

# GENDER EQUALITY PLAN 2023-2026



## Title

Gender Equality Plan of VORTEX CoLAB for 2023 – 2026

## Property

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## Revision Control Table

Revision	Date	Description
GEP.VTX.V.01	June 2023	N/A
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## Disclaimer



*As per the European Institute for Gender Equality (EIGE), data representing gender-related issues are collected and presented disaggregated by sex, as in referring to the biologically based categories of female and male, as the main and overall classification. The term gender is used to refer to the non-biological characteristics or social categories.*



## TABLE OF CONTENTS

Executive Summary .....	1
INTRODUCTION	Error! Bookmark not defined.
STRATEGIC OBJECTIVES.....	3
DATA COLLECTION AND MONITORING .....	4
ACTION PLAN.....	7
REFERENCES .....	11

**Table 1 - Vortex-Colab Focus Areas .....4**

**Table 2 - Personal development Plan .....9**

**Figure 1 - Global female representativity .....5**

**Figure 2 - Employee degree representativity.....5**

**Figure 3 - Female representativity .....6**

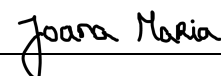


## Executive Summary

VORTEX-CoLab (VORTEX) is a private, not-for-profit association dedicated to applied research, technology transfer and co-creation. It was created in 2019 with the purpose of bringing its five associates (**Capgemini Engineering Portugal; Beta-I; CISTER; Nova Lincs; INESC TEC**) into a single vortex to accelerate the creation of novel solutions in the areas of cyber-physical systems and cybersecurity. VORTEX develops advanced cyber-physical systems and cybersecurity technology bricks by merging cutting-edge research with agile market solutions, to provide top-class products with the highest guarantees of safety and security.

The Gender Equality Plan (GEP) of VORTEX is a document covering the next three years with which the Laboratory aims to implement actions and projects to reduce gender inequalities and to enhance diversity. At a time of many uncertainties, we appreciate the importance of an inclusive community that is not only free from discrimination but is also able and willing to do more - in other words, a community perceiving differences as an ethical value and a valuable resource that can yield positive benefits.

As part of a research organization, it is our duty to offer gender equality in recruitment and career progression, work-life balance and organizational culture, integration of the gender dimension into research and appreciating employee individuality and originality. The Gender Equality Plan is a tool designed to encourage this cultural change, with the aim of continuing to build an honest and communicative learning and work environment where people are treated equally and there is no discrimination, a community which conveys trust, a sense of belonging and shared goals, and consequently enables the entire institution to grow. Plans for achieving gender equality are embedded within a range of procedures, initiatives and action plans in our organization.



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Joana Maria  
Executive Board Member

## Introduction

According to the United Nations “*Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world*”.

The Sustainable Development Goals (SDG’s) presents goal 5, gender equality and the empowerment of all women and girls as an explicit goal under the 2030 Agenda. Also goal 10, aims at reducing inequalities and ensuring no one is left behind which is integral to achieving the Sustainable Development Goals. These goals are recognized as an integral part of global development, both as an objective and as a foundation across SDG’s.



VORTEX is committed into supporting the achievement of the SDG’s and recognises that equality, diversity, and inclusion are critical to our success and excellence. Plans for achieving gender equality are embedded within a range of procedures and initiatives within our organisation. Our action plan presents the measures which VORTEX will adopt to fully assure gender equality, an opportunity to evaluate our reality and formalise our goals of reducing bias and thriving in a gender-equal economy.

***Gender equality is a fundamental value of the European Union. Gender equality benefits research and innovation (R&I) by improving the quality and relevance of R&I, attracting, and retaining more talent, and ensuring that everyone can maximise their potential (European Commission, 2021).***

***“Horizon Europe sets gender equality as a crosscutting principle and aims to eliminate gender inequality and intersecting socio-economic inequalities throughout research and innovation systems, including by addressing unconscious bias and systemic structural barriers. “(European Commission, 2021)***

## Strategic Objectives

The Gender Equality Plan is defined as a strategy based on 4 priority areas of intervention:

- equal access to employment: recruitment and selection
- performance evaluation and career progression
- internal and external information
- communication and work-life balance

VORTEX develops a set of actions and initiatives to promote gender equality and actions at all levels, and to guarantee the conditions for full and equal participation of man and woman in professional activity, free of gender stereotypes. These actions have two main objectives:

**OBJ1.** Externally,

**OBJ1.1.** on the development of activities that contribute to promote an improved gender balance among the employees.

**OBJ1.2** Identify actions at the level of the promotion of equality between men and women

**OBJ2.** Internally,

**OBJ2.1:** supporting policies that facilitate the career advancement of women, both on the research and administrative careers.

**OBJ2.2.:** define and adopt good practices in terms of promoting equality between men and women

VORTEX has a dedicated leadership and governance structure to support implementation and monitoring of equality and diversity related matters.



## Data Collection and Monitoring

VORTEX is a research-driven organisation in cutting-edge applied research, development, and technology transfer in the areas of Cyber-physical Systems and Cybersecurity (table 1 represents it in more detail). Our responsibilities are:

- Provide advanced Expert Services in Perception for the Edge (Data fusion, AI/ML, Advanced Visualization, Simulation, and robotics), Security and Smart Distributed Systems (Distributed intelligent systems, cybersecurity), and Safety for Embedded Systems (verification, low-level software, RISC-V).
- Co-creation / development of feasibility studies, demonstrators, POCs or MVPs with clients.
- Leverage strategic positioning as an industry and academic bridge for the capture of public and private funds.

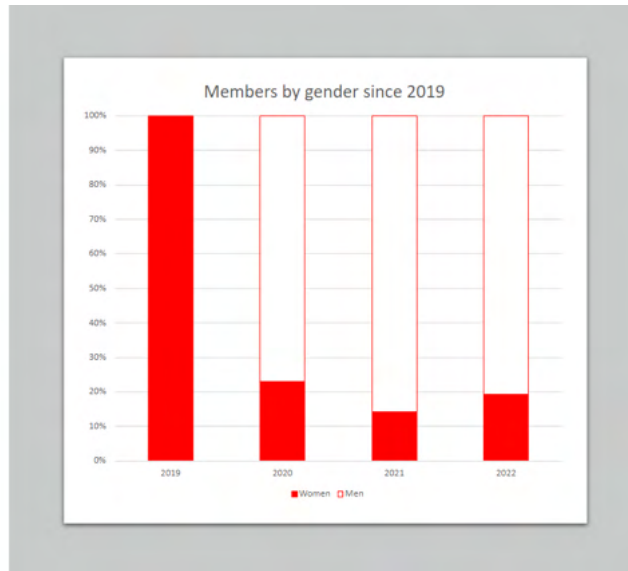
VORTEX mission is to bridge the innovation gap between academia and business to accelerate the launch of cutting-edge cyber-physical systems and cybersecurity solutions that have a meaningful impact in industry and society.

*Table 1 - Vortex-Colab Focus Areas*

SECURITY FOR SMART DISTRIBUTED SYSTEMS	SAFETY FOR EMBEDDED SYSTEMS	PERCEPTION ON THE EDGE
Smart systems, data, communication, and computation (cyber)security to improve CIA triad (Confidentiality, Integrity, Availability).	Embedded systems require an in-depth approach to enable flexibility in resource allocation and guarantees of safety by design	Systems that react to external stimulus need to have a perception of the surrounding environment. Humans need to visualize the systems' perception for validation and trust.
AUTOMOTIVE ADAS & AD		
SECURITY & DEFENCE: UNMANNED ROBOTIC SYSTEMS		
<ul style="list-style-type: none"> <li>+ Cybersecure Cyber Physical Systems for Automotive and Unmanned Robotic Systems</li> <li>+ Verification and Validation of V2X Apps</li> <li>+ Secure Over-the-Air (OTA) updates</li> <li>+ Trust / Privacy</li> </ul>	<ul style="list-style-type: none"> <li>+ Embedded Virtualization (ARM and RISC-V)</li> <li>+ Safety of mixed-criticality systems</li> <li>+ Continuous observation</li> <li>+ Hardware accelerators</li> <li>+ Lightweight formal verification methods</li> <li>+ Data-centric computing architecture</li> </ul>	<ul style="list-style-type: none"> <li>+ Driving Simulation</li> <li>+ Real-Time Perception</li> <li>+ World Model integration</li> <li>+ V2X Data fusion for extended horizon</li> <li>+ Advanced Visualization</li> <li>+ Interaction for fomenting Human-Machine trust</li> </ul>

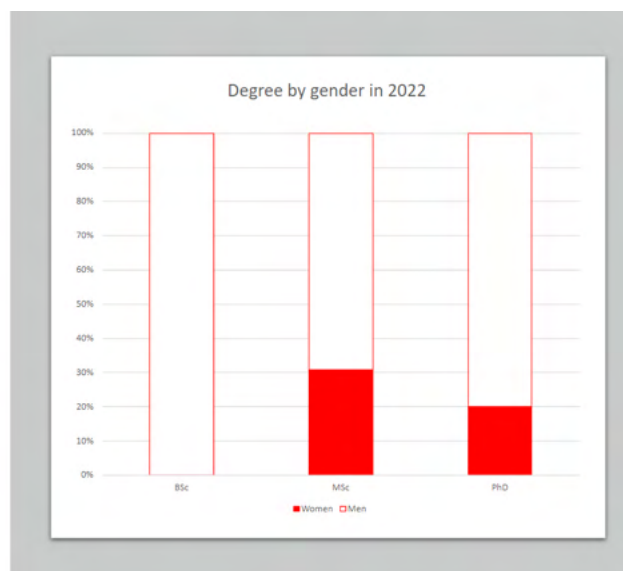
Since the beginning of our activity, there has always been a concern to maintain gender equality in recruited members. Although it is a challenge, given the area of activity, over time we have been moving towards achieving gender balance.

The global female representativity in all the employees of Vortex-CoLab is of 20%, in 2022.



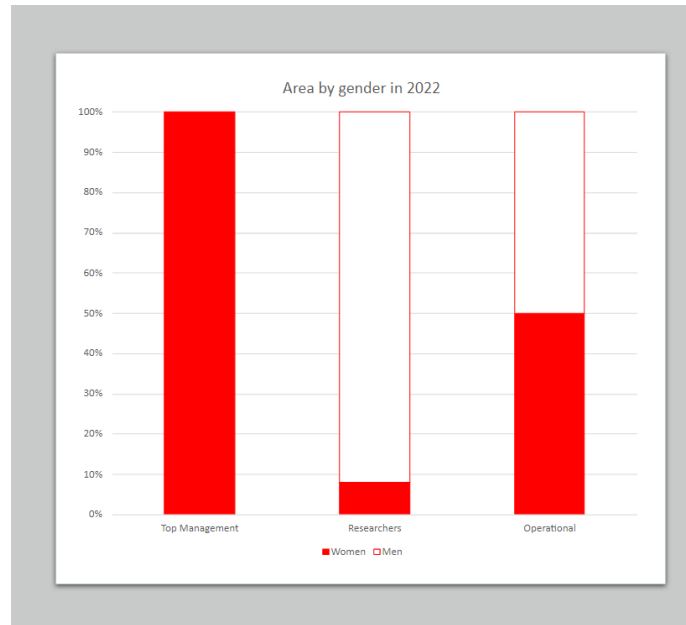
**Figure 1 - Global female representativity**

Although women are underrepresented in all categories, all are found to have a degree above MSc.



**Figure 2 - Employee degree representativity**

The female representativity is higher in almost all categories, except for Research staff (6% women), and equal for operational staff. This trend is in line with the overall gender distribution in technological areas.



**Figure 3 - Female representativity**

Our multidisciplinary team represents 20% PhDs, 63% Research Engineers & 5% Project Managers. Currently with a staff of 41 employees, 9 woman and 32 men, it is our objective to carry out comprehensive diagnosis of the current situation of VORTEX in equality and assure an equal opportunity: diversity and equality in the recruitment process.

## Action Plan

The structure of the VORTEX's action plan is in line with the recommendations by the European Commission which are broken down into different areas.

### 1. Gender balance in leadership and decision-making

Attracting female employees for leadership positions at VORTEX is an elementary component of the outlook discussions of its executive board. As a result, the female representativity is higher in most categories (please see figure 3 for more detail).

### 2. Work-life balance and organizational culture

It is of most importance for VORTEX that our organizational culture encompasses the creation of a positive work environment and strong work-life balance for employees, which is a key component for family-friendly working conditions for employees.

VORTEX has established numerous strategies to support working with care responsibilities including counseling, training, and awareness-raising. Also, VORTEX has been promoting integration of work with family and personal life. Some measures are availability of flexible working times arrangements, from part-time to remote working. As part of its efforts to facilitate a better work-life balance for its staff, VORTEX will produce a guideline to encourage men and women to share family activities disseminating and proposing new support measures to facilitate work/life balance.

### 3. Gender equality in recruitment and career progression

VORTEX formulated four standards for gender-equitable procedures in the recruitment of employees, which are anchored in the appointment regulations, the selection and evaluation regulations for tenure-track positions as well as the appointment guidelines:

- Gender equality as an overriding quality criterion in selection procedures
- Gender parity in the composition of the selection committees
- Extensive women's representative participation rights
- Definition of Gender and diversity competence as a cross-disciplinary leadership skills.

The executive board ensures that gender-equitable quality standards are consistently applied in all selection procedures at VORTEX, so that appointment rates of at least 45% are stabilised across all proportion of female applicants increases.

### 3.1 Personnel development

Gender-equitable personnel development has a primordial strategy at VORTEX. It includes goals for gender equality and anti-discrimination. As presented on table 2, we aim at applying the below personal development plan and monitoring its implementation.

VORTEX aims to reduce discrimination and biases in personnel selection procedures and to strengthen diversity in science go addresses HR managers as well as early career employees. The team develops workshops and awareness-raising activities, which sensitize decision-makers to unconscious biases.

Table 2 - Personal development Plan

Objective	Action	Success Measure	Responsibility
<b>Increase the number of female Employees</b>	<b>a. Develop predefined metrics prior to job advertisement</b> b. Increase the diversity in applicant pools by incorporating required statements on diversity and mentoring	<b>a. Increase in female representation in research staff level</b> b. Increase membership of women in institutional committee	a. People Operations Management b. Head of Operations
<b>Develop an inclusive culture that recognises and strengthens gender and racial diversity</b>	Identify additional opportunities for enhancing an inclusive culture at VORTEX	Metrics of evaluation based on feedback from staff	a. Business Development <b>b. Director</b>
<b>Develop awareness and training actions on gender equality</b>	Employee Training		People Operations Management
<b>Continue to collect and monitor data against GEP</b>	Baseline data: Modifications and corrections made to the current HR database to aid efficient and accurate collection of data (we started from a low baseline)	<b>a. Improved quality and quantity of data in future submissions</b> b. Timely and accurate data available for annual reporting purposes	People Operations Management
<b>Woman in Tech Industry</b>	<b>Organize network events, start-up visits, and workshops.</b>	Exchange ideas, network, support each other!	<b>a. Business Development</b> <b>b. Director</b> c. Head of Operations

## Conclusion

The next step is the implementation phase, where we will continue to monitor and report the data collected during 2023 and updating the GEP action plan, accordingly. In addition to the training and awareness-raising actions, the Human Resources team will monitor the update this plan to ensure its successful implementation and assure our commitment to it.

It is important to highlight that VORTEX is a recent organization and that we are committed into seeking to positively influence the application of the GEP into our society to drive a sustained change in the paradigm of gender equality.

## References

European Commission, Directorate-General for Research and Innovation, *Horizon Europe, gender equality – A strengthened commitment in Horizon Europe*, Publications Office, 2021, <https://data.europa.eu/doi/10.2777/97891> [accessed 28 June 2023]

UN General Assembly, *Transforming our world : the 2030 Agenda for Sustainable Development*, 21 October 2015, A/RES/70/1, available at: <https://www.refworld.org/docid/57b6e3e44.html> [accessed 28 June 2023]



