

# **COST Action**

## **Progress Report at 24 months**

### **(19/10/2020 to 19/10/2022)**

## **CA19122: European Network For Gender Balance in Informatics**

The Action was approved by the Committee of Senior Officials (CSO) on 24-3-2020 and has the MoU reference COST 025/20.

This report shows the data entered into e-COST to enable the Action Chair to verify the completeness and accuracy of the report with the MC prior to submitting the report via e-COST in fulfilment of the rules for COST Action Management, Monitoring and Final Assessment.

## Action leadership and participants

### Leadership positions

Position	Name	Contact details	Country*
Chair	Prof Letizia Jaccheri	letizia.jaccheri@ntnu.no +4791897028	Norway

Position	Name	Contact details	Country*
Vice Chair	Prof Barbora Buhnova	buhnova@fi.muni.cz +420549494494	Czech Republic

### Working groups

#	WG Title	# of participants	WG Leader	Country*
1	From School to University	26	Dr Zeynep ŞAHİN TIMAR zeynep.sahin@ktu.edu.tr	Turkey
2	From Bachelor/Master Studies to Ph.D.	25	Dr Miguel Goulão mgoul@fct.unl.pt	Portugal
3	From Ph.D. to Professor	29	Dr Steve Kremer steve.kremer@inria.fr	France
4	Cooperation with Industry and Society	35	Dr Karima Boudaoud Karima.BOUDAUD@univ-cotedazur.fr	France
5	Strategy & Dissemination	28	Dr Valentina Lenarduzzi Valentina.lenarduzzi@oulu.fi	Finland

### Other key leadership positions

Position	Name	Contact details	Country*
Science Communication Coordinator	Dr Maria Roussou	mroussou@di.uoa.gr	Greece
GH Scientific Representative	Ms Nuria Anguera	nuria.anguera@informatics-europe.org	Switzerland

\* The country displayed is:

- for the Action Chair, the country that nominated that person to the Management Committee before they were elected Action Chair;
- for the Vice Chair the country that nominated the person as a Management Committee Member,
- for all other leadership positions, if the person is a MC Member the country displayed is the country of nomination, otherwise it is the country of the person's primary work affiliation.

## Participants

COST members having accepted the MoU

<b>AL</b>	16/05/2020	<b>AM</b>	09/01/2023	<b>AT</b>	28/04/2020	<b>BE</b>	15/06/2020	<b>BA</b>	12/05/2020
<b>BG</b>	20/07/2020	<b>HR</b>	30/04/2020	<b>CY</b>	24/04/2020	<b>CZ</b>	04/08/2020	<b>DK</b>	28/05/2020
<b>EE</b>	29/04/2020	<b>FI</b>	10/08/2020	<b>FR</b>	22/04/2020	<b>GE</b>	12/04/2022	<b>DE</b>	08/05/2020
<b>EL</b>	24/04/2020	<b>HU</b>	04/08/2020	<b>IS</b>	04/06/2020	<b>IE</b>	07/05/2020	<b>IL</b>	14/05/2020
<b>IT</b>	12/06/2020	<b>LV</b>	08/10/2020	<b>LT</b>	17/05/2020	<b>LU</b>	07/08/2020	<b>MT</b>	27/04/2020
<b>MD</b>	27/04/2020	<b>ME</b>	02/11/2021	<b>NL</b>	11/06/2020	<b>MK</b>	02/11/2021	<b>NO</b>	08/05/2020
<b>PL</b>	27/04/2020	<b>PT</b>	29/05/2020	<b>RO</b>	26/05/2020	<b>RS</b>	18/05/2020	<b>SK</b>	27/08/2020
<b>SI</b>	06/05/2020	<b>ZA</b>	02/11/2021	<b>ES</b>	18/06/2020	<b>SE</b>	06/05/2020	<b>CH</b>	22/04/2020
<b>TR</b>	27/04/2020	<b>UA</b>	12/04/2022	<b>UK</b>	23/04/2020				

## Other participants

Institution Name	Country
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## Summary

### **The main aim and objective of the Action is to**

improve gender balance in Informatics at all levels, from undergraduate and graduate studies to participation and leadership in academia and industry, through the creation of a European network of colleagues working on the forefront of the efforts for gender balance in Informatics in their countries and research communities.

### **During its first two years the Action progressed the achievement of this as described below**

For the first time, the European Informatics academic community, active on gender balance initiatives, working in multiple countries, has been brought together to learn from previous experiences, share best practices, highlight successful, as well as unsuccessful efforts.

Despite the COVID-19 pandemic, heavily hampering the possibility to meet for the first year, the Action has been able to turn in an opportunity to strengthen the community building objectives. The possibility to regularly interact virtually and meet and attend an increasing number of virtual events of interest for the EUGAIN Action at reduced or with no costs (because of the virtual format) has positively impacted and fostered the collaborative work across the network, with several scientific advancements in different areas covered by the Action objectives. The Action has become very visible, stimulating the increasing interest of stakeholders beyond the European borders.

During these two years, the Action has laid a solid foundation to complete the ongoing activities and to fulfill the remaining objectives. The ambition for the future is to bring tangible improvements contributing to foster the transition of the European informatics community to gender inclusion beyond the lifetime of the Action.

### **The Action will implement the following measures in the coming two years to overcome any issues identified in this report as potentially endangering the achievement of the objectives of the Action**

EUGAIN has established a framework consisting of 1) a leadership structure; 2) a network of young researchers; 3) a scientific platform for data collection and publication 4) contact with industry, policy makers, and bodies like ACM and IE. In the next two years the network will work to achieve the objectives by following the established framework.

### **Action website**

<https://eugain.eu>

## Achievement of MoU objectives, deliverables and additional outputs/ achievements

### MoU objectives

Please self-assess and describe the level of achievement of each MoU objective. For any MoU objective that is 25% or less achieved, please add an explanation.

<b>Mou objective</b>	Coordinate information gathering and collecting practices and initiatives for recruiting and retaining female students, researchers, and professors.
<b>Type of objective</b>	1.a Development of a common understanding/definition of the subject matter
<b>Level of progress</b>	51 - 75%
<b>Description of progress with achieving the MoU objective</b>	<p>The majority of EUGAIN researchers work across the five WGs to coordinate information gathering and collecting practices and initiatives for recruiting and retaining female students, researchers, and professors.</p> <p>The network already allows specific transfer of knowledge to upscale understanding of gender issues in informatics, proposing solutions for the key issues from school to university (WG1), from master to PhD (WG2), and from PhD to professor (WG3). In particular, EUGAIN research projects have identified a number of references, interventions and studies. The results of cross-collaborative work has been published and will be published in the due course. The work is ongoing.</p> <p>See website publication list; <a href="https://eugain.eu/results/research-publications/">https://eugain.eu/results/research-publications/</a></p>

<b>Mou objective</b>	Support partners in assessing and evaluating existing practices and methodologies, facilitating the choice of what could be implemented according to the local situation (cultures, resources, etc.).
<b>Type of objective</b>	1.b Coordination of information seeking, identification, collection and/or data curation
<b>Level of progress</b>	51 - 75%
<b>Description of progress with achieving the MoU objective</b>	<p>EUGAIN partners support each other in assessing and evaluating existing practices and methodologies for recruiting and keeping women in the pipeline, facilitating the choice of what can be implemented according to the local situation (cultures, resources, etc.)</p> <p>Progress is documented by webinars, scientific papers, videos, all available at the action website.</p> <p>In specific working groups, EUGAIN members have been working on bringing together local partners to share experience and received advice about obstacles, and best practices.</p>

<b>Mou objective</b>	Coordinate data from across each WG to assist in the development of cross-validated instruments to help Informatics Departments set goals and priorities for female recruiting, integration and promotion.
<b>Type of objective</b>	1.f Achievement of a specific tangible output that cannot be achieved without international coordination (e.g. due to practical issues such as database availability, language barriers, availability of infrastructure or know-how, etc.)
<b>Level of progress</b>	26 - 50%
<b>Description of progress with achieving the MoU objective</b>	EUGAIN has developed instruments to help Informatics Departments set goals and priorities for the recruitment, integration and promotion of women in WG1, WG2, and

	<p>WG3.</p> <p>In the rest of the action duration, the action will coordinate data from across each WG to assist in the development of cross-validated instruments.</p> <p>EUGAIN has monthly core group meetings in which one of the goals is for WG leaders to share knowledge and instruments and validate these across countries.</p>
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<b>Mou objective</b>	Collate collaboratively a handbook of interventions and web-based resources across all WGs for practical use by the academic community and stakeholders.
<b>Type of objective</b>	1.f Achievement of a specific tangible output that cannot be achieved without international coordination (e.g. due to practical issues such as database availability, language barriers, availability of infrastructure or know-how, etc.)
<b>Level of progress</b>	51 - 75%
<b>Description of progress with achieving the MoU objective</b>	<p>The action has collaboratively built web-based resources across all WGs for practical use by the academic community and stakeholders. We refer explicitly to webinars and videos that summarize status and interventions for each country. In the upcoming two years, efforts are planned to collate a handbook of interventions and web-based resources across all WGs and all countries for practical use by the academic community and stakeholders.</p> <p>On our youtube chanel <a href="https://www.youtube.com/channel/UCvBGQWPrO1hHotE7Pz6JkOg/videos">https://www.youtube.com/channel/UCvBGQWPrO1hHotE7Pz6JkOg/videos</a> we provide 50 videos for practical use by the academic community and stakeholders. In addition we provide academic papers and booklets. See on our website: <a href="https://eugain.eu/results/research-publications/">https://eugain.eu/results/research-publications/</a></p>

<b>Mou objective</b>	Deliver guidance and recommendations on how to overcome the challenges in a comprehensive policy document targeting policymakers and other relevant stakeholders at the national and the EU level.
<b>Type of objective</b>	1.g Input to stakeholders (e.g. standardization body, policy-makers, regulators, users), excluding commercial applications
<b>Level of progress</b>	26 - 50%
<b>Description of progress with achieving the MoU objective</b>	<p>Working Groups 4 and 5 are working toward different stakeholders in industry and society to elicit challenges and give recommendations on how to overcome the challenges in a comprehensive policy document targeting policymakers and other relevant stakeholders at the national and the EU level. As an example we mention the invited talk given by Mina Stareva (EC) and the following discussion <a href="https://www.youtube.com/watch?v=84oZmrcBTH0&amp;t=1921s">https://www.youtube.com/watch?v=84oZmrcBTH0&amp;t=1921s</a></p>

<b>Mou objective</b>	Create visibility, both within the academic community and to other stakeholders, about the common issues and challenges facing the academic community, local, national and EU authorities in addressing gender balance in Informatics.
<b>Type of objective</b>	2.a Building a community around a topic of scientific and/or socio-economic relevance, allowing for knowledge exchange and the development of a joint research agenda
<b>Level of progress</b>	51 - 75%
<b>Description of progress with achieving the MoU objective</b>	<p>The EUGAIN network is creating visibility, both within the academic community and other stakeholders (like industry, teachers, policymakers), about the common issues and challenges facing the academic community, as well as the local, national and EU authorities in addressing gender balance in Informatics.</p> <p>The EUGAIN community is the first and foremost effort in Europe to build awareness around gender and informatics as a topic of scientific and socio-economic relevance, allowing for knowledge exchange and the development of a joint research agenda.</p>

<b>Mou objective</b>	Create a communications strategy to spread information about the actions and results to the general public and stakeholders, using for that a website created for the project, social media channels, newsletters, and press releases.
<b>Type of objective</b>	1.i Dissemination of research results to the general public
<b>Level of progress</b>	51 - 75%
<b>Description of progress with achieving the MoU objective</b>	EUGAIN has succeeded in:  Creation of the website,Creation of social media channels,Creation of communication materials,Delivering presentations and talks about EUGAIN,Organisation of the Annual Workshop,Participation to Minerva Awards Ceremony,  Participation to conferences.

<b>Mou objective</b>	Develop a common European understanding around the issues of female participation in Informatics, policy priorities, and areas of intervention.
<b>Type of objective</b>	1.g Input to stakeholders (e.g. standardization body, policy-makers, regulators, users), excluding commercial applications
<b>Level of progress</b>	26 - 50%
<b>Description of progress with achieving the MoU objective</b>	EUGAIN has worked systematically since its start to develop a common European understanding around the issues of women's participation in Informatics and areas of intervention. A number of working groups (WG1, WG2, WG3) have organized several workshops, surveys, and interviews to understand the differences and common threads of issues across countries in Europe.  Scientific papers and videos have been made available to stakeholders (e.g. teachers, university professors and leaders).  The action is working to finalize a policy document which will outline priorities for standardization body, policy-makers, etc.  A central cooperation partner of EUGAIN is the ACM Women in Computing, whose leader is an active member of EUGAIN.

<b>Mou objective</b>	Involve industry stakeholders in the efforts to address the main challenges and creating opportunities and synergies.
<b>Type of objective</b>	1.j Dissemination of research results to stakeholders (excluding specific input in view of knowledge application)
<b>Level of progress</b>	26 - 50%
<b>Description of progress with achieving the MoU objective</b>	EUGAIN has a dedicated working group (WG4) to coordinate the efforts toward involvement of industry stakeholders in the efforts to address the main challenges and creating opportunities and synergies. EUGAIN has invited stakeholders from industry to workshops and webinars. See concretely <a href="https://www.youtube.com/watch?v=U4IZOTnIJAY">https://www.youtube.com/watch?v=U4IZOTnIJAY</a> This is a panel with Norwegian Stakeholders in University, Society, Industry as a step in dissemination of research results to stakeholders from industry.

<b>Mou objective</b>	Develop and publish an Action website to become the reference point for addressing the gender balance in Informatics, including an online repository of the evidence collected by the WGs, information about the networking activities organized, channels for dissemination and communication.
<b>Type of objective</b>	1.i Dissemination of research results to the general public  1.j Dissemination of research results to stakeholders (excluding specific input in view of knowledge application)

<b>Level of progress</b>	76 - 100%
<b>Description of progress with achieving the MoU objective</b>	EUGAIN has developed and published the Action website (eugain.eu) which is becoming the reference point for addressing gender balance in Informatics. The website includes an online repository of the scientific papers based on the evidence collected by the WGs, information about the networking activities organized, as well as channels for dissemination and communication (Facebook, twitter, YouTube).

<b>Mou objective</b>	Establish an efficient and lasting network of excellence to advance knowledge and methods to improve gender balance in Informatics. Such a network will encourage sustainable collaboration, facilitate knowledge and experience sharing, with an emphasis on intervention best-practices, and involving a comprehensive list of stakeholders.
<b>Type of objective</b>	2.a Building a community around a topic of scientific and/or socio-economic relevance, allowing for knowledge exchange and the development of a joint research agenda
<b>Level of progress</b>	51 - 75%
<b>Description of progress with achieving the MoU objective</b>	<p>EUGAIN has used the first year to establish an efficient network of excellence to advance knowledge and methods to improve gender balance in Informatics. Working group co-leaders have been recruited among the most qualified persons in Europe in the field, and they have contributed to shape the whole network. EUGAIN counts 121 members, of which 72 are MC members. The Core Group is composed by 16 people acting as WG co-leaders, Action Chair and Vice Chair, Science Communication Manager, STSM Coordinator, ITC Grants Coordinator, Young Researcher and Innovator Coordinator, and Gender Balance Coordinator.</p> <p>The Core Group acts as facilitator to encourage sustainable collaboration, enhance knowledge and experience sharing, with an emphasis on intervention of best-practices, and involving a comprehensive list of stakeholders.</p> <p>The goal of the remaining time is to set up structures that will ensure sustainability of the established scientific network.</p> <p>A key achievement until now has been the recruitment and establishment of a network of young researchers who will represent the main contribution of our network.</p>

<b>Mou objective</b>	Develop and publish the Action website with an online repository of the evidence collected by the WGs, information about the networking activities organized, channels for dissemination and communication.
<b>Type of objective</b>	2.b Building a community around a new or emerging field of research
<b>Level of progress</b>	76 - 100%
<b>Description of progress with achieving the MoU objective</b>	The Action website with its online repository of the scientific papers, booklets, and videos acts as a catalyzer to build the community around gender in informatics as a new and emerging field of research. The website shares information about the networking activities organized, and links to Facebook, twitter, and YouTube channels for dissemination and communication.

<b>Mou objective</b>	Promote policy and intervention practices for recruiting and selection of female students, researchers, professors, including guidelines for their monitoring and evaluation; disseminate the practices for further development by the wider academic community, fostering collaborative international projects.
<b>Type of objective</b>	<p>1.j Dissemination of research results to stakeholders (excluding specific input in view of knowledge application)</p> <p>2.a Building a community around a topic of scientific and/or socio-economic relevance, allowing for knowledge exchange and the development of a joint research agenda</p>
<b>Level of progress</b>	51 - 75%



<b>Description of progress with achieving the MoU objective</b>	<p>EUGAIN has from its start built on the connections with relevant actors, like Informatics Europe, ACM, as well as relevant actors in the EC, to have an overview of policy and intervention practices about the mission (recruiting and selection of female students, researchers, professors to informatics).</p> <p>Together with these actors, EUGAIN works at guidelines for monitoring and evaluation and actively disseminates the practices for further development by the wider academic community. The network is active in applying at establishing collaborative international projects at European and National level.</p> <p>At the European level, we can mention the Erasmus+ Women Step Up, which includes partners from Sweden, Norway, Greece, and Belgium.</p>
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<b>Mou objective</b>	Encourage publication (and support the drafting) of peer-reviewed papers, presentations at important conferences and events, to create at an international level awareness of gender gap in Informatics.
<b>Type of objective</b>	<p>1.j Dissemination of research results to stakeholders (excluding specific input in view of knowledge application)</p> <p>2.a Building a community around a topic of scientific and/or socio-economic relevance, allowing for knowledge exchange and the development of a joint research agenda</p>
<b>Level of progress</b>	51 - 75%
<b>Description of progress with achieving the MoU objective</b>	<p>The EUGAIN network started from scratch to establish gender in informatics as a scientific field in Europe. By help of the annual workshop, the five STSMs and thirteen VMs, and not the least the first Training school, the network has been able to establish the foundations to create a system of peer-reviewed papers, presentations at important conferences and events.</p> <p>In the remaining two years, the network will continue the process toward international level awareness of gender gap in Informatics.</p>

<b>Mou objective</b>	Increase awareness of the issues across disciplinary boundaries, both within and outside of academia, by promoting continued exchange and development of knowledge, practice and policy guidance.
<b>Type of objective</b>	2.c Bridging separate fields of science/disciplines to achieve breakthroughs that require an interdisciplinary approach
<b>Level of progress</b>	51 - 75%
<b>Description of progress with achieving the MoU objective</b>	<p>EUGAIN has given presentations in interdisciplinary arenas outside informatics, like for example in the COST Action CA18112 Mechanochemistry for Sustainable Industry and CA17137 - A network for Gravitational Waves, Geophysics and Machine Learning (G2net).</p> <p>Some EUGAIN members also participate in the newly established COST Action CA20137 - Making Young Researchers' Voices Heard for Gender Equality (VOICES).</p> <p>Several presentations have been done in the respective member countries to IT companies, NGO's, and governmental organizations outside of academia, by promoting continued exchange and development of knowledge, practice and policy guidance.</p>

<b>Mou objective</b>	Cooperate with industry to foster career networks, creating mutually beneficial synergies, for students and early career researchers to find excellent career opportunities and for industry to tap on a pool of highly motivated talented individuals.
<b>Type of objective</b>	2.d Acting as a stakeholder platform or trans-national practice community, pertaining to

	a certain area of socio-economical or societal application, or to a certain market sector
<b>Level of progress</b>	26 - 50%
<b>Description of progress with achieving the MoU objective</b>	<p>A network for a pool of highly motivated and talented individuals (early career researchers) has been established with the goal to find career opportunities mainly in academia and research centers.</p> <p>A specific WG (WG4) is devoted to cooperate with industry to create mutually beneficial synergies for students and educators.</p> <p>In connection to ACM Women, EUGAIN shapes and develops mechanisms like career fairs, hackathons, and industry panels.</p>

<b>Mou objective</b>	Act as a transnational platform facilitating multi-stakeholder engagement and co-creating processes and actions at local, national, European and international levels.
<b>Type of objective</b>	2.d Acting as a stakeholder platform or trans-national practice community, pertaining to a certain area of socio-economical or societal application, or to a certain market sector
<b>Level of progress</b>	26 - 50%
<b>Description of progress with achieving the MoU objective</b>	<p>All in all, EUGAIN has established the foundations to act as a transnational platform facilitating multi-stakeholder engagement and co-creating processes and actions at local, national, European and international levels.</p> <p>See concretely the website, the YouTube channels, the partnership with Informatics Europe, ACM Women and the national bodies.</p> <p>STSMs and VMs are all clear examples of collaborative processes set up by EUGAIN.</p>

## Deliverables

This section covers only deliverables that were foreseen for the Action, not additional outputs that were generated during the Action (these additional outputs will be added in the following section). Please select and comment on the progress with achieving each deliverable.

For deliverables that are:

- Delivered, please provide proof to enable the Action Rapporteur to confirm the delivery
- Not delivered but delivery is foreseen within 2 years please explain how the delivery will be achieved
- Not foreseen to be delivered please explain why not

<b>Deliverable</b>	Action website: it will present the evidence collected by WGs and all the information on all activities organized within the Action. The Action website will be the entry point for all partners and stakeholders, and it will be a key instrument for dissemination and communication of activities and results		
<b>Progress with achieving deliverable</b>	Delivered	<b>Month deliverable due</b>	6
<b>Proof of progress with achieving the deliverable</b>	<a href="https://eugain.eu/">https://eugain.eu/</a>		

<b>Deliverable</b>	Booklet "From Ph.D. to Professor": a short, compact/pocket size, publication with best practices for supporting the transition of Ph.D. and postdoctoral researchers into faculty positions (directed to university departments)		
<b>Progress with achieving deliverable</b>	Delivered	<b>Month deliverable due</b>	15
<b>Proof of progress with achieving the deliverable</b>	<a href="https://eugain.eu/results/deliverables/">https://eugain.eu/results/deliverables/</a>		

<b>Deliverable</b>	Booklet "From School to University": a short, compact/pocket size, publication including best practices and suggestions for recruiting and retaining female students (directed to university departments)		
<b>Progress with achieving deliverable</b>	Not delivered, but expected before end of Action	<b>Month deliverable due</b>	25
<b>Explanation</b>	A draft of this booklet already exists and was presented at the annual workshop in October 2022. It is expected to be delivered in time.		

<b>Deliverable</b>	Booklet(s) "Future Informatics Students": a short, compact/pocket size, publications including advises and advantages of studying and choosing Informatics as a career (directed to students at different school levels)		
<b>Progress with achieving deliverable</b>	Not delivered, but expected before end of Action	<b>Month deliverable due</b>	27
<b>Explanation</b>	A draft of this booklet already exists and was presented at the annual workshop in October 2022. It is expected to be delivered in time.		

<b>Deliverable</b>	Booklet "From Bachelor/Master Studies to Ph.D.": a short, compact/pocket size, publication including best practices and suggestions for retaining and supporting the transition of female students to Ph.D. positions (directed to university departments)		
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<b>Progress with achieving deliverable</b>	Not delivered, but expected before end of Action	<b>Month deliverable due</b>	39
<b>Explanation</b>	The WG is working as planned to deliver the booklet based on the data collected during the first two years.		

<b>Deliverable</b>	Policy recommendation document: a set of policy recommendations directed to policymakers, at national and European level. Such documents will contain concise and practical measures that policymakers can adopt to support gender balance in Informatics		
<b>Progress with achieving deliverable</b>	Not delivered, but expected before end of Action	<b>Month deliverable due</b>	42
<b>Explanation</b>	WG4 and WG5 are working toward this policy recommendation document.		

<b>Deliverable</b>	Handbook of intervention methods: the Handbook will provide an understanding of the factors that contribute to increasing the recruitment and retention of female computer scientists, methods and intervention strategies. It will translate research into best practices, and empower decision makers to implement interventions		
<b>Progress with achieving deliverable</b>	Not delivered, but expected before end of Action	<b>Month deliverable due</b>	48
<b>Explanation</b>	The scientific papers, published, in progress and future will constitute the building blocks for the handbook of intervention methods.		

<b>Deliverable</b>	Dissemination outputs: publication of peer-reviewed papers, proceedings from the Annual Workshop, presentations/seminars about the Action, and successful projects within, at Informatics departments, external conferences or at relevant events organized by industry or by policymakers		
<b>Progress with achieving deliverable</b>	Delivered	<b>Month deliverable due</b>	6
<b>Proof of progress with achieving the deliverable</b>	<a href="https://eugain.eu/">https://eugain.eu/</a>		

## Additional outputs / achievements

### Co-authored Action publications

Please enter below ONLY publications (including publications that are submitted but not yet accepted):

- that are on the topic of the Action, and
- that are co-authored by at least two Action participants from two countries participating in the Action, and
- for which the Action networking was necessary.

Please pay special attention to the COST Excellence and Inclusiveness policy and ensure the inclusion of publications with authors from COST Inclusiveness Target Countries (ITCs), from the underrepresented gender in the Action and from Early Career Investigators/Young researchers.

	Bibliographic data	Countries participating in the Action among authors	Open Access	COST cited?	COST funds?	Relevance to H2020 Societal challenge	Peer Reviewed?
1	<p><a href="https://doi.org/10.1109/MS.2021.3099077">doi:10.1109/MS.2021.3099077</a></p> <p>Title Frustrations Steering Women Away From Software Engineering</p> <p>Authors Lucia Happe; Barbora Buhnova</p> <p>DOI <a href="https://doi.org/10.1109/MS.2021.3099077">doi:10.1109/MS.2021.3099077</a></p> <p>Type Journal article</p> <p>Published in IEEE Software</p> <p>Published by Institute of Electrical and Electronics Engineers (IEEE)</p> <p>ISSNs <a href="https://doi.org/10.1109/MS.2021.3099077">0740-7459</a>; <a href="https://doi.org/10.1109/MS.2021.3099077">1937-4194</a></p> <p>Subject Software</p> <p>Link <a href="http://xplore.staging.ieee.org/ielx7/52/9801/712/09495952.pdf?arnumber=9495952">http://xplore.staging.ieee.org/ielx7/52/9801/712/09495952.pdf?arnumber=9495952</a></p>		Other	Y	Y		Y
2	<p><a href="https://doi.org/10.1145/3502717.3532118">doi:10.1145/3502717.3532118</a></p> <p>Title The Co-Design of An Outreach Initiative to Attract Females into Higher Education Computer Science</p> <p>Author Fiona Redmond</p> <p>DOI <a href="https://doi.org/10.1145/3502717.3532118">doi:10.1145/3502717.3532118</a></p> <p>Type Proceedings article</p> <p>Published in Proceedings of the 27th ACM Conference on on Innovation and Technology in</p>		Other	Y	Y		Y

	Published by Link	Computer Science Education Vol. 2 ACM <a href="https://dl.acm.org/doi/pdf/10.1145/3502717.3532118">https://dl.acm.org/doi/pdf/10.1145/3502717.3532118</a>					
3	<a href="https://doi.org/10.1109/MECO55406.2022.9797130">doi:10.1109/MECO55406.2022.9797130</a> Title Author DOI Type Published in Published by Link	Software for a Better Society Letizia Jaccheri <a href="https://doi.org/10.1109/MECO55406.2022.9797130">doi:10.1109/MECO55406.2022.9797130</a> Proceedings article 2022 11th Mediterranean Conference on Embedded Computing (MECO) IEEE <a href="http://xplore.staging.ieee.org/ielx7/9797068/9797069/09797130.pdf?arnumber=9797130">http://xplore.staging.ieee.org/ielx7/9797068/9797069/09797130.pdf?arnumber=9797130</a>		Other	Y	Y	Y
4	<a href="https://doi.org/10.1007/978-3-031-06417-3_18">doi:10.1007/978-3-031-06417-3_18</a> Title Authors DOI Type Published in Published by ISSNs Link	Human Computer Interaction - Gender in User Experience <a href="#">Anna Szlávi</a> ; <a href="#">Monica Landoni</a> <a href="https://doi.org/10.1007/978-3-031-06417-3_18">doi:10.1007/978-3-031-06417-3_18</a> Book chapter Communications in Computer and Information Science Springer International Publishing <a href="#">1865-0929</a> ; <a href="#">1865-0937</a> <a href="https://link.springer.com/content/pdf/10.1007/978-3-031-06417-3_18">https://link.springer.com/content/pdf/10.1007/978-3-031-06417-3_18</a>		Other	Y	Y	Y
5	<a href="https://doi.org/10.1007/s10639-020-10379-x">doi:10.1007/s10639-020-10379-x</a> Title Authors DOI Type Published in Published by	Effective measures to foster girls' interest in secondary computer science education <a href="#">Lucia Happe</a> ; Barbora Buhnova; Anne Koziolok; Ingo Wagner <a href="https://doi.org/10.1007/s10639-020-10379-x">doi:10.1007/s10639-020-10379-x</a> Journal article Education and Information Technologies Springer Science and Business Media LLC		Other	Y	Y	Y

	ISSNs Subjects Links	<a href="#">1360-2357</a> ; <a href="#">1573-7608</a> Library and Information Sciences; Education <a href="https://link.springer.com/content/pdf/10.1007/s10639-020-10379-x.pdf">https://link.springer.com/content/pdf/10.1007/s10639-020-10379-x.pdf</a> ; <a href="https://link.springer.com/article/10.1007/s10639-020-10379-x/fulltext.html">https://link.springer.com/article/10.1007/s10639-020-10379-x/fulltext.html</a>						
6	<a href="https://doi.org/10.1109/SYNASC51798.2020.00014">doi:10.1109/SYNASC51798.2020.00014</a> Title Authors DOI Type Published in Published by Link	Gender Issues in Computer Science: Lessons Learnt and Reflections for the Future Letizia Jaccheri; Cristina Pereira; Swetlana Fast <a href="https://doi.org/10.1109/SYNASC51798.2020.00014">doi:10.1109/SYNASC51798.2020.00014</a> Proceedings article 2020 22nd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC) IEEE <a href="http://xplore.staging.ieee.org/ielx7/9356934/9356935/09357077.pdf?arnumber=9357077">http://xplore.staging.ieee.org/ielx7/9356934/9356935/09357077.pdf?arnumber=9357077</a>		Other	Y	Y		Y
7	Rubegni, E., Penzenstadler, B., Landoni, M., Jaccheri, L., & Dodig-Crnkovic, G. (2022). Owing Your Career Paths: Storytelling to Engage Women in Computer Science. In J. Vallverdu (Ed.), Gender in AI and Robotics: The Gender Challenges from an Interdisciplinary Perspective. Springer.		NO, CH, UK	Y	Y	N	Europe in a changing world, inclusive innovative and reflective societies	Y
8	<a href="https://doi.org/10.1109/SANER53432.2022.00043">doi:10.1109/SANER53432.2022.00043</a> Title Authors DOI	Gender Diversity and Community Smells: A Double-Replication Study on Brazilian Software Teams Camila Sarmiento; Tiago Massoni; Alexander Serebrenik; Gemma Catolino; Damian Tamburri; Fabio Palomba <a href="https://doi.org/10.1109/SANER53432.2022.00043">doi:10.1109/SANER53432.2022.00043</a>		Other	Y	Y		Y

	Type Published in  Published by Link	Proceedings article 2022 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER) IEEE <a href="http://xplore.staging.ieee.org/ielx7/9825713/9825693/09825896.pdf?arnumber=9825896">http://xplore.staging.ieee.org/ielx7/9825713/9825693/09825896.pdf?arnumber=9825896</a>					
9	<a href="https://doi.org/10.1109/MS.2020.3045817">doi:10.1109/MS.2020.3045817</a> Title  Authors  DOI Type Published in Published by  ISSNs Subject Link	The Diversity Crisis in Software Development Khaled Albusays; Pernille Bjorn; Laura Dabbish; Denae Ford; <a href="#">Emerson Murphy-Hill</a> ; <a href="#">Alexander Serebrenik</a> ; <a href="#">Margaret-Anne Storey</a> <a href="https://doi.org/10.1109/MS.2020.3045817">doi:10.1109/MS.2020.3045817</a> Journal article IEEE Software Institute of Electrical and Electronics Engineers (IEEE) <a href="#">0740-7459</a> ; <a href="#">1937-4194</a> Software <a href="http://xplore.staging.ieee.org/ielx7/52/9354388/09354402.pdf?arnumber=9354402">http://xplore.staging.ieee.org/ielx7/52/9354388/09354402.pdf?arnumber=9354402</a>		Other	Y	Y	Y
10	<a href="https://doi.org/10.1108/AJIM-05-2020-0170">doi:10.1108/AJIM-05-2020-0170</a> Title  Authors DOI Type Published in Published by ISSN Subjects  Links	Gender differences in the Israeli academia: a bibliometric analysis of different disciplines Tzipi Cooper; <a href="#">Noa Aharony</a> ; Judit Bar-Ilan <a href="https://doi.org/10.1108/AJIM-05-2020-0170">doi:10.1108/AJIM-05-2020-0170</a> Journal article Aslib Journal of Information Management Emerald <a href="#">2050-3806</a> Library and Information Sciences; Information Systems <a href="https://www.emerald.com/insight/content/doi/10.1108/AJIM-05-2020-0170/full/xml">https://www.emerald.com/insight/content/doi/10.1108/AJIM-05-2020-0170/full/xml</a> ; <a href="https://www.emerald.com/insight/content/doi/10.1108/AJIM-05-2020-0170/full/html">https://www.emerald.com/insight/content/doi/10.1108/AJIM-05-2020-0170/full/html</a>		Other	Y	Y	Y



		<a href="https://doi.org/10.1108/AJIM-05-2020-0170/full/html">oi/10.1108/AJIM-05-2020-0170/full/html</a>					
11	<a href="https://doi.org/10.5485/TMCS.2021.0521">doi:10.5485/TMCS.2021.0521</a> Title Authors DOI Type Published in Published by ISSNs Subject Link	Young women's barriers to choose IT and methods to overcome them - A case study from Hungary <a href="#">Anna Szlávi; Péter Bernát</a> <a href="https://doi.org/10.5485/TMCS.2021.0521">doi:10.5485/TMCS.2021.0521</a> Journal article Teaching Mathematics and Computer Science University of Debrecen/ Debreceni Egyetem <a href="#">2676-8364; 1589-7389</a> General Medicine <a href="https://ojs.lib.unideb.hu/tmcs/article/download/10975/9734">https://ojs.lib.unideb.hu/tmcs/article/download/10975/9734</a>		Other	Y	Y	Y
12	<a href="https://doi.org/10.1109/BigData52589.2021.9671375">doi:10.1109/BigData52589.2021.9671375</a> Title Authors DOI Type Published in Published by Link	hUGe <sup>2</sup> : An Interdisciplinary Research Program for Sustainability J. David Paton-Romero; Letizia Jaccheri <a href="https://doi.org/10.1109/BigData52589.2021.9671375">doi:10.1109/BigData52589.2021.9671375</a> Proceedings article 2021 IEEE International Conference on Big Data (Big Data) IEEE <a href="http://xplore.staging.ieee.org/ielx7/9671263/9671273/09671375.pdf?arnumber=9671375">http://xplore.staging.ieee.org/ielx7/9671263/9671273/09671375.pdf?arnumber=9671375</a>		Other	Y	Y	Y
13	<a href="https://doi.org/10.36427/CEJNTREP.3.3.2582">doi:10.36427/CEJNTREP.3.3.2582</a> Title Author DOI Type Published in	Barriers, Role Models, and Diversity – Women in IT Anna Szlávi <a href="https://doi.org/10.36427/CEJNTREP.3.3.2582">doi:10.36427/CEJNTREP.3.3.2582</a> Journal article Central-European Journal of New Technologies in Research, Education and Practice		Other	Y	Y	Y

	Published by ISSN Subject	Eotvos Lorand University (ELTE) <a href="#">2676-9425</a> Ocean Engineering					
14	<p>Valentina Lenarduzzi, Lafifa Jamal, Letizia Jaccheri, 2022 IEEE/ACM 3rd International Workshop on Gender Equality, Diversity and Inclusion in Software Engineering (GEICSE)</p> <p><a href="https://ieeexplore.ieee.org/xpl/conhome/9853504/proceeding">https://ieeexplore.ieee.org/xpl/conhome/9853504/proceeding</a></p> <ul style="list-style-type: none"> <li>- Can Female Underrepresentation in Information Technology Be Solved Through an Awareness-Based Approach? Noshin Tahsin; Nazmus Sakib Ahmed; Moumita Asad; Kazi Sakib</li> <li>- The Role of Biased Data in Computerized Gender Discrimination Md. Arshad Ahmed; Madhura Chatterjee; Pankaj Dadure; Partha Pakray</li> <li>- The Role of Diversity in Cybersecurity Risk Analysis: An Experimental Plan Katja Tuma; Romy Van Der Lee</li> <li>- Towards gender balance in modern hackathons: literature-based approaches for female inclusiveness Yekaterina Kovaleva; Ari Happonen; Audrey Mbogho</li> <li>- Pros and Cons of running educational Hackathons in a gender-neutral fashion Yekaterina Kovaleva; Ari Happonen; Victoria Hasheela-Mufeti</li> <li>- Retaining Women in Computer Science: the Good, the Bad and the Ugly Sides Simona Motogna; Lenuța Alboai; Ioana Alexandra Todericiu; Catrinel Zaharia</li> <li>- Designing Gender-neutral Software Engineering Program. Stereotypes, Social Pressure, and Current Attitudes Based on Recent Studies Yekaterina Kovaleva; Ari Happonen; Eneli Kindsiko</li> </ul> <p>Gender Equality in Tech Entrepreneurship: A Systematic Mapping Study Alis Wiken Wilson; J. David Patón-Romero</p> <ul style="list-style-type: none"> <li>- Challenges and Opportunities when Deploying a Gender STEM Intervention During a Pandemic Marie Travers; Ita Richardson; Linda Higgins</li> <li>- An Exploration of Intersectionality in Software Development and Use Hana</li> </ul>	FI, NO	Y	Y	Y	Europe in a changing world, inclusive innovative and reflective societies	Y

	Winchester; Alicia E. Boyd; Brittany Johnson						
	- Discrimination, Misogyny and Harassment: Examples from OSS : Content Analysis of Women-focused Online Discussion Forums Vandana Singh; William Brandon						
	- A social-cognitive analysis of a female-focused hackathon Luciana A. Almeida; Cleidson R. B. de Souza						
	- An Analysis of Sex Differences in Computing Teaching Evaluations Priscila Santiesteban; Madeline Endres; Westley Weimer						
15	<p><a href="https://doi.org/10.5445/IR/1000149935">doi:10.5445/IR/1000149935</a></p> <p>Title IT Mission: Interdisziplinäre Online Expeditionen</p> <p>Authors Kai Marquardt; Lucia Happe; Alexander Koch; Ingo Wagner</p> <p>DOI <a href="https://doi.org/10.5445/IR/1000149935">doi:10.5445/IR/1000149935</a></p> <p>Type Journal article</p> <p>Published in Karlsruher Institut für Technologie (KIT)</p> <p>Published by Karlsruher Institut für Technologie (KIT)</p>		Other	Y	Y		Y
16	<p><a href="https://doi.org/10.5445/IR/1000145153">doi:10.5445/IR/1000145153</a></p> <p>Title Enhancing Girls' Feeling of Belonging to Computer Science : Possibilities of Interdisciplinary Online Courses to Increase Diversity of Learning</p> <p>Author Kai Marquardt</p> <p>DOI <a href="https://doi.org/10.5445/IR/1000145153">doi:10.5445/IR/1000145153</a></p> <p>Type Journal article</p> <p>Published in Association for Computing Machinery (ACM)</p> <p>Published by Association for Computing Machinery (ACM)</p>		Other	Y	Y		Y
17	<p><a href="https://doi.org/10.5445/IR/1000143548">doi:10.5445/IR/1000143548</a></p> <p>Title Ein Rahmenwerk für Evaluierung von Interdisziplinären Lerneinheiten für den Informatikunterricht</p> <p>Author Kai Marquardt</p>		Other	Y	Y		Y

	DOI Type Published in Published by	<a href="https://doi.org/10.5445/IR/1000143548">doi:10.5445/IR/1000143548</a> Journal article Karlsruher Institut für Technologie (KIT) Karlsruher Institut für Technologie (KIT)					
18	<a href="https://doi.org/10.36427/CEJNTREP.2.2.472">doi:10.36427/CEJNTREP.2.2.472</a> Title DOI Type Published in Published by ISSN Subject Link	Introducing the Gender Aspect into Hungarian IT Education <a href="https://doi.org/10.36427/CEJNTREP.2.2.472">doi:10.36427/CEJNTREP.2.2.472</a> Journal article Central-European Journal of New Technologies in Research, Education and Practice Eotvos Lorand University (ELTE) <a href="https://www.issn.org/issn/2676-9425">2676-9425</a> Ocean Engineering <a href="http://ojs.elte.hu/cejntrep/article/download/472/1041">http://ojs.elte.hu/cejntrep/article/download/472/1041</a>		Other	Y	Y	Y
19	<a href="https://doi.org/10.1145/3501712.3535292">doi:10.1145/3501712.3535292</a> Title Authors DOI Type Published in Published by Link	Designing a Digital StoryTelling platform to detect gender stereotypes Rahimu Kasibante; Elisa Rubegni; Letizia Jaccheri <a href="https://doi.org/10.1145/3501712.3535292">doi:10.1145/3501712.3535292</a> Proceedings article Interaction Design and Children ACM <a href="https://dl.acm.org/doi/pdf/10.1145/3501712.3535292">https://dl.acm.org/doi/pdf/10.1145/3501712.3535292</a>		Other	Y	Y	Y
20	<a href="https://doi.org/10.1016/j.ijhcs.2021.102727">doi:10.1016/j.ijhcs.2021.102727</a> Title Authors DOI Type Published in	Raising Awareness of Stereotyping Through Collaborative Digital Storytelling: Design for Change with and for Children <a href="#">Elisa Rubegni</a> ; <a href="#">Monica Landoni</a> ; <a href="#">Laura Malinverni</a> ; Letizia Jaccheri <a href="https://doi.org/10.1016/j.ijhcs.2021.102727">doi:10.1016/j.ijhcs.2021.102727</a> Journal article International Journal of Human-Computer		Other	Y	Y	Y

	<p>Published by ISSN Subjects</p> <p>Links</p>	<p>Studies Elsevier BV <a href="https://doi.org/10.1016/j.entcom.2020.100387">1071-5819</a> Hardware and Architecture; Human-Computer Interaction; General Engineering; Education; Human Factors and Ergonomics; Software <a href="https://api.elsevier.com/content/article/PII:S1071581921001452?httpAccept=text/xml">https://api.elsevier.com/content/article/PII:S1071581921001452?httpAccept=text/xml</a>; <a href="https://api.elsevier.com/content/article/PII:S1071581921001452?httpAccept=text/plain">https://api.elsevier.com/content/article/PII:S1071581921001452?httpAccept=text/plain</a></p>						
21	<p><a href="https://doi.org/10.1016/j.entcom.2020.100387">doi:10.1016/j.entcom.2020.100387</a> Title</p> <p>Authors</p> <p>DOI</p> <p>Type</p> <p>Published in</p> <p>Published by</p> <p>ISSN</p> <p>Subjects</p> <p>Links</p>	<p>Improving girls' perception of computer science as a viable career option through game playing and design: Lessons from a systematic literature review Kshitij Sharma; Juan C. Torrado; Javier Gómez; Letizia Jaccheri <a href="https://doi.org/10.1016/j.entcom.2020.100387">doi:10.1016/j.entcom.2020.100387</a> Journal article Entertainment Computing Elsevier BV <a href="https://doi.org/10.1016/j.entcom.2020.100387">1875-9521</a> Human-Computer Interaction; Software <a href="https://api.elsevier.com/content/article/PII:S1875952120300951?httpAccept=text/xml">https://api.elsevier.com/content/article/PII:S1875952120300951?httpAccept=text/xml</a>; <a href="https://api.elsevier.com/content/article/PII:S1875952120300951?httpAccept=text/plain">https://api.elsevier.com/content/article/PII:S1875952120300951?httpAccept=text/plain</a></p>		Other	Y	Y		Y
22	<p><a href="https://doi.org/10.1016/j.ijcci.2020.100239">doi:10.1016/j.ijcci.2020.100239</a> Title</p> <p>Authors</p> <p>DOI</p>	<p>"The girl who wants to fly": Exploring the role of digital technology in enhancing dialogic reading <a href="https://doi.org/10.1016/j.ijcci.2020.100239">Elisa Rubegni</a>; Rebecca Dore; Monica Landoni; Ling Kan <a href="https://doi.org/10.1016/j.ijcci.2020.100239">doi:10.1016/j.ijcci.2020.100239</a></p>		Other	Y	Y		Y

Type	Journal article						
Published in	International Journal of Child-Computer Interaction						
Published by	Elsevier BV						
ISSN	<a href="https://doi.org/10.1016/j.ijcci.2021.100000">2212-8689</a>						
Subjects	Human-Computer Interaction; Education						
Links	<a href="https://api.elsevier.com/content/article/PII:S2212868920300507?httpAccept=text/xml">https://api.elsevier.com/content/article/PII:S2212868920300507?httpAccept=text/xml</a> ; <a href="https://api.elsevier.com/content/article/PII:S2212868920300507?httpAccept=text/plain">https://api.elsevier.com/content/article/PII:S2212868920300507?httpAccept=text/plain</a>						

### Projects resulting from Action activities

Please enter below all the projects on the topic of the Action resulting from Action activities, involving at least one Action participant, and for which the Action networking was necessary.

The Action reported 6 project(s) and 1 proposal(s) resulting from the Action networking.

Key details of the projects are shown below.

#	Title	Countries participating in the Action among proposers	Main proposer name	Funder	Amount	Call identifier	Relevance to H2020 Societal Challenge
1	Women STEM -UP	BE, EL, NO, SE	Sweden	Other EU	400000 €	KA220-HED - Cooperation partnerships in higher education	Europe in a changing world, inclusive innovative and reflective societies
2	Making cloud software more sustainable	NL	Patricia Lago	Trans-national	400000 €	Open Competition ENW	Climate action, environment, resource efficiency and raw materials
3	SE4GreenDeal: Software Engineers for the Green Deal	FI, IT, NL	Patricia Lago	Other EU	4460000 €	EAC/A02/2019	Climate action,

						JMD-MOB	environment, resource efficiency and raw materials
4	TADAA - Tools for Assessing and Developing Affecting & Attractive Narratives for Girls in Informatics	NO, CH, UK	Monica Landoni	National	313770 €	SNSF-COST	Europe in a changing world, inclusive innovative and reflective societies
5	Inspiring girls for computer science - virtual settings as new opportunities	DE	Lucia Happe	National	310000 €	'Vector Foundation'.	Europe in a changing world, inclusive innovative and reflective societies
6	CrAFt – Creating Actionable Futures	BE, CZ, IT, NL, NO	Norwegian University of Science and Technology	H2020 - Horizon Europe	2000000 €	HORIZON-MIS S-2021-CIT-01-02	Europe in a changing world, inclusive innovative and reflective societies

### Other outputs / achievements

Please enter below any additional outputs/ achievements on the topic of the Action that contribute to the COST mission: “COST enables break-through scientific developments leading to new concepts and products and thereby contributes to strengthen Europe’s research and innovation capacities”, and for which the Action networking was necessary (e.g. a patent, standards, white paper).

Output / achievement description	Dependence of achievement on the Action networking
Informatics Europe, in collaboration with the EUGAIN COST Action, organises the Gender Equality in Informatics webinar series, which aims to contribute to sharing best practices as well as relevant research about gender equality and diversity in computer science. The series, organized each month from July to October (except August), is a way to strengthen both the understanding as well as the action perspective of this topic. The recorded webinars are publicly available and can be found at the EUGAIN YouTube channel ( <a href="https://www.youtube.com/channel/UCvBGQWPrO1hHotE7Pz6JkOg">https://www.youtube.com/channel/UCvBGQWPrO1hHotE7Pz6JkOg</a> )	High
EUGAIN member country videos recorded during the Management Committee meeting of March 2022 and published on the EUGAIN YouTube channel: <a href="https://www.youtube.com/playlist?list=PLhqfzJAqZ77D5qArDnxoPDuoH9U3yAey8">https://www.youtube.com/playlist?list=PLhqfzJAqZ77D5qArDnxoPDuoH9U3yAey8</a> The purpose of this playlist is to give an overview of the initiatives about gender balance in Informatics in the different countries for the benefit of the stakeholders in the given countries and of the International researchers who wish to compare the different initiatives. Stakeholders include schools, universities, IT industry, and society.	High

<p>Minerva Awards</p> <p>The Minerva Informatics Equality Award recognises best practices in Departments or Faculties of European Universities and Research Labs that encourage and support the careers of women in informatics research and education.</p> <p>The steering committee for the Minerva award are the members of the Informatics Europe Working Group Women in Informatics Research and Education (WIRE), which now are part of the COST Action European Network For Gender Balance in Informatics (EUGAIN).</p> <p>On a three-year cycle, the award focuses each year on a different stage of the career pipeline:</p> <p>Developing the careers of female faculty, including retention and promotion; Supporting the transition for PhD and postdoctoral researchers into faculty positions; Encouraging female students to enrol in Computer Science/Informatics programmes and retaining them.</p> <p>More details are at: <a href="https://www.informatics-europe.org/society/minerva-informatics-equality-award.html">https://www.informatics-europe.org/society/minerva-informatics-equality-award.html</a></p>	<p>Medium</p>
<p>Meet-ups with existing initiatives addressing gender balance in Informatics across Europe - These were coordinated by Bara Buhnova (year 1) and Zeynep Sahin Timar (year 2). Overall we had participation by EUGAIN members. Each meet-up consisted of several parallel break out rooms concentrating on barriers that female are encountering in the different countries. Non profit organizations, industrial organizations, governmental organizations, and innovation hubs were involved.</p>	<p>High</p>
<p>ITC Grant for participation in HCI International Conference by Dr. Anna Szlavi (Hungary) of a contribution developed together with Dr. Monica Landoni (Switzerland).</p> <p>Title of the presentation: Human Computer Interaction - Gender in User Experience</p> <p>Here's the link to the proceedings: <a href="https://link.springer.com/chapter/10.1007/978-3-031-06417-3_18">https://link.springer.com/chapter/10.1007/978-3-031-06417-3_18</a></p> <p>Conference web-page: <a href="https://2022.hci.international/">https://2022.hci.international/</a></p> <p>Conference venue: Gothenburg, SWE / online</p> <p>Conference start and end date: 26/06/2022 to 01/07/2022</p>	<p>High</p>
<p>ITC Grant to attend conference 7th International Academic Conference on Humanities and Social Sciences (IACHSS 2022)</p> <p>Grantee Betül Aydın (Turkey)</p> <p>Conference web-page: <a href="https://www.iachss.org/">https://www.iachss.org/</a></p>	<p>High</p>



<p>Conference venue: Paris, France.</p> <p>Conference start and end date: 19/08/2022 to 21/08/2022</p> <p>Title of the presentation: Online Psycho-Instructional Model: For Women Victims of Cyber Bullying &amp; Cyber Harassment</p> <p>Type of the presentation: Oral</p> <p>Co-authors: Betül AYDIN, Özge MISIRLI, Soner ATAKAN</p> <p>The presenter reports that she received great attention from participants from Brazil, South Africa and America, who stated that the subject was very important and worth considering. Especially female participants stated that they needed more studies on this issue.</p> <p>This innovative presentation was created in a multidisciplinary collaboration. It was carried out with expert instructional designers, psychiatrists and academicians who are experienced in gender studies, especially in information technologies. Related topics of the IACHSS – 2022 conference: Feminism, Gender Issues, Online Society/Online Community and Social Psychology.</p>	
<p>Questionnaire about industry academia cooperation</p> <p>As part of EUGAIN's working group 4 activities on strengthening Cooperation with Industry and Society, we are collecting information about existing successful initiatives across the EU on best practices of collaboration between Academia and Industry or other organizations promoting inclusiveness and a broader talent pool that has a positive impact on gender balance in informatics/ICT.</p> <p>Our intention is to create a database of successful initiatives and inspire further collaboration.</p> <p>WG2: questionnaire on Career Paths in Computer Science: <a href="https://isdl.limesurvey.rz.uni-bamberg.de/index.php/119143?lang=en">https://isdl.limesurvey.rz.uni-bamberg.de/index.php/119143?lang=en</a>  WG3: Good Practices that Promote Gender Balance in Informatics <a href="https://www.surveymonkey.com/r/VHVLNF9">https://www.surveymonkey.com/r/VHVLNF9</a></p> <p>WG4: <a href="https://eugain.eu/news/eugain-industry-academia-collaboration-survey/">https://eugain.eu/news/eugain-industry-academia-collaboration-survey/</a></p>	<p>Medium</p>
<p>Several partners are supervising master students who are delivering theses about EUGAIN topics. The best theses will be uploaded at EUGAIN.eu site</p>	<p>Medium</p>

## Impacts

Please describe the impacts (the short- to long-term scientific, technological, and / or socioeconomic changes produced by a COST Action, directly or indirectly, intended or unintended) that have resulted, or might result, from the Action in the following table (one impact per line).

Description of the impact, i.e. what will change, and for whom, as a result of what the Action achieved	Type of impact	Timing of impact
A bridge to young talents. Members and participants in EUGAIN, namely Early career investigators, work already on the theme of gender in Informatics. This network was established by the first Training School EUGAIN-STS 2022 which focused on how to conduct research studies in the field. The network of young researchers is coordinated by a member of the core group who actively supports the pool of young people and encourage them to build the research by the help of the instruments in the network (STSM, VG, participation to conferences). The group of young researchers have already taken part in joint publication projects, as well as working on Action deliverables.  See <a href="https://sites.google.com/view/eugain-training-schools">https://sites.google.com/view/eugain-training-schools</a>	<ul style="list-style-type: none"> <li>• Scientific / Technological</li> <li>• Economic</li> <li>• Societal</li> </ul>	Foreseen by the end of the Action
The scientific and technological development in EUGAIN will bring new business opportunities not only to major IT companies, but also SME's, start-up companies in IT who struggle to fill the gender and talent gap.	<ul style="list-style-type: none"> <li>• Scientific / Technological</li> <li>• Economic</li> <li>• Societal</li> </ul>	Foreseen by the end of the Action
Addressing societal challenges with focus on United Nation Sustainable Development Goal 5 via the creation of an authoritative community in the field of gender equality in Informatics able to translate knowledge into guidelines for the new generation of informatics teachers, students, professors, IT professional and decision makers. EUGAIN members working in academia complement the efforts done in the European IT industry to fill the talent and gender gap.	<ul style="list-style-type: none"> <li>• Economic</li> <li>• Societal</li> </ul>	Foreseen by the end of the Action

Please describe how the Action is advancing the careers, skills and network of researchers, including ECIs (for example: joint supervision of graduate and PhD students, research exchanges not funded by the Action, collaborations, Training Schools with ECTS accreditation, joint projects and jobs prospects).

EUGAIN is advancing the careers, skills and network of researchers, with focus on the young researchers and investigators by joint supervision of master and PhD students. The first EUGAIN Training School has already been accredited with 7.5 ECTS accreditation at the Norwegian University of Science and Technology.

The career benefits are mainly to researchers with the following amount of experience after their PhD:  $\leq 8$  years.

**Which of the stakeholders described in the “Plan for involving the most relevant stakeholders” in the Action’s MoU have been engaged and how? What additional stakeholders have been, or will be, engaged and how?**

School teachers have been included by working group 1. University professors and department heads are included by working group 2 and 3. Researchers, IT professionals and policy makers are included mainly in the connection with Informatics Europe ECSS and ACM Women.

## Dissemination and exploitation of Action results (other than co-authored Action publications listed previously)

Please describe the Action's dissemination and exploitation approach as well as all activities undertaken to ensure dissemination and exploitation of the Action results and the effectiveness of these activities.

### Dissemination and exploitation approach of the Action

There are four key objectives of the communication of EUGAIN: Create awareness of and advocate for the closing of gender gap in informatics in Europe and beyond; Reach and engage key stakeholders who could promote improving gender balance in informatics in Europe; Create a wider community sharing knowledge on the best practices and effective strategies on the topic of improving gender balance in informatics; Share results and success stories on the topic. The communications objectives are being met by communicating through various channels and platforms, with adaptations to different groups of stakeholders. Our website serves as the major dissemination hub, and includes news items and general information on objectives, WGs, and events. It also hosts all deliverables of EUGAIN, e.g., our booklets and publications. Finally, it serves as the central contact point for involved stakeholders. The EUGAIN website also provides a unique portal to the dissemination of research results. EUGAIN's accounts on Facebook and Twitter target different groups of stakeholders. EUGAIN disseminates research results among academic as well as industrial communities in spaces where these communities gather. EUGAIN strives to be visible at key conferences in the field, being often invited to share the results via keynotes and invited talks.

### Dissemination

#### Dissemination meetings funded by the Action

Title of Dissemination meeting	Meeting date	Meeting country	Action participant	Event name and hyperlink to the website	Title of presentation	Description of added value to the Action
N/A						

#### Other dissemination activities

E.g. participation to non-Action meetings, e.g. EU Parliament, meetings with policy makers, experts in the field, regional authorities.

Item/activity	Target audience	Outcome	Hyperlink
WIRE-EUGAIN Workshop "Sustainability and Gender Balance – How to Retain Girls and Women in Computer Science" 2021	The EUGAIN COST Action organized the WIRE-EUGAIN Workshop (a full-day workshop) on 26 October 2021, as part of the ECSS 2022. This workshop is a follow-up of the previous WIRE Workshops (2017, 2018, 2019 and 2020) and open to	The workshop was chaired by Karima Boudaoud, Université Côte d'Azur and Christopher Staff, Institute of Technology, Carlow. The workshop focused on sustainability in Computer Science and particularly on "How to retain girls and	<a href="https://www.informatics-europe.org/ecss/about/past-summits/ecss-2021/wire-workshop.html">https://www.informatics-europe.org/ecss/about/past-summits/ecss-2021/wire-workshop.html</a>

	<p>all ECSS 2022 participants as well as invited EUGAIN members.</p>	<p>women in computer science" at all the career stages. Many studies have been conducted on how to attract girls and women in Computer Science but very few on how to retain them. More specifically, the goal of the workshop was: Define first what sustainability in gender balance means in relation to retention; Understand then the reasons that push girls and women in Computer Science to leave - and consider whether there are different reasons in different cultures. Discuss mitigation measures to retain girls and women in Computer Science Exchange views on the best strategies to retain women in Academia See from a perspective of Science how to progress in more scientific approach when dealing with sustainability in gender balance; Involve in the debate all the actors concerned: Policy makers, Industry, Academia, Organisations and Associations dealing with gender balance. Extend the discussion about sustainability to diversity. We invited participants to send an extended abstract to collect their own scientific goals, actions, measures, best practices and recommendations.</p>	
<p>Panel at ACM Interaction Design and Children Conference (IDC) to disseminate the results of the EUGAIN project. Zeynep Şahin Timar participated to the conference with a DCG by EUGAIN. IDC was held at University of Minho, Campus de Gualtar, Braga (in person participation) Conference start and end date: 27/06/2022 to 30/06/2022 The conference program link <a href="https://idc.acm.org/2022/conference-program/">https://idc.acm.org/2022/conference-program/</a> The panel video <a href="https://youtu.be/AeDmPZqhAmQ">https://youtu.be/AeDmPZqhAmQ</a></p>	<p>The ACM Interaction Design and Children Conference (IDC) attracts Researchers, students, teachers. For the 2022 editions it had 200 participants, physical and online</p>	<p>The conference program link <a href="https://idc.acm.org/2022/conference-program/">https://idc.acm.org/2022/conference-program/</a> The panel video <a href="https://youtu.be/AeDmPZqhAmQ">https://youtu.be/AeDmPZqhAmQ</a> Extended network for EUGAIN</p>	<p><a href="https://idc.acm.org/2022/">https://idc.acm.org/2022/</a></p>
<p>WIRE Workshop 2020 Why and how to</p>	<p>We joined together Academia, Industry and</p>	<p>The 2020 WIRE Workshop was divided in</p>	<p><a href="https://www.informatics-europe.org/ecss/ab">https://www.informatics-europe.org/ecss/ab</a></p>

<p>improve gender balance at all stages of the career path in Informatics The workshop was chaired by Erika Ábrahám, RWTH Aachen University and Letizia Jaccheri, Norwegian University of Science and Technology with contribution of the members of the WIRE Working Group. Attendance to the Workshop only was free of charge (attending other ECSS sessions involved registration and fee payment).</p>	<p>Policy (European Commission) for a fruitful debate on how these sectors can work together to inspire and promote change that can impact the access of women to higher education and their ability and prospects of leading successful and fulfilling careers in Informatics in Academia, Industry or other sectors.</p>	<p>five interactive sessions, chaired by members of the WIRE Working Group, that addressed how gender balance affects the different career levels and what are possible actions for improvement and progress. Two sessions addressed the interplay of our actions with external stakeholders. Video recordings and slides available</p>	<p>out/past-summits/ecss-2020/wire-workshop.html</p>
<p>ACM Women Encourage 2022 This year's ACM womENCourage 2022 recognises that both the Arts and STEM (Science, Technology, Engineering and Mathematics) share a focus on creative thinking, problem solving and experiential, immersive learning. We are celebrating ways in which the Arts relate to STEM, often referred to as STEAM (Science, Technology, Engineering, Arts, and Mathematics) Letizia Jaccheri gave a workshop in the main track of the conference titled ATTRACTING, RETAINING, ENCOURAGING, AND INSPIRING WOMEN TO PURSUE A CAREER IN COMPUTER SCIENCE – WORKSHOP AT ACM WOMENCOURAGE</p>	<p>Open to all genders, womENCourage was initiated by ACM-W Europe and aimed at connecting women from diverse technical disciplines and encouraging them to pursue their education and profession in computing.</p>	<p>The slides of the workshop are available at <a href="https://letiziaccheri.org/2022/09/21/attracting-retaining-encouraging-and-inspiring-women-to-pursue-a-career-in-computer-science-workshop-at-acm-womencourage/">https://letiziaccheri.org/2022/09/21/attracting-retaining-encouraging-and-inspiring-women-to-pursue-a-career-in-computer-science-workshop-at-acm-womencourage/</a> Jaccheri also announced that ACM WomENCourage will be held in Trondheim in 2023 in cooperation with EUGAIN</p>	<p><a href="https://womencourage.acm.org/2022/">https://womencourage.acm.org/2022/</a></p>
<p>EUGAIN at the ACT TOGETHER Workshop of the 4th Summit on Gender Equality in Computing GEC'22 Aristotle University Research Dissemination Center Thessaloniki, Greece &amp; online (hybrid event) Conference start and end date: 16/06/2022 - 17/06/2022 Maria Roussou participated with a DCG from EUGAIN.</p>	<p>The Summit aims at promoting gender-equal access to the computer-related scientific frontiers, encouraging and educating women and men in an equal way to achieve their goals and utilize their potential in digital professions. The goal of the Summit is also to celebrate and disseminate the achievements of computer professionals in a fair and gender-equal way. Furthermore, the Summit brings together students, researchers, and professionals in the field of Computer Science to: Present and share their</p>	<p>The EUGAIN presentation was part of the workshop "Act Together": The role of H2020 projects and EU initiatives - their impact on Gender Equality. The workshop included presentations from 8 EU-funded projects that work on the promotion of Gender Equality in research and academic communities, and was followed by an interactive discussion with the public about expectations and their final outcomes.</p>	<p><a href="https://gec22.auth.gr/">https://gec22.auth.gr/</a></p>

	<p>achievements and experience in the computing field Discuss and understand the reasons why there is gender disparity in individuals opting for Computer Science and Engineering Consider and exchange views on gender stereotyping in Computer Science Come up with incentives and measures to reduce gender inequalities in the field</p>		
<p>International Conference in Software Engineering (ICSE) Conference Details Conference web-page: <a href="https://conf.researchr.org/home/icse-2022">https://conf.researchr.org/home/icse-2022</a> Conference venue2 Pittsburgh (USA) Conference start and end date: May 2022 22th - 27th Accepted oral contribution details Title of the presentation: EUGAIN. The European Network For Gender Balance in Informatics Co-authors: Letizia Jaccheri and Barbora Buhnova</p>	<p>ICSE, the IEEE/ACM International Conference on Software Engineering, is the premier software engineering conference. Since 1975, ICSE provides a forum where researchers, practitioners, and educators gather together to present and discuss the most recent innovations, trends, experiences and issues in the field of software engineering.</p>	<p>Link to the conference programme of May 25th: <a href="https://conf.researchr.org/program/icse-2022/program-icse-2022/DetailedTable?date=Wed%2025%20May%202022">https://conf.researchr.org/program/icse-2022/program-icse-2022/DetailedTable?date=Wed%2025%20May%202022</a> Link to the description of the accepted Poster presentation: <a href="https://conf.researchr.org/details/icse-2022/icse-2022-papers/198/EUGAIN-The-European-Network-For-GenderBalance-in-Informatics">https://conf.researchr.org/details/icse-2022/icse-2022-papers/198/EUGAIN-The-European-Network-For-GenderBalance-in-Informatics</a></p>	<p><a href="https://conf.researchr.org/program/icse-2022/program-icse-2022/DetailedTable?date=Wed%2025%20May%202022">https://conf.researchr.org/program/icse-2022/program-icse-2022/DetailedTable?date=Wed%2025%20May%202022</a></p>
<p>Third Workshop on Gender Equality, Diversity, and Inclusion in Software Engineering The purpose of this ICSE 2022 workshop was to discuss about the role, difficulties and opportunities concerning people of different gender in the field of software engineering, in research, education and industry. The workshop included some invited speeches from experts in the areas mentioned above, the presentation of accepted position papers and open discussion sessions. The third edition of the Workshop on Gender Equality, Diversity, and Inclusion in Software Engineering will be held entirely online.</p>	<p>Researchers, Educators, students, industry representatives. ICSE is the International venue for software engineering stakeholders.</p>	<p>Two keynote speeches were delivered by two of the most renowned scientists in the gender and informatics fields. Moreover 12 papers were presented. The recordings are available at eugain.eu website and the scientific papers are published in the IEEE and ACM press <a href="https://ieeexplore.ieee.org/xpl/conhome/9853504/proceeding">https://ieeexplore.ieee.org/xpl/conhome/9853504/proceeding</a></p>	<p><a href="https://geworkshop.github.io/program.html">https://geworkshop.github.io/program.html</a></p>

## Exploitation activities

Please describe below any activities undertaken to ensure exploitation (use, in particular in a commercial context) of the Action's achievements.

Item/activity	Target audience	Outcome
N/A		