# PLIADES

## AI-Enabled Data Lifecycles Optimization and Data Spaces Integration for Increased Efficiency and Interoperability

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## PLIADES GENDER EQUALITY PLAN

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|---|---|
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# Executive Summary

The PLIADES Gender Equality Plan (GEP) is a comprehensive strategy to promote gender equality throughout the project and is in line with EU directives, the EU Gender Equality Strategy 2020-2025 and the UN Sustainable Development Goals (SDGs). It focuses on the integration of gender-sensitive approaches in the areas of recruitment, AI development, research, events and communication. The plan includes measures such as eliminating gender bias in AI systems through ethical impact assessments, ensuring equitable recruitment practises, incorporating gender considerations into research, promoting diversity in events and collaborations, and introducing inclusive language. The GEP was developed using the EIGE GEAR methodology and follows a structured "Define, Plan, Act, Review" cycle that ensures continuous monitoring and evaluation. Supported by an Ethics Advisory Board and project leaders, the GEP creates a framework for inclusion, diversity and ethical practises in all PLIADES activities.

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# List of Terms and Definitions

| Abbreviation | Definition |
|---|---|
| EAB | Ethics Advisory Board |
| EIA | Ethics Impact Assessment |
| EIGE | European Institute for Gender Equality |
| EU | European Union |
| GEAR | Gender Equality in Academia and Research |
| GEP | Gender Equality Plan |
| SDGs | Sustainable Development Goals |
| WP | Work Package |
| WR | White Research |
| T | Task |

# 1 Introduction

The current document constitutes the Gender Equality Plan (GEP) of the PLIADES project as part of the Task 1.5 of the PLIADES project. The GEP under the PLIADES project is structured to set out the key activities and performance indicators to promote gender equality under the project. Recognising that gender balance and gender mainstreaming in all key areas are crucial to the success of PLIADES, the GEP serves as a flexible framework in line with EU directives to ensure and promote equal opportunities.

The PLIADES GEP is in line with the relevant EU directives on gender rights and equality, in particular Directives 2000/78/EC, 2006/54/EC, 2010/41/EU and 92/85/EEC, and adheres to the guidelines of the EU Gender Equality Strategy 2020-2025. The GEP also builds on the United Nations Sustainable Development Goals (SDGs), with a particular focus on SDG 5 (gender equality), SDG 8 (decent work and economic growth) and SDG 10 (reduced inequalities).

In designing the PLIADES GEP, the project follows the comprehensive, step-by-step guidance offered by the European Institute for Gender Equality (EIGE). In addition, the GEP draws on best practises and methodologies from established plans developed by the project partners to ensure that PLIADES benefits from proven approaches to mainstreaming gender equality at every stage of its activities and that it is also consistent with the GEPs of the project partners.

# 2 Context

## 2.1 Gender perspective in the PLIADES Project

In line with the EU Gender Equality Strategy 2020-2025[1] and SDG 5 (gender equality and empowerment of all women and girls), PLIADES emphasises the gender perspective in environmental, social, technical and financial aspects of AI-based tools and examines whether and how these solutions have a different impact on gender. PLIADES takes a gender-sensitive approach in all phases of research — including problem definition, design research, pilot installation, data collection and analysis, and dissemination - focussing on health, well-being and environmental quality.

To this end, the current GEP is part of *T1.5 - Regulatory, societal, ethical and gender issues,* and is developed to outline the approach and requirements for integrating gender equality considerations into PLIADES activities. Several activities will take place to ensure the gender dimension is properly addressed, including a gender analysis and impact assessment, workshop, training and supporting guidelines, as outlined later in the plan. During PLIADES activities, individuals of all genders regardless of religion, age, income, education, disability or ethnicity will be offered equal opportunities to participate to ensure that inclusive end-user groups play a central role in defining user requirements.

PLIADES outcomes will ensure that data are disaggregated by gender, that all outcomes, both positive and negative, are captured, and that gender differences are documented in accordance with the '*Sex and Gender Equity in Research'* (SAGER) guidelines[2]. In interrelation with all work packages, WP1 incorporates gender considerations throughout project implementation and promote gender balance in research, decision-making, evaluation panels and advisory boards to ultimately promote the empowerment of women throughout the sector and in line with Horizon Europe guidelines.

## 2.2 Roles and Responsibilities

The PLIADES project is developed with a commitment to an equal-opportunity culture that aligns with its core values. To facilitate the efficient and effective design and implementation of the Gender Equality Plan (GEP), an internal Ethics Advisory Board has been established, comprising a gender-balanced team of PLIADES experts within the project partners. Oversight and evaluation of the GEP are supported by multiple groups within the project: (i) the Ethics Advisory Board (EAB); (ii) the WP Leaders; (iii) WR's team who is responsible for designing the implementing the GEP. The PLIADES Project Coordinator have formally approved the Gender Equality Plan, reinforcing their commitment to fostering equality throughout the project.

## 2.3 Objectives

The PLIADES project embraces a culture of diversity and inclusion, building on principles already established within its framework. As such, the scope of the PLIADES Gender Equality Plan (GEP)

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[1] A Union of Equality: Gender Equality Strategy 2020-2025, COM/2020/152: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152
[2] Heidari, S., Babor, T.F., De Castro, P. *et al.* Sex and Gender Equity in Research: rationale for the SAGER guidelines and recommended use. *Res Integr Peer Rev* **1**, 2 (2016). https://doi.org/10.1186/s41073-016-0007-6

incorporates a well-developed foundation of ideas, approaches, and practices that have evolved since the project's inception. This GEP includes measures aligned with the project's gender equality strategy, aiming to achieve the following objectives:

1. **Promote gender balance in recruitment and selection**
   Ensure fair recruitment practises that create equal opportunities for all genders at all levels of recruitment.

2. **Eliminate gender bias in AI and data-driven technologies**
   Implement ethical, bias-free AI and data practices that are gender inclusive. Conduct Ethical Impact Assessments (EIA) at three stages of the project to evaluate AI algorithms for gender bias. Raise awareness about gender and AI by organizing two workshops focused on ethics and gender biases in technology, ensuring that use case developers are trained on these topics by M18.

3. **Integrate gender strategies into all research initiatives**
   Embed gender-sensitive approaches in research frameworks and promote the inclusion of gender perspectives in research topics and methods. This goal supports increasing the participation of female researchers, addressing gender-specific challenges and disseminating research results that promote gender equality in research areas.

4. **Promote the inclusion of the gender dimension in events and research activities**
   Ensure gender balance in all events and research activities in terms of participation, leadership and the role of speakers. By creating inclusive events and research platforms, PLIADES aims to empower underrepresented genders and promote a culture of equal engagement in research and professional activities.

5. **Introduce gender-equitable and gender-sensitive language**
   Introduce and maintain gender-sensitive language in all internal and external communications to reinforce the project's commitment to gender equality and inclusion. This includes training employees in gender-sensitive communication practises.

## 2.4  Methodology

To establish a solid foundation for an effective Gender Equality Plan (GEP), WR adopted the approach outlined in the European Institute for Gender Equality (EIGE) GEAR tool,[3] which includes the following steps:

**Step 1. Define**: Understand and analyze the current state of gender equality within the project.

**Step 2. Plan**: Develop the framework for the GEP.

**Step 3. Act**: Implement the GEP across relevant project areas.

**Step 4. Check**: Monitor and evaluate the progress of the GEP.

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[3] Gender Equality in Academia and Research - GEAR tool, Available at: https://eige.europa.eu/gender-mainstreaming/toolkits/gear?language_content_entity=en.
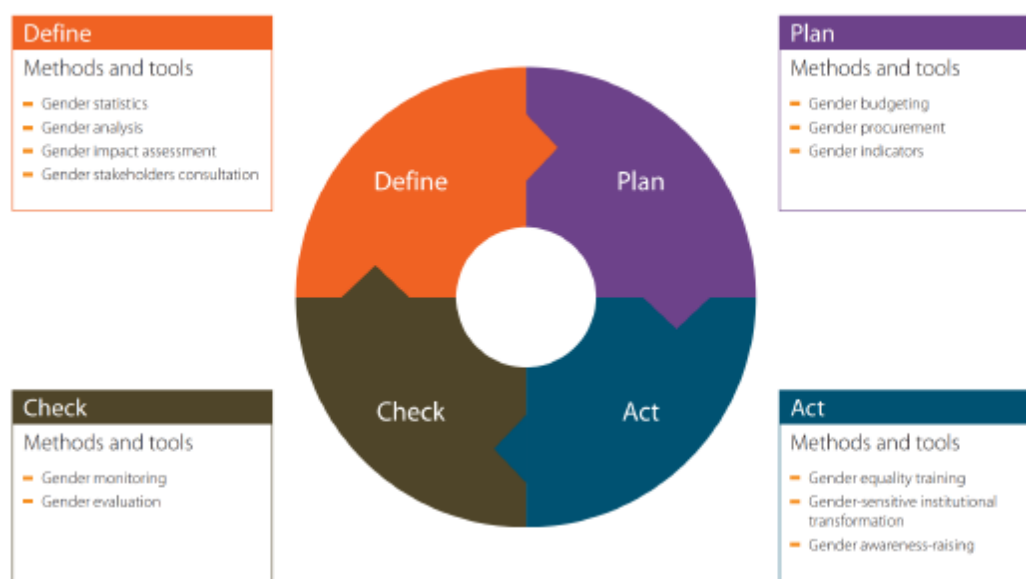
*Figure 1. Gender mainstreaming cycle.*
*Source EIGE, Gender Mainstreaming Cycle | European Institute for Gender Equality (europa.eu)*

This structured approach, represented in the gender mainstreaming cycle, serves as the foundation for achieving and maintaining gender equality throughout the PLIADES project.

As a first step, WR compiled the GEPs of all partners (see table below) in order to review them and draft a GEP that takes into account not only the needs of the project but also the needs of the individual partners. In particular, seventeen (17) out of twenty seven (27) project partners have a GEP. WR has read all of the partners' existing GEPs in detail and created the thematic areas listed below on this basis.

*Table 1. List of the PLIADES project partners that have a GEP.*

| Number and short name of organization | Gender Equality Plan (GEP) |
|---|---|
| 1.  CERTH | Yes |
| 1.1. I4ByDesign | Yes |
| 2.  ATLA | No |
| 3.  VICOM | Yes |
| 4.  EURECAT | Yes |
| 5.  E@W | No |
| 6.  TALTECH | Yes |
| 7.  INNO | Yes |
| 8.  TECNALIA | Yes |
| 9.  DENN | Yes |
| 10. BOR | No |
| 11. CVUT | Yes |
| 12. THI | Yes |
| 13. ZERO | No |
| 14. UC3M | Yes |
| 15. MU-EPS | Yes |

| Number and short name of organization | Gender Equality Plan (GEP) |
|---|---|
| 16. KUL | Yes |
| 17. CEIT | Yes |
| 18. IDSA | Yes |
| 19. TNO | Yes |
| 20. CICbioGUNE | Yes |
| 21. BasqueCCAM | No |
| 22. AVL | No |
| 23. WR | No |
| 24. HYPERTECH | No |
| 25. LIBATTION | No |
| 26. SIPBB | Yes |
| 27. PATRIC | No |

# 3  Thematic Areas of the PLIADES' GEP

## 3.1  Thematic Area 1: Gender Strategy in Research

Ensuring gender considerations are integrated at all stages of the research activities is crucial for PLIADES. By conducting a gender analysis and impact assessment, we will be able to evaluate how gender is affected by the research processes of PLIADES, and thus, anticipate potential gender inequalities. At the same time, the inclusion of a gender dimension in research findings is crucial to ensure that PLIADES results reflect different perspectives and take into account the specific needs and experiences of all genders. By incorporating a gender-sensitive perspective into all outputs and by collecting available data to identify gaps and inequalities, PLIADES aims to produce results that are relevant to a wide audience. This commitment not only increases the depth and applicability of the research, but is also in line with best practises to promote gender equity in scientific and technological advances.

| Objectives (Why?) | Measures (What?) | Leading (Who?) | Timeline (When?) | KPIs & Goals |
|---|---|---|---|---|
| **I. Ensure gender considerations are integrated at all project stages anticipating potential gender inequalities** | 1. Conduct a gender analysis and impact assessment to evaluate how gender is affected by research processes | WR, All partners | M13 - M42 | The results will be integrated in the final report D1.4. |
| **II. Highlight gender-dimension in research findings** | 2. Integrate gender dimension into the research outcomes | WR, All partners | M13 - M42 | Gender dimension will be added in all Deliverables |

## 3.2  Thematic Area 2: Recruitment and selection procedures

Recruitment and selection procedures stand at the core of the PLIADES project. Equitable recruitment and selection processes are taken place to ensure gender balance and the inclusion of all genders. All partners develop strategies that eliminate gender bias, promote diversity and offer equal opportunities to all candidates. This includes introducing standardised, transparent criteria for job advertisements, assessments and interviews, as well as training staff on unconscious bias. By setting gender-specific targets and regularly monitoring recruitment data, partners can identify and account for areas for improvement. Ultimately, these efforts aim to create a fair, inclusive hiring framework that supports gender equality at all levels of the PLIADES project.

| Objectives (Why?) | Measures (What?) | Leading (Who?) | Timeline (When?) | KPIs & Goals |
|---|---|---|---|---|
| **I. Ensure gender balance in recruitment processes** | 1. Review and revise recruitment materials for inclusivity | WR, EAB | M13 - M40 | Achieve 50/50 gender ratio in candidate applications |

## 3.3  Thematic Area 3: AI, data and gender

The PLIADES project takes into account the intersection of artificial intelligence, data management and equality. It focuses on ensuring that AI systems and data practises are designed and implemented in a way that is fair, transparent and free from gender bias. This includes developing an ethical impact assessment (EIA). An EIA is a systematic process for identifying, evaluating and addressing the potential ethical implications of a project, policy, programme or technology. The EIA is intended to be a living document that is completed incrementally and iteratively in different phases. Therefore, an EIA can be conducted during the development or implementation of a system and several times during the life cycle of the system. In this way, any concerns are quickly identified, facilitating remedial action.

In the PLIADES project, the EIA plays a critical role in Task 1.5, which oversees the ethical and safety approval processes for the proposed applications across the use cases. To ensure comprehensive monitoring, the EIA will be conducted in three phases: an initial assessment at the start of the project (Month 10), a mid-project review (Month 26), and a final evaluation at the project's conclusion (Month 34). In addition to the EIA, one workshop will be organized to raise awareness on gender, between M16 and M18.

| Objectives (Why?) | Measures (What?) | Leading (Who?) | Timeline (When?) | KPIs & Goals |
|---|---|---|---|---|
| **I. Conduct EIA three times** | 1. Conduct EIA to assess among others AI algorithms for gender bias | WR, EAB, Pilot partners | M10, M26, M34 | 100% of use cases assessed for gender bias |
| **II. Raise awareness about gender and AI** | 2. Organize a workshop on ethics and gender biases in data and AI | WR, EAB | M16-18 | Use case developers trained on AI and gender issues by M18 |

## 3.4   Thematic Area 4: Gender in events and Research Activities

Events and research activities serve as central platforms for promoting gender equality and improving the visibility of underrepresented groups. This thematic area emphasises the importance of ensuring gender balance in participation, speaker line-up and research collaboration. By implementing measures to track gender representation at events and actively promoting inclusivity, PLIADES aims to create spaces where diverse voices are heard and valued. This commitment also extends to fostering a culture of engagement that empowers all participants, ultimately leading to richer discussions and more innovative outcomes.

| Objectives (Why?) | Measures (What?) | Leading (Who?) | Timeline (When?) | KPIs & Goals |
|---|---|---|---|---|
| **I. Ensure gender balance in event participation** | 1. Track gender representation in event speakers and panels | WR, HYP | M13 - M42 | 50% female representation in all events |
| **II. Promote gender diversity in research activities** | 2. Encourage collaborations with diverse organizations | WR, HYP | M13 - M42 | Encourage at least 2 collaborations with women-focused entities |

## 3.5   Thematic Area 5: Gender inclusive and gender sensitive language

Language is a powerful tool that can either reinforce stereotypes or promote integration. This topic addresses the importance of gender-inclusive and gender-sensitive language in all PLIADES communication. By training staff and reviewing internal and external communications, the project seeks to eliminate gender bias and promote equitable language use.

| Objectives (Why?) | Measures (What?) | Leading (Who?) | Timeline (When?) | KPIs & Goals |
|---|---|---|---|---|
| **I. Promote awareness of inclusive language** | 1. Conduct one training session on gender-sensitive language | WR, All partners | M20 | 100% of staff trained by end of 2025 |

# 4 Implementation and commitment to the PLIADES' GEP

The PLIADES' GEP establishes a structured and flexible framework to ensure gender balance and inclusivity across all project activities. Its objectives are designed to eliminate gender biases, ensure equitable participation, and foster an inclusive research and innovation environment. In sum, to achieve this, partners are encouraged to integrate gender-sensitive practices in the following ways:

- ✓ **Embedding gender in Work Packages & deliverables –** WP leaders should integrate gender considerations, track KPIs, and ensure research reflects diverse perspectives.
- ✓ **Bias-free AI development –** Regular ethical impact assessments (EIAs) at M10, M26, and M34 will monitor gender fairness in AI systems and data practices.
- ✓ **Equitable recruitment & team diversity –** Partners should ensure gender-balanced hiring, promote fair selection processes, and track representation.
- ✓ **Inclusive events & communication –** Gender-balanced panels, gender-sensitive language, and diversity in outreach materials will be prioritized**.**
- ✓ **Training & awareness –** Workshop and training on gender and AI ethics for partners will enhance inclusivity.
- ✓ **Monitoring & accountability –** The Ethics Advisory Board (EAB) will oversee progress on gender and ethics ensuring continuous improvements.

By actively applying these measures, PLIADES partners will foster a more inclusive, diverse, and equitable AI-driven dataspace ecosystem in line with Horizon Europe's gender mainstreaming policies.