nffa.eu PILOT 2021 2026

DELIVERABLE REPORT

WP1 MGT1 - Project Management

D1.4 First gender report

Due date



This initiative has received funding from the EU's H2020 framework program for research and innovation under grant agreement n. 101007417, NFFA-Europe Pilot Project

PROJECT DETAILS

PROJECT ACRONYM	PROJECT TITLE
NEP	Nanoscience Foundries and Fine Analysis - Europe PILOT
GRANT AGREEMENT NO:	FUNDING SCHEME
101007417	RIA - Research and Innovation action
START DATE	
01/03/2021	

WORK PACKAGE DETAILS			
WORK PACKAGE ID	WORK PACKAGE TITLE		
WP1	MGT1 - Project Management		
WORK PACKAGE LEADER			

Laura Esposito (CNR)

DELIVERABLE DETAILS

DELIVERABLE ID	DELIVERABLE TITLE
D1.4	First gender report

DELIVERABLE DESCRIPTION

The deliverable presents gender statistics within NEP at M18

D	UE	DA	TE	

ACTUAL SUBMISSION DATE

M18 31/08/2022

31/08/2022

AUTHORS

Elisabetta Narducci (CNR)



PERSON RESPONSIBLE FOR THE DELIVERABLE

Elisabetta Narducci (CNR)

NAT	URE
\boxtimes	R - Report
	P - Prototype
	DEC - Websites, Patent filing, Press & media actions, Videos, etc
	O - Other

DISSEMINATION LEVEL

\boxtimes	P - Public	
	PP - Restricted to other programme participants & EC:	(Specify)
	RE - Restricted to a group	(Specify)
	CO - Confidential, only for members of the consortium	



REPORT **DETAILS**

		NUMBER OF PAGES	
NFO PLEASE CONTAG	т		
	Italy)	email: elisabetta.nar	ducci@nffa.eu
DATE 29/08/2022	AUTHOR(S) E. Narducci (CNR)	DESCRIPTION / REASON FOR MODIFICATION	STATUS Final Draft
31/08/2022	E. Narducci (CNR),	L. Esposito (CNR) review	Final
			Choose an item.
			Choose an item.
	Narducci, ne 24 – Genova (<u>DATE</u> 29/08/2022	22 INFO PLEASE CONTACT Narducci, ne 24 – Genova (Italy) DATE AUTHOR(S) 29/08/2022 E. Narducci (CNR)	22 13 INFO PLEASE CONTACT email: elisabetta.nar Narducci, email: elisabetta.nar ne 24 – Genova (Italy) DESCRIPTION / REASON FOR MODIFICATION DATE AUTHOR(S) 29/08/2022 E. Narducci (CNR)

CONTENTS

Introduction	5
Background	5
NEP project commitment	5
First actions undertaken	6
Gender at NEP: first 18 months data	7
Gender Balance in decision-making bodies and expert groups	7
Gender Balance in Project management	8
Gender Balance in the User Community	9
Gender Balance in the Participants to events, schools and workshops	12
Gender dimension in Research and Innovation content	12
Next steps	13



INTRODUCTION

Under Horizon 2020 gender is a cross-cutting issue and 3 objectives underpin the strategy on gender equality:

- 1. Fostering gender balance in research teams, in order to close the gaps in the participation of women.
- 2. Ensuring gender balance in decision-making, in order to reach the target of 40% of the under-represented sex in panels and groups and of 50% in advisory groups.
- 3. Integrating the gender dimension in research and innovation (R&I) content.

In Horizon 2020 funded projects grant beneficiaries commit themselves to promoting equal opportunities and a balanced participation of women and men at all levels in research and innovation teams and in management structures.

Moreover, gender balance is a feature of H2020 projects evaluated under Impact.

This document aims at having a detailed snapshot of NEP performances about gender in the first 18 months from the beginning of the project, also in comparison with the numbers presented in SHE FIGURES 2021 (https://ec.europa.eu/assets/rtd/shefigures2021/index.html), and at identifying actions to pursue to better address gender issues outlined in NEP proposals.

BACKGROUND

NEP project commitment

As for all H2020 projects, NEP Grant Agreement signed by beneficiaries contains ARTICLE 33 — GENDER EQUALITY, and in particular 33.1 Obligation to aim for gender equality:

"The beneficiaries must take all measures to promote equal opportunities between men and women in the implementation of the action. They must aim, to the extent possible, for a gender balance at all levels of personnel assigned to the action, including at supervisory and managerial level."

Moreover, being trans-national access to research infrastructures a core business of NEP, under rules for providing access it is stated under Article 16.1.2, that the access provider must *"promote equal opportunities in advertising the access and take into account the gender dimension when defining the support provided to users".*

Based on that, NEP was committed to develop a gender equality strategy to enforce gender equal opportunities at RIs, taking advantages of potential democratization of open access processes.

A specific task (Task 1.5, reported in the box below) was planned within the management workpackage (WP1) concerning gender issues at Research Infrastructures (RIs).



Task 1.5: Gender issue in RIs (CNR)

Gender data and current strategies adopted inside the Consortium to deal with genders issues will be discussed on the RIs landscape to foster policy coordination, mutual learning and best practice exchange. Availability of users' gender disaggregated data and analysis will be improved to provide RIs specific benchmarking, and a sustainable strategy will be proposed to enforce gender equal opportunities at RIs, taking advantages of potential democratisation of open access processes. Gender will be also addressed from research content point of view, in order to promote and stimulate the integration of a gender dimension in research and innovation. NEP will collect and share data on the possible presence of any gender dimension in the TA research and will be able to play an effective role as promoter among users of initiatives to raise awareness on this issue, also providing online documentation and links. The potential of IRA will be addressed.

First actions undertaken

The first step has been checking which actions and recommendations by the Consortium, in the form of good practice, have been undertaken to foster gender balance in governing bodies and advisors' committees as well as in transnational access management, and their results.

As a general guideline, the gender balance has been taken into account by the beneficiaries to designate among their researchers with valuable expertise, the members of the General Assembly, WP and task leaders, node representatives and local contacts. Concerning external experts' committees, in case of comparable competencies, availability of experts suggested was firstly asked to underbalanced gender candidates.

Analysis of female presence at all levels of RI staffing (decision-making bodies, scientific, technical and managerial) has been conducted to seek and exchange good practices among beneficiaries that effectively foster gender equality in the career paths of women.

In the access assignment to users, gender balance is considered by the Consortium as a priority factor, in case of equal ranking. However, in the frame of the access assigned in the first reporting period, there was no case where it was necessary to apply it.

The NFFA platform created to submit proposal for access has been implemented in the first months of NEP to acquire and process specific data in order to allow disaggregated statistics on the users' distribution and on gender dimension in the research proposed.

Users' gender disaggregated data and analysis have been conducted and are continuously updated within IDRIN to provide specific benchmarking statistics of NEP users. Collection of detailed statistics on female presence among users by typology and provenance provides a detailed picture of the user community that can be compared with the SHE FIGURES periodically published by the EC. It also allows benchmarking the specificities of research carried out by selected users in top European RIs.



GENDER AT NEP: FIRST 18 MONTHS DATA

In the following paragraphs, a detailed analysis of the gender status at M18 inside NEP project is presented and commented.

Gender Balance in decision-making bodies and expert groups

The gender-disaggregated data of the decision-making bodies and expert advisory groups is represented in Figure 1.

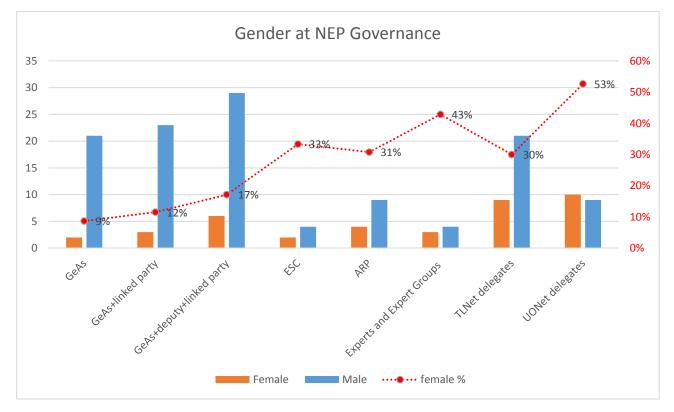


Figure 1. Gender Balance at Governance Level in NEP. GeAS: General Assembly; ESC Executive and Strategic Committee; ARP: Access Review Panel; TLNet: Technical Liaison Network; UONet: User Office Network

According to SHE FIGURES 2021 (https://ec.europa.eu/assets/rtd/shefigures2021/index.html), in EU in 2019 women made up 31,1 % of the members of boards of research organizations, while when focusing on board leaders alone, the proportion of women decreased to 24,5 %; moreover, the proportion of women among heads of institutes in the Higher Education Sector stood at 23,6%.



At first sight the figures concerning NEP show a governance structure predominantly male driven: the General Assembly (GeAs), consisting of one delegate per partner, is composed by only 9% of female members, that is very slightly mitigated if also linked parties are included in the count (11% of the members) and also deputy delegates (17%). In addition, the Coordinator is a male.

The main executive body of NEP is the Executive and Strategy Committee (ESC), that is composed by 6 members endorsed by the GeAs. The ESC has been delegated by the GeAs to execute specific tasks and guarantees a smooth and effective day-to-day implementation of the project. The balance in the composition of this committee, important for assuring the synthesis of governance and strategic developments during the life of NEP, is more favorable, as female presence is 33% slightly above the EU figures.

Concerning external experts' committees, in case of comparable competencies, availability of experts suggested by beneficiaries was always firstly asked to underbalanced gender candidate in order to seeking gender equality. This pro-active approach allowed to reach a comforting situation not so much in the numbers but in the profiles of the NFFA-Europe's expert groups. In fact, despite the fact that the Access Review Panel (ARP) has only four females (31%) against nine males, it is worth to note that the Chair is a woman. Where competencies on wide-ranging scientific policy are requested, such as in the composition of the Experts and Expert Groups on long-term sustainability, nanosafety, research infrastructures landscape, EC-policy and EOSC, a better balance (43%) has been reached, counting 3 females over 4 males.

The central Technical Liaison Network (TLNet) is staffed by 30% of women, but if we count the User Office Network (UONet) delegates the percentage of women increases to 53%.

The outcome of the elections and appointments of the members of the main governing bodies all show that despite NFFA-Europe Pilot did try to apply a Responsible Research and Innovation (RRI) approach by integrating a gender dimension in the selection of the international experts, it is difficult to reach 50% gender equality. In this sense, this is also due to the fact that women in STEM (science, technology, engineering and mathematics) are less represented. According to SHE Figures 2021, in 2018 "*at Doctoral level, women represented 36.8% of students and 37.9% of graduates in STEM at European level*" and "*an even wider gender gap is observed across different grades of academic staff. Women represented 34.9% of academic staff in grade C positions within STEM, declining to 28.2% of staff in grade B positions and less than 20% of staff in grade A positions."*

Gender Balance in Project management

At the implementation level, the gender-disaggregated data concerning Coordination Boards, Work Package and Task leaders, and Management Team are reported respectively in Figure 2.

Except for the management team, that on the contrary is highly overbalance in female presence (83%), the Work Package (WP) management structure shows only four females (22%) against fourteen males as WP leaders, a slight increase to 26% if also task leaders are added, and a further little increase to 30% when considering the members of all the coordination boards.

Gender disaggregated data on total workforce per beneficiary will be completely available after the first periodic report and will be later analysed.



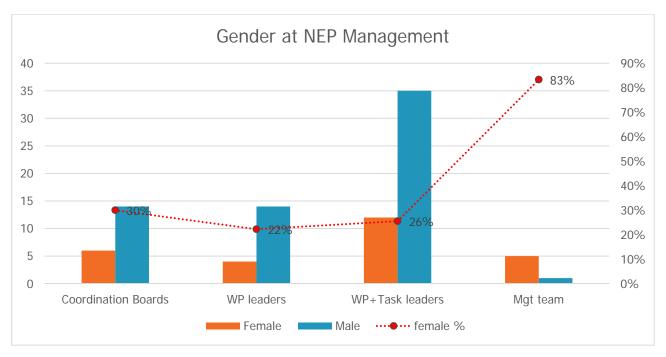


Figure 2. Gender Balance at Management Level in NEP

Gender Balance in the User Community

Table 1 and Figure 4 show gender disaggregated data of requested and accepted proposals (Source: internal access database acquired through NFFA platform) collected in the first 3 calls.

NUMBER OF FEMALES/MALES AS TEAM MEMBERS IN PROPOSAL	FEMALE (F)	MALE (M)	TOTAL	F/M (%)
team members + PI in submitted proposals	68	218	286	23,8
team members + PI in accepted proposals	42	147	189	22,2
team members success rate %	61,8	67,4	66,1	
NUMBER OF FEMALES/MALES AS PI IN PROPOSAL	FEMALE (F)	MALE (M)	TOTAL	F/M (%)
PI in submitted proposals	27	95	122	22,1
PI in accepted proposals	15	59	74	20,3
PI success rate %	55,6	62,1	60,7	
NUMBER OF PROPOSALS WITH/WITHOUT FEMALES AS PI OR TEAM MEMBERS	WITH FEMALE(S)	WITHOUT FEMALE(S)	TOTAL	WITH/WIT HOUT (%)
number of submitted proposals	49	73	122	40,2
number of accepted proposals	30	44	74	40,5
proposals success rate %	61,2	60,3	60,7	

Table 1: Gender Data of users and proposals for Transnational Access at NEP



The first two sets of data represent the distribution of proponents among females and males in the proposals, respectively if we count all types of roles in the proposal or if we count only principal investigators (PI). The third set of data are the distribution of proposals containing or not females among proponents.

As shown in Table 1 and Figure 3, the female presence in accepted proposals is about 22,2% (20,3% if referred to proposals with female PI) and it is about correspondent to the percentage in submitted ones (respectively 23,8% and 22,1%). The success rate seems slightly unfavourable by gender. This is confirmed by the success rate referred to the users: females have 61,8% success rate as proposers against a total 66,1% success rate, and female PIs are successful with a percentage of 55,6% against a general success rate of 60,7%. If we consider the number of proposals, the percentage of submitted proposals containing at least one female is about the same of accepted proposals with at least one female (40,2% and 40,5% respectively), showing that the success rate of proposals containing at least one female (61,2%) is slightly higher than proposals with male proponents only (60,3%).

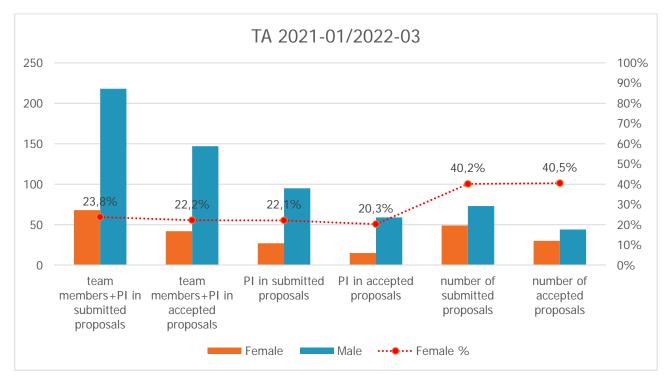


Figure 3. Gender Balance in Transnational Access at NEP

Overall, the percentage is consistent with data of presence of women in STEM at all level of academic carrier confirmed in the SHE FIGURES 2021, and already mentioned above.

A deeper analysis of the gender balance in the proposals will be conducted once a higher number of calls for proposals will be delivered and the data will be more consolidated. The academic carrier level (student, fixed-term, permanent), the age, the geographic distribution, the type of organization and all the other relevant parameters will be considered.

It can be noted that the access review panel (ARP) was instructed to adopt a pro-active approach in the evaluation of user proposals to foster gender equality, e.g. in case of competition between



projects at equal level of scientific ranking by referees (gender-blind review) a preference has to be given to female PIs. However, such case was never registered.

An interesting analysis of the NEP users, that have been granted access within the first 3 calls for proposals, concerns their distribution with respect to the gender among the research activity domain as reported in figure 4. In this case we consider head count, so that users that has more than one access are counted only once. Also in this case we need a larger statistic to compare the data with literature and to evaluate the presence of possible bias factors in NEP community, so that we will monitor the evolution during the next calls.

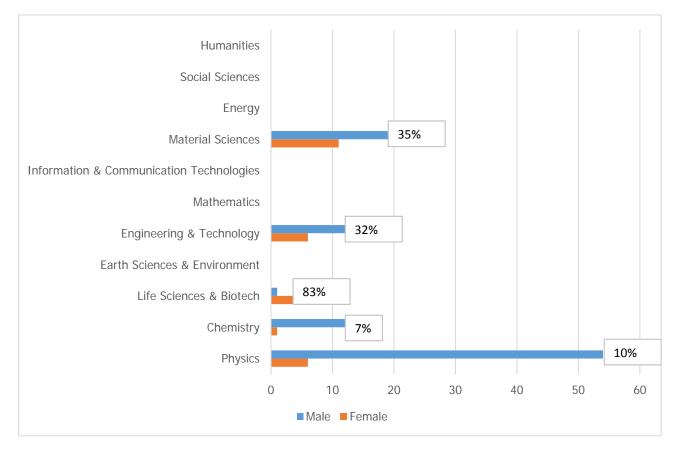


Figure 4. NEP Users' gender disaggregated data per activity domain - TA calls 01/2021-03/2022. In the box beside the columns the value of the percentage of females over the total users in the specific domain is reported.

Data on users' gender with respect to the home institution country are available and they are shown in Figure 5. Any analysis or benchmark however cannot be done, due to the very poor statistics we have till now.



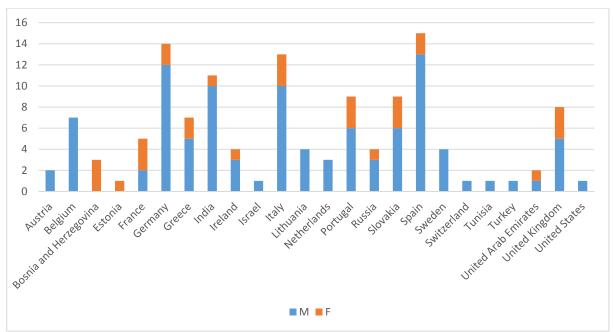


Figure 5. NEP Users' gender disaggregated data per Home Institution Country - TA calls 01/2021-03/2022

Gender Balance in the Participants to events, schools and workshops

During the first 18 months within WP13 NEP organized a symposium titled "New trends in advanced lithography and pattern transfer methods" as a dissemination activity at EMRS 2022 Spring Meeting, held on-line (May 3031, 2022). It consisted of a total of 33 contributions: 7 invited talks, 11 contributed talks and 15 poster presentations, and 27% of the contribution were given by female researchers.

Gender dimension in Research and Innovation content

With respects to the third main objective that underpins the EC strategy on gender equality in Horizon 2020, it must be noted that the integration of the gender dimension in NEP research and innovation (R&I) content is a bit out of the scope or leverage capacity of the project. However, in order to have an overview of any gender dimension in the users' research, the proposal form has been implemented with the request of declaring its possible existence. Considering the first 3 calls, we register 3 over 122 proposals with a positive reply. All 3 proposals have been assigned access and we will need checking in the final report for further information if any gender dimension has effectively been taken into account in the project's content.



NEXT STEPS

Availability and analysis of gender-disaggregated data is a core issue to design and implement gender equality strategies and set up reasonable target indicators, which can be thoroughly monitored in order to assess their impact over time.

The project management will continue to collect and analyse female presence at all levels of RI staffing (decision-making bodies, scientific, technical and managerial) in order to seek and exchange good practices among beneficiaries that effectively foster gender equality in the career paths of women. Gender analysis will be presented and discussed within the NEP governing bodies to arise awareness of the currently unbalanced set-up. Beneficiaries will be encouraged to make efforts in order to improve gender balance at all levels of the project hierarchy, in particular at the highest ones, where the gender distribution is mostly unbalanced. The increase of the female presence in decision-making bodies can be pursued whenever a renewal of decision-making positions, experts and advisory groups will occur.

Collection of detailed gender statistics among users will be implemented throughout the entire project's lifespan. This will provide a detailed picture of the user community that will allow a comparison with the SHE FIGURES periodically published by the EC. Continuous periodic monitoring of these data will bring further insight on the dynamics and trends of user communities and will help understanding to which extent the use of research infrastructures (RIs) can play an effective role in the career of young researchers, with a special eye on gender figures.

To raise awareness of gender issue in the nanoscience community, NEP will give more visibility to gender data, publishing periodical report and gender statistics related to the calls for proposals on the website.

