



2019/2168(INI)

4.9.2020

DRAFT REPORT

on closing the digital gender gap: women's participation in the digital economy
(2019/2168(INI))

Committee on Women's Rights and Gender Equality

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MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on closing the digital gender gap: women's participation in the digital economy (2019/2168(INI))

The European Parliament,

- having regard to Articles 2 and 3(3), second subparagraph, of the Treaty on European Union (TEU) and Article 8 of the Treaty on the Functioning of the European Union (TFEU),
- having regard to Article 23 of the Charter of Fundamental Rights of the European Union,
- having regard to the Beijing Declaration and Platform for Action, adopted at the Fourth World Conference on Women in 1995, and, in particular, the area of concern ‘Women and the Media’,
- having regard to the outcome document of 16 December 2015 of the high-level meeting of the UN General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society,
- having regard to the Commission communication of 6 May 2015 entitled ‘A Digital Single Market Strategy for Europe’ (COM(2015)0192), and the mid-term review of 10 May 2017 on its implementation entitled ‘A Connected Digital Single Market for All’ (COM(2017)0228),
- having regard to Pillars II (‘Creating the right conditions for digital networks and services to flourish’) and III (‘Maximising the growth potential of our European economy’) of the Commission’s digital single market strategy,
- having regard to the strategic framework for European cooperation in education and training (ET 2020),
- having regard to the Commission studies entitled ‘ICT for work: Digital skills in the workplace’ and ‘Women in the Digital Age’,
- having regard to the Commission communication of 10 June 2016 entitled ‘A New Skills Agenda for Europe: Working together to strengthen human capital, employability and competitiveness’ (COM(2016)0381),
- having regard to the Commission communication of 5 March 2020 entitled ‘A Union of Equality: Gender Equality Strategy 2020-2025’ (COM(2020)0152),
- having regard to the Commission report of 1 October 2013 entitled ‘Women active in the ICT sector’,
- having regard to the European Institute for Gender Equality (EIGE) study of 26 January 2017 entitled ‘Gender and digital agenda’,

- having regard to the Council conclusions of 30 May 2016 on ‘Developing media literacy and critical thinking through education and training’,
- having regard to the Council conclusions of 6 December 2018 on ‘Gender Equality, Youth and Digitalisation’,
- having regard to the Council conclusions of 10 December 2019 on ‘Gender-Equal Economies in the EU: The Way Forward’,
- having regard to the opinion of the Advisory Committee on Equal Opportunities for Women and Men of 19 December 2018 entitled ‘The future of gender equality strategy after 2019: the battles that we win never stay won’,
- having regard to the Declaration of Commitment on Women in Digital (WID), signed in 2019 by 27 EU ministers and Member States’ representatives plus Norway,
- having regard to its resolution of 24 May 2012 with recommendations to the Commission on application of the principle of equal pay for male and female workers for equal work or work of equal value¹,
- having regard to its resolution of 12 March 2013 on eliminating gender stereotypes in the EU²,
- having regard to its resolution of 12 September 2013 on the Digital Agenda for Growth, Mobility and Employment: time to move up a gear³, and, in particular, the Grand Coalition for Digital Jobs,
- having regard to its resolution of 28 April 2016 on gender equality and empowering women in the digital age⁴,
- having regard to the World Summit on the Information Society (WSIS) Forum 2019 on ‘Information and Communication Technologies for achieving the Sustainable Development Goals’,
- having regard to the WSIS Forum 2020 on ‘Fostering digital transformation and global partnerships: WSIS Action Lines for achieving the Sustainable Development Goals (SDGs)’,
- having regard to the question to the Commission on empowering women and girls through the digital sector (O-000004/2018 – B8-0010/2018),
- having regard to its resolution of 17 April 2018 on empowering women and girls through the digital sector⁵,
- having regard to its interparliamentary committee meeting held on International

¹ OJ C 264 E, 13.9.2013, p. 75.

² OJ C 36, 29.1.2016, p. 18.

³ OJ C 93, 9.3.2016, p. 120.

⁴ OJ C 66, 21.2.2018, p. 44.

⁵ OJ C 390, 18.11.2019, p. 28.

Women's Day 2018 on empowering women and girls in the media and ICT,

- having regard to the in-depth analysis entitled ‘Empowering women on the Internet’, published by its Directorate-General for Internal Policies on 30 October 2015⁶,
 - having regard to the study entitled ‘The underlying causes of the digital gender gap and possible solutions for enhanced digital inclusion of women and girls’ published by its Directorate-General for Internal Policies on 15 February 2018⁷,
 - having regard to the study entitled ‘Education and employment of women in science, technology and the digital economy, including AI and its influence on gender equality’ published by its Directorate-General for Internal Policies on 15 April 2020⁸,
 - having regard to the survey by the European Union Agency for Fundamental Rights (FRA) entitled ‘Violence against women: an EU-wide survey’, published in 2014,
 - having regard to Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA⁹,
 - having regard to the Commission communication of 19 June 2012 entitled ‘The EU Strategy towards the Eradication of Trafficking in Human Beings 2012-2016’ (COM(2012)0286) and the mid-term report of 17 October 2014 on the implementation thereof (SWD(2014)0318),
 - having regard to the Women in Digital scoreboard¹⁰,
 - having regard to Rule 54 of its Rules of Procedure,
 - having regard to the report of the Committee on Women's Rights and Gender Equality (A9-0000/2020),
- A. whereas digitalisation has fundamentally changed most aspects of our lives in ways that create countless opportunities but also present new challenges; whereas the COVID-19 crisis and its aftermath are likely to result in permanent changes to life in Europe, in which digitalisation will have a major role;
- B. whereas gender stereotypes constitute a serious obstacle to equality between women and men, further widen the gender gap in the digital sector and prevent women's full participation as users, innovators and creators;

⁶ In-depth analysis – ‘Empowering women on the Internet’, European Parliament, Directorate-General for Internal Policies, Policy Department C – Citizens’ Rights and Constitutional Affairs, 30 October 2015.

⁷ Study – ‘The underlying causes of the digital gender gap and possible solutions for enhanced digital inclusion of women and girls’, European Parliament, Directorate-General for Internal Policies, Policy Department C – Citizens’ Rights and Constitutional Affairs, 15 February 2018.

⁸ Study – ‘Education and employment of women in science, technology and the digital economy, including AI and its influence on gender equality’, European Parliament, Directorate-General for Internal Policies, Policy Department C – Citizens’ Rights and Constitutional Affairs, 15 April 2020.

⁹ OJ L 101, 15.4.2011, p 1.

¹⁰ <https://ec.europa.eu/digital-single-market/en/women-digital-scoreboard>

- C. whereas the Gender Equality Index for 2019 reveals persistent inequalities between men and women in the digital sector;
- D. whereas Eurostat data from 2018 showed that about 1.3 million people were studying Information and Communication Technologies (ICTs) in the European Union and that girls and women were largely in a minority, accounting for only 17 % of all ICT students in the EU;
- E. whereas 73 % of boys aged between 15 and 16 feel comfortable using digital devices that they are less familiar with, compared with 63 % of girls in the same age bracket¹¹;
- F. whereas gender stereotypes greatly influence subject choices; whereas very few teenage girls in EU Member States (less than 3 %) express an interest in working as an ICT professional at the age of 30¹²;
- G. whereas women in the information and communication sector earn 19 % less than men; whereas the gender pay gap directly contributes to the gender pension gap¹³;
- H. whereas all around the globe, women as a demographic group use the internet less often than men, either to install software or to use online radio and television, online banking or e-commerce services;
- I. whereas in the past couple of years, there has been an increase in the number of women working in cybersecurity, the figures nevertheless remain significantly low, with women representing fewer than 20 % of cybersecurity professionals in Europe;
- J. whereas in the future more than 90 % of jobs are expected to require some degree of e-skills and digital literacy;
- K. whereas women struggle to find their place in the ICT job sector as a result of various barriers, such as stereotypes and male-dominated workplaces; whereas there is considerable vertical and horizontal segregation in the ICT sector and women are often overqualified for the positions they occupy; whereas only a small minority of women occupy senior software engineering positions;
- L. whereas ICT is a sector with a low proportion of female workers, a great number of women abandons their ICT career (the phenomenon known as the ‘leaky pipeline’), mainly due to a poor work-life balance, organisational constraints and a male-dominated environment;
- M. whereas the IT sector has witnessed a significant increase in female board members, but is also the sector with the highest percentage of all-male boards;

General remarks

¹¹ EIGE Indicator 6. Source: EIGE factsheet entitled ‘Gender equality and digitalisation in the European Union’, published on 11 October 2018.

¹² EIGE factsheet entitled ‘Gender equality and digitalisation in the European Union’, published on 11 October 2018.

¹³ <https://ec.europa.eu/digital-single-market/en/women-ict>

1. Welcomes the Commission's commitments to boosting the participation of women in the information society included in the Gender Equality Strategy 2020-2025; calls on the Commission to continue to address the serious gender gap within the ICT sector in the digital agenda, the European digital strategy and all other digitalisation policies;
2. Calls on the Commission to take the digital gender gap into due account while negotiating programmes within the next multiannual financial framework (MFF) and funds and loans under the Recovery Plan, and to increase awareness of these mechanisms amongst women;
3. Calls on the Commission to ensure the full implementation of the ministerial Declaration of Commitment on 'Women in Digital';

Education

4. Underlines the importance of ensuring gender mainstreaming in digital education at all levels, including extra-curricular, informal and non-formal education, also for teaching staff; calls for specific strategies for different age ranges;
5. Encourages the Commission and the Member States to address the gender gap in the ICT sector and cooperate in finding solutions and sharing best practices on better inclusion of girls in digital education from a very young age; calls for the EU and the Member States to develop, support and implement the actions promoted by the UN and its bodies;
6. Calls on the Commission to thoroughly address the issue of the low numbers of women participating in ICT studies and careers, also in the updated digital education action plan; calls on educational entities to encourage girls to take up mathematics, coding, ICT classes and science subjects in schools;
7. Underlines the importance of female self-efficacy in science, technology, engineering and mathematics (STEM) and ICT becoming an integral part of female identity in pre-school and primary school, abandoning harmful gender role stereotypes for girls and boys;
8. Calls on the Commission and the Member States to set up mentoring schemes with female role models in ICT within all levels of education;
9. Calls on the Commission and the Member States to support lifelong learning, as well as training and schemes to boost the e-skills of girls and women;
10. Calls on the Commission and Member States to adopt policies and measures to address the leaky pipeline phenomenon;
11. Calls for gender equality to become a consistent and structural part of future EU youth strategy and policies;

Employment and entrepreneurship

12. Urges the Member States to fully transpose and implement the Work-Life Balance

Directive and calls on the Commission to monitor it effectively; invites the Member States to observe trends in the digital sector in order to adapt their work-life balance measures, if necessary;

13. Stresses that the gender pay gap has an irreversibly negative impact on the pension gap for women in the digital sector; welcomes the Commission's commitment to present binding measures on pay transparency by the end of 2020 in order to effectively address the gender pay and pension gaps;
14. Calls on the Commission and Member States to promote gender equality in companies in the ICT and related sectors and in the digital economy and to adopt horizontal policies to reduce the gender gap in the digital economy;
15. Calls on the Commission and the Member States to fully assess the causes and factors that lead to a high drop-out rate of women from digital careers and to develop mechanisms and programmes to integrate women and girls into education, training and employment initiatives in the digital sector;
16. Calls on the Commission and the Member States to increase financing opportunities for female entrepreneurs and to improve access to existing funds so that they have equal opportunities to compete in the digital single market;
17. Encourages the Commission and the Member States to reinforce the funding for research on gender-related issues in ICT;
18. Considers it to be of the utmost relevance to have more women role models and to increase the number of women in leadership positions in the ICT sector;

The culture, media and audiovisual sectors

19. Stresses the impact of the cultural, media and audiovisual sectors in the development of gender stereotypes and promotion of normative and cultural barriers;
20. Calls on the audiovisual and media industries to portray women in STEM and ICT-related professions;
21. Recalls the importance of eliminating conscious and unconscious gender-discriminatory bias from AI applications, videogames and toys that devalue the role of women and lead to the reduced participation of women in the digital, AI and ICT fields;

Women's civic, political and economic empowerment

22. Stresses that ICTs can greatly increase women's ability to take part in electoral processes, public consultations, surveys and debates, as well as to submit petitions or complaints; calls on the Commission and the Member States to take the gender dimension into account when devising e-government initiatives; underlines the effectiveness of using the internet for campaigns, forums and boosting the visibility of female role models;
23. Calls on the Commission and the Member States to engage constructively with and

support digital civil society organisations and to encourage such organisations to get involved in internet governance;

24. Encourages the Member States and the Commission to organise awareness-raising, training and gender mainstreaming campaigns to highlight the impact of ICT proficiency on the economic empowerment of women;

Data collection

25. Welcomes the creation of the Women in Digital scoreboard as an integral part of the Digital Economy and Society Index (DESI), as well as the four new indicators proposed by the EIGE in its 2018 report entitled ‘Gender equality and youth: opportunities and risks of digitalisation’;
26. Calls on the Commission and the Member States, as well as businesses, to collect sex and age-disaggregated data on the use of ICT;

Cybersecurity

27. Acknowledges with great concern the rise in digital crimes and acts of harassment and violence against women in the digital world; calls for campaigns to raise awareness of the risks involved and for measures to educate women in how to protect themselves online; calls on the Member States to empower law enforcement agencies to effectively deal with digital crimes;
28. Calls for the EU institutions, agencies and bodies, as well as the Member States and their law enforcement agencies, to cooperate and take concrete steps to coordinate their actions to counter the use of ICT to commit crimes; calls on the Member States to review their criminal law to ensure that new forms of digital violence are defined and acknowledged;
29. Calls for further legally binding measures and for a directive to prevent and combat gender-based violence, including cyber violence and online hate speech against women;

Gender equality in development policies

30. Expresses its concerns about the possibility of an increase in the digital gender gap in the developing countries in the current crisis; stresses the importance of digital proficiency as an instrument to obtain gender equality in development strategies;

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31. Instructs its President to forward this resolution to the Council and the Commission.

EXPLANATORY STATEMENT

Digitalisation fundamentally changed our lives, creating new opportunities but also multiple challenges. Equal labour market opportunities and treatment at work, and striving for gender balance in the digital sector, is utmost important not only the EU's economy, expressed for example in terms of GDP growth, but also as a matter of plain justice for all the talented women and girls choosing a STEM (Science, Technology, Engineering, Mathematics) career path.

The present COVID-19 crisis, which revolutionised the way people and companies use ICT and other digital technologies to work and interact, only highlighted the urgency to promote gender balance in this sector.

The inequalities were identified decades ago, and efforts have been made to address them over the years. Nevertheless, as demonstrated by a recent study commissioned by the European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs, at the request of the FEMM Committee, biases and inequalities persist in STEM fields and the digital sector (e.g., digital technologies, Computer Science, Information Technology, Information and Communication Technology, Artificial Intelligence, cybersecurity).

This report identifies two major phenomena contributing to this reality. On the one hand, for a number of cultural reasons, girls tend to avoid these areas, because they do not see them as viable career paths. On the other, many of those that actually follow this road end up giving it up somewhere along the way, either as students or as professionals, in what has already been called the 'leaky pipelines' effect. The differences between men and women become evident quite early and are notorious throughout their lives. At ages 15-16, 73% of boys claim to feel comfortable using electronic devices, while only 63% of girls in the same age group say the same. Even more worrisome, only 3% of teenage girls express an interest in pursuing a career as an ICT professional.

The 'leaky pipeline' refers to the situation where, the further a woman advances in her academic studies and profession, the higher the likelihood she will drop out. The leaky pipeline is due to a number of conditions, including non-family friendly work environments, lack of female peers and mentors, and a lack of professional recognition.

Purpose and measures

This INI Report aims to address the root causes of the existing digital gender gap, reflect on the data available and propose concrete measures and actions to promote women's and girl's participation in the digital economy.

The causes of digital gender gap are multiple. The rapporteur structures the report on a trajectory basis from the previous stages of **Education** up to **Employment** level, and also the social and cultural influences, in an attempt to identify positive feedback loops and bottlenecks that prevent the full integration of women and girls in the digital sector.

This report includes a group of recommendations to the commission, the member states and

society in general.

The rapporteur stresses that it is not only up to public authorities and bodies to respond appropriately to combat gender digital gap. Different actors - public figures, private actors or academics – can carry out targeted actions to efficiently enhance the participation and role of women and girls in the digital economy.

It is necessary to encourage women's participation in technical and high-level jobs by overcoming educational barriers from an early stage, as well as professional barriers, while guaranteeing digital lifelong learning for women.

This report also includes several recommendations intended to address the digital gender gap in various areas such as **Media, Culture and Audiovisual Sector, Women's Civic, political and economic** participation.

The importance of Data Collection, Cybersecurity and further research on gender issues in ICT is also addressed.

It is the rapporteur's conviction that eliminating the gender gap will boost prosperity at all levels and ensure social justice through enhanced equality between women and men.