



Work package 1

Deliverable 1.2

i-MASTER gender equality plan

D1.2 i-MASTER gender equality plan

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1. Introduction

The i-MASTER project will contribute to greater gender diversity within the maritime sector through research and actions that will encourage and empower women to become part of the industry. Maritime industry has long been considered as a male-dominated industrial sector where women represent only 1.2% among 1.25 million seafarers around the world. While the seagoing profession has been considered as a male-dominated occupation, the female labor force participation in this sector is low due to several factors such as gender-related stereotypes, masculine culture, discrimination, remote working condition, maternity and health issues, harassment and bullying, difficulties in exercising leadership (Österman & Boström, 2022). Although the industry, governments and regulatory bodies have made progress towards minimizing the gender inequality, the labor market in the maritime industry remains overwhelmingly represented by the male gender (Pineiro & Kitada, 2020; Kitada, 2021). Moreover, policy analyses have shown that gender issues are not explicitly mentioned or addressed in documents regarding maritime education and training, indicating a lack of clear strategies for bridging the gender gap (Cars & Österman, 2015). As a result, the number of female students taking maritime education and training today is limited (Barahona-Fuentes et al. 2020). While few studies have examined maritime education and training from a gender perspective, there are indications that problems of a masculine culture where women are considered “the other”, gender-related stereotypes, discrimination, harassment, and bullying are problems also in educational contexts (Horck, 2010). Maritime education and training institutions has been identified as key stakeholders in addressing gender equality issues as they are important bearers of societal norms and values (Barahona-Fuentes et al. 2020). Hence, a goal in maritime education and training is to educate future generations of seafarers who are gender sensitive and inclusive and expect that this is norm within their company and everyday work environment (Cars & Österman, 2015).

The i-MASTER research teams acknowledge the gender-imbalance in the maritime situation and is committed to promote gender equality and empower women through systematically integrating the gender analysis, engagement and empowerment into all research process, training activities, programs, and structures. The European Commission emphasises the need to open gender equality policies to intersections with other diversity categories, including ethnicity, disability, and sexual orientation, the main emphasis of the gender equality plan (GEP) for i-MASTER is put on gender equality as this is a pivot issue in the maritime industry that has the potential to broaden awareness and actions related to other intersectional areas of social equality. In addition, i-MASTER will generate additional valuable and relevant research outputs for all EU citizens – regardless of their gender, ethnicity, disability, or sexual orientation.

2. i-MASTER gender equality plan

The i-MASTER project is committed to promote gender equality and to reduce the gender gaps in maritime education and training domain. The GEP formulated for the i-MASTER project provides the basic requirement for gender equality through a set of commitments and actions. The GEP draws on guidelines from the European Institute for Gender Equality (EIGE) to ensure that the GEP provides a systematic and strategic instrument that establishes priorities and concrete objectives for the i-MASTER consortium. In particular, the GEP strives to promote gender equality in both the research process and the research output by pinpointing gender equality in research team composition (Section 2.1) and decision-making processes (Section 2.2), as well as gender equality in research and innovation content (Section 2.4).

2.1. Gender equality in research team composition

The i-MASTER consortium recognizes the importance of gender equality within its planned activities. Given that the maritime sector is, currently, dominated by men, the consortium will actively promote the involvement of both men and women at all management and research levels in accordance with the Treaty on EU and articles 2 and 3 of the Treaty of Amsterdam. To ensure the highest level of scientific quality and societal relevance of the i-MASTER consortium, partners of i-MASTER will seek balanced participation of both genders in the research team at large as well as in the various tasks. To strengthen gender integration as a dimension of all research and innovation activities, i-MASTER will have at least 50% of women in research teams. Moreover, every research team will work actively to ensure that administrative responsibilities are transparent and distributed between team members alongside research outputs.

In a policy brief by the European Research Area and Innovation Committee (ERAC) Standing Working Group on Gender in Research and Innovation, the existence and persistence of implicit gender bias in the evaluation of research and performance becomes evident (ERAC, 2018). For example, different gender roles are associated with women and men, and men are regularly considered to show excellence in research more frequently than women. To critically review existing recruitment processes at all stages and correcting any discriminating biases are important steps for ensuring inclusiveness and equality in research.

The i-MASTER consortium partners will consider gendered bias in the recruitment processes of researchers in the project by obliging to the following codes of conduct formulated by European Institute for Gender Equality (EIGE):

- Open and publicly advertised recruitment and selection procedures
- Ensuring that appointment panels are gender balanced, or, if not possible, including a minimum number of women

- Involving intersectional gender equality expertise in recruitment and promotion committees
- Subtracting leave periods and career breaks when assessing research output of the applicants
- Assessing research quality rather than quantity
- Assessing leadership and collaboration experience as well as research outcomes

The overall aim of these measures is to foster inclusiveness and equality in scientific careers, regardless of gender, ethnicity, disability, or sexual orientation.

2.2. Gender balance in decision-making

The i-MASTER project will work on ensuring gender balance in decision-making through three important principals: equal representation, transparency in decision-making processes for all team members, as well as yearly audits to assess the inclusiveness of the research practices and research outcomes taking place within the project.

The i-MASTER project is exemplary in promoting female leaders. The project is coordinated by a team which is led by a female associate professor at the University of Tromsø-The Arctic University of Norway. Moreover, the i-MASTER has a high percentage of female project team leaders. To strengthen gender integration as a dimension of all research and innovation activities, i-MASTER will ensure to have at least 50% women in the advisory groups for the whole project duration.

EIGE states that evidence shows that women are more likely to succeed in research when there are clarity and transparency in decision-making processes. i-MASTER will provide information on the members of key committees on the i-MASTER website, as well as information and minutes that are available to all project members through regular newsletters.

As pointed out by EIGE, achieving gender balance in decision-making requires more than equal representation. To ensure gender balance, there also need to be measures in place to examine how decision-making processes are carried out to, and if and how women are empowered to take an equal role. In the project, a yearly audit of the work of the i-MASTER steering committee will be carried out to assess the inclusiveness of the steering committee's decision-making practices and outcomes.

2.3. Gender equality in research and innovation content

Previous research has found that effective utilization of adaptive learning systems has the potential to increase gender equality in education, and address heterogeneity in classrooms (Kim et al. 2019). With the assistance of the Intelligent Learning System (ILS) developed in the i-MASTER project, the learning environment in the maritime simulator-based education and training could also be more inclusive, adaptive, engaging, and accessible for all students. To secure this, the i-MASTER project aims to use principles for inclusive design in the design process of the ILS, systematically integrating gender analysis into the entire design process (Clarkson et al. 2013). In particular, the gender dimension will be considered and analyzed during the design and evaluation phase of the ILS. Partners will seek balanced participation of both genders in the population samples (at least 40% female participation). By comparing the learning pathways between women and men and searching for ways that could maximize the learning effectiveness for all users, the gender gaps in the maritime domain could be reduced and the scientific quality and societal relevance of the produced technology could be improved for both genders.

The i-MASTER consortium plans to carry out public outreach, communication, and dissemination activities within the project. It is widely acknowledged that representation and presentation matters when it comes to reducing gendered bias. Hence, through their participation in dissemination activities of research results, the i-MASTER project participants will contribute as positive examples of female researchers in the maritime industry. Moreover, a dedicated campaign on “Empowering women and girls in the maritime education sector” will be carried out on M39, aiming at encouraging women and girls to study maritime and nautical science, and empowering them to further embrace a career in maritime research.

3. United Nations Sustainable Development Goals (SDG), alignment and action

The United Nations “2030 Agenda for Sustainable Development”, adopted on 25 September 2015, by the UN General Assembly, is a clear and actionable statement on how to enhance human wellbeing, now and in the future, with 17 Sustainable Development Goals (SDG). i-MASTER aligns with and contributes to several of the United Nations SDGs that relate to gender:

SDG 4. Quality Education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

i-MASTER will contribute to these SDG Targets through its focus on enhancing and developing female participation in the maritime industry through enhanced educational opportunities utilizing new and innovative technologies to development and enhance technical and vocational skills.

SDG 5. Gender Equality. Achieve gender equality and empower all women and girls.

5.1 End all forms of discrimination against all women and girls everywhere

5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women

i-MASTER will contribute to these SDG Targets through its focus on enhancing and developing female participation in the maritime industry as a core goal of the research programme and its outcomes.

SDG 8. Decent Work and Economic Growth. Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.

8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

i-MASTER will also contribute to SDG 8 through technological upgrading and innovation to enhance the learning effectiveness and accessibility of simulator-based education for all genders.

SDG 9 Industry, Innovation and Infrastructure. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

i-MASTER will contribute to this SDG Target through innovation and developments that will enhance the opportunities for woman to gain high level employment in the maritime sector, the largest transborder activity on Earth.

Summary

The close alignment of i-MASTER with these United Nations Sustainable Development Goals reflects the European Union's "... strategic approach for achieving sustainable development in Europe and around the world." (European Union, 2016)

4. Actions for all partners

In order to implement the GEP in the i-MASTER project, the consortium partners will take part in the following activities, designed to ensure that the GEP will be a living document that provides information that is current, accurate and easy to understand for all partners. This reflective and iterative programme will provide both a formal structure for ongoing improvement and enhance an informal culture for reflection and further consideration.

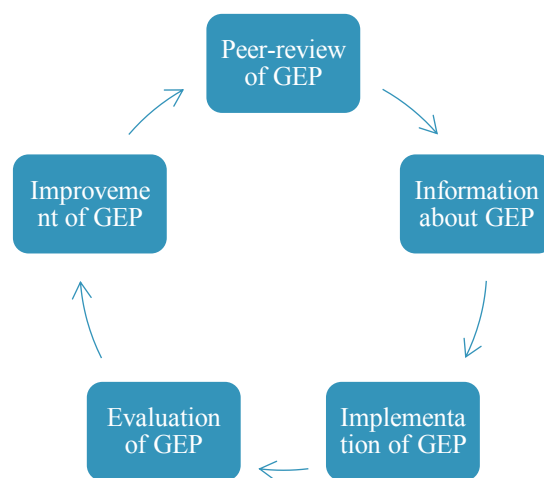


Figure 1. The GEP implementation round.

Action 1: In this *peer-review* step, the GEP will be reviewed by the i-MASTER consortium, and if needed, revisions will be implemented in relation to the consortium's evaluation.

Action 2: In this *information* step, all partners in the i-MASTER consortium will participate in a consortium meeting where the GEP is presented by UGOT and discussed between partners.

Action 3: In this *implementation* step, all partners will implement the planned activities across the i-MASTER consortium.

Action 5: In this *evaluation* step, the Steering Committee will perform monitoring and evaluation activities through a yearly audit.

Action 6: In this *improvement* step, the GEP will be updated by the UGOT team in relation to experiences, achievements and lessons learned in the preceding GEP implementation round.

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