GENDER BALANCE PLAN

The purpose of this document is to oversee and promote gender balance within the QUADRATURE project from its start in 2023 until its conclusion in 2027.

Introduction

Patterns observed in the STEM sector, particularly in the quantum field, reflect that women and gender-diverse individuals remain significantly underrepresented in both academic and industrial research environments.

Despite the fact that the number of women researchers has grown in every sector at EU level over the last decade, disparities persist and gender balance is yet to be achieved in many countries. According to a recent EC report, women in the EU currently comprise just over one-third (34 %) of the total population of researchers, where notably more men are in senior positions. Moreover, women account for only one-fifth of doctoral candidates in ICT, and remain below parity in physics doctoral programmes, which form a core pipeline for quantum research careers (European Commission, 2025).

In the private sector, a study by the consulting firm McKinsey reports that progress regarding gender and ethnic diversity in leadership teams has been slow since 2014, even though executive teams with more than 30% women tend to perform better than those with fewer or no women (McKinsey, 2020).

Available evidence suggests that gender disparities may be more pronounced in quantum computing than in other high-tech fields. A report conducted by the London School of Economics and Political Science, supported by data from Quantum Futures, indicates that fewer than 2% of applicants for quantum-related technical roles are women, and that approximately 80% of quantum companies have no women in senior positions. Women also occupy only a small fraction of technical roles in quantum start-ups (LSE, 2023).

This is further corroborated by a sectoral analysis of the quantum industry by *Physics World*, the magazine of the Institute of Physics (IOP). The article reports that the limited participation of women within technology-driven sectors means that the field is likely missing out on substantial innovative potential, particularly at a time when creativity and interdisciplinary thinking are critical to technological breakthroughs. (Physics World, 2022).

Studies agree that diverse teams in terms of gender and ethnicity can improve innovation and financial performance (LSE, 2023) and are 12% more likely to outperform other organisations (McKinsey, 2020). Nonetheless, there remains a systemic challenge in attracting, retaining, and advancing women in the quantum research and industrial workforce, which has been shown to result in loss of talent, innovation, and productivity (LSE, 2023).

In conclusion, the STEM field, particularly quantum computing, presents the following challenges:

- persistent gender imbalances,
- structural barriers affecting participation and career progression,
- the need for proactive, targeted measures

Policy Statement

The QUADRATURE project considers that ensuring gender balance in quantum research and innovation is imperative and immediate. It is not only a matter of social responsibility, but also a strategic necessity for maximising scientific excellence and long-term technological competitiveness. Therefore, this policy is designed to integrate equality and inclusion into our work culture, strategies, and practices, so that everyone involved in the project feels respected, valued, and empowered.

The QUADRATURE project:

- Follows the gender equality aims of the European Union.
- Aligns with Horizon Europe's objective to strengthen women's participation in science and technology.
- Recognises gender equality as a fundamental principle for excellence in research and innovation.
- Adheres to the consortium's GEPs and is supported by their equality offices.

Commitment

The consortium commits to promoting equal participation and career development opportunities for women and men in all their diversity across the project's academic, technical, and administrative roles.

With this document, the QUADRATURE consortium commits to:

- collect and analyse data on the gender of personnel and students, reporting progress based on indicators at the end of each Reporting Period;
- enforce a zero-tolerance policy on harassment, bias, and discrimination, to ensure a safe workplace for everyone. Any form of gender-based misconduct will be addressed promptly, with stringent actions being taken against perpetrators;
- provide equal opportunities for all employees and not discriminate in hiring practices, professional development, promotions, or any other activities;
- ensure fair pay through regular reviews of pay equity;
- support a healthy work-life balance for everyone in the team, considering their individual situations;
- dedicate resources to facilitate measures contributing to gender equality:
    - appointing an external expert as Gender Issues Advisor.
    - designating the UPV team as responsible for gender balance within the project.
    - featuring content oriented to gender inclusion in its social networks.
    - discussing any gender related issues in the plenary Progress Meetings.
    - promoting activities to encourage women's participation in STEM.
    - developing a network with gender-related associations in science.
    - encouraging training activities on gender equality for the whole consortium;

Diagnosis

The cumulative number of researchers during the project is 50, of whom 20% are women. Currently, the female team consists of 2 leading roles – Project Coordinator and WP4 leader, and WP6 leader and Innovation/Exploitation Manager –, as well as 2 more Senior Researchers/Professors, 5 PhD candidates, and 1 Postdoctoral researcher.

As per the end of the RP2 (M13-M30), it can be concluded that the number of female researchers involved in the QUADRATURE project increased by 3% compared to the end of RP1 (M1-M30). 60% of them are PhDs and Post-docs, confirming our efforts to encourage young women to pursue careers in Quantum Technologies, as well as the progress towards our overall gender balance goals.

Gender Issues Advisor

Prof. Núria Castell Ariño has been appointed as Gender Issues Advisor for the QUADRATURE project. She will ensure compliance with this plan and counsel the consortium on any gender issues that may arise.
Ms. Castell Ariño is actively involved in gender balance initiatives to increase the presence of woman in STEM at local, national and international level for which she has received multiple awards. Since 2018, Prof. Castell has been part of the Steering Committee of the womENcourage, an annual conference organised by ACM-WE that brings together women in the computing profession and related technical fields to exchange knowledge and experience and provide special support for women who are pursuing their academic degrees and starting their careers in computing.

Ms Carmen G. Almudéver
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QUADRATURE

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