

Linking Research & Innovation for Gender Equality

D5.2 Report on existing identified opportunities for facilitating the engagement and access to the market of STEM researchers

WP5 - Task 5.2 Engaging with the innovation ecosystems: CALIPER FemTech Events

Disclaimer

Any dissemination of results reflects only the author's view and the European Commission is not responsible for any use that may be made of the information it contains.

Copyright message

© CALIPER Consortium, 2020

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both. Reproduction is authorised provided the source is acknowledged.

Document information

Grant Agreement Number	873134	Ac	ronym		CALII	PER
Full Title	The CALIPER proje	ect: Lin	king research	and innovat	ion for	gender equality
Торіс	SwafS-09-2018-2019-2020 - Supporting research organisations to implement gender equality plans					
Funding scheme	CSA – Coordinatio	n and	Support Actio	on		
Start Date	1 st January 2020		Duration		48 m	onths
Project URL	http://caliper-pro	ject.eu	L			
EU Project Officer	Raquel FERNANDI	Z HOR	CAJADA			
Project Coordinator	Vasiliki Moumtzi -	ViLabs	5			
Deliverable	D5.2 Report on existing identified opportunities for facilitating the engagement and access to the market of STEM researchers					
Work Package	WP5 – Engageme	nt, cha	nge manager	nent and sus	tainabi	ility
Date of Delivery	Contractual	M18		Actual		M18
Nature	R - Report		Disseminati	ion Level	P - Pu	ublic
Lead Beneficiary	VIL					
Responsible Author (s)	VIL					
Reviewer(s):	ULB, YAE					
Keywords	Female researchers' mobility					

D5.2 Report on existing identified opportunities for facilitating the engagement and access to the market of STEM researchers

Page 3 of 45

Document History

Version	Issue Date	Stage	Changes	Contributor
0.1	06/04/2021	Draft	ТоС	VIL, SV, ULB, YAE
0.2	10/05/2021	Draft	Preparation of draft document	VIL
0.3	18/06/2021	Draft	Draft document quality check	VIL
0.4	25/06/2021	Draft	Review	ULB, YAE
1.00	28/06/2021	Final	Final document	VIL

D5.2 Report on existing identified opportunities for facilitating the engagement and access to the market of STEM researchers

Page 4 of 45

Executive Summary

The D5.2 Report on existing identified opportunities for facilitating the engagement and access to the market of STEM researchers which is part of the Task 5.2: Engaging with the innovation ecosystems: CALIPER Femtech Events under WP5 Engagement, change management and sustainability, presents the current issues at stake regarding the presence of female issues to STEM curricula and the transition of female researchers to entrepreneurship both at European level and the CALIPER's RPOs/RFOs level. In this respect, this deliverable describes relevant actions for tackling these key issues at stake for attracting more female students into STEM curricula and facilitating female researchers' mobility between academic research jobs to the market (incl. public and private organizations, NGOs, feminist organizations, civil society etc). In addition, this deliverable is setting up the ground for the organization of the Joint CALIPER Femtech per RPO/RFO with their R&I Hubs ensuring their smooth implementation among CALIPER's project partners.

Contents

Execu	tive	e Summary	. 4
1	In	troduction	. 6
1.1		Purpose & Scope	6
1.2		Structure of the deliverable	6
1.3		Relation to other WPs & Tasks	6
2	G	ender inequalities in STEM field - Issues at stake	.7
2.1		Girls and women in STEM - European state of play	7
2.2		Girls and women in STEM – CALIPER's partners state of play	10
2.2.	1	University of Zagreb – Faculty of Electrical Engineering and Computing (RPO)	10
2.2.	2	Shota Rustaveli National Science Foundation of Georgia (RFO)	11
2.2.	3	Slovak University of Technology in Bratislava (RPO)	11
2.2.	4	Université libre de Bruxelles (RPO)	12
2.2.	5	National Technical University of Athens – School of Electrical and Computer Engineering (RPO)	12
2.2.	6	Institute for Research in Biomedicine (RPO)	13
2.2. (RF0		Executive Unit for Higher Education, Research, Development and Innovation Funding in Roman 13	iia
2.2.	8	Yasar University (RPO)	13
2.2.	9	Salento University (RPO)	14
3	SI	haring of good practices	15
3.1		Actions attracting female students in STEM curricula	15
3.1.	1	Existing actions	16
3.1.	2	Emerged collaborations	23
3.2		Actions facilitating female researchers' mobility between academic and non-academic jobs	26
3.2.	1	Existing actions	27
3.2.	1	Emerged collaborations	36
4	To	owards the joint CALIPER FemTech events	12
4.1		Guidelines for the organization of the joint CALIPER FemTech event	42
4.2		Template for reporting the joint CALIPER FemTech event	43
Annex	cl:	References	45

1 Introduction

1.1 Purpose & Scope

The aim of this deliverable is twofold. Firstly, it aims at describing relevant existing or emerged actions (as a result of the multi-stakeholder dialogues held under WP2) for enhancing the attraction of more female students in STEM curricula and for facilitating female researchers' mobility between academic research jobs and the business sector (including public and private entities, NGOs, feminist organizations etc). Secondly, this deliverable aims at setting the scene for the organization of one joint CALIPER Femtech event between each CALIPER's RPO/RFO and its respective R&I Hubs contributing to the creation of win-win strategies among them and enable the setup of internal change measures to involve more women in STEM as well as for taking the gender dimension of research into consideration.

1.2 Structure of the deliverable

The structure of the deliverable is the following: Chapter 2 is divided into two parts. The first part describes the current issues at stake in Europe regarding the persistent gender inequalities in STEM fields for creating a common understanding on their social and economic losses. The second part summarizes the current problems that our project partners encounter regarding the attraction of female students in STEM curricula and the mobility of female researchers between academic research-jobs and the business sector including public and private bodies as well as the civil society. Chapter 3 describes existing and emerged actions between CALIPER partners and their R&I Hubs to attract young girls to STEM curricula and to facilitate female researchers' mobility because academic research jobs and the business sector. Chapter 4 is setting up the ground for the organization of the Joint CALIPER Femtech per RPO/RFO with their R&I Hubs ensuring their smooth implementation among CALIPER's project partners.

1.3 Relation to other WPs & Tasks

This deliverable constitutes the second task (Task 5.2: Engaging with the innovation ecosystems: CALIPER Femtech Events) of WP5 (Engagement, change management and sustainability), serving as a basis for the appropriate design of the Femtech events described under T5.2. This task contributes to T5.3 (engaging with the innovation ecosystems and raising awareness and engagement activities, respectively) and T6.3 External communication and multiplying effect.

It is also interlinked with WP3 implementation of GEPs as it is describing actions that can be part of the GEP. Last but not least, this report is linked with WP1: Analysis of external and internal conditions for GEPs development and acceptance, WP2 (Design and Development of customised GEPs) given that it draws from T1.3, T1.4, T2.2.

2 Gender inequalities in STEM field - Issues at stake

2.1 Girls and women in STEM - European state of play

Gender equality in one of the European Union's Fundamental values as stated in Articles 2 and 3 of the Treaty on European Union and one of the 17 Sustainable Development Goals, and also integral to all dimensions of inclusive and sustainable development. It is also widely recognized as a significant driving force for achieving higher economic growth (World Economic Forum, 2019)¹. The Gender Equality strategy for 2020-2025 published by the European Commission (2020a)² states clearly that gender equality brings more jobs and higher productivity. In particular, a study contacted by EIGE on the economic benefits of Gender Equality in the EU (European Institute for Gender Equality, 2017)³ states that enhancing gender parity can potentially result to an increase in the EU GDP per capita between 6.1% and 9.6% by 2050, with the potential impact on GDP in specific EU member States of up to 12% by 2050. The same study mentions that improvements in gender equality would lead to an additional 10.5m jobs in 2050 which would benefit both women and men.

Apart from the economic benefits of achieving a more gender equal society, gender inequalities have been recognized as a fundamental human rights issue. Therefore, it is of utmost importance to tackle them. According to the EIGE's Gender Equality Index (2020)⁴ the EU is at least 60 years away from reaching complete gender equality. In particular, this index shows that advances in gender equality are still moving with a slow pace, with an average improvement of just half a point each year. To make things worse, the breakthrough of the novel coronavirus (COVID-19) risk maintaining or even furthering pre-existing gender inequalities and rolling back the progress achieved to date as the pandemic has significantly impacted the career opportunities for many people in the EU.

Focusing on in Science, Technology, Engineering and Mathematics (STEM) fields particularly targeted by the CALIPER project, we will see that STEM fields and the digital sector (e.g., digital technologies, CS, IT, ICT, AI, cybersecurity) are among the employment domains where gender bias prevails the most. Hence, addressing these inequalities is of high importance, especially when considered within the frame of the EU's principles and values (Zacharia, Hovardas, Xenofontos, Pavlou, Irakleous, 2020)⁵. In particular, reducing the gender gap in STEM education areas could help reduce skills gap, increase employment and productivity of women and reduce occupational segregation, fostering economic growth via both higher productivity and increased labour market activity. However, despite good employment opportunities and highly productive jobs in this area, there are persistent gender inequalities in these fields.

According to 2018 data from Eurostat, there is currently a low proportion of women studying and graduating in STEM subjects. Only one in five young people in Europe graduates from STEM tertiary

¹ World Economic Forum (2019), Global Gender Gap Report 2020. Available at: <u>Global Gender Gap Report 2020 |</u> World Economic Forum (weforum.org)

² European Commission (2020a), A Union of Equality: Gender Equality Strategy 2020-2025. Available at: <u>EUR-Lex - 52020DC0152 - EN - EUR-Lex (europa.eu)</u>

³ European Institute for Gender Equality (2017), Economics Benefits of Gender Equality in the EU. Available at: Economic Benefits of Gender Equality in the EU | European Institute for Gender Equality (europa.eu)

⁴ European Institute for Gender Equality (2020), Gender Equality Index. Available at: About | Gender Equality Index | European Institute for Gender Equality (europa.eu)

⁵ Zacharia Z., Hovardas T., Xenofontos N., Pavlou I., Irakleous M. (2020). Education and employment of women in science, technology and the digital economy, including AI and its influence on gender equality. European Union. Available at: http://www.europarl.europa.eu/supporting-analyses

D5.2 Report on existing identified opportunities for facilitating the engagement and access to the market of STEM researchers

Page 8 of 45

education, less than two million STEM graduates every year⁶. This number can be increased by promoting STEM pathways in particular among young women (European Commission, 2020b)⁷. Furthermore, closing the gender gap in STEM would contribute to an increase in EU GDP per capita by 2.2 to 3% in 2050⁸.

According to UNESCO's report (2017⁹) a major concern in many countries is not only limited to the number of girls attending school, but the limited educational pathways available for those that do step into the classroom. Girls are significantly under-represented in STEM subjects in many settings. Furthermore, the gender gap in STEM becomes particularly apparent in upper secondary education, as reflected in girls' choices of advanced studies in mathematics and science. Women continue to drop out of STEM disciplines in disproportionate numbers during their higher education studies, while transitioning to the world of work and even during their career cycle.

In particular, UN's Institute for Statistics for 2019¹⁰ revealed that less than 30% of the world's researchers are women, and that there have been a series of indicators impacting women's decisions to pursue a career in STEM fields, including the fact that in this field, women "are paid less for their research and do not progress as far as men in their careers. In particular, the "leaky pipeline" is a metaphor that refers to the erosion of gender balance in universities. This erosion, or "loss of women", is particularly significant in STEM disciplines as women face disproportionally more obstacles in their careers than men.

The graph below shows the participation of female researchers in European countries as a percentage of the total country's researchers. Interpreting the graph we will see that there is a significant country variation on the percentage of female's researchers in Europe.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 873134.

-

⁶Eurostat (2018) Graduates in tertiary education, in science, math., computing, engineering, manufacturing, construction, by sex - per 1000 of population aged 20-29 Available: <u>Tertiary education statistics - Statistics Explained (europa.eu)</u>

⁷ European Commission (2020b) European Skills Agenda for sustainable competitiveness, social fairness and resilience. Available at: Communication 30June v2.pdf

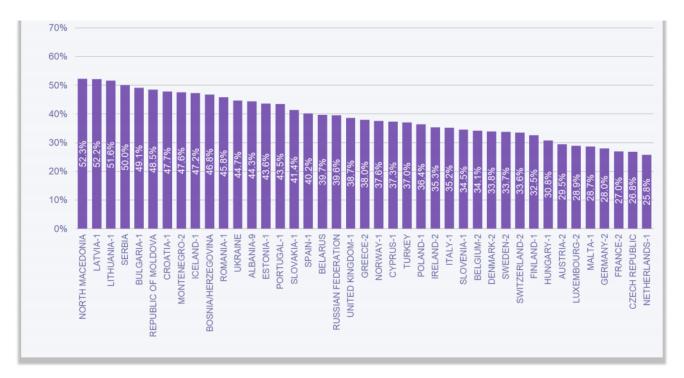
⁸ European Institute for Gender Equality (2017), Economics Benefits of Gender Equality in the EU. Available at: Economic Benefits of Gender Equality in the EU | European Institute for Gender Equality (europa.eu)

⁹ UNESCO (2017) Cacking the code: girls' and women's education in STEM. Available at: New UNESCO report sheds light on gender inequality in STEM education

¹⁰ United Nations (2019) Women in Science - Fact Sheet No. 55. Available at: <u>fs55-women-in-science-2019-en.pdf</u> (unesco.org)

D5.2 Report on existing identified opportunities for facilitating the engagement and access to the market of STEM researchers

Page 9 of 45



Notes:-1 =2016, -2 = 2015, -9 = 2008.

Source: UNESCO Institute for Statistics, June 2019.

Figure 1: Participation of female researcher in Europe

In this framework, the well-known ERA priorities on gender in research, such as facilitating women researchers' careers in science and technology (including leadership positions) as well as integrating a gender dimension in research content, are increasingly seen to be achievable only if the entire research and innovation pipeline is addressed: in fact, for example, the above mentioned new ERA communication stresses out how intersectoral circulation of researchers (from academia to industrial R&D) shall be enhanced and gender gaps shall be tackled across the entire pipelines, with the re-focused objective of increasing the number of female researchers in STEM and favouring the transition of female researchers to entrepreneurship.

In particular, the new ERA Communication published in September 2020, acknowledges that (European Commission, 2020c)¹¹:

- The EU R&D investment is still far from reaching the 3% of GDP target for R&D investment for European Member States (currently, on average, 2.19%) (European Commission, 2019) ¹² emphasizing on the need for strengthening interlinkages between scientific research and the economy
- 2. Science quality and innovation activity show significant discrepancies within the EU
- 3. Europe is still lagging behind in translating R&I results into the economy, calling for a strengthening of technology transfer, public-private cooperation and industrial innovation
- 4. Despite continuous policy attention also progress in reaching gender equality in R&I remains insufficient.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 873134.

-

¹¹ European Commission (2020c) A new ERA for Research and Innovation. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0628&from=EN

¹² European Commission (2019) ERA Progress Report 2018. Available at: <u>ERA progress report 2018 | European Commission</u> (europa.eu)

To this end, on the spotlight have been actions attracting more young people and especially females into STEM curricula because people with high level skills on STEM subject are important for fostering innovation in cutting-edge areas, improving the equal access for women and men to all areas and hierarchical levels in science and research closing the gender pay gap, removing the structural barriers to the careers of women and the integration of the gender dimension in research content and teaching.

For example, in 2020 within the framework of the Digital Education Action Plan and the European Skills Agenda, the Commission announced a range of actions fostering an uptake in Science, Technology, Engineering and Mathematics subjects to ensure that girls and young women participate equally in STEM and ICT studies and develop their digital skills. In particular, the European Skills Agenda (2020b)¹³ has set 12 actions organized around 4 blocks. Its 7th action focuses on increasing STEM graduates and fostering entrepreneurial and transversal skills by encouraging young people, especially women, into Science, Technology, Engineering and Maths. With this action the Commission at strengthening the support for entrepreneurs and the acquisition of transversal skills like cooperation and critical thinking. The Commission identifies three pathways within this objective. Such includes increasing STEM graduates in the EU, which will be achieved by promoting the attractiveness of STEM studies and careers, helping to address the shortage of STEM teachers, fostering science education in research and innovation actions, and promoting an integrated framework and learning continuum inter alia between secondary and higher education systems.

Moreover, the executive plans to boost entrepreneurial skills in the STEM field, by launching a 'European Action on Entrepreneurship Skills, focusing on the development of entrepreneurial mindsets and a more resilient workforce.' Further to this, as a means to promote transversal skills across the STEM domain, the Commission will present 'a strategic framework for the recognition of transversal skills to support validation practitioners in Europe.'

Therefore, addressing the entire STEM pipeline by developing of concrete and various actions is seen as a prerequisite to narrow the gender gap in STEM fields. This deliverable aims at contributing towards this effort by summarizing the key issues at stake at the CALIPER partner's institutions regarding the STEM pipeline as they have been reported during their internal and external assessment conducted in WP1 Analysis of external and internal conditions for GEPs development and acceptance for putting on the spotlight the issues that should be addressed and by providing a set of good practices/actions tackling these issues throughout the entire STEM pipeline. These actions can serve a basis for the CALIPER partners to set up internal change processes towards gender equality and enhancing the content of their Gender Equality Plan.

2.2 Girls and women in STEM – CALIPER's partners state of play

2.2.1 University of Zagreb – Faculty of Electrical Engineering and Computing (RPO)

Female students are under presented within all the educational levels within the University even though that UZG FER is offering information/guidance to prospective students since 2012 via the organization of various events. In particular, the number of female students per level is:

¹³ European Commission (2020b) European Skills Agenda for sustainable competitiveness, social fairness and resilience. Available at: Communication 30June v2.pdf

- Undergraduate level 23%,
- Graduate level 20%,
- Postgraduate level 21%.

At UZG FER there are no gender sensitive/gender specific measures/actions on enhancing transfer to the market of scientific research results. Additionally, no female researchers have been identified in the teams of university spin offs.

There are no workshops on the topic of gender analysis and gender dimension into research and there is no mechanism in place regarding the gender dimension in the curricula and gender sensitive teaching at UNIZG-FER.

Last but not least, the communication materials do not reflect diversity neither in gender nor in terms of ethnicity, disability etc., the desk research showed. There are no awareness raising campaigns aimed at fighting stereotypes at UNIZG – FER. The main problem is that there is no institutional training or official guidelines on fighting stereotypes in communications. Due to the specificity of the Croatian language, there is a legal problem in the scientific titles, as the law prescribes that scientific titles should be used in masculine gender in legal documents

2.2.2 Shota Rustaveli National Science Foundation of Georgia (RFO)

The institution recruits research evaluators based on an official Code of Conduct, but it does not include any gender sensitive criteria and currently they are mostly men. They do not receive any additional training or guidelines on gender stereotypes and unconscious bias. Also, the review process is single and no double blind. Moreover, the grant calls contain gender-neutral language, since the Georgian language is gender neutral itself (there are no exclusionary forms he/she). Also, the grant winners are mostly females. However, the calls for grants do not include gender evaluation related criteria, neither they require integration of gender into research content.

Last but not least, each year the Government approves the official annual budget of SRNSFG, and it is possible to add a new research funding program on gender equality.

2.2.3 Slovak University of Technology in Bratislava (RPO)

MTF STU BA is carrying out activities to transfer the research results to the market and achieve further exploitation. Researchers participate in collaborative co-founded/co-managed research projects with companies or other stakeholders. Throughout the last two years (2017-2018) 35% females and 65% males were involved in such projects, while in 2019 the gender ration gap decreased to 40% females and 60% males. With regards to the gender ratio of patenting researchers, males (80%) are dominating this field

MTF STU BA has a relatively high number of female students who enroll in STEM studies, but only half of them graduate. Most of those who do it continue to postgraduate studies, but only a few of them continue their career to PhD studies. MTF STU BA hasn't initiated yet activities aimed at counselling both prospective and enrolled female students to attract them to enroll and continue STEM studies.

Both male and female researchers of the institution are members of joint research projects with companies. Along the years, the proportion between males and females has become more balanced, apart from patenting outputs, which are achieved mostly by men. Until now, MTF STU BA has not set up measurements about the gender ratio of researchers in the teams of university spin-offs, speakers at STEM

conferences and participants in training initiatives on knowledge transfer and research valorisation.

2.2.4 Université libre de Bruxelles (RPO)

Female students are underrepresented in all of the educational levels (Brussels Polytechnic School, BA, MA, Sciences faculty).

The statistics of the last three years show that the percentage of male participants in research is higher than females. They are the majority of the project Leaders, Principal Investigators, and Patenting. In addition, MScs and PhD thesis are consider the gender dimension only at departments for humanities and social sciences.

The statistics of the recent years show that the percentage of male researchers (more than 80%) who belong to spin-off teams is higher than females (less than 20%). Also, more males participated in the relevant summer school event. In addition, more males are transferring the research results into patents.

ULB is very sensitive to gender issues and takes measures to correct gender biases and inequalities. However, based on the principle of 'freedom to do research' – a core value of the University, ULB is reluctant to target specific research topics by means of specific funds or other means. There is no allocation of funds for specific programs on gender studies, but such funds do not exist on any other subject either.

In the sub-area of gender sensitive/gender specific Information/guidance to prospective students, it was identified that there are two services as key points of information: a) InforSciences is the Department of Science outreach of the Faculty of Sciences of the ULB and b) InforEtudes: Information, counselling, advice and personalised workshops, the Infor-Études service welcomes prospective and enrolled students all year round, guides them and advises them on their choice of studies. In these services the gender dimension is not systematically taken into account yet.

No policies or guidelines are in place regarding the gender dimension into curricula.

2.2.5 National Technical University of Athens – School of Electrical and Computer Engineering (RPO)

With regards to initiatives that aim at attracting girls to STEM studies, ECE-NTUA School does not have a specific strategy on attracting girls to the Electrical and Computer Engineering field. However, there are some outreach activities for secondary education. For instance, several schools from secondary education visit the campus and get a guided tour of the premises and all the labs and available services. Additionally, professors pay visits to various schools to speak about the engineering profession and the potential careers of students applying to the School. Finally, there is a dedicated course in secondary education on "Vocational guidance" aiming at helping students in their selection of higher education and professional alternatives. Within the framework of an initiative of the Liaison - Student Services Office, at an NTUA level, NTUA students (volunteers) were sent at various interested schools, to disseminate and communicate the research and work elaborated in the institution and to further encourage school students to enroll for engineering studies. However, the volunteer character of this activity made it hard to continue and currently is no longer available. In the context of NTUA, several services are provided to students at all Schools (like ECE-NTUA), including a career counselling office and a psychological support service. All these services aim at aiding and counselling enrolled students in any kind of matter, including possibly gender equality issues. However, this is unclear from the descriptions of these services if they adopt a gendersensitive approach. It worth to mention that in article 7 of Law 4485/2017 (Official Government Gazette, 2017) the counselling services that need to exist in each university are enumerated. The law notes that they

can vary depending on the university's needs. There is no provision for a gender-sensitive approach in counselling

The NTUA as a whole, and especially ECE-NTUA have a clear interest to attract young people equally enroll in STEM studies and continue their careers. Through the interviews and focus groups, two critical challenges were identified. The first is that students are not aware of some actions that the University undertakes, therefore particular emphasis should be given on promotional activities. Moreover, the Career – Liaison Office of the NTUA offers to all of the enrolled students' psychological support and counselling regardless of the topic of the issue. It was noted that about 10% of the students have asked for help with gender, gender identity and sexuality issues.

The ECE-NTUA is producing several and substantial research results, which transfers to the market through scientific paper and thesis, but it does not commercially exploit them. The gap is overt between females and males who participated as speakers to STEM conferences. The NTUA Innovation and Entrepreneurship Unit provides support to student-led startups but gender disaggregated data are not available yet.

2.2.6 Institute for Research in Biomedicine (RPO)

In regard to the student services, there are some initiatives that contribute to give visibility to women in the IRB research center and encourage young girls to STEM studies respectively. However, these initiatives are not promoted by the institution as much as they should be. At the same time, there are no initiatives aimed at counselling enrolled students with a gender sensitive approach. In addition, there is lack of awareness regarding the gender dimension into curricula and gender sensitive teaching.

IRB is putting efforts to transfer research results into market but currently it has not set up a system to measure and monitor gender related aspects. At the moment, 3 out of the 6 spin-off created in the IRB Barcelona have a female CEO. However, the number of female researchers in the teams of university spin offs are less than males

2.2.7 Executive Unit for Higher Education, Research, Development and Innovation Funding in Romania (RFO)

There is no fund for specific programs on gender studies in the last 3 years. There are, under the Human resources dimension, call texts which allow projects for social sciences and humanities where projects on gender topics can be submitted. In addition, there are guidelines on the integration of the gender analysis into research; the call texts mention that in developing and implementing the project, project managers must take all measures to promote equal opportunities for men and women and to have gender balanced teams, but there is no specific legislation and the guidelines are not provided in the data.

2.2.8 Yasar University (RPO)

Currently, there are no initiatives aimed at counselling enrolled students with a gender sensitive approach or initiatives offering information/guidance to prospective students.

According to the Vice Rector at YU who is responsible for the Knowledge and Technology Transfer Office, while gender balance and equality is achieved in international projects, projects with NGOs, private sector and municipalities, women researchers still face obstacles when it comes to projects with public bodies. In terms of gender sensitive actions on enhancing transfer to market of scientific research results, operating under Yaşar University Information and Technology Transfer Office, Minerva Incubation Center supports all innovative entrepreneurs, especially students and academicians at Yaşar University since 2015.

Currently, there are a few women-intensive teams in the Minerva Incubation Center, so quotas started to be implemented in the entrepreneurship group. In regard to the presence of educational/science communication projects with a gender component, there are several EU and/or locally funded educational/science projects implemented by the YU either as a partner or a coordinator. The following are the names of the YU projects with a gender component: 1. Gender Politics and EU in the Time of Crisis (GP-EU) (Erasmus+, Jean Monnet Module) 2. Gender Perspective in EU Mobility Program (Erasmus+ KA2)

2.2.9 Salento University (RPO)

UNILE is not following a plan of systematic initiatives that offer gender-sensitive information/guidance to prospective students. However, some initiatives have recently started to take place. In 2019, the Woman Observatory participated with an information desk to an event for high students about "STEM WORLD: Universities and Scientific Association in the window" in the Bari University Camp. In addition, is the same year started a project that is addressed to male and female students, which has been an initiative of a student member from CUG, to prevent discriminative behaviour due to lack of knowledge. The related issues addressed included: specific learning disorders, non-sexist language and reflection about LGBTQIA+ community. Also, equality bodies or other research centres or by student associations have promoted similar initiatives, but there isn't a steady procedure. The figures below depict the current status of gender distribution among students.

UNILE currently doesn't have any collaborative research projects with a gender dimension in research/technology development content. In addition, it doesn't take any measures or actions related to gender when it transfers to market the scientific research results. At present, UNILE has established fourteen (14) spin-offs, in which there are one woman and thirteen men as legal representatives. The University of Salento company's Board of Directors is comprised of eight (8) men only. The figure below depicts the current situation in this area. Despite the fact that almost 50% females participate in training initiatives on knowledge transfer and research valorization and they are patenting researchers, on the contrary, the percentage of women in comparison with men is very low, when we look at the speakers in STEM conferences and the co-funded/co-managed research projects with companies or other stakeholders.

UNILE organizes every year presentation of study courses at high-school students to help them choose the University course they will enroll. It is a meaningful initiative, and it is not focusing on attracting students in STEM. With regards to the academic staff, the institution has not taken any activities to inform them about the need to consider gender sensitiveness during teaching and to develop tailored guidelines. The institution is active in transferring results to the market. It has many collaborations with research projects, it has established spin-offs, participates in conferences, but mostly males lead such activities. The gender aspects are not taken into account and even if female researchers participate to training activities that focus on knowledge transfer to innovation.

3 Sharing of good practices

This section presents a series of existing actions at CALIPER partner counties and across Europe in general with the aim of attracting more female student to STEM curricula and facilitating female researchers' mobility between academic and non-academic research jobs. In this vein, this section is also describing emerged collaborations among the CALIPER RPOs/RFOs towards the above-mentioned aim as they have been discussed during their multi-stakeholder dialogues held under T2.2. These actions can serve as good practices for CALIPER's partners for designing their own activities tackling the main issues mentioned in section 2. This section complements the actions identified under the partners' internal and external assessment (D1.2&D1.3) and the actions identified on repository of resources developed by SV under T2.3 which some of those are mentioned below (the relevant ones).

3.1 Actions attracting female students in STEM curricula

In this section, 15 existing actions and 4 emerged collaborations after the multi-stakeholder dialogues attracting female students in STEM curricula have been identified and described.

In particular, the table below summarizes the identified actions:

Existing actions

- 1. Generation Next
- 2. Woman to Woman mentoring cycles for young women in STEM
- 3. Inco Academy Work In Tech programme
- 4. Automobilová JUNIOR Akadémia / Automotive JUNIOR Academy
- 5. Yaşar University Education and Promotion Days
- 6. Greenlight for girls
- 7. ŽensCast
- 8. SFI Gender Strategy 2016-2020
- Centre for Women in Science and Engineering Research
- 10. Gender sensitive recruitment procedure for doctoral schools
- 11. Collaborative Childcare activities
- 12. CLUBS PROGRAM After school clubs for 3rd-12th grade girls to explore coding in a fun & friendly environment
- 13. Summer Immersion
- 14. STEM passport for Inclusion
- 15. Special IT Post-Graduate in 1 year ULB

Emerged collaborations

- Emerged collaboration 1: Science Festival at Technical Museum Nikola Tesla in Zagreb – UZG FER
- Emerged collaboration 1: DHITECH and INNOVAAL projects UNILE
- 3. Emerged collaboration 1 Tackling low representation of female students, researchers, academics ECE NTUA
- 4. Emerged collaboration 2 Tackling low representation of female students, researchers, academics ECE NTUA

3.1.1 Existing actions

Generation Next

Generation Nex	Generation Next	
Country	Greece	
Website	Generation Next Vodafone (vodafonegenerationnext.gr)	
Description	Generation Next is a STEM skills development training program with free access for all to new technologies and science. The Vodafone Foundation brings a new educational experience and gives the power to the "explorers of today" to build the society of tomorrow they dream of.	
Parties involved	Private companies: Vodafone Foundation	
What need addresses	Attract more women in STEM	
Achievements	No data available	
Suggestions for improvement	It could be done in collaboration with other Greek Universities	

Woman to Woman - mentoring cycles for young women in STEM

Country	Greece
Website	Our partnerships Women On Top
Description	In order to raise awareness about the company's strategy to encourage more women to choose a career in the STEM field and to break down stereotypes about the role of women in the IT sector, we created the "Woman to Woman" program. Through this program, sixteen women aged 20-28 were able to receive mentoring from Microsoft Hellas female executives for 3 months (April-July and September-December 2016). This mentoring cycle provided them with valuable insights, experience and tools that could help them pursue a successful career in the IT field.
Parties involved	 Private companies: Microsoft Hellas NGOs and feminist organizations: Women on top
What need addresses	Overcome gender biases and attract more women in STEM
Achievements	Within 48 hours, over 100 women had applied for the program. Out of those 16 participants were finally selected. Of these, one was recruited by Microsoft Hellas after the end of the program, while three more were able to secure a position in the IT field. For Microsoft, the initiative proved valuable in that it enabled the company to get to know and evaluate in-depth women who could join Microsoft in the future, but also to promote its image as a technology organization that actively invests in and supports women at all stages of their working lives.

Inco Academy Work In Tech programme

Country	Greece
Website	https://www.mexoxo.com/wit

Description	670 scholarships (of 157 hours duration) to women, in order to participate in this fully funded professional certification program, supported by Google.org and Coursera, and powered by INCO. It is a launch pad to careers in IT, a field almost totally occupied by men. The program is implemented under the auspices of the Ministry of Digital Governance, the Ministry of Development and Investments, the General Secretariat for Demography and Family Policy and Gender Equality, the Central Union of Municipalities (KEDE), the Region of Epirus and the Municipality of Thessaloniki
Parties involved	 Academic partners: University of Peloponnese, the American College of Deere, AUTH, NTUA, University of Piraeus, University of Macedonia Private companies: Google.org, Coursera Public bodies: Ministry of Digital Governance, Ministry of Developments and Investments, General Secretariat for Demography and Family Policy and Gender Equality, KEDE, Region of Epirus, the Municipality of Thessaloniki NGOs and feminist organizations: Mexoxo
What need addresses	The program believes in women empowerment through education, while going beyond the stereotypes and boundaries imposed by society. To this end the program aims to welcome learners facing barriers to employment, especially in the IT field, which is mostly occupied by men. The program's specific goals are to 1) Enroll and educate 670 women, 2) 75% will complete the training and receive certificate, 3) 50% will retain of find a job, in the Technology field, within the Greek and EU markets.
Achievements	The particular action was first launched on the 7 th of April 2021. As it is still an ongoing action, no results have been available so far.

Automobilová JUNIOR Akadémia / Automotive JUNIOR Academy

Country	Slovakia
Website	https://ajakademia.sk/
Description	Summer thematic academy, built on students' experiential activities. It is organized by major employers not only in the regions, but also throughout Slovakia, automotive companies, universities and the Association of the Automotive Industry of the Slovak Republic. The AJA project mediates education in an entertaining way in the academic environment of universities as well as directly in production plants. Young people aged 12 to 16 are addressed, with an emphasis on gender balance of the teams of participants. The promotion is focused on increased attention to addressing girls.
Parties involved	 Academic partners: Faculty of Materials Science and Technology in Trnava, Faculty of Mechanical Engineering, Slovak University of Technology in Bratislava Private companies: Volkswagen Groupservices, Groupe PSA Slovakia NGOs and feminist organizations: Automotive Industry Association of the Slovak Republic, Pontis Foundation
What need addresses	The AJA project opens the door to getting to know the technical fields. It combines theory with practice in an entertaining way. The project was developed due to the lack of connection of the technical world with the world of young people and their leadership to this issue, so that technology becomes attractive for them. The aim is to point out the fact that technology is not only a world for men, but also for girls.
Achievements	Proof of success is the registration of children for the summer academy in a larger number than the project capacity allows. The participants are also a large number of children who return repeatedly. The academy is positively perceived not only by the participants, but also by parents and colleagues from the participating institutions. Children gain a new perspective on science and spread this information further, especially among girls.

Yaşar University Education and Promotion Days

Country	Turkey
Website	N/A - This is a sample news about the event: https://haber.yasar.edu.tr/genel/universite-maratonundaki-liselilere-katki-2.html
Description	Each year Yaşar Department of Public Relations and Promotion organizes <i>University Education and Promotion Days</i> to help senior high school students to select right education and career pathway. University Education and Promotion Days are organized to promote all departments especially STEM departments to potential candidates. During these days, students coming from all over the region attend sample lectures conducted by their academicians in the Selçuk Yaşar Campus also have the opportunity to experience the university atmosphere. The general aim of the event, which was carried out in cooperation with the İzmir Provincial Directorate of National Education, is to enable students, who had information about all departments and programs, to determine their future goals correctly. In addition to sample course practices, candidate students were also supported with seminars on career development. Receiving information about Yaşar University's academic programs, educational opportunities, international education collaborations, scholarship options and campus opportunities, students also have the opportunity to see and examine the departments they wanted to choose on-site
Parties involved	 Academic partners: Yaşar University (all departments) Private companies: Yaşar Holding companies Public bodies: İzmir Provincial Directorate of Education, District Directorates of Education, public and private high schools NGOs and feminist organizations: N/A
What need addresses	Attract more female students to STEM departments of the university
Achievements	Each year this event attracts approximately 5000 senior high school students from the region.
Suggestions for improvement	Special promotional materials could be prepared to attract especially female candidates to STEM departments

Greenlight for girls

dictingni for giris		
Country	Belgium, US	
Website	http://www.greenlightforgirls.org/	
Description	An international established non-profit organization, with international headquarters in Brussels, Belgium and offices in the US. The organization aims at encouraging girls of any age and any background to consider STEM (Science, Technology, Engineering and Mathematics) -related careers by introducing them to the world of science in fun and exciting ways. The initiative organizes different events in schools and a broadcast.	
Parties involved	Academic partners and private companies	
What need addresses	Attract more female students to STEM studies	
Achievements	Thousands of girls have participated in their STEM events (see <u>website</u>).	
Suggestions for improvement	It targets only girls (women-only events are sometimes not well understood).	

<u>ŽensCast</u>

Country	Croatia
Website	https://www.ieee.hr/ieeesection/interesne_skupine/wie?@=2syjd#news_39457 https://www.youtube.com/watch?v=BJD1a22BnEl&list=PL5arXmzW_acllaF2YBTG99BCC8zSn_InT_
Description	ŽensCast is a podcast created within the Croatian section of IEEE Women in Engineering as an attempt to adapt to the "new normal" or "online" situation created by the Covid pandemic. By broadcasting the podcast, the organizers hope that they will reach a wider audience than through the standard "live" lectures that were held on the physical premises of UNIZG-FER. One of the main goals of the WiE is to encourage women to find their interests in one of the STEM areas by presenting them with female role models.
Parties involved	 Academic partners: UNIZG-FER, researchers of other STEM faculties Private companies: CROZ, Koncar NGOs and feminist organizations: Croatian section of IEEE Women in Engineering
What need addresses	 explore the possibilities of applying STEM skills in order to solve community problems, sensitize students of technical and natural sciences faculties for social topics, raise awareness of some prejudices that exist in public space, talk openly about stereotypes, with the aim of raising awareness of our own attitudes and thinking, explore the processes of change, both personal and institutional
Achievements	Two episodes of ŽensCast with over 1000 views on youtube in total

SFI Gender Strategy 2016-2020

Country	Ireland
Website	https://www.sfi.ie/research-news/publications/SFI-Gender-Strategy-2016-2020.pdf
Description	The SFI's Gender Strategy for the period 2016-2020 provides guidance on the implementation of policies towards gender equality
Parties involved	Science Foundation Ireland
What need addresses	a)To achieve the revised target of 30% female award holders by 2020. b)To increase the uptake of STEM subjects by female students at second and third level. c)To increase the proportion of women leading major STEM research initiatives in Ireland. d)To increase the proportion of women in the Science Foundation Irelandpeer-review process.e)To ensure that the SFI peer-review process remains unbiased. f)To increase excellence in research and impact by requiringScience Foundation Ireland applicants to demonstrate that they have given full consideration to any potential gender dimension in their proposed research. g)To increase excellence in research and impact, by continuing to fund meritorious researchers regardless of their gender, while widening the pool of potential applicants.
Achievements	No available data

Centre for Women in Science and Engineering Research

Country

Website	https://www.tcd.ie/tcgel/
Description	WiSER (Centre for Women in Science and Engineering Research) at Trinity College Dublin (TCD) (Ireland) was established following a funding call from Science Foundation Ireland in 2005 aimed at addressing the under-representation of women in science, engineering and technology.
Parties involved	Trinity College Dublin
What need addresses	The Centre aims to recruit more women and girls into STEM careers and education; to enable highly skilled women researchers to remain in STEM careers; and to encourage and assist top-level researchers to return to work following a career break. WiSER's activities and practices are underpinned by the core value that scientific excellence is only achievable in an environment that supports, enables and sustains all outstanding researchers, regardless of gender. WiSER collects gender disaggregated statistics in TCD and reports on them annually to highlight gender gaps and to monitor progress. WiSER offers a range of practical professional development training to women academics and researchers working in STEM in TCD such as a mentoring programme, seminars which provide networking opportunities for women, WiSER academic writing group seminars and tips and information on how women can build their academic research profile via online tools and checklists and other supports. There is also information on work life balance and TCD policies and support for career breaks and flexible working. Funding for the Centre comes from the university (TCD). However, many of the WiSER activities have been funded through EU projects such as INTEGER.
Achievements	No available data

Gender sensitive recruitment procedure for doctoral schools

Country	Austria
Website	http://www.geecco-project.eu/fileadmin/t/geecco/geecco/URBEM-DK_application_procedure_documentation_eng_GESAMT.pdf
Description	When recruiting for a joint doctoral school of Vienna Technical University (Technische Universität Wien, TUW), methods were tried out for the first time in 2013 to increase the proportion of women as much as possible without establishing binding quotas, and still setting an internal target of having 50% of applicants as female candidates. From these experiences, a guideline for all doctoral programs was developed and is set into practices for the future doctoral programs at TU Wien. For the whole process of recruitment, all steps, from advertisement to selection procedure and recruitment were considered. The selected procedure extends typical recruiting processes by further aspects: e.g. in the context of an assessment center, topics such as personal skills, motivation, and the ability to work in a team are also considered. All process steps were assessed from a gender perspective, and specific measures and tools were developed for each stage of the recruitment process. Thus, women were to be better reached by the call for applications when the texts of the call for applications were written accordingly. During the selection process, personal skills were evaluated in addition to the classic topics. Participating supervisors, including those initially more resistant, proved very satisfied with the selection process. For many of them it was the first time that they were able to experience for themselves how teamwork skills can be assessed – and what a difference it made to their personal selection.
Parties involved	Vienna Technical University (Technische Universität Wien, TUW)
What need addresses	Attracting more females into STEM
Achievements	No available data

Collaborative Childcare activities

Country	Italy
Website	Good Practice described in CALIPER D1.3 as a collaborative action due to the collaboration with several external stakeholders (cooperatives, other RPOs and Local/regional authorities)
Description	In the frame of the Families Share Project, FBK an italian RPO with about 600 employees has successfully experimented a collaborative chilcare service where employees have devoted time and organized STEM Labs for kids both within Summer/Winter Camps and as after-school activities, allowing to reduce existing fees for families and at the same time enhancing worklace collaboration among colleagues. With a focus on Gender equality, the active participation of men/fathers has been promoted. Strongly supported by the HR department, the initiative has become part of the internal organizational welfare policies, as employees (both research and administrative staff) has been authorized to be active in childcare activities within their working schedule.
Parties involved	Italian RPO FBK
What need addresses	Attract more females into STEM studies
Achievements	No available data

CLUBS PROGRAM - After school clubs for 3rd-12th grade girls to explore coding in a fun & friendly environment

Country	Interested parties can contact Girls who code and organize this club in their countries if they meet the requirements.
Website	Girls Who Code Clubs
Description	Clubs are free after-school programs for 3rd-5th and 6th-12th grade girls to join our sisterhood of supportive peers and role models using computer science to change the world.
Parties involved	NGO: Girls who code
What need addresses	Attract more young girls in STEM
Achievements	More than 450,000 girls served through their in-person programming including our Summer Immersion Program, Clubs, and College Loops

STEM passport for inclusion

Country	Ireland
Website	STEM Passport for Inclusion Maynooth University

Description	The STEM Passport for Inclusion (STEM Passport Inc.) aims to support 1000 girls from working class communities across Ireland to move into STEM courses and careers. STEM Passport Inc will make three key changes to the existing systems to change the future of 1000 girls, we will: Build an accredited STEM skills programme, Preparing 1000 disadvantaged girls from Munster and Leinster for STEM courses Build an accredited Pathway into both Maynooth University and Munster Technological University facilitating entry to STEM degree courses for disadvantaged girls who do not meet University matriculation requirements who have participated in the STEM skills programme Build a Platform where girls are provided with a STEM profile, where their STEM needs are identified and where all STEM activities, courses and career opportunities are housed.
Parties involved	 Maynooth University and Munster Technological University STEM Passport Inc. is externally funded by Science Foundation Ireland Discover grant and funded by Microsoft Ireland, Accenture, the RDI Hub.
What need addresses	Attract more young girls in STEM that are socially-economically disadvantaged (SED)
Achievements	By 2022 there will be 6.2 million new STEM jobs unfilled -only 2% of graduates will have the qualifications for these roles. This potential crisis is even more frightening, from a social and demographic perspective, as it not only adversely impacts the economy, but it threatens to widen the opportunity gap between those people who are affluent in society, and those who are not. With working class girls least likely to enter STEM careers there is a risk that they will be left out of the 21st-century job market- especially if trends are not reversed. This will mean that women from these communities will be more likely to end up in low paid, low potential jobs- remaining entrenched in poverty through a lack of STEM opportunities.
	The STEM Passport.inc will reverse this drift, and support 1000 young working class women to see STEM as a future career. Dr Katriona O'Sullivan is leading the project with collaborators from Dr Kevin Marshall of Microsoft Education Ireland and adjunct ALL Institute, Teen-Turn, Liam Cronin in RDI HUB, Paula Neary in Accenture, Michelle O' Kelly Principal of Mercy Inchicore Secondary school and Helena McMahon of Munster Technological University.

Special IT Post-Graduate in 1 year

Country	Belgium
Current need/problem	A general shortage of graduates in ICT degrees and a lack of diversity within these graduates (only 3% of them are women)
Short description of the emerged collaboration and how it responds to the current need/problem	To develop a new program to boost ICT talents at university level, specifically marketed towards women and with a hard 50%-50% ratio.
Description of the action	Not available yet. It is expected to start in the future.
Parties involved	ULB, VUB and industry

Summer Immersion

Country	USA
Website	Girls Who Code Clubs
Description	2-week virtual summer programs for rising 10-12th-grade girls to learn coding & get exposure to tech jobs. This 2-week virtual program teaches girls—trans and cis—and non-binary students the computer science skills they need to make an impact in their community while preparing for a career in tech. Participants will get exposure to tech jobs, meet women in tech careers, and join a supportive sisterhood of girls in tech. The signature Girls Who Code Summer Immersion Program will be running virtually in 2021. The 2-week opportunity is available to rising sophomore, junior, and senior girls—trans and cis—and non-binary students. No prior computer science experience is required.
Parties involved	NGO: Girls who code
What need addresses	Attract more young girls in STEM with an intersectional approach
Achievements	450,000 girls participated through their in-person programming including our Summer Immersion Program, Clubs, and College Loops

3.1.2 Emerged collaborations

University of Zagreb – Faculty of Electrical Engineering and Computing - UZG FER

Emerged collaboration 1: Science Festival at Technical Museum Nikola Tesla in Zagreb

Country	Croatia
Current need/problem	To attract female students in STEM curricula.
Website	Science Festival at Technical Museum Nikola Tesla: http://www.festivalznanosti.hr/2021/
Short description of the emerged collaboration and how it responds to the current need/problem	Each year in May, the Technical Museum organizes a Science Festival and invites researchers from University of Zagreb to organize science popularization activities. This event is not devoted to female students, however researcher are free to frame their workshops/talks. This gives opportunity to organize activity specially for female students.
Description of the action	The goal of the Science Festival is the demystification of science, to bring science closer to children and political factors and to help them understand how important and ubiquitous science is in today's society and human lives. In one week of festival in May, all the researchers are invited to organize workshops and science popularization activities for visitors of the museum. This event is very well visited and attractive to media.
Parties involved	Technical Museum Nikola Tesla, researchers from faculties of University of Zagreb, children and students, visitors of the museum.
Next steps	To organize special science popularization activity in the field of STEM specially intended for female students. This activity can serve to attract female students in STEM curricula.

• Salento University – UNILE

Emerged collaboration	n 1: DHITECH and INNOVAAL projects
Country	Italy
Website	http://www.dhitech.it/ecosistema/ https://clustercollaboration.eu/content/innovaal
Current need/problem	Measures to attract female students to the stem – Overcoming cultural prejudice
Description	INNOVAAL 's statutory purpose is to support, through scientific and technological excellence, the attractiveness of investments in emerging production sectors linked to issues related to social challenges (change of living conditions, demographic change, population ageing, etc.) and focuses, among other things, on the development of new technologies and the development of new technologies. Among other things, it focuses on the following strategic objectives: infrastructural consolidation of research and technology transfer in relation to the needs and expectations expressed by the productive realities of Puglia, but also nationally, in the sector of intervention, as well as shared European strategies for competitiveness, innovation and sustainable development; creation of a stable link between the world of research, the world of production of goods and services, the world of credit and the territory, so as to encourage the widespread development of innovation processes. The DHITECH is characterised as a strategic hub and support tool for the growth of the high-tech sectors in the Regional Innovation Ecosystem, i.e. the set of public or private players, advanced training and research institutions, large enterprises, public administrations, involved in various ways in the innovation-based development processes of the territory. According to the second issue, the use of the skills profile and seminar activities will allow for a more objective approach to female students' choice of university. The following entities are represented in DHITECH: Universities (37.6%); Public Research Institutions (19.9%); Research Institutes (3.3%); Local Authorities (1.4%); Large Enterprises (22.9%), Small and Medium Enterprises (13.5%), Trade Associations (1.4%).
	Salento, University of Bari Aldo Moro. Politecnico di Bari) and Private Shareholders (business company, but also building cooperatives, Scientific Hospitalization and Care Institutes - IRCCS, clinical analysis laboratories, social cooperatives, non-profit organizations).
Short description of the emerged collaboration and how it responds to the current need/problem	With respect to the existence of frameworks that can facilitate the mobility of women researchers between academic-research jobs to the academic and non-academic sector and vice versa, we do not see problems, but significant realities that promote a constant interchange between universities and business. In the local area there are at least two consortia, partners in the Caliper project, INNOVAAL and DHITECH, whose statutes provide for public-private partnerships and whose aim is precisely to promote exchanges between the university and the world of production. More detailed information on the actual mobility experiences of young female researchers could be obtained, by partners. Also, public-private partnership is one of the usual requirements for funded projects.
Parties involved	 Public Partners Private Shareholders schools, businesses and local administrations

Next steps	 Carrying out activities in schools aimed at promoting a gender culture, presenting representative figures of both genders in different scientific-disciplinary areas, in collaboration with representatives of the productive world and/or civil society, telling their stories;
	 Establishing scholarships for participation in specific degree courses (especially STEM) for the less represented gender; using the skills profile to provide a more objective guidance service, based on the real aptitudes of the students.

National Technical University of Athens – School of Electrical and Computer Engineering - ECE NTUA

Emerged collaboration 1 - Tackling low representation of female students, researchers, academics

Country	Greece
Current need/problem	Low representation of female students, researchers, academics
Short description of the emerged collaboration and how it responds to the current need/problem	 The following activities will assist in creating a better working environment, and in attracting more female students / researchers/ academics to ECE-NTUA Establish Gender Equality targets -KPIs (eg. Target % of female representation in academia, target % of female representation in researchers, target % of female representation in students) Adopt family leave policies that go beyond the Greek legal system (especially for non-permanent researchers), Adopt policies for flexibility at work, Establish an antiharassment policy.
Description of the action	The above best practices are currently being implemented by Schneider Electric S.A and other private businesses. The flexibility at work policies, has also been mentioned by the Finclude representative as well as by various other stakeholders from the private sector. Therefore, cooperation through the Hub will further lead to an amount of knowledge transfer supporting the adjustment and adoption of specific practices within the ECE-NTUA operational framework.
Parties involved	Schneider Electric SA, Finclude and other private companies (as sources of best practices and know-how on the particular policies)
Next steps	Bilateral communication, as well as cooperation through the following meetings of the Hub, in order to discuss the needed corrective adjustments, as well as possible changes and suggestions.

Emerged collaboration 2 – Tackling low representation of female students, researchers, academics

Country	Greece
Current need/problem	Low representation of female students, researchers, academics

Short	Most of the Hub's stakeholders stressed out the importance of role model dissemination.
description of	Therefore, an important opportunity is the cooperation and knowledge transfer with IEEE Women
the emerged	in Engineering Greece Section AG that is organizing the "Coffee talks" events. In these events,
collaboration	female scientists and experts on their field are invited to share their experiences "live" with the
and how it	participants. Also, participants get the opportunity to ask them questions and receive further
responds to the	feedback. The "coffee talk" is recorded and disseminated through various channels. To this end,
current	the private sector, as well as institutions of the research community and scientific associations
need/problem	exhibited strong interest in the participation and dissemination of such events.
Description of the action	Dissemination of role models, "Coffee talks" with women scientists and experts on their field. The existence of role models is important, especially in order to attract more girls to STEM and to ECENTUA in particular. Moreover, the existence of various role models in an Institution, creates a more friendly environment for more female researchers to attend.
Parties involved	IEEE Women in Engineering Greece Section AG, ORFIUM, Greek Women's Engineering Association – EDEM, NTUA Gender Equality Committee, NTUA Career and Student Services Office and other interested parties.
Next steps	Bilateral communication, as well as cooperation through the following meetings of the Hub in order to decide the role model dissemination method and manage all the respective parameters.

3.2 Actions facilitating female researchers' mobility between academic and non-academic jobs

In this section, 18 existing actions and 8 emerged collaborations after the multi-stakeholder dialogues facilitating female researchers' mobility between academic and non-academic have been identified and are being described below.

In particular, the table below summarizes the identified actions:

Existing actions

1. CERT-ANTREP (Policy Accelerator Hub)

- 2. To the Mothers of Science
- 3. 100tifiques
- 4. LEI project
- 5. Women Innovators/EQUALIZE
- 6. Supporting Women Innovators in technology transfer
- 7. Empower Talent! The mentor scheme
- 8. The Gender Balance Committee of the Genomic Regulation Centre
- 9. Training and advice to women in STEMM to apply and write funding applications
- 10. Female professorship program sponsored by the Federal State in Germany
- 11. Minna Canth Academy Professorship
- 12. Georgia's Innovation & Technology Agency (GITA) funding programmes
- 13. Center for Social Sciences (CSS)
- 14. Pfizer D&T Hub ECE Rotational Program Hackathon
- 15. Network for Women Researchers "Periktioni"
- 16. Programma Operativo Nazionale FSE-FESR "Ricerca e Innovazione 2014-2020"
- 17. StepFWD
- 18. College Loops

Emerged collaborations

- 1. Emerged collaboration 1: PhD Day of UNIZG-FER UZG FER
- Emerged collaboration 1: Combat brain drain STU BA
- 3. Emerged collaboration 2: Establishing a connecting platform between academia and business STU BA
- 4. Emerged collaboration 1 Lack of gender dimension in STEM research content -ULB
- 5. Emerged collaboration 1 Low representation of women in leadership positions ECE NTUA
- 6. Emerged collaboration 1 Low representation of women in leadership positions ECE NTUA
- Emerged collaboration 1 Need of tools/guidelines in order to measure the evolution of women and LGTBQ+ Collective members into transfer to market – IRB
- 8. Emerged collaboration 1: Yaşar University Graduate School Protocols YU

3.2.1 Existing actions

CERT-ANTREP (Policy Accelerator Hub)

Country	Romania
Website	https://cert-antrep.ro/policy-accelerator-hub-2021/
Description	Policy Accelerator Hub is a new initiative in Romania through which talent from the university environment is encouraged to actively participate in solving existing challenges in society by developing effective public policies.
	Policy Accelerator Hub was created in 2019, within CERT-ANTREP, a project developed by SNSPA (National School of Political and Administrative Studies), in partnership with UEFISCDI (Executive Agency for Higher Education, Research, Development and Innovation Funding) and CCIR (Chamber of Commerce and Industry of Romania). The hub aimed to create a space for collaboration, using the model of business accelerators, in which students learn to develop public policies, following all the steps - from the idea to the presentation of the policy developed in front of the decision makers.

Parties involved	 Academic partners: National University of Political Studies and Public Administration Public bodies – UEFISCDI (Executive Agency for Higher Education, Research, Development and Innovation Funding), CCIR (Chamber of Commerce and Industry of Romania) NGOs and feminist organizations: ARC Romania
What need addresses	The acceleration program involves a series of events whose role is to familiarize participants with the notion of public policy, to recommend model policy briefs or white papers, to present success stories and to connect them with policy makers. The events are doubled by a mentoring program in which participants choose a public policy theme and work in teams with mentors to develop a policy brief. In 2019 the Policy Accelerator Hub was launched as a physical hub within SNSPA, with offline events and meetings, but due to the current epidemiological situation, the entire program takes place online. In CERT-ANTREP programme doctoral students are helped to develop a career plan which helps them develop entrepreneurial skills.
Achievements	In the pilot programme 3 policy briefs were developed: https://uefiscdi.gov.ro/news-policy-accelerator-hub-rezultatele-primei-editii

To the Mothers of Science

Country	Spain
Website	https://bist.eu/talent/mothers-of-science/
Description	The Mothers of Science programme offers supporting grants and coaching sessions to talented BIST female researchers to recognize their roles as scientists and mothers, and support them along their way to becoming pioneers in their fields.
Parties involved	 Academic partners/Research Institutes: IRB: Institute for Research in Biomedicine IBEC: Institute for Bioengineering of Catalonia CRG: Centre for Genomic Regulation ICFO: The Institute of Photonic Sciences ICIQ: Institute of Chemical Research of Catalonia ICN2: Catalan Institute of Nanoscience and Nanotechnology
	o IFAE: The Institut de Física d'Altes Energies
What need addresses	The initiative aims to address the gap that exists between the number of women in the BIST community who are research associates or senior postdoctoral researchers (41%) and the percentage of women who are group leaders (18%).
Achievements	60% of researchers who took part in the programme's first edition have progressed towards senior positions or research coordination
Suggestions for improvement	Increase the number of women in senior scientific positions and attracting female students to scientific positions. Women make up 44% of the BIST community, yet only occupy 18% of group leader positions (although some progress has been made since 2018 when the percentage was 15%).

100tifiques

Country	Spain
Website	https://100tifiques.cat/ https://www.irbbarcelona.org/en/news/gathering-of-100tifiques-fostering-education-to-change-stereotypes-that-drive-girls-away-from
Description	This initiative aims to boost visibility of the contribution of women to science and to strengthen their role as references for future generations.
Parties involved	Academic partners/Research Institutes: IRB: Institute for Research in Biomedicine IBEC: Institute for Bioengineering of Catalonia FCRI: Catalan Foundation for Research and Innovation CRG: Centre for Genomic Regulation ICFO: The Institute of Photonic Sciences ICIQ: Institute of Chemical Research of Catalonia ICN2: Catalan Institute of Nanoscience and Nanotechnology IFAE: The Institut de Física d'Altes Energies
What need addresses	The aim of the project is to make visible and highlight the relevance and strategic role of women in science and technology, while encouraging joint actions between academia and business scientists. The program aims to foster a more direct and reciprocal relationship between science and society, and especially to increase the awareness of this group and expand its space.
Achievements	Involvement of more than two hundred schools in the initiative and they will have the opportunity to connect and meet more than 200 researchers from the business world, research centers and universities in Catalonia
Suggestions for improvement	 Fighting stereotypes Underline the importance of girls having access to female references when opting for a scientific degree Foster interaction between researchers and technologists and promote the creation of a community

LEI project

Country	Italy
Website	https://www.unive.it/pag/31274/
Description	The LEI - Leadership, Energy, Entrepreneurship project, born at the Ca 'Foscari University of Venice, aiming at accompaning young women towards the future. It sets up a series of activities and initiatives to promote the strengthening of the social and economic role of women in the world of work. Its objectives are: the promotion and development of leadership skills, the support for women's employability, the dissemination of business culture for women, the support and development of self-employment and self-employment, etc.
Parties involved	ca' Foscari University Venice
What need addresses	 Promotion and development of leadership skills Support for women's employability Dissemination of corporate culture to women Support and development of self-entrepreneurship and self-employment Projects to reduce the pay gap between graduates and graduates Increased access to women in STEM (Science, Technology, Engineering and Mathematics) disciplines

Achievements	LEI - Center for Women's Leadership - YouTube
Acinevenients	For the 2020/2021 a.y., the Career Service, through the LEI project, was the winner of a regional call
	from the European Social Fund (DGR 526/2020: The Veneto delle Donne), presenting the Project
	Women and the future between formAzione and narrAzione.
	Iniziative: LEI - Leadership Energia Imprenditorialità (unive.it)

Women Innovators/EQUALIZE

Country	USA
Website	https://equalize.wustl.edu/
Description	Since 2014, Women Innovators/EQUALIZE programmes run by the Office of Technology Management and Tech Transfer of the Washington University to educate women faculty on how to navigate the commercialization process, while also introducing various resources available within the St. Louis region.
Parties involved	Washington University
What need addresses	Support services to female scientists in commercializing their research results
Achievements	No available data

Supporting Women Innovators in technology transfer

Country	United Kingdom
Website	https://wonkhe.com/blogs/scaling-up-gender-diversity-in-the-university-spinout-ecosystem/
Description	Based on the Women in Spin Out Study, the Oxford Brooks University jointly with the University Alliance and supported by Innovate UK is pointing at the need of taking joint action among different innovation ecosystems stakeholders, but also, more specifically suggesting RPOs to foreseee support for students and Early Career Researchers (ECRs) to understand and exploit available spinout opportunities and career perspectives. Oxford Brooks University, Innovate UK, University Alliance
Parties involved	Oxford Brooks offiversity, inflovate oil, offiversity randifice
What need addresses	Support services to female scientists in commercializing their research results
Achievements	No available data

Empower Talent! The mentor scheme

Country	Denmark
Website	https://medarbejdere.au.dk/en/administration/hr/organisational-learning-and-development/empower-talent-mentor-scheme/in-short/

Description	The Aarhus University developed the mentor scheme within a collaboration between the STAGES-team and the HR department. Empower Talent! is a mentor scheme for academic staff at Aarhus University. It matches staff at assistant professor (assistant professor/researcher/postdoc) level with more experienced colleagues at associate professor level or above. The purpose of the scheme is to contribute to supporting and developing the professional and personal career potential of the academic staff.
Parties involved	Aarhus University
What need addresses	The purpose of the scheme is to contribute to supporting and developing the professional and personal career potential of the academic staff.
Achievements	No available data

The Gender Balance Committee of the Genomic Regulation Centre

Country	Spain
Website	https://eige.europa.eu/sites/default/files/crg_hr_strategy_action_plan_2013-1015_short.pdf
Description	The Gender Balance Committee of the Genomic Regulation Centre (CRG), a Spanish biomedical research institute of excellence, was established in 2013. Its mission is to promote equal opportunities for men and women at the CRG, alongside women's advancement in academia. The Committee aims at eliminating gender bias from the CRG recruitment process, attracting female scientists, and improving the work-family life balance for its employees. It is composed of members representing all areas of the institute and has regular meetings every two months. The practice is included in the previous CRG policy regarding gender equality and HR management excellence. The centre, for instance, received the "HR Excellence in Research" honour from the European Commission in 2013 – a recognition which entails the development of a Gender Equality Plan. Among other activities, in 2014, the Committee launched a mentoring programme geared towards young postdoctoral researchers, and, in 2015, a support grant providing extra financial support to CRG women scientists with family responsibilities. Altogether, the Gender Balance Committee contributes to strengthening gender institutional change at a leading research performing organisation.
Parties involved	Genomic Regulation Centre (CRG)
What need addresses	Facilitate female researcher's mobility
Achievements	No available data

Training and advice to women in STEMM to apply and write funding applications

Country	Italy
Website	https://www.plotina.eu/encouragement-women-to-apply-for-funding/#1571055341720-dfa9392f-7645
Description	The University of Modena and Reggio Emilia elaborated Guidelines and Protocols on Gender Sensitive Language use and set up trainings to staff members to build internal knowledge and awareness on inclusive language. The actions, started within the EQUAL-IST H2020 project, were integrated in the Triannual Positive Action Plan of the University, to maximixe sustainability.

Parties involved	 Kemijski Inštitut National Institute of Chemistry Research institute
What need addresses	To encourage, empower and support women to apply for funding and lead projects.
Achievements	Female staff of the institution attended workshops about finding relevant sources of funding and writing funding applications.
Suggestions for improvement	 It would be useful to have a career development plan for early career researchers focusing on grant applications. Providing information is not enough to persuade/encourage female researchers to apply for funding. Training should be combined with specific actions that allow young researchers to focus on research (research time allocation).

Female professorship program sponsored by the Federal State in Germany

Country	Germany
Website	https://www.bmbf.de/de/das-professorinnenprogramm-236.html
Description	In 2008, the German Federal Ministry for Education and Research, in cooperation with Länder, launched the Female professorship program. Higher education and research organisations can apply for a full professor position reserved to a woman, to be funded over five years from federal funds (while universities are usually funded at Länder level). This opportunity is granted based on the adoption of a fully-fledged gender equality strategy by the applying institutions, which commit to fund these additional positions permanently beyond the five first years. Regularly assessed, this program granted with 200 million Euros for the 2018-2022 phase has received over 500 million since its launch, and by the end of 2019, 570 female full professors had been appointed. Utterly competitive and successful, this program has also brought tens of universities and higher education institutions to adapt comprehensive gender equality strategies. Although hardly replicable in a nonfederal system and/or to a similar scale, this successful program highlights the impact of strong, sustainable and well-monitored incentives for gendering research organisations.
Parties involved	 German Federal Ministry for Education and Research Länder
What need addresses	Female researchers mobility between academia and business
Achievements	No available data

Minna Canth Academy Professorship

Country	Finland
Website	https://www.bmbf.de/de/das-professorinnenprogramm-236.html

Description	The Academy of Finland – the nation-wide RFO - funds professorships. Professors selected are in an employment relationship with the organisations by which the research posts are hosted. Research posts as Academy Professor, a specific title linked to the Academy, are intended for fixed-term, full-time research work where the professors carry out their own research plan, supervise their own research team and provide guidance to junior researchers. Their duties also include the supervision of thesis and M.A dissertation in their own field and teaching related to their research. One of these professorships – the Minna Canth Academy Professorship – is dedicated to women's studies and gender research and is open for applications every five years
Parties involved	Academy of Finland
What need addresses	Female researchers mobility between academia and business
Achievements	No available data

Georgia's Innovation & Technology Agency (GITA) funding programmes

Country	Georgia
Website	N/A
Description	Georgia's Innovation & Technology Agency (GITA) funding programmes with support of Bank of Georgia provide startup grants for beginners, private, small and innovative enterprises. Funded projects are innovations and technologies based and also have an ability to develop products that have a global potential.
Parties involved	Georgia's Innovation & Technology Agency (GITA)Bank of Georgia
What need addresses	 GITA funding programmes provide the opportunity for female entrepreneurs to find financial support and increase their participation and involvement in business sector. The funded project -
Achievements	 https://mynanny.ge/en https://gita.gov.ge One of the examples of funded grant project is "my nanny platform" co-created by Ilia State University former vice-rector - Nino Dvalidze. My nanny platform gives the opportunity to improve work-life balance situation.

Center for Social Sciences (CSS)

Country	Georgia
Website	http://css.ge
Description	The Center for Social Sciences (CSS) was founded in November 2003 as a spin-off of Social Sciences Support Program (SSSP, 2000-2003) at Open Society Georgia Foundation (OSGF). The mission of the center is to prepare a highly qualified next generation of social science scholars and practitioners, and thus facilitate the formation of civil society in Georgia.
Parties involved	 Academic partners Private companies Public bodies NGOs and feminist organizations

What need addresses	Funding of the creation of the Center for Social Sciences is a good example of facilitating female researchers' mobility between academic-research jobs to non-academic sector. The mission of the center is to support the development of a creative, evidence-based research in Social Sciences in Georgia that would be useful for society.
Achievements	Since 2012 CSS has reconsidered its mission and together with the educational one, set a new objective, which is evidence-based scientific and applied research of foreign policy and security issues, EU integration, education, gender equality and women empowerment, etc.

Pfizer D&T Hub - ECE Rotational Program - Hackathon

Prizer D&T Hub – ECE Rotational Program – Hackathon	
Country	Greece
Website	https://www.codehub.gr/product/pfizer-dt-hub-auth-ece-hackathon-for-pfizer-rotational-graduate-program/
Description	The action addresses exclusively women graduates of the Electrical and Computer Engineering Department of the Aristotle University of Thessaloniki (AUTH). The main goal in to attract candidates for the Rotational Graduate Program of Pfizer and enhance the employment of women in the field of technology. The program includes lectures, mentoring and workshops in real case studies using online classrooms and online collaboration platforms. All teams that will present their projects will participate in an interview process with the prospect of recruitment under the Pfizer Rotational Graduate Program. The Hackathon Challenge targets to inspire and lead towards innovative applications on the field of "Hybrid Healthcare".
Parties involved	 Academic partners: AUTH-ECE Private companies: Pfizer Digital & Technology Hub Public bodies NGOs and feminist organizations
What need addresses	The action further enhances female employment in the field of STEM, where women are underrepresented. The program lasts 2 years, while selected graduates will work in 4 different positions in the Pfizer Digital & Technology Hub (6 months in each position), aiming in the stable employment of one of them at the end of the program.
Achievements	The action has started on the 26 th of April 2021, while interested applicants are able to submit their CVs until the 4 th of May 2021. As it is still an ongoing action, no results have been available so far.
Suggestions for improvement	A possible shortcoming is that the program is addressed exclusively to graduates of a specific department of AUTH (Electrical and Computer Engineering). Therefore, female applicants of other Universities, even if they have graduated from similar Schools or Departments, are not eligible.

Network for Women Researchers "Periktioni"

Country	Greece
Website	http://ereunitries.ekt.gr/opencms/opencms/ereunitries/Project/index.html
Description	The main goal of the project was to track down in a quantitative and qualitative manner the employment situation of the Greek female researchers, in the various Public sector bodies, while also recording their participation in the Decision Making Centers.

Parties involved	 Academic partners: National and Kapodistrian University of Athens, Athens University of Economics and Business, Panteion University, University of Piraeus, University of Ioannina, NTUA – National Technical university of Athens, University of Patras, AUTH – Aristotle University of Thessaloniki, Democritus University of Thrace, University of Aegean, University of Crete, Technical University of Crete Private companies Public bodies: National Documentation Center NGOs and feminist organizations
What need addresses	 The project, which was concluded in 2007 led to the Recording of the female researchers, the extraction of (statistical and non statistical) results and the identification of specific parameters that determine their professional development, as well as difficulties that they face. Capturing of the female researchers' participation in the Public Sector's Decision Making Centers. Identification of the postgraduate theses prepared by women on the topics of gender, family, work, politics and equality. Composition of Greek bibliography and international articles on the previously mentioned topics.
Achievements	Apart from the quantitative data that are available through the particular project, the project also recommends future policies in order to eliminate inequalities. (http://ereunitries.ekt.gr/opencms/opencms/ereunitries/apotelesmata fylladio.pdf)

Programma Operativo Nazionale FSE-FESR "Ricerca e Innovazione 2014-2020"

Country	Italy
Website	http://www.ponricerca.gov.it/notizie/2021/dottorati-innovativi-online-le-graduatorie-delle-borse-didottorato-xxxvi-ciclo/
Description	The National Operational Programme ESF-ERDF "Research and Innovation 2014-2020" of the Ministry of Education, University and Research, with reference to Axis I "Human Capital", Action I.1 "Innovative Doctorates with industrial characterisation", intends to support the promotion and strengthening of higher education and post-graduate specialisation at doctoral level in line with the needs of the national production system and with the National Strategy of Intelligent Specialisation 2014-2020 approved by the European Commission, including also the specific needs related to the strategy of transformation of the manufacturing sector of Industry 4.0 and the training and skills issues in the "big data" sector, for those subject areas with a strong scientific-technological vocation, i.e. of greater relevance with respect to the needs, in terms of highly qualified figures, of the labour market in regions lagging behind in development (Basilicata, Calabria, Campania, Puglia and Sicily) and regions in transition (Abruzzo, Molise, Sardinia), contributing to the achievement of smart, sustainable and inclusive growth. In this programme, research projects are carried out in collaboration with a company and the doctoral student must spend at least 6 months in the company. The programme has been running for five years and is funded through competitive tenders.
Parties involved	Private companies
What need addresses	The programme aims to support the promotion and strengthening of higher education and postgraduate specialisation at doctoral level in line with the needs of the national productive system. This also offers an opportunity for industrial placement, but to date we do not know if any PhD students have been employed by the company
Achievements	At the University we have had several positions, but we have no historical data available at the moment.

StepFWD

Country	Romania
Website	https://stepfwd.today/
Description	StepFWD is an 8-week pre-accelerator program, aimed at fueling growth for tech companies with diverse teams. STEP FWD purpose is to educate first-time and early-stage entrepreneurs who want to grow a prototype or idea into a profitable business. The program is powered by TechHub Bucharest, in partnership with Google for Startups.
Parties involved	TechhubGoogle Romania
What need addresses	Very few females are enrolled in start-ups or are part of the teams that start new businesses. To encourage females to be part of these teams/ to start new businesses
Achievements	No available data

College Loops

Country	USA
Website	Girls Who Code Clubs
Description	College programs to help our alumni succeed and build community with other women in tech. Girls Who Code College Loops are university-level networks for college-aged women interested in tech to support one another and help each other persist and succeed in the field. College Loops build belonging and community through weekly meetings during the school year.
Parties involved	Girls who code
What need addresses	Facilitate female STEM alumni to their transition into the market
Achievements	450,000 GIRLS SERVED Through their in-person programming including our Summer Immersion Program, Clubs, and College Loops

3.2.1 Emerged collaborations

University of Zagreb – Faculty of Electrical Engineering and Computing - UZG FER

Emerged collaboration 1: PhD Day of UNIZG-FER

Country	Croatia
Current need/problem	Low connection between STEM researchers and market

Website	https://www.fer.unizg.hr/studiji/doktorski_studij/dan_doktorata
Short description of the emerged collaboration and how it responds to the current need/problem	There is a special event PhD Day where the graduated doctoral students present their PhD thesis. Awards are awarded to best PhD thesis, and one of the categories is for the best PhD thesis with application in industry. This event is not devoted to female researchers, however it brings attention also to young female researchers and helps disseminate their research outputs.
Description of the action	PhD Day was inspired by the top universities from around the world, as an open gathering where doctoral students publicly present their research results, and everyone interested can get an insight into the diversity and quality of scientific work at UNIZG-FER. Through "PhD Day", we want not only to increase the visibility of research activities and results at UNIZG-FER, but also to enrich the existing Research seminar at the doctoral study at UNIZG-FER, through presentation of personal results and exchange of experiences among the doctoral students
Parties involved	UNIG-FER, various companies from related industries, interested public, doctoral students.
Next steps	To organize special round table / webinar with female researchers that participated in PhD day and representatives of companies that were involved in PhD thesis with application in industry. This activity can serve both to facilitate female researchers' mobility between academic-research jobs and business, and to attract female students in STEM curricula.

• Slovak University of Technology in Bratislava - STU BA

Emerged collaboration 1: Combat brain drain

Country	Slovakia
Current need/problem	Combat brain drain
Short description of the emerged collaboration and how it responds to the current need/problem	Creation of stable scientific sites with appropriate evaluation and appreciation of research results
Examples	https://www.vedatechnika.sk/SK/VedaATechnikaVSR/novinky/Stranky/Druha-vyzva-mobilitneho-programu-SASPRO-2.aspx
Parties involved	The project is intended for Slovak scientists who are currently working abroad and want to return to Slovakia or researchers from abroad. SASPRO 2 is a joint project of the Slovak Academy of Sciences, the Slovak University of Technology and Comenius University. Its aim is to strengthen the scientific organizations of these institutions with researchers from top foreign institutes, to improve cooperation between scientific and application sectors, to support multidisciplinary approaches to project solution.
Next steps	Creating these positions at the University

Emerged collaboration 2: Establishing a connecting platform between academia and business

Country	Slovakia
Current need/problem	Connect academia and business
Short description of the emerged collaboration and how it responds to the current need/problem	Conference organized as one of the forms of bringing science into practice through technology transfer. One of the possible ways is to set up a platform in this form so that there is a clash between the presentation of supply on the one hand and demand on the other. Open dialogues and allowing the information sharing is one of the effective ways to increase the value of science in terms of its applicability.
Description of the action	Conference organized as one of the forms of bringing science into practice through technology transfer. One of the possible ways is to set up a platform in this form so that there is a clash between the presentation of supply on the one hand and demand on the other. Open dialogues and allowing the information sharing is one of the effective ways to increase the value of science in terms of its applicability.
Examples	https://www.minedu.sk/zaujimate-sa-o-fungovanie-prepojenia-vedy-s-praxou-zalistuje-v-zborniku/ https://cointt.sk/wp-content/uploads/2021/04/ZBORNIK_COINTT_2020.pdf
Parties involved	NGO Slovak Centre of Scientific and Technical Information, Academia institutions, Private companies, NGOs, Public
Next steps	application and maintenance of this platform within the University

• Universite Libre de Bruxelles - ULB

Emerged collaboration 1 - Lack of gender dimension in STEM research content

Country	Belgium
Current need/problem	Lack of gender dimension in STEM research content
Short description of the emerged collaboration and how it responds to the current need/problem	To develop a guide about how to include the gender dimension in STEM research, including a checklist and a repertory of case studies.
Description of the action	Guide on the integration of the gender dimension in STEM research
Parties involved	Universities
Next steps	NA

National Technical University of Athens – School of Electrical and Computer Engineering - ECE NTIIA

Emerged collaboration 1 - Low representation of women in leadership positions

Country	Greece
Website	N/A
Current need/problem	Low representation of women in leadership positions.
Short description of the emerged collaboration and how it responds to the current need/problem	Within the previous stakeholder dialogues Schneider Electric briefly presented the "Schneider Women Leader's Program which is implemented in cooperation with INSEAD, the NTUA Career and Student Services Office underlined the importance of the implementation and dissemination of such events, EDEM mentioned various activities that have already been implemented in order to fight stereotypes, while ELEGYP stressed the importance of supporting such actions. Therefore, a well established core exists for the implementation of female empowerment seminars / programs / workshops, which will certainly be further enhanced.
Description of the action	Organization of female leadership seminars / programs / workshops.
Parties involved	 Schneider Electric (as invited speakers), NTUA Career and Student Services Office, the Greek Association of University Women - ELEGYP, the Greek Women's Engineering Association - EDEM
Next steps	Bilateral communication, as well as cooperation through the following meetings of the Hub, in order to set the basis and schedule the needed timeframe for the implementation of such an activity.

Emerged collaboration 2 - Low representation of women in leadership positions

Country	Greece
Website	N/A
Current need/problem	Low representation of women in leadership positions.
Short description of the emerged collaboration and how it responds to the current need/problem	The University of West Macedonia has organized various short-term laboratories on gender equality issues. On the other hand, the Gender Equality Committee of NTUA has expressed its will to establish a Gender Equality Laboratory that will be involved exclusively with gender equality research. Therefore, best practices can be derived by the University of West Macedonia, as well as form other academic Institutions, in order to launch the particular Laboratory

Description of the action	Organization and establishment of gender equality laboratories. The integration of gender issues into research will further attract more female (and not only) researchers from abroad and/or from the private sector, while it will also create a more "friendly" environment for more female students to enroll to the School.
Parties involved	NTUA Gender Equality Committee, University of West Macedonia.
Next steps	Bilateral communication, as well as cooperation through the following meetings of the Hub in order to set the groundwork for such an establishment

Institute for Research in Biomedicine - IRB

Emerged collaboration 1 - Need of tools/guidelines in order to measure the evolution of women and LGTBQ+ Collective members into transfer to market.

Country	Spain
Current need/problem	Need of tools/guidelines in order to measure the evolution of women and LGTBQ+ Collective members into transfer to market.
Short description of the emerged collaboration and how it responds to the current need/problem	Have a better overview of the results of transfer to market in the scientific sector. The results will be focused on an intersectional point of view. Having a better overview will help to create solutions/actions to better understand the actions can also be developed in order to attract students promoting successful areas and positive transitions to market.
Description of the action	Understand through "good practices" meetings existing methods and guidelines on how to better control the evolution of female scientific and LGTBQ+ collective members into transfer to market.
Parties involved	Innovatia 8.3 (https://innovatia83.es/) through contacts of Universidad de Compostela (https://www.usc.gal/gl) which is a member of the IRB R+I Hub.
Next steps	NA

• YAŞAR UNIVERSITY - YU

Emerged collaboration 1: Yaşar University Graduate School Protocols

Country	Turkey
Current need/problem	Limited cooperation between university and industry

Short description of the emerged collaboration and how it responds to the current need/problem	The Graduate School of Yaşar University signs cooperation protocols with companies to attract researchers from the industry to come back to scientific careers and vice versa, and to increase collaborations between university and industry. Currently, there are 24 different protocols signed. While some of these protocols established between YU and companies some of them are with professional organizations such as Chamber of Electrical Engineers, Chamber of Mechanical Engineers, Chamber of Medical Professionals, and Chamber of Architects. Furthermore, there are also protocols with District Municipalities, public organizations (e.g. Social Security Institution). These cooperation protocols aim to attract researchers from the industry and from other non-academic sectors to come back to scientific careers by providing incentives such as reduced graduate fees, evening or weekend programmes, etc. These special offers attract female candidates from the industry because it can fit into their busy work and family life. https://lee.yasar.edu.tr/en/protocols/
Description of the action	NA
Parties involved	Yaşar University and various companies from the industry
Next steps	YU graduate school will continue to cooperate with various non-academic sector organizations such as private companies, public bodies, and municipalities to attract researchers and special attention will be given to female graduate candidates from the industry.

4 Towards the joint CALIPER FemTech events

4.1 Guidelines for the organization of the joint CALIPER FemTech event

This section aims at providing guidelines to the CALIPER partners regarding the organization of one joint CALIPER FemTech event as it is described in *T5.2 Engaging with the innovation ecosystems: CALIPER FemTech Events* ensuring their smooth implementation and alignment among the project partners.

The innovative element of the project in relation to the development and sustainability of the GEPs is the creation of CALIPER Research and Innovation Hubs in T2.2. The collaboration with ecosystems of multistakeholders can positively impact the involved RPO/RFOs to set up internal change measures to involve more women researchers in STEM as well as for taking the gender dimension of research into consideration.

Therefore, one joint CALIPER FemTech shall be organized per RPO/RFO in collaboration with their R&I Hubs having a twofold aim: to highlight and value women's led innovations presenting startups and spin offs and examples of gender sensitive product development/design and to work as a means of raising awareness and attracting more girls to STEM research.

Each partner should invest in a thorough process when selecting and inviting the participants of the event. This event should include a variety of stakeholders at national level. The below bullet points mention the participants that could be involved in this event:

- RPO/RFOs R&I Hubs,
- Female led start-ups and spin-offs
- Organizations/Institutions adopting a gender sensitive approach on product development/design
- (University's) research centers
- NGOs
- Student organizations
- Female entrepreneurs
- Staff in charge of curricula management
- Researchers and innovators
- People working in the career offices
- Students

The content of this event shall be developed based on the abovementioned aim and objectives. The **main components of the event** could be indicatively (each RPO/RFO can choose among the topics listed below or supplement their FemTech event with additional topics/activities if necessary according to their needs):

- Success stories of female entrepreneurs and female led start-ups and spin-offs
- Successful products which adopted a gender sensitive design
- Roundtable/Panel debate showcasing business opportunities supporting female entrepreneurs
- Good practices in the respective CALIPER RPO/RFO promoting female entrepreneurship
- Presentation of the CALIPER RPO/RFOs Gender Equality Plan especially the relevant actions promoting female entrepreneurship
- Companies present their available positions for students or early career professionals or researchers

This event can be a standalone CALIPER event however it can be combined with another RPO/RFOs event such as student fair in order to maximize the events' outreach. The **format of the event** is highly recommended to be organized in person as it will facilitate the interaction among the different stakeholders however this will depend on the current COVID-19 situation, as it is expected to take place in end of 2021 or 2022. Depending on the format of the session its **duration** can be half a day or a one-day event.

The **dissemination** of the event shall be executed by CALIPER's social media accounts and the respective social media accounts of the RFO/RPO.

Once the event is finalized, a report should be completed including relevant information on the organization process of this event and its main results along with its recording. The section below summarizes the key aspects based on which the partners should prepare their report.

4.2 Template for reporting the joint CALIPER FemTech event

Introduction

A part that will state the time and place of the event's implementation, its objectives and a brief summary of its structure, proceedings and overall success in achieving its goals. One photo can be included (screenshot or group photo).

The events agenda

Presentation of the event's agenda with a brief description of its main parts.

The event's participants

Description of the participant groups, participant profile, invitation criteria and a full list of participants along with relevant information (name, contact details respecting GDPR criteria, stakeholder group, etc.).

Description of event's sessions, discussions, outcomes

A detailed description of the overall structure of the joint CALIPER Femtech event including:

- A description of the process that was followed / of the structure of the event
 - the people in charge of each session, exercise, presentation, etc.
 - the methods used and how they were used, if any
 - the main remarks of each session
 - the main outcomes of each session

Conclusions

Conclusions and possible next steps (e.g. utilization of the good practices within your organisation etc.)

D5.2 Report on existing identified opportunities for facilitating the engagement and access to the market of STEM researchers

Page 44 of 45

Annexes

- Photos of the event
- Any other background material / document that should be included
- Recording of the session

Annex I: References

European Commission (2019) ERA Progress Report 2018. Available at: <u>ERA progress report 2018</u> | European Commission (europa.eu)

European Commission (2020a), A Union of Equality: Gender Equality Strategy 2020-2025. Available at: <u>EUR-Lex - 52020DC0152 - EN - EUR-Lex (europa.eu)</u>

European Commission (2020c) A new ERA for Research and Innovation. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0628&from=EN

European Commission (2020b) European Skills Agenda for sustainable competitiveness, social fairness and resilience. Available at: <u>Communication 30June v2.pdf</u>

European Institute for Gender Equality (2017), Economics Benefits of Gender Equality in the EU.

Available at: Economic Benefits of Gender Equality in the EU | European Institute for Gender Equality (europa.eu)

European Institute for Gender Equality (2017), Economics Benefits of Gender Equality in the EU.

Available at: Economic Benefits of Gender Equality in the EU | European Institute for Gender Equality (europa.eu)

European Institute for Gender Equality (2020), Gender Equality Index. Available at: About | Gender Equality Index | European Institute for Gender Equality (europa.eu)

Eurostat (2018) Graduates in tertiary education, in science, math., computing, engineering, manufacturing, construction, by sex - per 1000 of population aged 20-29 Available: <u>Tertiary education</u> <u>statistics - Statistics Explained (europa.eu)</u>

UNESCO (2017) Cacking the code: girls' and women's education in STEM. Available at: <u>New UNESCO</u> report sheds light on gender inequality in STEM education

United Nations (2019) Women in Science - Fact Sheet No. 55. Available at: <u>fs55-women-in-science-2019-en.pdf</u> (unesco.org)

World Economic Forum (2019), Global Gender Gap Report 2020. Available at: <u>Global Gender Gap</u>

Report 2020 | World Economic Forum (weforum.org)

Zacharia Z., Hovardas T., Xenofontos N., Pavlou I., Irakleous M. (2020). Education and employment of women in science, technology and the digital economy, including AI and its influence on gender equality. European Union. Available at: http://www.europarl.europa.eu/supporting-analyses