

		<h1>Gender Equality Plan</h1>	Referência:	P
			Revisão:	00
			Data:	Dez 2021
Objetivo:	Definir o planeamento para promover a igualdade de género nas atividades da instituição			
Âmbito:	Gestão estratégica			

Este procedimento tem como objetivo definir o planeamento para promover a igualdade de género nas atividades da instituição e encontra-se redigido em língua inglesa.

## Introduction

According to the UNESCO Science Report: towards 2030, existing data demonstrate that women are globally under-represented in fields of science, technology, engineering, and mathematics (STEM), both in the number of graduates (especially at the Ph.D. level), and in research professions. The gender gaps are generally more evident in disciplines such as mathematics, engineering, and computer science. According to the organization catalyst<sup>1</sup>, Europe's gender gap in STEM is especially wide in information and communication technologies. Even though, only 27% Women's Share of bachelor's Degrees in engineering within STEM Fields, 2018. In 2019, women made up more than a third (41%) of scientists and engineers in the EU-28<sup>2</sup>, an increase of 9% since 2009. Nevertheless, a study (Hägglund, A. E., & Leuze, K., 2021) affirms that boys are more likely to expect to work in a STEM occupation at the age of 30 than girls across all countries. According to Gottfredson and Lapan, 1997, "Women's underrepresentation in scientific and technical fields is the result of a long-lasting process of occupational preference formation, typically set in motion in childhood and early adolescence" (Hägglund, A. E., & Leuze, K., 2021). This means that women and men systematically choose different fields of study in higher educational levels across all countries. A study (Munoz Boudet, A. M., et. al, 2021) suggests that throughout European and Central Asia Countries, women dominate tertiary fields of arts, education, health and welfare, humanities and social sciences and tertiary programs such as engineering, construction and information technology appear to be male dominated across countries. In the case of Portugal, of all women in employment, around 38% graduated from STEM subjects and only 5% women in ISCO 1<sup>3</sup> (Hägglund, A. E., & Leuze, K., 2021).

Between 2018-2019, in the framework of the project SUPERA - Supporting the Promotion of Equality in the Research and Academia, the University of Coimbra (UC), through the definition of qualitative and quantitative indicators and a mix-method analysis, characterized gender equality among the institution. The statistical assessment results, in terms of vertical segregation, showed that the higher the qualification, the lower the proportion of women involved in terms of historical context. The distribution per scientific areas evidenced these traditional patterns of vertical segregation where women are more present in social, humanities, and health fields than men, who prevalence in engineering and technologies fields. In the case of the University of Coimbra, 33% of the total of collaborators are women related to engineering and technologies. Hence, the UC's number one objective targets the promotion of the increment of female academic collaborators in the scientific field of engineering and technologies in 3-7% for 2023.

At DEM the difference between the number of female and male elements is also reflected: in the last five years, over 80% of first year students are male.

The Association for the Development of Industrial Aerodynamics (ADAI) is a R&D Unit linked to the Mechanical Engineering Department (DEM) at the University of Coimbra which main research field is engineering. ADAI was founded in 1990. Also here, the STEM gender gap in unveiled: ADAI has 42 contracted elements, from which 74% are male.

<sup>1</sup> <https://www.catalyst.org/research/women-in-science-technology-engineering-and-mathematics-stem/>

<sup>2</sup> [https://ec.europa.eu/eurostat/web/products-datasets/product?code=hrst\\_st\\_ncat](https://ec.europa.eu/eurostat/web/products-datasets/product?code=hrst_st_ncat)

<sup>3</sup> <https://ilostat.ilo.org/resources/concepts-and-definitions/classification-occupation/>

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A brief characterization of gender-disaggregated data was made. Basically, 2021 data was broken down by gender to detect any gender differences that will provide our institution with crucial information for the identification of the most pressing areas requiring intervention; based on the UNESCO Gender Equality principle.

Data showed that the contracted elements holding a Ph.D. were represented by 74% men and 26% women. As for collaborators with a Master, 88% were men and 12% were women. And the numbers reverse as the educational level diminishes: 67% of graduated women and 67% with the 12th grade or less.

In summary, ADAI's staff is composed by 74% men and 26% women from a total of 42 contracted collaborators.

Following this historical tendency of gender gaps in the disciplines such as STEM, the main purpose of the Gender Equality Plan at ADAI will be to achieve equitable opportunities for all its collaborators and future collaborators. Gender Equity is defined as follows:

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*“Gender equity is the process of being fair to men and women. Targeted measures must often be put in place ‘to compensate for the historical and social disadvantages that prevent women and men from operating as equals. Gender equity can be considered as a step towards gender equality that recognizes the socioeconomic, cultural, physical psychological, and other factors that make each person different” (UNESCO, 2017)*

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UNESCO, in 2014, declared that equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on their sex or gender. Therefore, Gender equality plays outside sameness, and it is oriented to the equal valuing by society of the similarities and differences between women and men and the different roles that they play.

ADAI's vision for Research and Development (R&D) is to promote the transition to a based gender-inclusive system able to address the needs and concerns of all genders, and to provide innovative solutions that ensure diversity, equality, and equity among our collaborators. To boost the excellence in R&D at our research Unit, gender dimension must be guaranteed in all stages and phases of ADAI's GEP strategy. Therefore, ADAI aims to embed gender balance through working on a Gender Equality Plan (GEP) that conveys the following main fronts:

- GEP accessibility for all: institutionalization of the GEP and publication of a formal document signed by ADAI's Board of Directors on our website
- Data collection and monitoring: gender disaggregated data on personnel and annual reposting based on indicators
- Training: Raising awareness on gender equality and unconscious biases for staff and decision-makers.

The GEP at ADAI aims to reinforce the institution's engagement with the 2030 Agenda for Sustainable Development, specifically with goal number five, about gender equality, and goal number ten, about inequality reduction. In this framework, our institution commits to work in several actions and objectives.

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## Objectives

### 1. Embed work-life balance and organizational culture

The objective aims to create a stronger work-life balance for employees and balance its relationship with the organizational culture at our R&D Unit.

#### Actions

- Institutionalize GEP and include gender equality in ADAI's mission and vision
- Define indicators for gender disaggregated data collection
- Assign staff members that will conduct the task of performing the initial assessment of the GEP
- Create or use available mechanisms for data collection and monitoring gender-disaggregated data on personnel and students and annual reposting based on indicators. Establish sustainable data collection procedures and tools to monitor evolution, and regularly assess the policies in place

### 2. Promote gender balance in leadership and decision-making

The objective aims to ensure gender balance in leadership and decision-making through promotion and training.

### 3. Integrate the gender dimension into research and teaching content

The objective aims to integrate the gender dimension through promotion and initiatives within projects, teams and structures.

### 4. Promote policies for inclusion and protection of minorities

The objective aims to ensure the protection and inclusion of minorities, starting with the characterization and, following with monitoring gender-based violence, including harassment. Moreover, this objective will be indirectly linked with the objective number one "embed work-life balance and organizational culture" where an action addresses the nomination of the GEP ombudsman for dialogue, to bridge top-down and bottom-up approaches (including gender-based violence).

### 5. Promote gender equality in recruitment and career progression

The objective aims to support career progression of ADAI's Collaborators and to promote gender balance in the process of recruitment.

## GEP: steps or phases for 2022-2025

The following steps are inspired by the GEAR action toolbox › Toolkits › Gender Equality in Academia and Research by the European Institute of Gender Equality (EIGE).

I. Literature review phase: about gender equality in research. The designated team will have the task of reviewing existing literature at European and international levels, amongst others, with the purpose of learning about gender stereotypes in research, current inequalities in research settings, and measures or actions to tackle such problems.

II. Analysis phase: Data about gender-disaggregated on ADAI's personnel and students and gender-based violence (including sexual harassment) will be collected through a survey (GEAM tool, 9) procedures, processes and practices and critically assessed aiming to detect gender inequalities and gender bias.

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III. Planning phase: As soon as the GE characterization at ADAI is complete, objectives and goals will be defined, followed by the definition of actions and measures to mitigate the identified areas of improvement opportunity. After the identification of the problems and the definition of how we are going to tackle them, resources and responsibilities will be attributed, and timelines will be defined.

IV. Implementation phase: In this phase actions and mitigation activities are implemented.

V. Monitoring phase: with the objective of the improvement of the measures and actions implemented, the process and the progress will be annually monitored and assessed, so that the results can be optimized.

## Set of data to characterize and monitor gender equality

Gender in research categories: categories used within the organization to sort employees into different career levels

1. staff numbers by gender at all levels, by disciplines, function (including administrative / support staff) and by contractual relation to the organization;
2. numbers of women and men in academic and administrative decision-making positions (e.g. boards, committees, juries);
3. number of female and male students at all levels and for all disciplines.

Gender pay gap: the differential income of men and women deriving from the different positions and roles they assume within the organization following recurrent gender patterns

4. wage gaps by gender and job;

Gender in career progression:

5. number of women and men having left the organization in past years, specifying the numbers of years spent in the organization;

Gender in organizational and human resources matters:

6. number of female and male candidates applying for job positions;
7. number of staff by gender applying for/taking parental leave, for how long and how many returned after taking the leave;
8. number of training hours/credits attended by women and men;

Gender in Projects:

9. percentage of men and women in research teams of submitted and selected projects, and the distribution of tasks and roles among each team;
10. Percentage of men and women as principal researchers in submitted and selected projects;
11. Percentage of submitted and funded projects addressing the gender perspective;

Gender-based violence:

12. number and percentage of individuals that have been subjected to discrimination
13. number and percentage of individuals that have been subjected to harassment
14. number and percentage of individuals that have been subjected to unwanted sexual attention

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## Gender Equality Strategy:

The action plan presents the set of initiatives that aim to achieve the defined objectives. For each initiative, the indicators, schedule and those responsible for implementing the initiative are identified.

Objectives	Actions	Calendar				Indicator (if applicable)	Goals	Responsible
		2022	2023	2024	2025			
<b>1. Embed Work-life balance and organizational culture</b>	Institutionalize the GEP and include gender equality in ADAI's mission and vision	X				Nº of documents	1 document	Board of directors
	Define indicators for gender disaggregated data collection	X				Nº of indicators	At least: 4 feasible indicators	GEP staff
	Assign staff members that will conduct the task	X				Nº of staff members	At least 1 staff member	Board of directors
	Use or create mechanisms for data collection	X	X	X	X	Nº of tools/mechanisms	1 tool	GEP Staff
	Include gender indicators and analysis in annual reports		X	X	x	Nº of documents	1 document and 1 paragraph on the annual report	GEP staff
<b>2. Embed gender balance in leadership and decision-making</b>	To be defined after the gender disaggregated data collection		X					
<b>3. Integrate the gender dimension into research and teaching contents</b>	To be defined after the gender disaggregated data collection		X					
<b>4. Promote policies for inclusion and protection of minorities</b>	To be defined after the gender disaggregated data collection		X					
<b>5. Promote gender equality in recruitment and career progression</b>	To be defined after the gender disaggregated data collection		X					

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## Gender Equality data collection, audit and monitoring

The Gender Equality Audit and Monitoring (GEAM) tool will be used for the characterization and monitoring phases where data must be collected. Basically, this instrument, developed by gender experts across Europe and based on tried and tested existing measurement scales in the scientific literature, will provide ADAI with a solid starting point in the characterization of the gender equality and, also, monitoring the advances in the following years. It is constituted by questions that cover most aspects of gender equality in research and academic organizations, providing data for designing and implementing gender equality measures, and evaluating their impact over time. Therefore, in the first scenario, the tool will allow to characterize ADAI's actual situation and, later, to carry out survey-based gender equality audits, in our R&D Unit, annually.

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