therefore professional vocations in our country:
 - Field surveying is physically hard work – heavy instruments, bad weather, long working hours;
 - Women have to sit in the office;
 - Young women are going to be pregnant, better choose men for same position;
 - Women are too emotional;
 - Women can be paid less because they have a husband who covers the main expenses in the family.



Conclusion

1. The representation of women in surveying, in many countries, is significantly lower in relation to men – **around 20 % maksimum**
2. Improvement of soft skills: **marketing, sales, communication, project management, entrepreneurship, networking**
3. 3 main topics for gender equality program policies: **equal pay, maternity rights and protection, and development of entrepreneurial skills among women surveyors.**
4. To define **program of mentoring and networking** to help other women and to attract females in surveying
5. To conduct a strong **public awareness campaign** about the importance of surveying /geodesy including the image of women as bearers of these activities.



Another view



- Comparison of the gender equality in the private and public sector in the surveying profession in Croatia
- Scientific paper by
 - ***Stjepan Miletić, mag.ing.geod. et geoinf. and***
 - ***Associate Professor, Marija Selak Raspudić, PhD***
- For 14. Symposium of Chartered geodetic engineers in Croatia: Women in Surveying
- Research for women who are Chartered engineers and work in State Geodetic Administration (public and private sector)



Comparison of the gender equality in the private and public sector in the surveying profession in Croatia

- Women work in an environment where women predominate
 - 40.7% of respondents do work that has elements of leadership
- When it comes to the characteristics that best describe them, the results are:
 - 59.3% of respondents like to get a task and do what needs to be done
 - 14.7% of respondents like to get a task and coordinate up to 3 people
 - 26% of respondents like to lead, organize and manage the task
 - 99.3% of respondents believe that certain types of surveying work in the field can be performed by women as well as men



Have you ever been a victim of sexual harassment in the workplace?

Private sector : YES - 23 % NO – 77%

Public sector: YES - 23,3 % NO – 76,7 %



During the job interview, were you asked about your plans in the field of private life, e.g are you married, do you plan to have children?

Private sector : YES – 43,7% NO – 56,3%

Public sector: YES - 40,7 % NO – 59,3%

Every second person!



Have you ever, in some of the above situations, experienced discrimination just because of gender during: job application, awarding prizes, higher salaries, division of tasks, promotions, etc.?

Private sector : YES – 46,8 % NO – 53,2%

Public sector: YES – 31,3 % NO – 68,7%



What is the presence of sexism in the environment in which you work?

Private sector :

None – 33,3 %

It is present to a lesser extent – 49,2%

It is present to a considerable extent – 17,5 %

Public sector:

None – 56,0 %

It is present to a lesser extent – 36,0 %

It is present to a considerable extent – 8 %



Comparison of the gender equality in the private and public sector in the surveying profession in Croatia

How much you are attracted to a job that includes more responsibility, possible overtime, higher salary, official car and phone, more stressful situations, better status within the company?

Private sector :

I am very attracted to it – 26,2 %

It doesn't appeal to me at all I don't want it – 11,2%

I would agree to it but not at the expense of my private and/or family life - 62,7 %

Public sector:

I am very attracted to it – 20,0 %

It doesn't appeal to me at all I don't want it – 25,3%

I would agree to it but not at the expense of my private and/or family life - 54,7 %



How you assess the state of gender equality in the company you work for?

Private sector :

Women are completely equal to men – 50%

Women are in a better position than men – 9,5 %

women are generally unequal compared to men – 40,5 %

Public sector:

Women are completely equal to men – 76,7 %

Women are in a better position than men – 4,0%

women are generally unequal compared to men – 19,3 %



Do we have a gender gap in surveying?