

Impact of gender equality plans across the European Research Area

Policy briefs

Independent
Expert
Report

Impact of gender equality plans across the European Research Area (Pilot assessment activities for the European Knowledge and Support Facility on gender equality plans in research and innovation organisations – RTD/2021/SC/0026)

European Commission
Directorate-General for Research and Innovation

Unit D4 - Democracy, Equality and Culture: Gender Sector

Contact Kateřina Svíčková

Email katerina.svickova@ec.europa.eu

RTD-PUBLICATIONS@ec.europa.eu

European Commission B-1049 Brussels

Manuscript completed in June 2024

This document was prepared for the European Commission; however, it reflects the views of only the authors, and the European Commission is not liable for any consequence stemming from its reuse.

PDF ISBN 978-92-68-00059-5 doi:10.2777/655676 KI-07-23-100-EN-N

Luxembourg: Publications Office of the European Union, 2024

© European Union, 2024



The Commission's reuse policy is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39, ELI: https://eur-lex.europa.eu/eli/dec/2011/833/oj). Unless otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (https://creativecommons.org/licenses/by/4.0/). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of elements that are not owned by the European Union, permission may need to be sought directly from the respective rightholders. The European Union does not own the copyright in relation to the following elements: cover page: @skypicsstudio #286372753, @creativeteam #323412491, 2022. Source: stock.adobe.com

Impact of gender equality plans across the European Research Area

Policy briefs

Written by Monica Andriescu, Sophie Buckingham, Neringa Collier, Keelin Dunn, Carmen Hoya, Lucía Nájera, Danae Nicosia (Ecorys) and Rebecca Davies (Visionary Analytics)

Edited by Anne Pépin, Athanasia Moungou, Oriane Gilloz and Hana Tenglerova (Unit D4 – Democracy, Equality and Culture: Gender Sector)

Contents

Fore	Foreword1		
Intro	duction	. 10	
	licy brief 1. The role of national and EU policies and wider contextual ctors in the effective implementation of gender equality plans	12	
1.1.	Summary	12	
1.2.	Legislative and policy background	13	
1.3.	Evidence base and key sources of information	15	
1.4.	How policies at the EU and national levels can facilitate effective implementation of gender equality plans	17	
1.5.	Influence of wider contextual framework conditions at the national level	22	
1.6.	Conclusions and considerations for further actions	26	
1.7.	Bibliography	30	
	licy brief 2. Monitoring and evaluation of the implementation of the nder equality plan eligibility criterion in Horizon Europe	33	
2.1.	Summary	33	
2.2.	Background and relevance	34	
2.3.	Evidence base and key sources of information	36	
2.4.	Indicators	37	
2.5.	Mandatory process-related indicators	43	
2.6.	Thematic indicators in key areas	52	
2.7.	Conclusions and considerations for further actions	61	
2.8.	Bibliography	64	
2.9.	Annex 1. Review of EU initiatives / EU-funded projects aimed at monitoring progress towards implementation of gender equality plans	66	
	licy brief 3. Measuring progress at the EU and national levels on clusive gender equality plans and policies	73	
3.1.	Summary	73	
3.2.	Background and relevance	73	
3.3.	Evidence base and key sources of information	76	
3.4.	Key considerations for indicator selection	79	

3.5.	Indicators	81
3.6.	Conclusions and considerations for further actions	87
3.7.	Bibliography	89
3.8.	Annex 1. Overview of the existing indicators collected at the EU level on gender equality	90
	y brief 4. Gender-based violence, including sexual harassment, in arch and innovation	.99
4.1.	Summary	99
4.2.	Background and relevance	99
4.3.	Evidence base and key sources of information	101
4.4.	Gender-based violence in research and innovation	104
4.5.	The role of gender equality plans and other instruments in preventing gender-based violence, including sexual harassment	109
4.6.	Identified good practices and way forward	112
4.7.	Conclusions and considerations for further actions	118
4.8.	Bibliography	120
	y brief 5. Intersectional approaches to achieving inclusive gender lity – promising practices and remaining barriers	.123
5.1.	Summary	123
5.2.	Background and relevance	123
5.3.	Evidence base and key sources of information	126
5.4.	Inclusive gender equality plans and other measures promoting an intersectional approach – key features and objectives	127
5.5.	Monitoring and evaluation of inclusive gender equality actions	135
5.6.	Remaining barriers to the take-up and effective implementation of inclusive gender equality plans adopting an intersectional approach	138
5.7.	Conclusions and considerations for further actions	139
5.8.	Bibliography	142
	y brief 6. The role of organisational structure in ensuring the tive development and implementation of gender equality plans	.146
6.1.	Summary	146
6.2.	Background and relevance / scope of the problem	147
6.3.	Evidence base and key sources of information	149

6.4.	Resources as enabling and challenging factors in gender equality plan development	151	
6.5.	The state of play of organisational structures established to develop and implement gender equality plans		
6.6.	. Internal and external organisational networks as a key factor for successful implementation 158		
6.7.	Conclusions and recommendations 161		
6.8.	Bibliography	164	
6.9.	Annex 1. EU- and national-level initiatives promoting external gender equality networks in research and innovation		
	y brief 7. The role of support from senior leadership in gender lity plan development and implementation	.169	
7.1.	Summary	169	
7.2.	Background and relevance / scope of the problem	170	
7.3.	Evidence base and key sources of information	171	
7.4.	Enhancing gender competence in senior leadership	173	
7.5.	How can support from senior leadership impact the successful development and implementation of gender equality plans?	176	
7.6.	Conclusions and recommendations	178	
7.7.	Bibliography	181	
Box 2. E	S xamples of funding strategies aligned with intersectional principles xamples of institutional GEPs informed by intersectional approaches xamples of intersectional and inclusive data collection strategies	128	
Table	·		
	Recommendations for policymakers and institutions		
	Key data sources		
	Potential approaches to data collection and monitoring		
	Suggested indicators for monitoring the implementation at the EU and na els of the Horizon Europe GEP eligibility criterion mandatory requirements		

Table 6. Suggested indicators for monitoring the implementation of GEP thematic areas53
Table 7. Sources of information77
Table 8. Proposed indicators
Table 9. Proposed recommendations
Table 10. Overview of key existing indicators on gender equality collected at the EU level
Table 11. Key sources of information101
Table 12. Examples of measures against GBV, including sexual harassment, to be included in GEPs113
Table 13. Recommendations for policymakers, research organisations and universities
Table 14. Main sources of information
Table 15. The share of organisations identifying certain indicators for future data collection and analysis in conjunction with sex- or gender-disaggregated data to monitor inclusive GEPs in R & I organisations (n = 189)
Table 16. Recommendations for policymakers and institutions
Table 17. Sources of information
Table 18. Recommendations for policymakers and institutions
Table 18. EU- and national-level initiatives promoting external gender equality networks in R & I
Table 20. Sources of information
Table 21. Recommendations for policymakers and institutions
Figures
Figure 1. Members of the highest decision-making body184
Figure 2. Presidents or chairs

Abbreviations

COP	community of practice	
DG	directorate-general	
EDI	equality, diversity and inclusion	
EIGE	European Institute for Gender Equality	
ERA	European Research Area	
EMM	ERA Monitoring Mechanism	
ERAC	European Research Area and Innovation Committee	
EU-13	countries that joined the EU from 2004 onwards	
EU-14	countries that had joined the EU by 2004, excluding the United Kingdom	
EU-27	27 Member States comprising the European Union since the departure of the United Kingdom on 31 January 2020	
EUA	European University Association	
FP7	seventh framework programme	
GBV	gender-based violence	
GEAR tool	Gender Equality in Academia and Research tool	
GEP	gender equality plan	
HEA	Higher Education Authority	
HEI	higher education institution	
KIF	Committee for Gender Balance and Diversity in Research	
LERU	League of European Research Universities	
LGBTQI+	lesbian, gay, bisexual, transgender, queer and intersex and other sexual and gender minorities	
NSF	National Science Foundation	

OECD	Organisation for Economic Co-operation and Development	
R & D	research and development	
R & I	research and innovation	
RFO	research-funding organisation	
RPO	research-performing organisation	
STEM	science, technology, engineering and mathematics	
SWAN	Scientific Women's Academic Network	
SWG GRI	Standing Working Group on Gender in Research and Innovation	
Widera	Widening Participation and Strengthening the European Research Area	

Countries

AL	Albania
AM	Armenia
AT	Austria
AU	Australia
ВА	Bosnia and Herzegovina
BE	Belgium
BG	Bulgaria
СН	Switzerland
CN	China
CY	Cyprus
CZ	Czechia
DE	Germany

EE Estonia EL Greece ES Spain FI Finland FO Faroe Islands FR France GE Georgia HR Croatia IE Ireland IS Iceland IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NC Norway PL Poland PT Portugal	DK	Denmark	
ES Spain FI Finland FO Faroe Islands FR France GE Georgia HR Croatia IE Ireland IS Iceland IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	EE	Estonia	
FI Finland FO Faroe Islands FR France GE Georgia HR Croatia IE Ireland III Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	EL	Greece	
FO Faroe Islands FR France GE Georgia HR Croatia IE Ireland IS Iceland IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	ES	Spain	
FR France GE Georgia HR Croatia IE Ireland IS Iceland IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	FI	Finland	
GE Georgia HR Croatia IE Ireland IS Iceland IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	FO	Faroe Islands	
HR Croatia IE Ireland IS Iceland IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	FR	France	
IE Ireland IS Iceland IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	GE	Georgia	
IS Iceland IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	HR	Croatia	
IT Italy JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	IE	Ireland	
JP Japan LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	IS	Iceland	
LT Lithuania LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	IT	Italy	
LU Luxembourg LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	JP	Japan	
LV Latvia MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	LT	Lithuania	
MD Moldova ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	LU	Luxembourg	
ME Montenegro MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	LV	Latvia	
MK North Macedonia MT Malta NL Netherlands NO Norway PL Poland	MD	Moldova	
MT Malta NL Netherlands NO Norway PL Poland	ME	Montenegro	
NL Netherlands NO Norway PL Poland	MK	North Macedonia	
NO Norway PL Poland	MT	Malta	
PL Poland	NL	Netherlands	
	NO	Norway	
PT Portugal	PL	Poland	
	PT	Portugal	

RO	Romania
RS	Serbia
RU	Russia
I KO	rtussia
SE	Oweden
SE	Sweden
SI	Slovenia
SK	Slovakia
TN	Tunisia
TR	Türkiye
	Tankiyo
UA	Ukraine
UA	ONIGINE
1117	
UK	United Kingdom

Foreword

Gender equality is a core value of the European Union. It is essential also for competitiveness, for the green transition and for building a sustainable European Union. More than a decade ago research organisations were invited by the Commission to implement institutional change relating to gender equality in research through Gender Equality Plans, and many research organisations have since developed and implemented such plans on a voluntary basis.

With Horizon Europe, the European Research Programme running from 2021 to 2027, the European Commission introduced strengthened provisions for gender equality. Among them, having a Gender Equality Plan (GEP) is an eligibility criterion for all public bodies, higher education institutions and research organisations from EU Member States and Associated Countries wishing to benefit from Horizon Europe. This triggered structural changes towards gender equality in academic and research institutions across Europe, leading to a more inclusive and innovative European Research Area where all talents can thrive and contribute to solving global challenges.

This study was commissioned to evaluate GEPs' effectiveness in promoting gender equality in European research and innovation. It offers valuable insights into challenges and factors enabling successful implementation of GEPs in higher education institutions and research organisations. It emphasises the importance of monitoring frameworks for tracking progress in gender equality within R&I. Policymakers, stakeholders, and researchers can gain a deeper understanding of GEPs' role in promoting structural change and use the study's recommendations for advancing gender equality in R&I at institutional, national, and EU levels.

The study concludes that the GEP eligibility criterion is an important driver of change in the sector, inspiring institutions to strengthen existing policies and motivating laggards to step up their efforts. EU-level support, policies and resources have facilitated the adoption and implementation of effective GEPs by more organisations. However, only a combination of forces at different levels will lead to successful structural change and a truly inclusive European Research Area.

Marc Lemaître

Director-General for Research and Innovation

Introduction

This document contains seven policy briefs that are intended to complement the main report on the study 'Impact of gender equality plans across the European Research Area'. The report analyses recent key policy developments regarding gender equality plans (GEPs) in research and innovation (R & I) organisations at the EU, national and institutional levels.

These policy briefs analyse and discuss a range of themes in further detail, in addition to providing some conclusions and recommendations for policymakers and stakeholders. The policy briefs are organised as follows.

- Policy brief 1 considers the role of national and EU policies and wider contextual factors in the effective implementation of GEPs, building on the themes examined in Chapters 2 and 3 of the main report.
- Policy brief 2 examines the monitoring and evaluation of the implementation of the GEP eligibility criterion in Horizon Europe, building on the material contained in Chapter 5 of the main report.
- Policy brief 3 looks at the measurement of progress at the EU and national levels in relation to inclusive GEPs and policies, complementing the material contained in Chapters 5 and 9 of the main report.
- Policy brief 4 focuses on gender-based violence (GBV), including sexual harassment, in R & I.
- Policy brief 5 examines intersectional approaches to achieving inclusive gender equality, focusing on promising practices and remaining barriers, complementing the content presented in Chapter 9 of the main report.
- Policy brief 6 considers the role of organisational structure in ensuring the effective development and implementation of GEPs.
- Policy brief 7 discusses the role of support from senior leadership in GEP development and implementation.

It should be noted that the policy briefs were drafted in November 2022 and underwent a review process during the course of 2023. Although the text has been updated to address comments, no further evidence has been gathered since the end of 2022.

1. Policy brief 1. The role of national and EU policies and wider contextual factors in the effective implementation of gender equality plans

1.1. Summary

GEPs must now be implemented by higher education institutions (HEIs), research organisations and public bodies from EU Member States and associated countries if they are to be eligible for funding under Horizon Europe. This requirement aligns with the priorities set out in the European Commission's Gender Equality Strategy for 2020–2025 (1) to improve gender equality in R & I.

There is significant variation across Member States and the R & I sector in the design and implementation of GEPs. This variation depends on the national policy frameworks guiding the development of the GEPs and the wider social and cultural contexts that surround them. This brief will explore these factors and provide examples of how they can be used to support the achievement of GEPs' objectives.

There are a number of policy and legislative factors at the national and EU levels that can facilitate the development of effective and impactful GEPs. For example, the introduction of GEP-related policies at the national level (whether it be legislation imposing GEPs, for example in the public sector, or policies or measures supporting/imposing GEPs at the national, regional or institutional level) can further support and expand the efforts at the European level to improve gender equality in R & I. Additionally, the development of tools and the provision of resources by European and national actors can support institutions in the design and implementation of their GEPs.

Existing inequalities in the labour market, although not specific to the R & I sector, have clear ramifications for several of the key GEP thematic areas, particularly work—life balance and organisational culture, gender balance in leadership and decision-making, and gender equality in recruitment and career progression. For example, an under-representation of women in a range of academic fields (especially science, technology, engineering and mathematics (STEM) subjects) and an increasing precariousness of academic careers can be clearly observed. One of the key underlying reasons for the under-representation of women in the labour market, as well as for the part-time employment gap, the gender pay gap and the gender pension gap, is the care gap. The impact this had in the R & I sector specifically was particularly brought into focus during the COVID-19 pandemic. GEPs should consider including provisions to improve the care gap, such as better institutional policies around work—life balance, as well as addressing the gender stereotypes that contribute to the care gap, such as considering that care work is 'women's work'.

⁻

⁽¹⁾ European Commission (2020), Commission communication – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final) (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

There are a number of actions that can be taken at the EU, national and institutional levels to support the effective and impactful implementation of GEPs. These include establishing national policies around the implementation of GEPs in R & I, the continued support or increased provision of resources and funding for GEPs, and the inclusion of strategies within GEPs to address structural and cultural factors of gender inequality.

1.2. Legislative and policy background

The aim of this policy brief is to explore the role of national- and EU-level legislation and policies, along with broader contextual factors, in the effective implementation of GEPs. The brief covers examples of good practices at the EU, national and institutional levels in creating environments that promote and support gender equality efforts in R & I.

Gender equality and non-discrimination are fundamental values of the European Union, as established by Articles 2 and 3 of the Treaty on European Union (²), Articles 8 and 10 of the Treaty on the Functioning of the European Union (³) and Articles 21 and 23 of the Charter of Fundamental Rights of the European Union (⁴). In terms of policy developments, the EU Gender Equality Strategy for 2020–2025 adopted by the European Commission puts forward an ambitious framework to promote gender mainstreaming efforts across sectors and phases of life (⁵). Although significant progress has been made in recent decades, gender equality remains far from being realised.

In the 2022 European Institute for Gender Equality (EIGE) Gender Equality Index (⁶), the EU scored 68.6 points out of 100, showing a very marginal increase from the previous year. This increase in score was primarily due to the domain of power, which measures gender equality in decision-making positions across the political, economic and social spheres, including in research funding bodies' boards. Progress in this domain of + 2.2 points in 1 year (although it is the lowest scoring of all domains, with 57.2 points) prevented an overall slip in the EU's gender equality score compared with previous years. However, in several other domains (such as the domain of time), the score decreased due to the disproportionate gendered impact of the COVID-19 pandemic (⁷).

The *She Figures* publication is the main source of pan-European, comparable statistics on the state of gender equality in R & I (8). The 2021 edition of *She Figures* shows that the EU has seen positive developments for achieving gender balance in the overall pool of doctoral

(2) Consolidated version of the Treaty on European Union (OJ C 326, 26.10.2012, p. 13) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012M%2FTXT).

⁽³⁾ Consolidation Version of the Treaty on the Functioning of the European Union (OJ C 326, 26.10.2012, p 47) (http://data.europa.eu/eli/treaty/tfeu_2012/oj).

⁽⁴⁾ Charter of Fundamental Rights of the European Union (OJ C 326, 26.10.2012, p. 391) (http://data.europa.eu/eli/treaty/char_2012/oj).

⁽⁵⁾ European Commission (2020), Commission communication – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final) (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

⁽⁶⁾ EIGE (2022), Gender Equality Index 2022 – The COVID-19 pandemic and care, Publications Office of the European Union, Luxembourg (https://eige.europa.eu/publications/gender-equality-index-2022-covid-19-pandemic-and-care), p. 11.

See the information on the Gender Equality Index at https://eige.europa.eu/gender-equality-index/2022.

⁽⁸⁾ See more information on She Figures at https://ec.europa.eu/research-and-innovation/en/knowledge-publications-tools-and-data/interactive-reports/she-figures-2021.

graduates (with 48.1 % of women among doctoral graduates at the European level in 2018) (9). 'Despite this progress, in 2018, women represented around one-third (32.8 %) of the total population of researchers at the European level. At both the European and country level, women researchers account for a lower proportion of the economically active population compared to men researchers. However, the average growth rate of women researchers was 3.9 % between 2010 and 2018, indicating some positive changes over time' (10). The gap further increases when it comes to women in grade A positions (the single highest grade/post at which research is normally conducted). In 2018, women made up only 26.2 % of grade A positions at the EU level (11) (an increase of only 2 % compared with 2015).

GEPs have been a policy instrument for institutional change in research organisations encouraged by the EU for over a decade. Since the European Commission's 2012 communication on the European Research Area (ERA) (12), which was followed up by Council conclusions on advancing gender equality in the ERA in December 2015 (13), Member States have been encouraged to create a legal and policy environment and provide incentives, as well as engage in partnerships with funding agencies, research organisations and universities, to foster cultural and institutional change through GEPs.

Despite this priority set for the ERA framework, the adoption of ERA national action plans that have served as catalysers for action in several Member States, and the support provided by the European Commission to over 200 research organisations in the implementation of GEPs through the seventh framework programme (FP7) and Horizon 2020, the European R & I sector has overall made slower-than-expected progress in improving gender equality, and has particular organisational features that can make gender inequalities starker. The approach adopted by Horizon Europe to accelerate a structural change across Europe, first announced in the Commission's Gender Equality Strategy for 2020–2025, released in March 2020, was to introduce a condition for access to funding. Having a GEP was set as an eligibility criterion for HEIs, research organisations, and public bodies, such as research-funding organisations (RFOs), from Member States and associated countries. It entered into force in 2022, after a 1-year grace period during which guidance and support were offered to prospective applicants.

The primary aim of a GEP is to make structural and cultural progress towards gender equality in R & I organisations. To meet the mandatory requirements of the Horizon Europe eligibility criterion, R & I organisations are required to publish a public document with the proposed goals and actions endorsed at the highest level, dedicate resources and gender expertise for the implementation of the plan, establish data collection and monitoring to

/9\ lb:a

⁽⁹⁾ Ibid.

⁽¹⁰⁾ Ibid.

⁽¹¹) Eurostat (2024), 'Graduates by education level, programme orientation, sex and field of education' (https://ec.europa.eu/eurostat/databrowser/view/educ_uoe_grad02/default/table?lang=en); Eurostat (2024), 'Students enrolled in tertiary education by education level, programme orientation, sex and field of education' (https://ec.europa.eu/eurostat/databrowser/product/page/educ_uoe_enrt03).

⁽¹²) European Commission (2012), Commission communication – A reinforced European research area partnership for excellence and growth (COM(2012) 0392 final) (https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:52012DC0392).

⁽¹³⁾ Council of the European Union (2015), Council conclusions – Advancing gender equality in the European research area, Brussels, 1 December (https://data.consilium.europa.eu/doc/document/ST-14846-2015-INIT/en/pdf).

inform the GEP's objectives, and provide training sessions and other awareness-raising activities that engage staff and decision-makers (14). In addition to these mandatory process-related requirements, it is recommended that GEPs address five specific thematic areas. These include work-life balance and organisational culture, gender balance in leadership and decision-making roles, gender equality in recruitment and career progression, integration of the gender dimension into research and teaching content, and measures against GBV, including sexual harassment.

While the European Commission has set certain requirements for GEPs to be considered compliant under Horizon Europe, there are still significant variations across GEPs at national levels and across institutions. A preliminary review of GEPs as part of the European Commission's *She Figures* report reveals significant differences in their design, implementation, funding and monitoring across Member States (15). There are a number of barriers that HEIs, research organisations and public bodies may face in implementing impactful GEPs, including access to resources and gender expertise, as well as a lack of support from senior management (see policy brief 7 for more details). In addition to these structural barriers, broader contextual factors, such as cultural beliefs and labour market inequalities, also impact the design and implementation of GEPs. This policy brief explores how EU, national and institutional policies have navigated these environments and developed effective strategies to facilitate the advancement of gender equality in R & I.

1.3. Evidence base and key sources of information

Table 1 provides an overview of the key sources used to inform this policy brief. Additional sources consulted are included in footnotes.

Table 1. Main sources of information

Primary sources of information		
Interviews	Interviews were conducted with over 70 key stakeholders:	
with key	EU-level institutions/policymakers	
stakeholders	researchers in academic institutions / research communities in the EU	
	research associations and universities in the EU	
	national R & I agencies and organisations	
	public and private RFOs	
	public and private RPOs.	
Expert consultation	Experts in the field of GEPs have reviewed the policy brief, with particular emphasis on the proposed indicators, and provided useful feedback,	

(14) European Commission, DG Research and Innovation (2021), Horizon Europe Guidance on Gender Equality Plans, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

⁽¹⁵⁾ European Commission, DG Research and Innovation (2021), *She Figures 2021 – Policy briefs*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

insights and input that have been included in the policy brief.

Secondary sources of information		
Type of source	Name of source	Description
Databases	Eurostat (a)	Eurostat is the statistical office of the European Union. The data consulted for this policy brief include: • gender pay gap statistics (b) • gender employment gap statistics (c).
	GEAR tool (d)	Established by EIGE in close collaboration with the European Commission's Directorate-General for Research and Innovation, the GEAR tool provides RPOs and RFOs with advice, examples and tools to use in the development and implementation of GEPs, building on the outputs of GEP-related projects funded under the FP7 and Horizon 2020. The GEAR action toolbox was used to identify good practices.
	Gender Equality Index 2022 – The COVID-19 pandemic and care (°)	EIGE publishes an annual composite index that provides an overview on gender equality in the EU, encompassing six core domains (work, money, knowledge, time, power and health).
Studies	She Figures (^f)	This triennial statistical report led by the Directorate- General for Research and Innovation within the European Commission provides a pan-European state of play on gender equality in R & I.
	European Research Area and Innovation Committee Standing Working Group on Gender in Research and Innovation (9)	The main report consulted for this policy brief is the June 2021 report <i>Gender Equality Plans as a Catalyst for Change</i> (h).
	ERA Progress Report 2018	The <i>ERA Progress Report 2018</i> assesses the current state of the ERA and the progress made on ERA implementation in 2016–2018.

- (a) https://ec.europa.eu/eurostat.
- (b) https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Gender_pay_gap_statistics.
- (°) https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Gender_statistics#Labour_market.
- (d) https://eige.europa.eu/gender-mainstreaming/toolkits/gear.
- (e) https://eige.europa.eu/publications-resources/publications/gender-equality-index-2022-covid-19-pandemic-and-care.
- (f) https://ec.europa.eu/assets/rtd/shefigures2021/index.html.
- (9) The European Research Area and Innovation Committee's Standing Working Group on Gender in Research and Innovation (2017–2021) was a committee responsible for providing policy recommendations to the Council of the European Union, the European Commission and Member States regarding gender equality in R & I. Its primary focus was advising on the implementation of the ERA in Member States and associated countries and on other strategic R & I policy issues.
- (h) https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf.
- NB: GEAR, Gender Equality in Academia and Research; RPO, research-performing organisation.

1.4. How policies at the EU and national levels can facilitate effective implementation of gender equality plans

There are a number of challenges GEPs must overcome in order to be implemented in the first place, especially to be implemented effectively. To begin with, one of the main requirements set by Horizon Europe is that a GEP have dedicated resources and expertise in gender equality in place to ensure that actions accompany intentions. Resources are needed throughout the entire GEP cycle, from the development to the monitoring of the plan; they are also needed to fund the specific measures introduced, such as parental leave policies, the creation of working groups, and staff training and development (16). Having access to funding and expertise has been highlighted as a challenge for some organisations (17). This challenge can be particularly acute, as experts consulted during the final dissemination event for this study highlighted, because there is significant competition for resources and funding between GEPs and other sensitive issues, such as sustainable development.

There is also a risk that the GEP becomes **a 'box-ticking' exercise**, rather than a transformative one. This has been raised as an issue when senior management does not view gender equality in R & I as a priority and the commitments are not genuine (¹⁸), or when gender equality is considered 'addressed' simply through the presence of a GEP (¹⁹). This can also occur if the process becomes too administrative, which has been one critique of the Athena Scientific Women's Academic Network (SWAN) Charter, a framework and accreditation scheme that provides support for the development of GEPs (²⁰). That said, the

_

⁽¹6) European Commission, DG Research and Innovation (2021), Horizon Europe Guidance on Gender Equality Plans, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509), p. 20.

⁽¹¹) European Research Area and Innovation Committee Standing Working Group on Gender in Research and Innovation (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

⁽¹⁸⁾ Interview with a representative of an RPO in Spain, 2022.

⁽¹⁹⁾ European Research Area and Innovation Committee Standing Working Group on Gender in Research and Innovation (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

⁽²⁰⁾ Ovseiko, P., Chapple, A., Edmunds, L. D. and Ziebland, S. (2017), 'Advancing gender equality through the Athena SWAN Charter for Women in Science: An exploratory study of women's and men's perceptions', Health Research and Policy Systems, Vol. 15, No 12

counterargument is that **monitoring and evaluation of GEPs by an external agency** to ensure their implementation in practice **could also become a 'box-ticking' exercise** that would detract from the spirit of the GEP eligibility criterion and undermine its purpose (²¹) (the achievement of gender equality goals through a **structural approach to change** across the whole European R & I system) (²²).

The **COVID-19 pandemic has amplified the existing obstacles** to achieving gender equality in R & I. For instance, women have experienced an unequal burden of caregiving responsibilities, significantly impeding their capacity to engage in their own work, including research and publication. Furthermore, women have shouldered a disproportionate share of the responsibility for transitioning teaching and pastoral support activities to online platforms. Additionally, the pandemic has had varying effects on individuals depending on their seniority and employment contracts, potentially leading to adverse outcomes for women who are often overrepresented in precarious positions at the early research career stage (²³). In May 2023, a published report by the Commission's expert group on *The COVID-19 impact on gender equality in research and innovation* shed light on how the pandemic has deepened inequalities within the realm of R & I. The report underscores the detrimental effects of closed research facilities, diminished networking opportunities, suspension of international mobility and blurred boundaries between work and personal life (²⁴).

Additional impacts of the pandemic that continue to pose an issue today include the deprioritisation of gender equality initiatives and new ways of working that have introduced unique patterns of exclusion (²⁵). It is for this reason that initiatives such as the EU-funded **Gender-SMART project**, which conducted a **survey highlighting the impact of COVID-19 on** income, the need for child/family support and the work arrangements of **researchers and staff in its partner RFOs and research-performing organisations (RPOs)**, are so important. They allow us to better understand the impact of COVID-19 on women and men in R & I careers and 'how institutions can respond with more gender-sensitive strategies and actions' (²⁶).

Well-designed policies at the EU and national levels can help GEPs overcome these challenges and facilitate the effective implementation of their initiatives. For example, the introduction of the GEP eligibility criterion in Horizon Europe has been widely viewed as a positive development (²⁷), raising awareness of gender issues and resulting in the development of gender strategies extending beyond what is directly required by the provision. Countries that were already more advanced in gender equality initiatives have

(https://www.researchgate.net/publication/314078245_Advancing_gender_equality_through_the_Athena_SWA_N_Charter for Women in Science An exploratory study of women's and men's perceptions).

- (21) Policy workshop organised for the purposes of this study, 9 December 2022.
- (22) European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).
- (23) Ihid
- (24) See the full report at https://op.europa.eu/en/publication-detail/-/publication/cee1e9a7-ea92-11ed-a05c-01aa75ed71a1/language-en.
- (25) Ibid
- (26) European Commission, DG Research and Innovation (2021), She Figures 2021 Policy briefs, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).
- (27) This was a unanimous position of research organisations interviewed for the purposes of this project.

been encouraged to build upon existing practices (²⁸). For example, **in Norway**, HEIs and research institutes have long been responsible for working actively for equality in accordance with the Equality and Anti-Discrimination Act (²⁹). Moreover, the University and University Colleges Act requires universities and university colleges to 'make active, targeted and systematic efforts to ensure gender equality in all categories of employment at the institution' (³⁰). However, the introduction of the GEP eligibility criterion in Horizon Europe led to the adoption of a similar GEP eligibility criterion by the Research Council of Norway (³¹). The acting executive director at the Research Council of Norway underlined that 'Norway is a global leader in equality and gender balance but lags behind when it comes to academia. With the requirements for GEPs, I hope and believe we are getting closer to equality in academia' (³²). Even organisations that do not fall under the criterion, such as private RFOs, have in some cases begun developing gender initiatives (³³). The positive effect may be especially considered in countries that have been less active in advancing gender equality, requiring specific efforts to be made to address the structural and cultural factors that perpetuate gender inequalities.

In **Ireland**, the Higher Education Authority (HEA) recently published its **Second HEA** *national review of gender equality in Irish higher education institutions* (³⁴). In the period since the first review was conducted in 2016, Irish HEIs have, to a greater or lesser extent, invested in the advancement of gender equality. During the final dissemination event for this study, it was highlighted that a strong community of practice (COP) and 'critical mass' of gender expertise were highly valuable in making progress towards gender equality in the country. This can be seen in the fact that all HEIs have GEPs in place and are adhering to national Athena SWAN (³⁵) requirements (³⁶) (³⁷) (whereas 11 institutions and departments held Athena SWAN awards in 2016, this number increased to 98 as of

-

⁽²⁸⁾ Wroblewski, A. (2021), *Monitoring of ERA Priority 4 Implementation – Update and final assessment*, Genderaction (https://genderaction.eu/wp-content/uploads/2021/09/GENDERACTION_WP3_final_report.pdf).

⁽²⁹⁾ Act relating to equality and a prohibition against discrimination (Equality and Anti-Discrimination Act), 1 January 2018 (https://lovdata.no/dokument/NLE/lov/2017-06-16-51).

⁽³⁰⁾ Act relating to universities and university colleges (University and University Colleges Act), 1 August 2005 (https://lov/data.no/dokument/NLE/lov/2005-04-01-15).

⁽³¹⁾ Aukland, K. (2023), 'Never have there been so many equality plans but who ensures their quality?', Committee for Gender Balance and Diversity in Research, Oslo (https://kifinfo.no/en/2023/02/never-have-there-been-so-many-equality-plans-who-ensures-their-quality).

⁽³²⁾ Ibid.

⁽³³⁾ Interview with an RFO, conducted in 2022.

⁽³⁴⁾ Higher Education Authority (2022), Gender Equality – Report of the expert group: Second HEA national review of gender equality in Irish higher education institutions, Dublin (https://hea.ie/assets/uploads/2022/03/Report-of-the-Expert-Group-2nd-HEA-National-Review-of-Gender-Equality-in-Irish-Higher-Education-Institutions.pdf).

⁽³⁵⁾ The Athena SWAN Charter is a framework that is used across the globe to support and transform gender equality in higher education and research. Bronze institution awards recognise that the institution has a solid foundation for eliminating gender bias and developing an inclusive culture that values all staff (an assessment of gender equality in the institution, together with a 4-year plan that builds on this assessment, is needed).

⁽³⁶⁾ Science Foundation Ireland (2017), 'Irish funding bodies to require Athena SWAN gender equality accreditation for higher education institutions to be eligible for research funding' (https://www.sfi.ie/research-news/news/irish-funding-bodies-to-require-athena-swan-gender-equality-accreditation-for-higher-education-institutions/).

⁽³⁷⁾ Higher Education Authority (2022), Gender Equality – Report of the expert group: Second HEA national review of gender equality in Irish higher education institutions, Dublin (https://hea.ie/assets/uploads/2022/03/Reportof-the-Expert-Group-2nd-HEA-National-Review-of-Gender-Equality-in-Irish-Higher-Education-Institutions.pdf), p. 27.

April 2022) (³⁸). Athena SWAN is described in more detail in Section 10.2.1 of the main impact report.

Measures at the national and regional levels that require GEPs were viewed by interviewees as extremely impactful, especially for HEIs. For example, **Spain** has had equality-advancing policies and a GEP requirement in R & I since the enactment of the **Organic Law 3/2007**. This is considered to have developed a more gender-aware culture in R & I (³⁹), with 96 % of public universities and 70 % of private universities having developed a GEP since 2007 (⁴⁰). The Organic Law of the University System, adopted on 22 March 2023 (LOSU 2/2023), now requires all universities to publish an equality plan, as well as create equality units and diversity units to support the implementation of their plan (⁴¹). In **France**, the **Law on the Transformation of the Public Service** (Loi de transformation de la fonction publique) of 6 August 2019 also renders GEPs mandatory by law in all public organisations (⁴²).

Some countries have set additional requirements for RFOs to include gender criteria in their applications, which can further motivate R & I institutions to establish gender-sensitive practices (43). For example, the **German Research Foundation** requires their research-oriented equity and diversity standards to be met for grant approval, which has led universities and RPOs to implement gender equality initiatives (44). On the other hand, when these measures do not exist, patterns show that institutions rarely develop policies on their own initiative (45). Nevertheless, as shown for instance by the Horizon 2020 **Target project** (46), in the absence of this framework, institutions can still drive structural change if other key conditions are present, such as leadership, staff motivation, resources and gender expertise.

A number of EU-level policies and tools were noted as further supporting gender equality efforts in R & I.

 The Competitiveness Council conclusions on advancing gender equality in the ERA of 1 December 2015 resulted in 11 countries either amending existing policies or adopting new policies in light of these conclusions (⁴⁷).

⁽³⁸⁾ Ibid., p. 33.

⁽³⁹⁾ Interview with an RPO in Spain, conducted in 2022.

⁽⁴⁰⁾ EIGE (2024), 'Spain – Promoting gender equality in research' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/legislative-policy-backgrounds/spain).

⁽⁴¹⁾ Ley Orgánica 2/2023, de 22 de marzo, del Sistema Universitario, 12 April 2023 (https://www.boe.es/buscar/act.php?id=BOE-A-2023-7500).

⁽⁴²⁾ Loi no 2019-828 du 6 août 2019 de transformation de la fonction publique, 6 August 2019 (https://www.legifrance.gouv.fr/dossierlegislatif/JORFDOLE000038274919/).

⁽⁴³⁾ Dvořáčková, J. (2022), 'Sustainability of GEPs and Networks in Research Funding Organisations', Supera Final Conference, 25 March, Madrid (https://www.slideshare.net/SUPERAproject/sustainability-of-geps-and-networks-in-research-funding-organisations-251506736).

⁽⁴⁴⁾ For information on the standards, see https://www.dfg.de/en/research_funding/principles_dfg_funding/equal_opportunities/general_information/research_oriented/.

⁽⁴⁵⁾ Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., (2021), Report on the European Policy Baseline, Unisafe (https://zenodo.org/record/5780037#.YzQ1zXZByUm).

⁽⁴⁶⁾ For more information on the project, see http://www.gendertarget.eu/.

⁽⁴⁷⁾ European Research Area and Innovation Committee Standing Working Group on Gender in Research and Innovation (2018), Report on the implementation of Council conclusions of 1 December 2015 on advancing

- The Gender Equality in Academia and Research (GEAR) (⁴⁸) tool developed by EIGE in 2016 in close collaboration with the European Commission's Directorate-General (DG) for Research and Innovation has aided numerous universities and research organisations in the development of a GEP and is used as a key reference in GEP development and implementation (⁴⁹).
- She Figures (50) is the main source of EU-wide statistics on gender equality in R & I.
 One stakeholder noted that the European Commission requesting these data from Member States has meant that striving to achieve gender equality is taken more seriously (51).

On an institutional level, the **development of networks and alliances** can be especially beneficial. Best practices and methods of overcoming barriers can be shared, and efficiencies can be created in the establishment of gender equality initiatives (⁵²). Creating networks of GEP-implementing HEIs and other research organisations is at the core of the funding that the Commission has provided since the FP7, through (1) 30 collaborative GEP-implementing projects, (2) larger COPs (e.g. ACT (⁵³) and now INSPIRE (⁵⁴) for 'inclusive' GEPs), and (3) GEP-related policy transnational networks of national authorities and national RFOs (e.g. Genderaction (⁵⁵) and GENDER-NET Plus (⁵⁶)). Another example of a framework to support and transform gender equality within HEIs is the Athena SWAN Charter, which a number of research institutions from Ireland, the United Kingdom and Australia have joined. In a 2017 study on the charter, stakeholders involved felt that the structural and cultural changes witnessed, such as 'increased support for women's careers, greater appreciation of caring responsibilities, and efforts to challenge discrimination and bias', would not have happened without Athena SWAN (⁵⁷).

gender equality in the European research area, Brussels (https://data.consilium.europa.eu/doc/document/ST-1213-2018-INIT/en/pdf).

- (48) For more information on the GEAR tool, see https://eige.europa.eu/gender-mainstreaming/toolkits/gear.
- (49) For examples, see: University of Salerno (2022), 'The University of Salerno's First Gender Equality Plan' (https://web.unisa.it/uploads/rescue/123/7165/2021-09-6-unisa-gep-english.pdf); Paisii Hilendarski University of Plovdiv (2021), 'Gender equality plan 2021–2024' (https://gender-spear.eu/assets/content/PU_GEP_ENfinalS.PDF).
- (50) For more information on She Figures, see https://ec.europa.eu/assets/rtd/shefigures2021/index.html.
- (51) Interview with an RFO, conducted in 2022.
- (52) Ferguson, L. and Mergaert, L. (2022), 'Resistances to structural change in gender equality', Supera (https://www.superaproject.eu/wp-content/uploads/2022/02/Resistances-to-Structural-Change-in-Research-and-Innovation_v02.pdf).
- (53) For more information on the ACT project, see https://act-on-gender.eu/.
- (54) For more information on the Inspire project, see https://www.inspirequality.eu/.
- (55) For more information on the Genderaction project, see https://genderaction.eu/.
- (56) For more information on the Gender-NET Plus project, see https://gender-net-plus.eu/.
- (⁵⁷) Ovseiko, P., Chapple, A., Edmunds, L. D. and Ziebland, S. (2017), 'Advancing gender equality through the Athena SWAN Charter for Women in Science: An exploratory study of women's and men's perceptions', Health Research and Policy Systems, Vol. 15, No 12 (https://www.researchgate.net/publication/314078245 Advancing gender equality through the Athena SWA N Charter for Women in Science An exploratory study of women's and men's perceptions).

1.5. Influence of wider contextual framework conditions at the national level

One of the key factors that emerged in the course of our research as having an impact on the effective implementation of GEPs was broader inequality in the labour market. Inequality can be observed in terms of opportunities, wages and job security. Although these inequalities are not specific to the R & I sector, they have clear ramifications for several of the key GEP thematic areas, particularly work–life balance and organisational culture, gender balance in leadership and decision-making, and gender equality in recruitment and career progression.

Some of the key findings regarding labour market inequalities are listed below.

The gender employment gap shows that women continue to be under-represented in the labour market, with no significant change between 2016 and 2021 (⁵⁸). In R & I, although there is gender balance in doctoral graduates, there remains an under-representation of women in a range of academic fields (especially STEM fields) at all career stages (⁵⁹).

The overall part-time employment gap between women and men ranged from – 1.1 % in Romania to 44.1 % in the Netherlands in 2021, with an EU average of 20.7 % (⁶⁰). Moreover, an emerging issue is the increasing precariousness of academic careers, and early careers particularly, which affects women more strongly. In 2019, across the 27 Member States comprising the European Union since the departure of the United Kingdom on 31 January 2020 (EU-27), 9 % of women as opposed to 7.7 % of men researchers in HEIs were working under precarious contracts (⁶¹). Precarious contracts (i.e. the use of fixed-term, insecure contracts to fulfil core higher education functions) were highlighted in the 2022 Second HEA national review of gender equality in Irish higher education institutions as being a 'significant and overlooked gender equality issue in the Irish HE system' (⁶²).

Across the EU, the gender pay gap in 2021 stood at 12.7 % (⁶³), and the success rate in accessing research funding is 3.9 percentage points higher for men than women across

-

⁽⁵⁸⁾ Eurostat (n.d.), 'Gender employment gap' https://ec.europa.eu/eurostat/databrowser/view/lfst_r_lfe2emprtn custom 8717071/bookmark/table?lang=en &bookmarkId=f9029c06-cac1-44b7-82a1-0df02046c106.

⁽⁵⁹⁾ European Commission, DG Research and Innovation (2021), She Figures 2021 – Policy briefs, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

⁽⁶⁰⁾ Eurostat (n.d.), 'Gender gap in part-time employment' (https://ec.europa.eu/eurostat/databrowser/view/tepsr_lm210/default/table?lang=en).

⁽⁶¹⁾ European Commission, DG Research and Innovation (2021), She Figures 2021 – Gender in research and innovation – Statistics and indicators, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1).

⁽⁶²⁾ Higher Education Authority (2022), Gender Equality – Report of the expert group: Second HEA national review of gender equality in Irish higher education institutions, Dublin, pp. 22–23 (https://hea.ie/assets/uploads/2022/03/Report-of-the-Expert-Group-2nd-HEA-National-Review-of-Gender-Equality-in-Irish-Higher-Education-Institutions.pdf).

⁽⁶³⁾ Eurostat (n.d.), 'Gender pay gap statistics' (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Gender_pay_gap_statistics).

the EU (⁶⁴). Moreover, 'Women's relatively low participation in STEM contributes to the gender pay gap, as STEM fields tend to be associated with higher levels of pay compared to Education and Humanities fields in which women tend to be over-represented' (⁶⁵).

In 2020, the **gender pension gap stood at over 28** % on average in the EU (⁶⁶). Women's exclusion from the labour market for longer periods of time than men, and subsequent difficulties in re-entering the labour market in many cases, not only has an impact on pensions, but also goes some way towards explaining why only a minority of women are in top academic positions in the EU.

One of the key underlying reasons behind the under-representation of women in the labour market (including the R & I sector), the part-time employment gap, the gender pay gap and the gender pension gap is the **care gap**. Despite efforts to change this perception, unpaid care is frequently still viewed as 'women's work', with inadequate care services resulting in a disproportionate impact on women. In the EU, 92 % of women compared with 68 % of men are 'regular carers', with 81 % of women and 48 % of men being 'daily carers' (⁶⁷). This becomes particularly challenging when considering that the environment of long hours and presenteeism in the R & I sector (⁶⁸) is problematic for those with care commitments.

Care responsibilities can fall under the radar of increasing efforts to work with gender-related targets. For example, a 2019 survey from the European University Association (EUA) found that, while 57 % of HEIs had gender-related targets in place for academic staff, 32 % for non-academic staff and 41 % for students (⁶⁹), 'only 5 % of institutions reported having quantitative targets related to people with care responsibilities, which suggests that whilst there is increased interest, gender may be being examined somewhat in isolation' (⁷⁰).

Moreover, unpaid care responsibilities keep around 7.7 million women in Europe away from participating in the labour market, compared with only around 450 000

(64) European Commission, DG Research and Innovation (2021), *She Figures 2021 – Policy briefs*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

(65) European Commission, DG Research and Innovation (2021), She Figures 2021 – Gender in research and innovation – Statistics and indicators, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1).

(66) EU Monitor (2023), 'Understanding the gender pay gap: Definition and causes' (https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/vl59mpupm0vq?ctx=vk4jic6t1dxz#:~:text=With%20les s%20money%20to%20save,in%20the%20EU%20in%202020).

(67) European Commission (2022), Commission communication on the European care strategy (COM(2022) 440 final), p. 2 (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0440).

(68) A survey of UK researchers in 2020 found that 57 % of respondents agreed that there was a long working-hour culture at their workplace while 48 % agreed that they had felt pressured to work long hours. Furthermore, 62 % agreed that the system exploited their interest in the work, leading to a heavy workload (see *She Figures 2021*, p. 5).

(69) Claeys-Kulik, A.-L., Jørgensen, T. E. and Stöber, H. (2019), Diversity, equity and inclusion in European higher education institutions – Results from the Invited project, European University Association, Brussels, p. 35 (https://eua.eu/downloads/publications/web_diversity%20equity%20and%20inclusion%20in%20european%20 higher%20education%20institutions.pdf).

(70) European Commission, DG Research and Innovation (2021), She Figures 2021 – Policy briefs, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

men (⁷¹). Concerning part-time work, in 2020, more than 1 in 4 women (26 %), in contrast to 6 % of men, worked part-time due to care duties (⁷²). However, there is evidence to show that 'gender equality in care provision is gradually improving as more care responsibilities are shared equally between women and men' (⁷³). In addition, gender equality in housework improved slightly at the EU level in the past year (⁷⁴).

In R & I specifically, She Figures shows that women in the EU only account for 32.8 % of researchers, 31.1 % of board members, 26.2 % of full professorships and 24.5 % of board leaders, despite accounting for 48.1 % of PhD graduates (75). Moreover, 'Across the EU, in 2019, a higher proportion of women researchers, compared to men researchers, worked part-time and under precarious working contracts in the higher education sector (11.1 % for women and 7.2 % for men)' (76). These figures highlight that women do not advance in the sector in the same way as men. During interviews conducted for this project, participants underlined that by spending more time on caring responsibilities than men, many skilled women were less involved in the labour market. The COVID-19 pandemic brought this into stark focus, as women were faced with a disproportionate increase in caring responsibilities due to school and caring facility closures (77). Women researchers and academics with children had less spare time to spend on research projects, which led to gender parity within research publications worsening significantly during periods of national lockdown (78). The previously mentioned expert report from May 2023 on the impact of COVID-19 on gender equality in R & I reveals that women, especially those in the early stages of their careers, bore the brunt of the increased workload related to online teaching, student support and caregiving at home. As a result, they experienced a decline in their academic productivity, evidenced by reduced journal submissions and first authorships, in comparison to their male counterparts (79).

The manner in which research career success is evaluated is also problematic for those with care responsibilities. It currently depends on the time spent on research (e.g. full-time equivalent), rather than being able to effectively evaluate the performance of those who have (temporarily) exited the system or have worked part-time (80). This disproportionately

(71) European Commission (2022), Commission communication on the European care strategy (COM(2022) 440 final), p. 2 (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0440).

(74) Ibid., p. 14.

⁽⁷²⁾ EIGE (2022), Gender Equality Index 2022 – The COVID-19 pandemic and care, Publications Office of the European Union, Luxembourg, p. 41 (https://eige.europa.eu/publications/gender-equality-index-2022-covid-19-pandemic-and-care).

^{(&}lt;sup>73</sup>) Ibid., p. 12.

⁽⁷⁵⁾ European Commission, DG Research and Innovation (2021), She Figures 2021 – Policy briefs, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

⁽⁷⁶⁾ For more information on She Figures, see https://ec.europa.eu/research-and-innovation/en/knowledge-publications-tools-and-data/interactive-reports/she-figures-2021.

⁽⁷⁷⁾ UN Women (2020), From Insights to Action – Gender equality in the wake of COVID-19, New York (https://www.unwomen.org/en/digital-library/publications/2020/09/gender-equality-in-the-wake-of-covid-19).

⁽⁷⁸⁾ Ucar, I., Torre, M. and Elías, A. (2022), 'Mind the gender gap: COVID-19 lockdown effects on gender differences in preprint submissions', PLOS ONE, Vol. 17, No 3 (https://doi.org/10.1371/journal.pone.0264265).

⁽⁷⁹⁾ European Commission, DG Research and Innovation (2021), She Figures 2021 – Gender in research and innovation – Statistics and indicators, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1).

⁽⁸⁰⁾ European Commission, DG Research and Innovation (2021), *She Figures 2021 – Policy briefs*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

affects women researchers because of unequal care responsibilities. To counter this, Irish HEIs have been leading the way to ensure that HEI workload allocation models are transparent and are monitored annually for gender bias (81). Such bias is then taken into account in performance development reviews. Moreover, at the University of Nottingham in the UK, a gender-aware workload model has been developed to ensure 'equity and transparency in workload allocations' (82).

With the intention of improving working conditions and work–life balance for carers, the **European care strategy** was launched in September 2022 (⁸³). One of its key objectives is to ensure that there is a better balance between work and care responsibilities, meaning that there should be a move towards informal care being a choice rather than a necessity (⁸⁴). Monitoring the implementation of existing work–life balance legislation, in particular the **work–life balance directive** (⁸⁵), is crucial to ensuring that workers are able to balance their care responsibilities with work and are thus not excluded from the labour market. These important pieces of legislation aim to improve the working conditions for women and carers across the EU labour market, and they can be used as starting points for GEP measures to address work–life balance, organisational culture and career progression.

At a more systemic level, it is **fundamental that the stereotypes framing the roles and responsibilities of women and men are tackled**. This is emphasised in the EU gender equality strategy for 2020–2025, which states that 'Women and men, girls and boys, in all their diversity, should be free to express their ideas and emotions, and pursue their chosen educational and professional paths without the constraints of stereotypical gender norms' (86). Additionally, the Commission has committed itself to covering the unequal sharing of unpaid care work specifically in its ongoing communication campaign on combating gender stereotypes (87) (88).

GEPs in R & I organisations can support efforts to improve the care gap through the implementation of dedicated policies, such as parental leave policies, flexible working arrangements and remote working options, the provision of care services, and support for informal caring responsibilities. **Recognising the impact that caring has on employees is an important first step,** particularly given that the demands of research careers and the

⁸¹) Ibid.

⁽⁸²⁾ Ibid.; see also a national review by the Higher Education Authority at https://hea.ie/assets/uploads/2017/06/HEA-National-Review-of-Gender-Equality-in-Irish-Higher-Education-Institutions.pdf.

⁽⁸³⁾ European Commission (2022), Commission communication on the European care strategy (COM(2022) 440 final) (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0440).

⁽⁸⁴⁾ Ibid., p. 16

⁽⁸⁵⁾ Directive (EU) 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work–life balance for parents and carers and repealing Council Directive 2010/18/EU (OJ L 188, 12.7.2019, p. 79) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019L1158).

⁽⁸⁶⁾ European Commission (2020), Commission communication – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final) (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

⁽⁸⁷⁾ European Commission (2022), Commission communication on the European care strategy (COM(2022) 440 final), p. 17 (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0440).

⁽⁸⁸⁾ For more information on the campaign, see https://end-gender-stereotypes.campaign.europa.eu/index_en/.

culture of long hours are especially difficult for women with caring responsibilities (89). One of the recommended themes, under the Horizon Europe GEP eligibility criterion, is work–life balance and organisational culture, which can include efforts to address the beliefs held about women through awareness-raising activities and staff training. Tangible progress towards gender equality can be made through policy changes at the EU, national and institutional levels that seek to address the root causes of inequality and discrimination, including cultural beliefs and policies that hinder women's participation in the labour market.

A few good examples of measures included in institutional GEPs that specifically address the care gap are presented below.

- The Hanken School of Economics⁹⁰ in Finland has a policy in place to ensure that personnel can take family leave, without consequences for their academic career. It automatically extends temporary contracts of teaching and research personnel who have taken maternity, paternity and parental leave (91).
- The Jagiellonian University in Kraków, Poland, has established mini-grants for men and women academics with children under 15 who are planning to complete a publication (92). The mini-grants are used to cover the costs of delegating tasks to other people. The goal is to ensure equal opportunities for men and women researchers who combine work and caring responsibilities.
- Since 2012, the University of Southern Denmark allows researchers returning from a parental leave period of over 6 months to benefit from a teaching-free period once they return. The goal is to establish a supportive work–family culture and provide more flexible career trajectories (93).

1.6. Conclusions and considerations for further actions

As outlined above, national and regional legislative measures that require GEPs have been found to be extremely impactful, especially for HEIs. For countries that were already more advanced in gender equality initiatives, the Horizon Europe criterion has encouraged them to build upon existing practices, for instance by extending the scope of existing measures. Moreover, in some countries, even organisations that do not fall under the criterion, such as private RFOs, have in some cases begun developing gender initiatives.

At the EU level, a number of highly impactful policy actions have been taken. Providing definitions and obligatory building blocks, such as the Horizon Europe guidance for

(90) For more information on the Hanken School of Economics, see https://www.hanken.fi/en.

European Commission, DG Research and Innovation (2021), *She Figures 2021 – Policy briefs*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

⁽⁹¹⁾ EIGE (n.d.), 'Family-leave without consequences for the academic career (FI)' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/family-leave-without-consequences-academic-career-fi).

⁽⁹²⁾ EIGE (n.d.), 'Mini-grants for academic teachers, "Ensuring equal opportunities for male and female researchers who combine work and childcare during the COVID-19 pandemic" – Jagiellonian University in Kraków (JU) (PL)' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/mini-grants-academic-teachers-ensuring-equal-opportunities-male-and-female-researchers-who-combine-work). See also the Jagiellonian University website at https://en.uj.edu.pl/en_GB.

⁽⁹³⁾ EIGE (n.d.), 'Teaching-free period when returning from parental leave (DK)' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/teaching-free-period-when-returning-parental-leave-dk). See also the University of Southern Denmark's website at https://www.sdu.dk/en.

developing GEPs (⁹⁴), aids in the development and implementation of GEPs while also encouraging consistency across the R & I sector. EU-supported mutual learning activities and policy exchanges facilitate capacity building, encourage the implementation of best practices across institutions, and raise awareness about both the existing requirements and the need to advance gender equality in R & I (⁹⁵). Finally, the EU's provision of guidance, training sessions and mutual learning; the creation of an award under Horizon Europe for academic and research organisations demonstrating the most impactful GEPs which can serve as inspirational role models for organisations across Europe (⁹⁶); and the planned support for national contact points on GEPs all help organisations to develop and implement effective GEPs. There has thus been a clear move from funding for developing GEPs (which the EU provided for over a decade) to an eligibility criterion making it a prerequisite to have one, but accompanied by a whole host of supporting measures and incentives. These include, for example, training and mutual learning, an award for the most impactful GEPs (⁹⁷) and a soon-to-be-established support for national contact points on GEPs.

Through the provision of funding under Horizon Europe for the development and implementation of 'inclusive' GEPs and related policies, which go beyond the GEP eligibility criterion requirements and open up to intersectionality, the European Commission is also helping to transform institutions to advance towards inclusive gender equality within the ERA (98).

The recent creation of a policy coordination structure at the ERA governance level, namely the subgroup of the ERA Forum dedicated to Action 5 of the ERA Policy Agenda 2022–2024 on promoting gender equality and fostering inclusiveness (99), which gathers the Commission and representatives from Member States and associated countries as well as from EU-level umbrella organisations of R & I stakeholders, should also prove a powerful tool to advance the uptake of GEPs and the development of inclusive GEPs in organisations across the ERA.

In terms of wider contextual factors, policymakers at the national and EU levels can also make a significant difference to the care gap and labour market inequalities using measures that recognise, reduce, redistribute and reward care work, such as by providing sufficient public care services, establishing minimum parental leave policies and creating measures to ensure living wages in the care sector (100). The **European Care Strategy** (101) and the

(94) European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

⁽⁹⁵⁾ European Research Area and Innovation Committee Standing Working Group on Gender in Research and Innovation (2021), *Gender Equality Plans as a Catalyst for Change*, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

⁽⁹⁶⁾ For more information on the EU Award for Gender Equality Champions, see https://research-and-innovation.ec.eu/ropa.eu/funding/funding-opportunities/prizes/eu-award-gender-equality-champions_en.

⁽⁹⁷⁾ Ibid.

⁽⁹⁸⁾ European Commission (n.d.), 'Support to the implementation of inclusive gender equality plans' (https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-widera-2022-era-01-81).

⁽⁹⁹⁾ For more information on the expert group and subgroup, see https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&groupID=3833.

⁽¹⁰⁰⁾ Ghosh, J. (2022), 'Recognising and rewarding care work: The role of public policies', Foundation for European Progressive Studies, Brussels (https://feps-europe.eu/wp-content/uploads/2022/09/220905_Gosh_Article_3_final_online.pdf).

Work Life Balance Directive (¹⁰²) are welcome steps towards addressing the EU-wide care gap and the environment of long hours characterised by the R & I sector, and can be used as important reference points for how GEPs address work–life balance, organisational culture and career progression. However, more needs to be done to ensure that national family policies are compliant with EU law and promote gender equality across the EU (¹⁰³).

Improving gender equality in R & I is a priority of the EU, and the effective implementation of GEPs is a useful tool to bring about structural and cultural change. There are a number of policy actions that can be taken to create solid foundations that support the efforts outlined in GEPs and create tangible progress. Table 2 provides recommendations for policymakers at both the EU and national levels, as well as for management at research organisations, HEIs and public bodies.

Table 2. Recommendations for policymakers and institutions

Target group	Recommendation
EU-level policymakers	 Continue providing support services (including guidance, training sessions and mutual learning activities) to facilitate the effective development and implementation of GEPs, including consistency across methods and inclusion of best practices.
	 Support the activities of, and networking between, national-level contact points on the GEP eligibility criterion, particularly in those countries that are less advanced in the uptake of GEPs in their R & I organisations.
	 Continue providing and build upon existing financial instruments that support capacity building at an institutional level to develop and implement GEPs.
	 Continue dissemination activities on the Horizon Europe requirement for GEPs to ensure RPOs and RFOs are well informed and to raise awareness on the need for gender equality actions.
National-level policymakers	 Consider introducing or reviewing national-level policies and programmes that are linked to GEPs and can influence their initiatives and outcomes (e.g. legislation or policies supporting or imposing GEPs). National-level policies that encourage gender mainstreaming efforts provide stronger foundations for GEPs and lead to systemic improvements in gender equality.

⁽¹⁰¹⁾ European Commission (2022), Commission communication on the European care strategy (COM(2022) 440 final) (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0440).

⁽¹⁰²⁾ Directive (EU) 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work–life balance for parents and carers and repealing Council Directive 2010/18/EU (OJ L 188, 12.7.2019, p. 79) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019L1158).

⁽¹⁰³⁾ Coface Families Europe (2022), *EU Work–Life Balance Directive Transposition in Action: A mixed picture*, Brussels (https://coface-eu.org/wp-content/uploads/2022/10/COFACEAssessment_WLBDirective_2022.pdf).

- Once measures, policies and programmes have been introduced and operational for several years, consider conducting national- or regional-level reviews of gender equality in HEIs (as has been done in Ireland). These can monitor the progress made, assess the perception of gender equality in HEIs and ensure the continual advancement of gender equality in the higher education sector.
- Encourage and facilitate the establishment of networks (one such example being Athena SWAN) across similar or related institutions to create efficiencies in the development and implementation of GEPs and to share best practices for overcoming challenges and creating impact.

Research organisations, HEIs and public bodies

- Include measures that address the care gap in GEPs, such as flexible working policies, parental leave policies, and training to combat gender stereotypes. Provide further support to those with caring responsibilities, for example, parenting support networks, creche facilities and childcare support / voucher schemes (a).
- In line with the ERA policy agenda 2022–2024, Action 3, move away from inappropriate uses of journal and publication-based metrics in research assessment (^b). This includes reforming research career models so that they do not depend too heavily on the time spent on research (e.g. full-time equivalent).
- (a) For examples of measures addressing the care gap, see Higher Education Authority (2022), Gender Equality Report of the expert group: Second HEA national review of gender equality in Irish higher education institutions, Dublin, p. 42 (https://hea.ie/assets/uploads/2022/03/Report-of-the-Expert-Group-2nd-HEA-National-Review-of-Gender-Equality-in-Irish-Higher-Education-Institutions.pdf).
- (b) For more on research assessment, see Coalition for Advancing Research Assessment (2022), 'Agreement on reforming research assessment', core commitment 3, p. 6 (https://coara.eu/app/uploads/2022/09/2022 07 19 rra agreement final.pdf).

1.7. Bibliography

Act relating to universities and university colleges (University and University Colleges Act), 1 August 2005 (https://lovdata.no/dokument/NLO/lov/2005-04-01-15).

Aukland, K. (2023), 'Never have there been so many equality plans but who ensures their quality?', Committee for Gender Balance and Diversity in Research, Oslo (https://kifinfo.no/en/2023/02/never-have-there-been-so-many-equality-plans-who-ensures-their-quality).

Buckingham, S., Fiadzo, C., Dalla Pozza, V., Todaro, L., Dupont, C. and Hadjivassiliou, K. (2020), *Precarious work from a gender and intersectionality perspective, and ways to combat it*, European Parliament, Brussels (https://www.europarl.europa.eu/RegData/etudes/STUD/2020/662491/IPOL_STU(2020)662491_EN.pdf).

Claeys-Kulik, A.-L., Jørgensen, T. E. and Stöber, H. (2019), *Diversity, equity and inclusion in European higher education institutions – Results from the Invited project*, European University

Association,

Brussels (https://eua.eu/downloads/publications/web_diversity%20equity%20and%20inclusion%20in%20in%20institutions.pdf).

Coalition for Advancing Research Assessment (2022), 'Agreement on reforming research assessment' (https://coara.eu/app/uploads/2022/09/2022 07 19 rra agreement final.pdf).

Coface Families Europe (2022), *EU Work–Life Balance Directive Transposition in Action: A mixed picture*, Brussels (https://coface-eu.org/wp-content/uploads/2022/10/COFACEAssessment WLBDirective 2022.pdf).

Consolidated version of the Treaty on European Union (OJ C 326, 26.10.2012, p. 13) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012M%2FTXT).

Council of the European Union (2015), Council conclusions – Advancing gender equality in the European Research Area, Brussels, 1 December (https://data.consilium.europa.eu/doc/document/ST-14846-2015-INIT/en/pdf).

EIGE (n.d.), 'Family-leave without consequences for the academic career (FI)' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/family-leave-without-consequences-academic-career-fi).

EIGE (n.d.), 'Mini-grants for academic teachers, "Ensuring equal opportunities for male and female researchers who combine work and childcare during the COVID-19 pandemic" – Jagiellonian University in Kraków (JU) (PL)' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/mini-grants-academic-teachers-ensuring-equal-opportunities-male-and-female-researchers-who-combine-work).

EIGE (n.d.), 'Spain – Promoting gender equality in research' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/legislative-policy-backgrounds/spain).

EIGE (n.d.), 'Teaching-free period when returning from parental leave (DK)' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/teaching-free-period-when-returning-parental-leave-dk).

EIGE (2022), Gender Equality Index 2022 – The COVID-19 pandemic and care, Publications Office of the European Union, Luxembourg (https://eige.europa.eu/publications/gender-equality-index-2022-covid-19-pandemic-and-care).

EU Monitor, 'Understanding the gender pay gap: Definition and causes' (https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/vl59mpupm0vq?ctx=vk4jic6t1dxz#: ~:text=With%20less%20money%20to%20save,in%20the%20EU%20in%202020).

European Commission (2012), Commission communication on a reinforced European research area partnership for excellence and growth (COM(2012) 0392 final) (https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:52012DC0392).

European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

European Commission, DG Research and Innovation (2021), *She Figures 2021 – Gender in research and innovation – Statistics and indicators*, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1).

European Commission, DG Research and Innovation (2021), *She Figures 2021 – Policy briefs*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

European Research Area and Innovation Committee Standing Working Group on Gender in Research and Innovation (2018), Report on the implementation of Council conclusions of 1 December 2015 on advancing gender equality in the European research area, Brussels (https://data.consilium.europa.eu/doc/document/ST-1213-2018-INIT/en/pdf).

European Research Area and Innovation Committee Standing Working Group on Gender in Research and Innovation (2021), *Gender Equality Plans as a Catalyst for Change*, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

Eurostat (2024), 'Graduates by education level, programme orientation, sex and field of education'

(https://ec.europa.eu/eurostat/databrowser/view/educ_uoe_grad02/default/table?lang=en).

Eurostat (2024), 'Students enrolled in tertiary education by education level, programme orientation, sex and field of education' (https://ec.europa.eu/eurostat/databrowser/product/page/educ_uoe_enrt03).

Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., Strid, S., Hearn, J., Husu, L., Allori, A. and Wuiame, N. (2021), *Report on the European Policy Baseline*, Unisafe (https://zenodo.org/record/5780037#.YzQ1zXZByUm).

Ferguson, L. and Mergaert, L. (2022), 'Resistances to structural change in gender equality', Supera (https://www.superaproject.eu/wp-content/uploads/2022/02/Resistances-to-Structural-Change-in-Research-and-Innovation v02.pdf).

Forest, M., Arnaut, C. and Mergaert, L. (2016), 'Integrating gender equality into research and higher education institutions – Analytical paper', EIGE, Vilnius (https://eige.europa.eu/sites/default/files/analytical paper 0.pdf).

Ghosh, J. (2022), 'Recognising and rewarding care work: the role of public policies', Foundation for European Progressive Studies, Brussels (https://feps-europe.eu/wp-content/uploads/2022/09/220905_Gosh_Article_3_final_online.pdf).

Higher Education Authority (n.d.), *Gender Action Plan 2018–2020*, Dublin (https://hea.ie/assets/uploads/2018/11/Gender-Equality-Taskforce-Action-Plan-2018-2020.pdf).

Higher Education Authority (2016), Report of the expert group – HEA national review of gender equality in Irish higher education institutions, Dublin (https://hea.ie/assets/uploads/2017/06/HEA-National-Review-of-Gender-Equality-in-Irish-Higher-Education-Institutions.pdf).

Higher Education Authority (2022), *Gender Equality – Report of the expert group: Second HEA national review of gender equality in Irish higher education institutions*, Dublin (https://hea.ie/assets/uploads/2022/03/Report-of-the-Expert-Group-2nd-HEA-National-Review-of-Gender-Equality-in-Irish-Higher-Education-Institutions.pdf).

Ovseiko, P., Chapple, A., Edmunds, L. D. and Ziebland, S. (2017), 'Advancing gender equality through the Athena SWAN Charter for Women in Science: An exploratory study of women's and men's perceptions', *Health Research and Policy Systems*, Vol. 15, No 12 (https://www.researchgate.net/publication/314078245 Advancing gender equality through the Athena SWAN Charter for Women in Science An exploratory study of women's __and__men's_perceptions).

Science Foundation Ireland (2017), 'Irish funding bodies to require Athena SWAN gender equality accreditation for higher education institutions to be eligible for research funding', Dublin (https://www.sfi.ie/research-news/news/irish-funding-bodies-to-require-athena-swangender-equality-accreditation-for-higher-education-institutions/).

Ucar, I., Torre, M. and Elías, A. (2022), 'Mind the gender gap: COVID-19 lockdown effects on gender differences in preprint submissions', *PLOS ONE*, Vol. 17, No 3 (https://doi.org/10.1371/journal.pone.0264265).

UN Women (2020), From Insights to Action – Gender equality in the wake of COVID-19, New York (https://www.unwomen.org/en/digital-library/publications/2020/09/gender-equality-in-the-wake-of-covid-19).

Wroblewski, A. (2021), *Monitoring of ERA Priority 4 Implementation – Update and final assessment*, Genderaction (https://genderaction.eu/wp-content/uploads/2021/09/GENDERACTION WP3 final report.pdf).

2. Policy brief 2. Monitoring and evaluation of the implementation of the gender equality plan eligibility criterion in Horizon Europe

2.1. Summary

- The aim of this policy brief is to provide recommendations for developing indicators and a monitoring framework for measuring the implementation of the GEP eligibility criterion in the Horizon Europe framework programme for R & I. The policy brief outlines good practice examples, existing indicators and main gaps and challenges identified during the study.
- The indicators focus on the requirements for GEPs as identified in Horizon Europe that cover four mandatory requirements and five recommended thematic areas. The policy brief places special consideration on the compliance checks that will be carried out as part of Horizon Europe. Therefore, the defined indicators are aimed at feeding the evaluation framework of compliance checks (104).
- Despite a number of indicators available to monitor the progress of gender equality in R & I in Europe, there is a lack of indicators that focus on GEP implementation. In particular, there is a lack of information on prevalence, key characteristics and the extent to which GEPs cover the five recommended thematic areas as presented in the general annexes of the Horizon Europe work programme. Therefore, this policy brief focuses on developing process indicators that enable the monitoring of the extent to which GEPs, and more concretely, the Horizon Europe requirement, are implemented across Europe by Horizon Europe beneficiaries, applicants and prospective applicants.
- The data on gender equality in R & I available at the European level from existing sources, such as Eurostat, the Organisation for Economic Co-operation and Development (OECD), the MORE4 survey and the She Figures reports, do not include information on GEP implementation. Therefore, it is important to identify the information sources and data collection frameworks that would enable the collection of information on the implementation of GEPs.
- One of the most comprehensive sources of information on GEP implementation in Europe so far is the report by the European Research Area and Innovation Committee (ERAC) Standing Working Group on Gender in Research and Innovation (SWG GRI) on Gender Equality Plans as a Catalyst for Change. Although the group is no longer active, its work on monitoring GEP implementation is likely to continue through the ERA Forum and its subgroup on inclusive gender equality in the ERA, which was launched in March 2023 to support the implementation of Action 5 ('Promote gender equality and foster inclusiveness, taking note of the Ljubljana Declaration') of the ERA Policy Agenda 2022–2024 (105). In addition, all 30 collaborative GEP projects funded through Horizon 2020 and the FP7 developed monitoring frameworks and evaluated the progress of

⁽¹⁰⁴⁾ European Commission (2022), Horizon Europe Work Programme 2021–2022 – General annexes, Brussels (https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-13-general-annexes horizon-2021-2022 en.pdf).

⁽¹⁰⁵⁾ For more information of the expert group on the ERA Forum, see https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&groupID=3833.

GEP implementation through qualitative and quantitative indicators, particularly at the organisation level (106). The indicators identified by these projects were the basis for suggesting the indicators for this policy brief. However, despite the efforts made so far, no common data collection mechanism has been established that provides an overview of GEP implementation in Europe. It is therefore important to build on the findings from the FP7 and Horizon 2020 that have been implemented already and the new Horizon Europe projects such as GENDERACTIONplus and INSPIRE. Particularly, GENDERACTIONplus aims at contributing towards gender equality in the ERA through the creation of a policy COP (107). Additionally, one of the work packages focuses on monitoring. INSPIRE focuses on the development of new indicators for inclusive GEPs as well as conducting a GEP monitoring survey identifying key conditions to ensure GEP impact (108).

- Data collection on gender equality in R & I faces several challenges across Member States. However, particular areas are even more challenging due to the personal nature of data collected and the sociopolitical context. In particular, intersectionality and GBV (including sexual harassment) are areas that have been proven to face constraints regarding data collection and monitoring.
- The recommendations included in this policy brief are aimed primarily at the European Commission and national authorities, with some recommendations also focusing on R & I organisations implementing GEPs. The need to develop indicators and a monitoring framework that does not create a significant administrative burden and the importance of building on the existing monitoring frameworks are taken into account.

2.2. Background and relevance

GEPs were introduced as a Horizon Europe eligibility criterion and enforced starting with calls with deadlines in 2022, as a tool to accelerate gender equality in R & I in Europe. This criterion is applicable to public bodies, HEIs and research organisations from Member States and third countries associated to Horizon Europe. The need for data collection and monitoring of gender equality has gained significant attention since the establishment of the GEP eligibility criterion. This was also reinforced by the Ljubljana Declaration on gender equality in research and innovation prepared by the Slovenian Presidency in 2021, which called for 'the need to develop tools for the monitoring and evaluation of national gender equality policies in R&I and gender equality actions, including Gender equality plans. Such tools are essential to evaluate actions aimed at achieving institutional change, collect information on Gender equality plans uptake rates at national level, and consider intersectional data. Indicators and measurable goals need to be established to assess progress in achieving gender mainstreaming as a strategy' (109). Moreover, the new ERA Policy Agenda for the 2022–2024 period defines 20 concrete actions, including the

⁻

⁽¹⁰⁶⁾ For example, the ACT project developed the Gender Equality Audit and Monitoring tool, an integrated environment for carrying out survey-based gender equality audits in academic organisations or organisational units. The tool is available at https://geam.act-on-gender.eu/.

⁽¹⁰⁷⁾ For more information on the Genderactionplus project, see https://genderaction.eu/about-us/.

⁽¹⁰⁸⁾ For more information on the Inspire project, see https://www.inspirequality.eu/about.

⁽¹⁰⁹⁾ Slovenian Presidency of the Council of the European Union (2021), Ljubljana Declaration – Gender equality in research and innovation, Brussels, 26 November (https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/PSEU/Ljubljana-Declaration-on-Gender-Equality-in-Research-and-Innovation- endorsed final.pdf).

establishment of an efficient and effective ERA Monitoring Mechanism (EMM) (Action 19) and the promotion of gender equality and inclusiveness (Action 5), showing the importance of monitoring progress and identifying indicators at the policy and operational levels, in particular to monitor progress for gender equality in R & I (110).

Although the GEP eligibility criterion in Horizon Europe is new, R & I organisations have been invited to establish GEPs, and Member States have been invited to facilitate framework conditions to achieve this, since 2012 with the adoption of the European Commission communication on a reinforced European research area partnership for excellence and growth (111). To facilitate this, the European Commission supported research organisations to implement GEPs through dedicated funding in the FP7 and Horizon 2020, Over 200 organisations have been supported in total, through 30 GEPimplementing projects, and all of them were asked to develop monitoring indicators and evaluate progress. Therefore, there have been a substantial number of initiatives aimed at developing and piloting indicators for GEP implementation. The findings from these projects informed the development of the GEAR tool, which was launched by EIGE in close collaboration with the European Commission, DG Research and Innovation. The GEAR tool is aimed at supporting institutions to develop their GEPs through concrete examples and best practices from EU-funded GEP-related projects, including providing guidance for the institutions on developing monitoring indicators and data collection of their GEPs. For example, the Efforti project developed an evaluation framework for measuring gender equality impacts. Projects such as GENDERACTION, CASPER and TARGET also dedicated significant attention to monitoring indicators. Moreover, the ERAC SWG GRI conducted a survey to assess the adoption of GEPs by Member States and associated countries and identify the needs related to the implementation of GEPs at the national level. The findings of the ERAC SWG GRI report indicate a need to monitor the uptake of GEPs in national R & I systems as well as to monitor and evaluate GEP impact (112).

Despite strong policy commitments and initiatives aimed at promoting, developing, piloting and testing indicators and monitoring frameworks, there are no agreed and commonly used indicators that enable an assessment of the impact of the GEP eligibility criterion at the national and EU levels. Therefore, the focus of this policy brief is to provide recommendations in relation to the indicators for monitoring the implementation of the GEP eligibility criterion in Horizon Europe and to consider the monitoring frameworks through which the indicators could be implemented. This would enable verification of the extent to which R & I institutions implement GEPs in practice and how progress towards gender equality in R & I across the EU and associated countries is measured (and in particular its impact).

⁽¹¹⁰⁾ European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg (https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf).

⁽¹¹¹⁾ European Commission (2012), Commission communication on a reinforced European research area partnership for excellence and growth (COM(2012) 0392 final) (https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:52012DC0392).

⁽¹¹²⁾ ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

2.3. Evidence base and key sources of information

This policy brief draws on the review of lessons learned through FP7- and Horizon 2020–funded GEP projects which developed monitoring frameworks, and the review of available data that is being regularly collected at the EU and national levels. The findings were further complemented by research conducted for this study (including stakeholder interviews, an online survey of the organisations implementing GEP projects and expert consultation to validate the outputs). A summary of the sources of information is presented in Table 3.

Table 3. Key data sources

Primary sources of	f information
Stakeholder interviews	Stakeholder interviews provided information on: EU-level institutions/policymakers; researchers in academic institutions / research communities in the EU; research associations and universities in the EU; national R & I agencies and organisations; public and private RFOs; public and private RPOs.
Online survey on 'Gender equality plans in research and innovation organisations' (<i>n</i> = 303) (for more details, see Annex 2 of the main report for this study)	The online survey (non-representative sample) was conducted in August–September 2022 among public and private RPOs (with an educational component), public RFOs, ministries and other national or regional authorities. Selected questions within the survey specifically focused on monitoring indicators. The analysis of the findings from the survey was used to inform this policy brief.
Expert consultation	Experts in the field of GEPs have reviewed the policy brief and provided useful feedback, insights and input that have been included in the policy brief.
Secondary source	s of information

Secondary sources of information

Background information

This includes the General Annexes to the Horizon Europe Work Programmes 2021–2022 and 2023–2025, which outline the requirements of the GEP eligibility criterion, and the *Horizon Europe Guidance on Gender Equality Plans*. It also contains policy documents related to the ERA and the Horizon Europe framework programme, and guidance available through the GEAR tool co-developed by EIGE and DG Research and Innovation that provides information on GEPs

	and their implementation.
Project reports and evaluation	EU projects promoting gender equality in R & I have developed public deliverables that include reports, evaluations, methodological approaches and indicators.
Review of gender equality data in R & I	Reports and data available at the EU level that gather relevant gender data, particularly in relation to R & I.

NB: For background information sources, see European Commission (2022), Horizon Europe Work Programme General 2021-2022 annexes. Brussels (https://ec.europa.eu/info/fundingtenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-13-general-annexes_horizon-2021-2022_en.pdf); European Commission (2023), Horizon Europe Work Programme 2023-2025 -Brussels (https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-13-general-annexes horizon-2023-2024 en.pdf); Commission, DG Research and Innovation (2021), Horizon Europe Guidance on Gender Equality Office Plans. **Publications** of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509. For more information on the GEAR tool, see https://eige.europa.eu/gender-mainstreaming/toolkits/gear.

2.4. Indicators

2.4.1. Key considerations for indicator selection

This section is structured around three key questions that were considered during the study when developing the recommendations for GEP monitoring indicators.

- What is the purpose of developing GEP monitoring indicators?
- What should be measured through the monitoring indicators?
- What are potential data sources and monitoring frameworks that could be used for data collection?

As the purpose of this policy brief is to develop a set of indicators for the monitoring and evaluation of the Horizon Europe GEP eligibility criterion, the primary focus is on the GEP requirements as they are set out in the general annexes to the Horizon Europe work programme. However, as the GEP eligibility criterion was introduced to support the wider objectives of promoting gender equality in R & I across Europe, some suggested indicators aim to assess the uptake of GEPs in the R & I sector in participating countries and, whenever possible, to assess how this has been impacted by the introduction of the GEP eligibility criterion in the Horizon Europe framework programme.

The indicators recommended in this policy brief are aimed at monitoring GEP implementation at the national and European levels and enabling comparisons among the Member States and associated countries (where relevant) in order to respond to the Ljubljana Declaration pledge of monitoring national policies and tools including GEP implementation. Nonetheless, given that GEPs are developed and implemented at the organisational level, indicators also aim to enable the assessment of the extent to which the institutions taking part in Horizon Europe projects implement GEPs in practice. Particular attention has been paid to the compliance checks that will be carried out by the European Commission on beneficiaries. Given that the focus of this brief is on implementation progress, the indicators suggested primarily focus on process indicators and aim to

measure the aspects around uptake, inputs and commitment. There is less focus on impacts, which are covered more broadly through the ERA scoreboard and the policy brief developed for this study, which focuses on measuring progress on inclusive GEPs and policies and recommends the indicators specifically to be included in the ERA scoreboard.

The indicators in this section are categorised into two groups: those on mandatory requirements and those on thematic areas. The **mandatory requirements of the Horizon Europe eligibility criterion** include (113):

- **publication:** a formal document published on the institution's website and signed by the top management;
- dedicated resources: commitment of resources and expertise in gender equality to implement the plan;
- data collection and monitoring: sex-/gender-disaggregated data on personnel (and students, for the establishments concerned) and annual reporting based on indicators;
- training: awareness raising / training on gender equality and unconscious gender biases for staff and decision-makers.

The five recommended thematic areas are (114):

- work-life balance and organisational culture, which contributes to creating an
 enabling environment where everyone can thrive and have fulfilling careers (e.g.
 parental leave polices, flexible work arrangements, childcare, reintegration of staff after
 career breaks):
- **leadership and decision-making**, which centres on organisational gender-balanced participation in leadership and formal and informal decision-making bodies and structures (e.g. gender guotas):
- recruitment and career progression, which supports actions to avoid systematic and institutional/structural discrimination of women in their research careers (e.g. unconscious bias training for human resource managers, inclusive language for job vacancies):
- **gender dimension in research and teaching content**, to tackle and eliminate gender biases (e.g. sex/gender-based analysis, and intersectional analysis, across disciplines);
- measures against GBV, including sexual harassment, to put an end to this type of behaviour, which tends to be underestimated in the R & I sector (e.g. surveys of prevalence, training, codes of conduct, complaint protocols).

When developing the indicators and policy recommendations for their implementation, it is important to consider the **data sources** as well as how and by whom the data would be collected, analysed and reported. Currently there are no indicators used at the EU level for

_

⁽¹¹³⁾ European Commission (2022), Horizon Europe Work Programme 2021–2022 – General annexes, Brussels (https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-13-general-annexes_horizon-2021-2022_en.pdf).

⁽¹¹⁴⁾ Ibid.

monitoring GEP implementation, and therefore it is important to identify a framework through which the data monitoring could be delivered. Table 4 provides **potential** data sources and monitoring frameworks and includes associated advantages and disadvantages of each option.

Table 4. Potential approaches to data collection and monitoring

Potential source	Advantages	Disadvantages
Self-declaration questionnaires available through the participant register (a)	Collects the information on mandatory and thematic GEP requirements from all Horizon Europe applicants.	Relies on self-declarations by applicant organisations, without details on the extent to which GEPs are actually implemented by the applicant organisations.
Dedicated compliance checks by external experts contracted by the European Commission	 Enables an in-depth, targeted and comprehensive assessment of the extent to which the mandatory requirements of GEPs are implemented by Horizon Europe beneficiaries. Would enable the use of a mixed-methods approach, including a review of GEPs and other documents related to their implementation, quantitative data (collected from the institutions and/or targeted surveys), interviews with beneficiary organisations, on-site visits. 	 Would be resource and time intensive but would provide the most comprehensive information on GEP implementation. Some organisations might not be willing to take part in interviews complementing the compliance checks unless contractually required by Horizon Europe funding.
Dedicated survey on GEP implementation funded by the European Commission either through existing Horizon Europe projects (e.g. the Inspire project will conduct a survey and develop a web crawl instrument as part of the project, which could provide information on this) or contracted separately	 Enables the gathering of indepth information that is specifically focused on the GEP eligibility criterion in Horizon Europe. Allows the undertaking of tailored and detailed analysis. New projects such as INSPIRE could provide this information. 	 Is expensive and resource-intensive. Survey fatigue and the time needed to complete the survey might result in low response rates. Allows for assessment at one point in time unless delivered periodically and using consistent methodology. The continuation of the survey delivered

to an external provider		through existing projects is unclear and therefore, the progress over time might not be measured.
ERA monitoring/ERA scoreboard (these tools belong to the new EMM which will be key information-monitoring progress towards ERA implementation, including ERA Action 5 on promoting gender equality and fostering inclusiveness); the EMM includes the ERA scoreboard and Dashboard, an EU-level report, country reports and the policy platform	 Dedicated mechanism for monitoring ERA implementation already in place with opportunity to add indicators specifically focused on gender equality in R & I. Conducted periodically, allowing monitoring the progress over time. Less resource-intensive as it would be based largely on existing indicators collected through international comparative sources such as Eurostat, the OECD and others, enabling comparability among countries. 	 Would enable only a small number of indicators on GEP implementation with limited analysis possible. Tendency to focus on broader, often contextual, indicators with limited direct links to policies and actions (b). Little scope to introduce specifically GEP implementation indicators as, at this stage, the EMM is largely focused on existing sources (Eurostat, MORE surveys, Joint Research Centre data).
ERA Forum subgroup on inclusive gender equality in the ERA	 Will, as part of its tasks, facilitate the regular collection of sex- and/or gender-disaggregated data for the She Figures publication and, where possible, of inclusive gender equality indicators in the field of R & I. Close relation and dialogue with key national authorities and stakeholders, enabling access to the information on GEP implementation in Member States and particularly the information on national policies supporting GEP implementation. Ability to continue the work carried out by the ERAC 	 Limited ability to undertake regular data collection tools and/or frameworks, with focus on ad hoc data collection and analysis. Primary focus on developing policy recommendations with small scope to undertake large-scale surveys and/or data collection initiatives.

	SWG GRI, with the possibility of undertaking follow-up work on GEP implementation across Europe.	
She Figures report, which brings together quantitative information on monitoring gender equality in R & I	 Conducted periodically allowing monitoring of progress over time. Able to access/identify some national level data through scraping the organisations' websites and documents to identify the existence of GEPs/measures to advance gender equality. This includes checking the existence of GEPs, their public access, areas covered by GEPs, etc. It might have the capacity to further exploit and analyse the data collected from a range of sources such as compliance checks on GEPs, data collected through the ERA Forum subgroup on inclusive gender equality in the ERA and other sources. 	 Based largely on the existing data sources with little scope to cover GEP-specific data. The data gaps are likely to be significant depending on the countries and there is little comparability of the data between different countries.
European Tertiary Education Register, project (°)	 Collecting and disseminating student, graduate, personnel, financial and other data for all European HEIs covered by the project (includes 41 countries and nearly 3 500 institutions). Data available at the institutional level. Data available for the period of 2011–2019. 	 Current project funded until 2024 with uncertainty about the longer-term sustainability of the project. Based largely on available statistics and would depend on the extent to which data on GEPs is publicly available at the national level. GEPs are not currently within the scope of the project.
GENDERACTIONplus mapping of policies	GENDERACTIONplus is currently conducting a mapping	A one-time exercise, which limits its effectiveness over

and legislation exercise on national legislation and policies promoting GEPs which provides crucial qualitative information across Member States.	the years as it will become obsolete once the project finishes.
---	---

- (a) https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/participant-register.
- (b) See Whittle, M., Guasp Teschendorff, M. and Sikorski, A. (2022), Study to evaluate the ERA policy framework and ERA Monitoring Mechanism, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/98a8edb4-c763-11ec-b6f4-01aa75ed71a1/language-en/format-PDF/source-256243590).
- (c) For more information on the European Tertiary Education Register project and the data available through it, see the project website (https://www.eter-project.com/).

As already noted, Horizon Europe beneficiaries will provide a self-declaration on whether they possess a GEP at the proposal stage. This declaration takes the form of an online questionnaire to be filled in by the organisations to self-declare the coverage of both the four mandatory process-related GEP requirements and the five recommended thematic areas. The European Commission will carry out an assessment of the Horizon Europe eligibility criterion on randomly selected organisations. The pilot phase will assess 30 organisations (covering the three types of legal entities: public bodies, research organisations and higher education establishments), and building on this pilot, larger randomly picked samples of funded organisations will be assessed on an annual basis. These compliance checks will derive key conclusions on the level of commitment and implementation of GEPs regarding the four key mandatory requirements, but also the five recommended thematic areas. Particularly, it will be a crucial source of information to understand the progress and development of GEPs regarding the recommended areas.

Therefore, there is a strong need to guarantee that the assessment is carried out in the most effective way to fully capture compliance and the implementation of GEPs. The following section provides a selection of indicators for the monitoring of GEP implementation at the EU, national and institutional levels. These indicators could serve as guidance for the assessment of the Horizon Europe eligibility criterion, and effectively determine the implementation of GEPs in the different mandatory and recommended areas.

2.5. Mandatory process-related indicators

Table 5 proposes a set of indicators to measure the implementation of GEPs in relation to the four process requirements previously stated and defined by Horizon Europe. The indicators are classified into five categories, including the four Horizon Europe requirements and general indicators for GEPs. Moreover, **they are organised, within each category, from more relevant to less relevant**, taking into account the difficulty level in collecting the data. The indicators focus on monitoring the uptake and implementation of GEPs in R & I institutions in Europe and include a short description, the rationale for their relevance, the level at which they are to be collected and possible mechanisms that can support data collection. While other indicators can be added to this list, one of the main considerations for its development has been that the data collection should not create a significant administrative burden on stakeholders, but still enable meaningful insight into GEP implementation progress.

Table 5. Suggested indicators for monitoring the implementation at the EU and national levels of the Horizon Europe GEP eligibility criterion mandatory requirements

Indicator	Description	Rationale	Level at which collected	Information source where the indicator was defined	Data source, if already collected	Frequency, if already collected	Possible data collection sources if new indicator
General/contextua	al						
Number of countries that adopted national legislation and policies to promote or enforce the development of mandatory GEPs (by country)	The indicator would allow assessment of whether the country has adopted legislation that supports, promotes or requires R & I organisations to adopt mandatory GEPs. The indicator would not distinguish between different policies but would assess how widespread policies to promote or enforce GEPs are across the Member States.	Allows identification of which countries have policies that support GEP implementation, establishing favourable conditions for GEP implementation at the institutional level.	EU, national	Report by the ERAC SWG GRI on Gender Equality Plans as a Catalyst for Change (a)	Report by the ERAC SWG GRI on Gender Equality Plans as a Catalyst for Change (a)	None (one-time)	 She Figures report GENDERACT IONplus- Dedicated EU-wide survey, via the ERA Forum subgroup on Action 5 of the ERA policy agenda 2022–2024

When the legislation and policies supporting mandatory GEPs were established (by country)	Number of Member States that introduced the legislation or policies supporting mandatory GEPs during the following periods: past 12 months, past 3 years,	This indicator enables assessors to understand which countries have long-standing policies and legislation supporting GEPs and which ones introduced the requirement more recently.	EU, national	Suggested by the research team based on the feedback from expert contributions	No	None	•	She Figures report GENDERACT IONplus Dedicated EU-wide survey
	past 5 years,past 10 years,more than 10 years ago.							
Public document a	and awareness-raising							
Number and proportion of organisations with a GEP (by country)	Number of R & I organisations that adopted a GEP that meets the mandatory requirements as defined in the Horizon Europe regulations by country.	Measures how widespread GEPs are in R & I institutions per country compared to the total number of institutions.	EU, national	New – suggested by research team based on report by the ERAC SWG GRI on Gender Equality Plans as a Catalyst for Change (a)	ERAC SWG GRI reported on data where it is available	None (not systematically collected yet)	•	ERA Forum subgroup on Action 5 of the ERA policy agenda 2022–2024 Compliance checks She Figures

	The share of the organisations with a GEP compared to the overall number of R & I institutions in the country, where possible data per type of R & I organisation is available.						report Dedicated EU-wide survey (to be developed) ERA monitoring / ERA scoreboard
Number of staff and students who are aware of whether their institutions adopted GEP	This indicator measures the extent to which staff and students (where possible) within R & I organisations are aware of whether GEPs are adopted by their organisations, broken down by different staff groups: institutional leadership research administrative	GEPs required to be public and known to all staff. The indicator assesses to what extent the GEPs are known to the research community.	Organisational	New – suggested by research team based on the mandatory requirements	No	None	 Compliance checks Dedicated EU-wide survey (to be developed)

	technicalstudents.						
Dedicated resource	ces						
Financial resources committed to GEP implementation in R & I institution (annual)	The budget committed by the organisation specifically for GEP implementation in euros and as a proportion of the total operational budget of the institution. In some cases, GEPs are implemented in a cross-cutting way. In these cases, the identifiable costs devoted specifically to GEPs, as far as possible, should be included. This indicator should also measure actual spend.	Dedicated budget for GEP implementation is a mandatory requirement, and the level of funding that institutions dedicate as well as the proportion of their total operational budget would enable assessment of the level of resources allocated.	Organisational	Efforti project (b)	No	None	Dedicated EU- wide survey (to be developed)
Number and proportion of	This indicator would monitor how many	The requirement to have dedicated	National	 TARGETED- MPI project 	No	None	Dedicated EU- wide survey (to

R & I institutions which have a dedicated body(s)/unit(s) with overall responsibility for the implementation, dissemination and monitoring of their GEP (by country)	R & I institutions who have GEP have a body with overall responsibility for GEP implementation. This should be a body that is formalised within institutional structures, recognised and has dedicated resources.	resources implies the need to establish concrete responsibilities for GEP implementation which will be measured through this indicator.		ACT Gender Equality Audit and Monitoring tool			be developed)
Data collection ar	nd monitoring						
Existence of sex and/or gender- disaggregated data on personnel and students at the institutional level	This indicator measures the presence of periodic data collection disaggregated by gender on the organisation personnel.	Horizon Europe requires that GEPs include sex-/gender-disaggregated data on personnel (and students).	Organisational	Horizon Europe (^d)	No	None	 Dedicated EU-wide survey (to be developed) She Figures report
Number and proportion of R & I institutions with public monitoring reports on gender equality	This indicator measures how many R & I organisations report on gender equality situation on an annual basis and include gender-	The indicator assesses how many institutions per country are reporting gender-disaggregated data periodically.	National	'Gender equality impact drivers revisited: Assessing institutional capacity in research and	No	None	 Dedicated EU-wide survey (to be developed) She Figures report

(annual and by country)	disaggregated data on staff and students.			higher education institutions' (e)			
Existence of monitoring tools and processes that enable data collection	The indicator measures whether the R & I institutions implementing GEPs have established monitoring tools and processes, which can be integrated into the already-existing institutional monitoring processes or created as standalone tools.	GEP criteria involve the inclusion of data collection and monitoring as a binding criterion. Therefore, this indicator measures the existence of a monitoring tool that collects data regarding GEP implementation, for example, ACT's Gender Equality Audit and Monitoring tool.	Organisational	ACT project (f)	No	None	 Dedicated EU-wide survey (to be developed) She Figures report
Number and proportion of organisations undertaking evaluation of GEPs and how frequently (9) (by country)	This indicator measures whether the organisation is undertaking formal evaluation of GEPs (internal or external). It also considers how often such evaluations are taking place.	Data collection and monitoring are crucial to gather information about gender equality and GEPs, but organisations should also undertake evaluations (using these data to conduct analysis) in	National	New – suggested by research team based on the suggestions from experts contributing to the evaluation	No	None	Dedicated EU- wide survey (to be developed)

		order to measure implementation.								
Training and capacity building										
Number of training events developed as percentage of total staff per R & I institution	This indicator measures the number of training events developed as a percentage of the total personnel to control for organisation size.	A requirement for GEPs is to develop training activities in view of increasing gender equality and GEP awareness across the organisation. Monitoring it will help to understand the progress made by the organisation in this field.	Organisational	TARGET project (^h)	No	None	Dedicated EU- wide survey (to be developed)			
Number of participants as percentage of total number of staff per R & I institution per year	This indicator measures the number of people who have participated in any training or capacity-building activity as a percentage of total researchers (to control for organisation size) by different staff	As already noted, organisations' members must be aware of and trained in the gender dimension of the organisation. The indicator measures the uptake of the training activities.	Organisational	TARGET project (h)	No	None	Dedicated EU- wide survey (to be developed)			

groups:			
 institutional leadership 			
 research 			
 administrative 			
• technical.			

- (a) https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf.
- (b) https://efforti.eu/files/sites/default/files/2019-10/efforti%20full%20list%20of%20indicators.pdf.
- (°) https://targeted-mpi.eu/wp-content/uploads/2022/03/TARGETED-MPI_WP5-D5.1_TARGETED-MPI_Evaluation_Plan.pdf.
- (d) https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-13-general-annexes_horizon-2021-2022_en.pdf.
- (e) https://www.mdpi.com/2076-0760/11/9/379.
- (f) https://zenodo.org/record/5348197/files/ACT_D2.2_GEAM_Docu_31AUG2021.pdf?download=1.
- (9) Regarding organisations' GEP evaluation, the frequency will partly depend on the experience of organisations. Beginner organisations, in terms of GEP establishment, will conduct evaluations less frequently, whereas more advanced organisations are expected to carry out evaluations more frequently.
- (h) http://www.gendertarget.eu/wp-content/uploads/2022/08/D4.1-Monitoring-tool.pdf.
- NB: Although it is suggested that the data be aggregated at the national and EU levels, for most of the indicators it would need to be collected at the institutional level, as the GEP eligibility criterion is implemented by institutions receiving Horizon Europe funding.

The indicators presented in Table 5 focus on the monitoring of the Horizon Europe GEP mandatory requirements. Data analysis for the indicators should take into consideration the fact that some organisations and countries have had a requirement to establish mandatory GEPs for many years and have therefore implemented GEPs for a number of years already, while others are only recently starting to introduce it as a requirement. This needs to be taken into account when analysing and interpreting the data. Establishing the baseline for each Member State is important for measuring progress over time.

2.6. Thematic indicators in key areas

Table 6 proposes a list of indicators to monitor and evaluate the progress of GEP implementation in relation to the five thematic areas recommended by Horizon Europe. As with the previous table, it includes a short description, a rationale, the level at which data collection would take place and the source of the proposed indicators. Moreover, if the indicator is already collected, the source and frequency are provided. Conversely, when the indicator is new, possible sources of information are also provided. Finally, the table includes a distinction between process and outcome indicators, with a primary focus on process indicators, although outcome indicators are also suggested where they are already collected through the existing sources. As above, while additional indicators can be added to this list, one of the main considerations for its development is that data collection should not create a significant administrative burden on stakeholders, but still enable meaningful insight into GEP implementation progress. Therefore, the indicators are grouped in each important category from more to less important ones.

Table 6. Suggested indicators for monitoring the implementation of GEP thematic areas

Indicator	Description	Rationale	Level	Information source where the indicator was defined	Data source, if already collected	Frequency, if already collected	Possible data collection sources if new indicator	Process/ outcome indicator
General								
The level of coverage of thematic areas recommended for GEPs by country	This indicator will measure the extent to which the five thematic areas are incorporated in GEPs. GEPs might have merged or split these areas and therefore the aim of the indicator is to monitor not how many priorities GEPs have, but the extent to which the GEP as a whole covers the five recommended thematic areas.	This indicator will enable the identification of which areas are less covered as well as most covered through GEPs.	National	Based on desk research	None	None	 Compliance checks Dedicated EU-wide survey (to be developed) 	Process

Work-life balanc	ce and organisational c	ulture						
Number and proportion of R & I organisations with existing work-life balance policies per country: (a) parental leave, (b) care leave, (c) teleworking, (d) flexible working hours arrangement, (e) childcare services	This indicator assesses how widespread the policies aimed at promoting work–life balance in R & I organisations are per country.	Assess which work—life balance policies are adopted and to what extent per country.	National	TARGETED-MPI project (a)	None	None	Dedicated EU wide-survey (to be developed)	Process
Number and share of institutions with existing regulations and initiatives supporting parents returning to work after a	This indicator measures the extent to which regulations and initiatives supporting parents returning to work are widespread among the R & I organisations	It will indicate the extent to which the initiatives aimed at supporting the reintegration of parents and careers after the parental/adoption leave by country.	National	EFFORTI project (b)	None	None	Dedicated EU- wide survey (to be developed)	Process

career break (by country)	implementing GEPs.							
Leadership and	decision-making							
Number and proportion of R & I institutions establishing policies or support measures (e.g. training, mentoring schemes, quotas) to support women in taking up leadership positions, per country	The number of support measures aimed at women to support their participation in leadership positions. The indicator includes a wide range of measures such as leadership training, mentoring and coaching that aim to support women in taking up leadership skills.	Measures the extent to which support for women to develop leadership skills/ competences is widespread.	National	TARGET project (°)	None	None	Dedicated EU- wide survey (to be developed)	Process
Number and proportion of R & I institutions providing awareness-raising activities and gender	Number of R & I institutions in the country providing measures aimed at decision-making bodies to increase gender awareness and gender	Measures the extent to which support measures aimed at decision-making bodies are widespread in R & I institutions in the country.	National	TARGET project (°)	None	None	Dedicated EU- wide survey (to be developed)	Process

competence training for members of decision- making bodies and ad hoc bodies (such as selection and promotion Committees) per country	competences. This includes a wide range of measures such as training, awareness-raising and guidance.							
Composite indicator measuring women's participation in leadership and decision-making (by country)	 Share of women heads of institutions in the higher education sector (50 %) (d) Share of women on boards, members and leaders (50 %) 	This composite indicator becomes crucial to understanding the progress of women in decision-making bodies. Capturing only one of these dimensions can produce biased and misleading conclusions. Therefore, based on deliverable 3.3 of the GENDERACTION project, several indicators on this dimension have to be considered.	National	GENDERACTI ON project	 Women in Science databas e, DG Researc h and Innovatio n She Figures ERA survey 	Multiannual	 Women in Science database, DG Research and Innovation She Figures EMM 	Outcome

Recruitment and	d career progression							
Share of R & I institutions holding an HR Excellence in Research award or an equivalent award at the national level	The award recognises that the institution has adopted human resource policies in accordance with the principles set out in the European Charter and Code for Researchers. Some institutions might have received a similar award available at the national level, and they should be included in this indicator as far as possible. The indicator shows the number and proportion of institutions per country that are awarded the right to use the award.	The European Charter and Code for Researchers anticipates measures in the recruitment process that require gender balance (e.g. in selection committees) and is suggested to be used as a proxy indicator to assess the gender equality principles in the recruitment process.	EU, national	Based on desk research	Euraxess	Regular reporting available on Euraxess website (e)	Euraxess	Process
Share of women in	Indicator measures the extent to which	It assesses the extent to which	EU, national	She Figures	Women in Science	Multiannual	Women in Science	Outcome

grade A, B and C positions (by country)	women are represented in different positions.	women are able to progress into higher-level positions throughout their careers.		report	database		database	
Gender dimensi	on in research and tea	ching content						
Share of Horizon Europe projects with a gender dimension in their content	This assesses the extent to which Horizon 2020-funded research integrates gender dimension in research content. This indicator should be collected for Horizon Europe projects.	Assess the extent to which research projects funded by Horizon Europe integrate a gender dimension in research content.	EU	 She Figures report Efforti project Online survey conducted for the study 'Pilot assessment activities for the European Knowledge and Support Facility on gender equality plans in research and innovation' 	EU Open Data Portal	Every 3 years	She Figures report	 Outcome (focuses on the publicati ons and reporting of project findings Process (if assesse d based on the submitte d applicati ons and reporting to ERA)

Number and share of R & I institutions integrating measures addressing gender dimension in research (by country)	Number and proportion of R & I institutions implementing measures to support researchers to integrate a gender dimension into research and teaching. This could include training, awareness-raising, guidance, integration of a gender dimension in PhD programmes, etc.	Assesses how widespread support measures are in the R & I institutions.	National	Efforti project	None	None	Dedicated EU- wide survey (to be developed)	Process
Share of publications that include a gender dimension in their content (by country)	Proportion of publications that explicitly reference women, men or gender differences in the title or abstract.	Assesses to what extent the publications integrate a gender dimension. The indicator does not cover the full content of the publications but focuses on titles and abstracts, as this information is available through bibliometric data.	National	She Figures report	Scopus data	Every 3 years	She Figures report	Outcome

Measures against GBV, including sexual harassment										
Number and share of R & I institutions incorporating measures to address GBV, including sexual harassment, in their GEPs (by country)	Measures the extent to which GEPs cover measures to address GBV, including sexual harassment.	Assesses the extent to which the R & I institutions implementing GEPs address GBV.	EU, national	UniSAFE	None	None	Dedicated EU- wide survey (to be developed)	Process		

- (a) https://targeted-mpi.eu/wp-content/uploads/2022/03/TARGETED-MPI <a href="https://targeted-mpi.eu/wp-content/up-cont
- (b) https://efforti.eu/sites/default/files/2019-10/EFFORTI Full List of Indicators.pdf/.
- (c) http://www.gendertarget.eu/wp-content/uploads/2022/08/D4.1-Monitoring-tool.pdf.
- (d) In the composite indicator, each indicator would have equal weight.
- (e) https://euraxess.ec.europa.eu/jobs/hrs4r.

2.7. Conclusions and considerations for further actions

This section outlines the main recommendations on key priorities related to monitoring and evaluating the implementation of the GEP eligibility criterion and measuring progress in achieving gender equality in R & I. The target group of this policy brief is national and EU policymakers, given the need to understand and assess the extent to which GEPs are implemented systematically (which requires data to be collected across Member States). Although R & I institutions are likely to be affected, as they would probably need to provide the data as GEP-implementing organisations, the aim of this brief is to understand the uptake and implementation of GEPs at the national and EU levels, rather than the situation in individual organisations. The proposed recommendations are tailored to each specific stakeholder and are briefly discussed below.

Target group	Recommendations
EU-level policymakers (European Commission)	 In consultation with the Member States, to adopt a common set of indicators for monitoring GEP implementation focusing on the mandatory and thematic GEP requirements. Ensure that implementation/process indicators are used to assess the prevalence and uptake of GEPs as an incentive to encourage GEP implementation at the national and institutional levels. The new ERA Forum subgroup dedicated to the ERA policy agenda Action 5, co-chaired by DG Research and Innovation, could play a key role in this process.
	• In consultation with the Member States, to adopt a new set of indicators to measure the implementation of mandatory GEP requirements at the national level. The GEP as a Horizon Europe eligibility criterion is relatively new, and there is little information on the level of GEP implementation at the national level, particularly around the key areas such as the level of take-up and associated funding for GEP implementation. Therefore, the inclusion of key indicators within the compliance checks becomes crucial. These checks will also enable monitoring and measuring progress and impact over time on the implementation of GEPs across the EU.
	 In consultation with the Member States, to adopt process indicators to assess the extent to which GEPs contribute to achieving expected outcomes associated with five thematic areas. The data that is collected through existing sources focuses on outcome-level indicators without reference to the measures that contribute to the achievement of those outcomes. Therefore, we recommend integrating a set of process indicators to monitor the implementation of the measures supporting each thematic area, in order to assess the possible contribution of GEPs towards the outcomes. In relation to the previous recommendation, to adopt the indicators related to thematic areas identified for GEPs, with particular attention to the data on GBV, including sexual

harassment. The study found that there is a particular lack of indicators on GBV and sexual harassment currently being collected. Therefore, the work carried out and data collected by the UniSAFE project should be built upon in this regard.

- To ensure that data collection is taking place regularly, so that it allows for the analysis of progress over time. This could be achieved by developing dedicated data collection tools such as surveys or, in collaboration with Member States, agreeing on the country reporting on GEP implementation. Expanding the scope of existing data collection tools to incorporate GEP indicators would enable some indicators to be collected on GEP implementation. However, this would result in a smaller number of indicators on GEP implementation. When developing the data collection framework, it is essential to ensure that it is possible to undertake the data collection on an ongoing basis (e.g. annually or every 3 years, in line with the existing tools such as the She Figures report).
- To commission the development of a study evaluating the impact of the Horizon Europe GEP eligibility criterion in reshaping national policies. This will provide an understanding of whether the eligibility criterion has produced a positive effect at the national level.

National-level policymakers

- In cooperation with EU policymakers, to contribute to and prioritise the adoption of a common set of indicators for monitoring GEP implementation, focusing on the mandatory and thematic GEP requirements in Horizon Europe (thus ensuring alignment between national monitoring frameworks and the Horizon Europe eligibility criterion).
- To monitor GEP uptake and implementation at the national level, including the integration of suggested indicators on GEPs at the national level.
- To provide incentives and support peer learning among organisations to develop data collection methods, as this is an essential requirement for the effective and comparable monitoring of data regarding the implementation and progress of GEPs.
- To increase efforts for the collection and monitoring of data on sexual harassment and other GBV. There is a systematic lack of information across all countries in this field, due to the absence or weakness of mechanisms in place to collect data, but also due to a lack of reporting culture. At the national level, there are different ways to overcome this challenge, including awareness-raising and the promotion of a culture supporting the reporting of sexual violence. Another way is to develop national legal frameworks and protocols to establish a

- common approach on how to deal with these cases, ensuring standardisation across organisations.
- To take into consideration the national context and national legislation in place in the definition and utilisation of indicators. Each country develops its own legislation and policies that, in combination with national contexts, can affect the validity and comparability of the indicators. Therefore, countries should be aware of these contextual factors in the final definition and application of indicators. This will make it possible to account for what each country is doing, in addition to what is already mandated by legislation and the limits of contextual factors. Similarly, the track record of organisations with respect to GEPs should also be considered in order to accurately understand the progress achieved. Consequently, differences between beginners and more advanced organisations should be acknowledged in the definition and analysis of indicators.

2.8. Bibliography

Aldercotte, A., Caprile, M., Guyan, K. and Müller, J. (2021), *Gender Equality Audit and Monitoring* (GEAM), ACT (https://zenodo.org/record/5348197/files/ACT_D2.2_GEAM_Docu_31AUG2021.pdf?download=1).

EIGE (2016), 'Roadmap to gender equality plans in research and higher education institutions – A short guide', Vilnius (https://eige.europa.eu/sites/default/files/gear roadmap 01 shortguide.pdf).

EIGE (2021), Gender Equality Index 2021 – Health (https://eige.europa.eu/publications-resources/publications/gender-equality-index-2021-health).

Equal4Europe (2021), 'Comparative report in context' (https://equal4europe.eu/wp-content/uploads/2024/01/EQUAL4EUROPE-Comparative-Report-Summary-1-1.pdf).

ERAC SWG GRI (2021), *Gender Equality Plans as a Catalyst for Change*, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

European Commission (2022), 2022 Report on Gender Equality in the EU, Publications Office of the European Union, Luxembourg (https://commission.europa.eu/document/download/bd409e91-1bd1-490f-bf53-cdd2a37bcbe3 en?filename=annual report GE 2022 printable EN.pdf).

European Commission (2022), *Horizon Europe Work Programme 2021–2022 – General annexes* (https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-13-general-annexes horizon-2021-2022 en.pdf).

European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg (https://research-area-policy-agenda-2021.pdf).

European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

European Commission, DG Research and Innovation (2021), MORE4 Study – Support data collection and analysis concerning mobility patterns and career paths of researchers, Publications Office of the European Union, Luxembourg (https://cdn5.euraxess.org/sites/default/files/policy_library/more4_final_report.pdf).

European Commission, DG Research and Innovation (2021), 'She Figures 2021 – The path towards gender equality in research and innovation (R&I)' (https://data.europa.eu/doi/10.2777/759686).

European Commission, DG Research and Innovation (2021), *She Figures Handbook 2021*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/003736).

Kalpazidou Schmidt, E. et al. (2017), A Conceptual Evaluation Framework for Promoting Gender Equality in Research and Innovation, EFFORTI Deliverable 3.3 (https://efforti.org/sites/default/files/2019-

10/EFFORTI%20D3.3%20Conceptual%20Evaluation%20Framework%20Final.pdf).

Kalpazidou Schmidt, E., Bührer, S., Schraudner, M., Reidl, S., Müller, J., Palmen, R., Graversen, E. K., Holzinger, F., Striebing, C., Groó, D. and Rigler, D. (n.d.), 'Full list of indicators', Efforti (https://efforti.eu/sites/default/files/2019-10/EFFORTI%20Full%20List%20of%20Indicators.pdf).

Mergaert, L., Cacace, M. and Linková, M. (2022), 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', *Social Sciences*, Vol. 11, No 9 (https://www.mdpi.com/2076-0760/11/9/379).

Ozbilgin, M. and Gundogdu, N. (2020), *Targeted-MPI Evaluation Plan*, Targeted-MPI (https://targeted-mpi.eu/wp-content/uploads/2022/03/TARGETED-MPI_WP5-D5.1 TARGETED-MPI Evaluation Plan.pdf).

Slovenian Presidency of the Council of the European Union (2021), Ljubljana Declaration – Gender equality in research and innovation (https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/PSEU/Ljubljana-Declaration-on-Gender-Equality-in-Research-and-Innovation-endorsed final.pdf).

Whittle, M., Guasp Teschendorff, M. and Sikorski, A. (2022), *Study to evaluate the ERA policy framework and ERA Monitoring Mechanism*, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/98a8edb4-c763-11ec-b6f4-01aa75ed71a1/language-en/format-PDF/source-256243590).

Wroblewski A. (2021), *Monitoring of ERA Priority 4 Implementation – Update and final assessment*, Genderaction (https://genderaction.eu/wp-content/uploads/2021/09/GENDERACTION_WP3_final_report.pdf).

Wroblewski, A. and Eckstein, K. (2018), *Gender Equality Monitoring Tool and Guidelines for Self-assessment*, Target (http://www.gendertarget.eu/wp-content/uploads/2022/08/D4.1-Monitoring-tool.pdf).

2.9. Annex 1. Review of EU initiatives / EU-funded projects aimed at monitoring progress towards implementation of gender equality plans

GEPs are one of the most innovative tools for ensuring equality in the ERA. The main objective of the implementation of GEPs is to improve and promote equality within the R & I field. Nonetheless, the importance and efficacy of GEPs are derived from their capacity to generate substantial changes within the organisation that decides to implement them. Therefore, monitoring and regular progress reports (115) are of fundamental importance when it comes to reviewing what has been achieved. The *Horizon Europe Guidance on Gender Equality Plans* clearly states the significance of the monitoring dimension and its compulsory character in every GEP adopted by an institution. There are several examples of EU projects aimed at monitoring progress that can be illustrative in order to assess and review the different tools and indicators that can be useful to other institutions.

The following table presents an overview of some key initiatives at the EU level that collect information and/or propose indicators for monitoring progress on gender equality in R & I organisations, which informed the selection of the indicators for the monitoring of the implementation of the GEP eligibility criterion in Horizon Europe.

The following overview includes key projects financed by Horizon 2020. In total, 21 GEP-implementing projects were founded during the programming period 2014–2020. Despite their impact and relevance for the study, the following table contains only a selection of projects that, due to the outputs produced in relation to monitoring and evaluation and the definition of indicators, have fulfilled the needs of the policy brief to the greatest extent.

Some EU initiatives aimed at monitoring progress towards implementation of GEPs									
Name of the initiative	Years of implementation	Funder	Contribution to monitoring	Key indicators					
She Figures report (a)	2003–present (the report is published every 3 years)	European Commission	The She Figures report monitors the state of gender equality in R & I in the EU and beyond. While it does not focus specifically on monitoring the implementation of GEPs, it includes relevant indicators.	The indicators used in this report are divided into the following areas: education statistics, human resources in science and technology, high-tech industry and knowledge-intense services, and research and					

⁽¹¹⁵⁾ European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

				development statistics. The indicators are collected at every level (institutional, national and EU). Related to institutional change, there is an indicator using web scraping to identify the proportion (%) of research organisations that take actions or measures towards gender equality, by type of organisation.
TARGET project (b)	2017–2021	European Commission Horizon 2020 programme	This project provides a gender equality monitoring tool and guidelines for self-assessment (°). Target recommends discussing the monitoring results in order to identify structural differences which have affected the future career prospects of men and women differently, provide input for the development of alternative practices or processes, and support their implementation.	This project includes monitoring indicators that are divided in two categories: context indicators (information about the relevant context of each dimension) and implementation indicators (information about input activities). The indicators of a GEP can be either quantitative or qualitative. The TARGET project considers that gender equality is a complex construct that may be represented by multiple indicators.

GENDERACT ION project (9)	2017–2021	European Commission Horizon 2020 programme	GENDERACTION has generated a report on the monitoring of the (former) ERA priority 4 (gender equality and gender mainstreaming in research) in which they state their own approach to monitoring. According to GENDERACTION, the main function of monitoring is to provide information about policy implementation (h).	A monitoring system should include indicators describing the context of the policy (e.g. number of research institutions), its expected output (e.g. share of women among newly appointed professors) and its implementation (e.g. budget spent). The indicators should be available and interpreted at regular intervals and agreed by all relevant stakeholders.
Annual Report on Gender Equality in the EU (¹)	The report is published every year on 8 March	European Commission's gender equality strategy for 2020–2025	In order to monitor progress towards the objectives in the gender equality strategy, the Commission has developed a tailormade monitoring framework.	The monitoring framework is comprised of indicators reflecting the main aspects and key policy objectives of the strategy. An online platform, the gender equality strategy monitoring portal, makes data on the indicators available to all stakeholders, which can then feed into policymaking and public debate.
Gender equality strategy monitoring portal (i)	2020–2025	European Commission's Gender Equality Strategy for 2020–2025	The main aim of this tool is to support the development of policy initiatives that address gender inequality in the EU. Regarding monitoring, this tool allows users to track the progress	The indicators of the online monitoring portal are divided into three categories which correspond to the three main dimensions of the gender equality strategy: free from violence and stereotypes, thriving

			of the key objectives of the Gender Equality Strategy for 2020– 2025 and see the performance of each Member State.	in a gender-equal economy and leading equally throughout society. It contains indicators related to GEP such as graduates in ICT, sexual assault in the workplace, parental leave availability, women's share in boards of different institutions, etc. that can illustrate the impact of GEP implementation.
GEAR tool (*)	2021–2022	EIGE in collaboration with the European Commission's DG Research and Innovation	Regarding monitoring, EIGE highlights four key areas in order to build a monitoring and evaluation framework: firstly, the area of structure, which assesses the concrete characteristics of the institution in order to implement an adequate GEP; secondly, the area of personnel, which is significant as it includes the sociodemographic factor of the organisation; thirdly, the area of culture, which covers the gender- stereotype and the organisational culture; and fourthly, the area of power, which presents how men and women are represented at the	The GEAR tool is addressed to all staff working in research organisations (universities, RPOs, RFOs, etc.) which provides the necessary tools in order to create a GEP and evaluate its real impact. The GEAR tool has released two different step-by-step guides, one for research organisations and the other for RFOs with useful information regarding indicators and recommended measures for adequate implementation.

			decision-making level of the organisation.	
CASPER project (¹)	2020–2022	European Commission Horizon 2020 programme	Regarding monitoring, the CASPER project does not establish a monitoring framework but suggests the following recommendations. Firstly, Member States should revise their monitoring of the gender equality priority at the national level. Secondly, the European Commission and Member States should continue and improve the collection of sexdisaggregated and intersectional data. Thirdly, all RFOs (including the European Commission), should extend the time span for the monitoring and evaluation activities of funded structural-change projects, in order to assess longer-term impact.	This project explored existing award/certification schemes related to GEPs and, based on the analysis, proposed scenarios for an EU-level certification of GEPs. As a result, the project defined indicators for assessment relating to the impact of GEP implementation through the impact driver (m) model and developed impact drivers and related indicators for gender mainstreaming in research and HEIs. The indicators of the CASPER project are divided according to the ERA priorities: more effective national research systems, optimal transnational cooperation and competition, open labour market for researchers, and gender equality and gender mainstreaming in research.
INSPIRE project (ⁿ)	2022–2026	European Commission Horizon Europe programme	The INSPIRE research project was launched in October 2022 and will develop new indicators for	The project involves two concrete tasks with regard to developing GEP indicators. As part of the project, they will

	inclusive GEP design, conduct a GEP-monitoring survey throughout the EU and identify key configurations of GEP successes and failures.	develop GEP monitoring indicators, conduct a survey and explore to what degree a web- crawling tool can be used to make this less resource- intensive in the future, as well as how much existing databases can be gendered or expanded to collect gender data.
--	--	---

- (a) European Commission, DG Research and Innovation (2021), She Figures Handbook 2021, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/003736).
- (b) https://www.gendertarget.eu.
- (c) The tool and guidelines are available from the project website (http://www.gendertarget.eu/resources/project-deliverables/).
- (d) https://efforti.org/.
- (e) Kalpazidou Schmidt, E. et al. (2017), A Conceptual Evaluation Framework for Promoting

 Gender Equality in Research and Innovation, ,EFFORTI Deliverable 3.3

 (https://efforti.org/sites/default/files/201910/EFFORTI%20D3,3%20Conceptual%20Evaluation%20Framework%20Final.pdf).
- (f) https://efforti.org/sites/default/files/2019-10/EFFORTI_Key%20Results%20and%20Recommendations_Final.pdf.
- (9) https://h2020.genderaction.eu.
- (h) Wroblewski, A. (2020), Report on Monitoring of ERA Priority 4 Implementation, Deliverable 3.2, Genderaction (https://genderaction.eu/wpcontent/uploads/2021/02/GENDERACTION_D06_Monitoring-ERA-priority-4-implementation.pdf).
- (1) https://commission.europa.eu/publications/past-annual-reports-gender-equality_en.
- (j) https://composite-indicators.jrc.ec.europa.eu/ges-monitor/resources.
- (k) https://eige.europa.eu/gender-mainstreaming/toolkits/gear/step-step-guide/step-5.
- (l) https://www.caspergender.eu/.
- (m) The impact driver is an innovative tool to assess the sustainability and impact of institutional change towards gender equality. It comprises 11 impact drivers for institutional change towards gender equality with respective indicators. See Mergaert, L. and Kerremans, A. (2022), Report on the use of an innovative potential tool to assess the sustainability and impact of institutional change towards more gender equality, Casper (https://zenodo.org/record/6394073).
- (n) https://www.inspireguality.eu/.

3. Policy brief 3. Measuring progress at the EU and national levels on inclusive gender equality plans and policies

3.1. Summary

- The core objective of this policy brief is to identify indicators that could be included in the new EMM to measure progress on the implementation of Action 5 of the ERA policy agenda 2022–2024, 'Promote gender equality and foster inclusiveness', with a core objective being the development of inclusive GEPs.
- The ERA aims to harmonise the framework conditions for R & I in Europe. The EMM comprises the development of the ERA scoreboard (which will collect indicators at the EU level) and the ERA Dashboard (key quantitative and qualitative information at the national level), which will feed the EU-level and country reports that will contain key analyses of the implementation of the different ERA priorities at the EU and national levels.
- This policy brief is designed to provide key input on the ERA scoreboard and suggests
 indicators related to monitoring inclusive GEPs. It focuses on EU-level indicators to
 ensure consistency with other ERA scoreboard indicators. Nonetheless, taking into
 consideration the fact that the ERA scoreboard will also cover associated countries to
 Horizon 2020, these indicators could also begin to be collected by associated countries.
- The main recommendations involve a set of indicators proposed to be included in the ERA scoreboard. Their selection is informed by the review of key monitoring frameworks on gender equality in the EU and the review of key indicators collected at the EU level on gender equality. Section 3.5 also discusses key policy implications as well as other recommendations deriving from them, which are primarily aimed at policymakers at the EU and national levels. These include a greater promotion of data collection regarding intersectional data at the institutional level; overcoming the existing systematic lack of data on intersectionality; and an agreement about which indicators can be collected at the EU level and in associated countries to Horizon 2020 to enable comparative analysis. Taking into account the limitations regarding data collection on social and personal characteristics such as ethnicity, disability and sexual orientation (due to legal and historical reasons in different countries) is a key part of the process.

3.2. Background and relevance

The aim of this policy brief is to provide recommendations on indicators for assessing progress in the implementation of inclusive GEPs at the EU level. The suggested indicators focus on outcome/impact-level indicators that could be measured at the EU level to ensure consistency with other indicators proposed for the ERA scoreboard. Therefore, the scope of this policy brief involves analysing the existing monitoring frameworks and indicators to identify the most relevant ones and, where gaps are identified, to propose new ones. This policy brief complements policy briefs 2 and 5 on 'Monitoring and evaluation of the implementation of the gender equality plan eligibility criterion in Horizon Europe' and 'Intersectional approaches to achieving inclusive gender equality – promising practices and remaining barriers'.

The gender equality dimension was first included in the European Commission's 2012 ERA communication framework, where gender equality and gender mainstreaming in research

was included as one of the ERA priorities. In 2020, the European Commission released the communication 'A new ERA for Research and Innovation', which reinforced its commitment to gender equality while opening to inclusiveness (116). The ERA Policy Agenda 2022–2024, annexed to the Council Conclusions on the future of the ERA governance adopted on 26 November 2021 (117), contains a specific action, Action 5, to 'Promote gender equality and foster inclusiveness, taking note of the Ljubljana Declaration' (118). Action 5 proposes to develop inclusive GEPs and policies to open gender equality policies to inclusiveness and intersections with other social categorisations and identities, and potential grounds for discrimination, such as ethnicity, disability or sexual orientation. In addition, the ERA Action 5 aims to specifically address GBV, including sexual harassment, in R & I, as well as the integration of a gender perspective into research funding programmes.

In this context, the European Commission published in September 2022 the report *Approaches to inclusive gender equality in research and innovation (R & I)* (119). This report presents emerging practices and policies at the EU and national levels to support the inclusion and equal opportunity of students, researchers and staff from diverse backgrounds in EU R & I systems. Among the core findings, the report highlights that inclusive equality plans and policies are in the early stages of development at both the EU and national levels, and a core challenge faced is to move actions beyond general commitments to diversity and inclusion towards tangible structural actions. Similarly, policy brief 5, 'Intersectional approaches to achieving inclusive gender equality – promising practices and remaining barriers', provides an overview of the process of moving towards concrete actions and identifying key measures and funds in place as well as remaining barriers.

Intersectionality between gender and other social categorisations and personal identities is emerging as an important element of equality policies within R & I. The EU approach to inclusive gender equality in R & I acknowledges that 'other characteristics such as racial and ethnic origin, disability, socioeconomic background or sexual orientation interact and can reinforce intersectional and specific forms of discrimination that may limit the impact of measures focused only on one characteristic' (120) (121). The need to collect data on intersectionality was also recognised in the research reports produced by the

⁽¹¹⁶⁾ European Commission (2020), Commission communication – A new ERA for research and innovation (COM(2020) 628 final) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A628%3AFIN).

⁽¹¹⁷⁾ Council of the European Union (2021), Council conclusions on the future governance of the European research area (ERA), Brussels, 26 November (https://data.consilium.europa.eu/doc/document/ST-14308-2021-INIT/en/pdf).

⁽¹¹⁸⁾ European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg (https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf).

⁽¹¹⁹⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/006a43e7-3eda-11ed-92ed-01aa75ed71a1/language-en/format-PDF/source-search).

⁽¹²⁰⁾ European Commission, DG Research and Innovation (2022), 'Towards inclusive gender equality in research and innovation' (https://apre.it/wp-content/uploads/2022/07/KI0122349ENN.en_.pdf).

⁽¹²¹⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/006a43e7-3eda-11ed-92ed-01aa75ed71a1/language-en/format-PDF/source-search).

GENDERACTION project (2017–2021) (¹²²) and the ERAC SWG GRI (¹²³). In the new ERA framework, GEPs and policies on gender equality are to be conceptualised as inclusive and designed to address several key dimensions: (1) intersectional inequalities and inclusiveness in relation to race/ethnicity, age, disability, etc.; (2) inclusiveness in relation to geographical balance and aiming to reduce the gaps in the implementation of gender equality measures in R & I across the ERA; and (3) inclusiveness across sectors and the involvement of the private sector and innovation actors. For the purpose of this brief, inclusive gender equality policies and plans are understood as coherent actions that consider how the linkages between gender and certain other characteristics drive inequality and that seek to address these issues consistently at the EU and national levels.

Promotion of gender equality and inclusiveness in R & I is a key priority of the ERA. Monitoring and evaluating the progress towards achieving gender equality and inclusiveness remain key to tracking progress and understanding the main challenges, barriers, good practices and policy gaps. There exist key initiatives and frameworks in place, which have been particularly developed in the recent years.

The ERA has recently established the pact for R & I, which defines common values and principles for R & I in Europe, and the ERA policy agenda 2022–2024 with voluntary actions to be implemented over the course of 3 years. Within the ERA policy agenda, a specific action is included on inclusive gender equality: Action 5, to 'Promote gender equality and foster inclusiveness, taking note of the Ljubljana Declaration'. Additionally, the new EMM, established as part of the new ERA policy agenda, will support and facilitate the implementation of the ERA policy agenda at both the European and national levels. The EMM is composed of four core elements: (1) the online ERA policy platform, which will serve as an umbrella tool for sharing information on the implementation of actions and allowing exchanges between all actors; (2) a scoreboard, to show the overall progress at the EU level for a limited number of indicators in view of realising the ERA priority areas (as defined in the pact for R & I); (3) a Dashboard, which will provide a more detailed monitoring of the joint ERA actions, at the national level, with key qualitative information; and (4) reporting, including an EU-level report, to assess the implementation of the ERA actions at the EU level, and country reports, which will analyse the context and progress made by Member States and selected associated countries on the committed ERA actions. Additionally, these monitoring instruments, which are currently being developed and planned for 2024, will be revised and improved for subsequent versions.

The need for robust, systematically collected and disaggregated data that take into account intersectional aspects has often been highlighted as a critical barrier to achieving the objectives of GEPs. Good and robust data on gender issues as well as other characteristics (racial and ethnic origin, disability, socioeconomic background or sexual orientation) are essential to identify and understand challenges at the institutional level, and also at the national level. Good data are critical for building an understanding of the existing problems in different contexts and designing approaches and action plans that tackle them systematically and with an endurable long-term approach. Data protection legislation safeguards the collection of sensitive personal data, which can mean that organisations are

⁽¹²²⁾ Wroblewski, A. (2021), *Monitoring of ERA Priority 4 Implementation – Update and final assessment*, Genderaction (https://genderaction.eu/wp-content/uploads/2021/09/GENDERACTION_WP3_final_report.pdf).

⁽¹²³⁾ ERAC SWG GRI (2020), Position paper on the future gender equality priority in the European research area 2020–2030, Brussels (https://era.gv.at/public/documents/4236/0_Future_of_gender_priority.pdf).

unable to collect relevant data to monitor the implementation of inclusive GEPs. In such cases, there is a need for institutions to carefully consider how they can address data sensitivities (e.g. around data disclosing disabilities or ethnicity). Following the recommendations from the report on *Approaches to inclusive gender equality in research and innovation* (R & I) (124), any measures to collect sensitive personal data should be developed transparently and in partnership with marginalised groups, with clear links and accountability for actions, building on the General Data Protection Regulation principles.

3.3. Evidence base and key sources of information

The primary sources of information for this brief include stakeholder interviews and consultation with key experts in this field to validate our findings and provide useful insights. The secondary sources of information include a review of the most relevant online databases, including gender data on R & I, and some monitoring reports providing useful indicators. Table 7 presents a summary of the main sources of information, and further details are included in footnotes.

_

⁽¹²⁴⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/006a43e7-3eda-11ed-92ed-01aa75ed71a1/language-en/format-PDF/source-search). Following the publication of this report, an internal report was finalised in June 2022, which recommended indicators in line with those that the EMM is using for the scoreboard and Dashboard. This internal report only partly retained those indicators proposed in the public report, including the percentage of women in grade A positions and the indicator on GEPs, and suggested new indicators, such as the Women in Digital Index, and a focus on women graduates in the STEM fields.

Table 7. Sources of information

Primary sources of information	n
Interviews with key	Interviews with key stakeholders:
stakeholders	EU-level institutions/policymakers
	 researchers in European academic institutions / research communities
	European research associations and universities
	 national R & I agencies and organisations
	public and private RFOs
	• public and private RPOs.
Online survey on 'Gender equality plans in research and innovation organisations' (<i>n</i> = 303). For more details, see Annex 2 of the main report for this study	The online survey (non-representative sample) was conducted in August–September 2022 among public and private RPOs (with an educational component), public RFOs, ministries and other national or regional authorities. Selected questions within the survey specifically focused on monitoring indicators. The analysis of the findings from the survey were used to inform this policy brief.
Expert consultation	Experts in the field of GEPs have reviewed the policy brief and provided useful feedback, insights and input that have been included in the policy brief.
Secondary sources of informa	ntion
Online databases	EIGE Gender Statistics Database
	Eurostat
	• OECD
	European Commission–OECD STIP Compass
	 European Union Agency for Fundamental Rights, including tools such as the LGBTI survey data explorer (a) and the compendium of practices for equality data collection (b)
	The EU Fundamental Rights Information System

Studies, project reports, evaluations

- She Figures publications (c)
- GENDERACTION Report on Monitoring of ERA Priority 4 Implementation (d)
- ERA Progress Report 2018 (e)
- Horizon Dashboard (f)
- Interim Evaluation of Horizon 2020 (9)
- Commission communication A new ERA for research and innovation (h)
- A New ERA for Research and Innovation Staff working document (¹)
- Study to evaluate the ERA policy framework and ERA Monitoring Mechanism (i)
- Approaches to inclusive gender equality in research and innovation (R & I) (k)
- (a) https://fra.europa.eu/en/data-and-maps/2020/lgbti-survey-data-explorer.
- (c) https://research-and-innovation.ec.europa.eu/knowledge-publications-tools-and-data/publications/all-publications/she-figures-2021_en.
- (d) Wroblewski, A. (2020), Report on Monitoring of ERA Priority 4 Implementation, Deliverable 3.2, Genderaction (https://genderaction.eu/wp-content/uploads/2021/02/GENDERACTION_D06_Monitoring-ERA-priority-4-implementation.pdf).
- (e) https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/european-research-area/progress-report_en.
- (f) https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-dashboard.
- (9) European Commission, DG Research and Innovation (2017), Interim Evaluation of Horizon 2020 Commission staff working document, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/fad8c173-7e42-11e7-b5c6-01aa75ed71a1/language-en/format-PDF/source-77918455).
- (h) European Commission (2020), Commission communication A new ERA for research and innovation (COM(2020) 628 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A628%3AFIN).
- (i) European Commission, DG Research and Innovation (2020), A New ERA for Research and Innovation Staff working document, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/f8f19fc4-2888-11eb-9d7e-01aa75ed71a1/).
- (i) European Commission, DG Research and Innovation (2022), Study to evaluate the ERA policy framework and ERA Monitoring Mechanism, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/98a8edb4-c763-11ec-b6f4-01aa75ed71a1/language-en/format-PDF/source-256243590)
- (*) European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).
- NB: STIP, science, technology and innovation policy.

3.4. Key considerations for indicator selection

As already mentioned, two of the most important elements in monitoring the progress and implementation of ERA priorities are the ERA scoreboard and Dashboard. These monitoring tools assess the overall collective progress of ERA priorities and display aggregated data at the EU and national levels. The scoreboard shows overall progress on R & I at the EU level, based on a selected number of quantitative indicators, which consist mainly of outcome and impact indicators, while the Dashboard presents information at the national level (125). Although there are existing indicators in the EMM (126) on gender equality, they currently do not cover GEP implementation, inclusive GEPs or inclusiveness. In fact, the included indicators cover the number of women in digital index, the share of women in publications and the share of women in STEM fields and grade A positions. Nonetheless, the quality data contained in the ERA Dashboard and particularly the EU-level and country reports could provide key information on the state of play and progress made with regard to intersectionality in the R & I sector. These tools will enable key analysis at both the EU and national levels of the progress made towards the ERA committed actions. In addition, these monitoring instruments will be revised and improved for the 2024 version and following ones.

In 2021, the ERAC SWG GRI published the report Gender Equality Plans as a Catalyst for Change (127). This report presents the main findings of a survey in which both Member States and associated countries were participants. Its aims were to assess the adoption of national policy/legal requirements with regard to GEPs and to identify needs related to the implementation of GEPs at the national level. Therefore, this report is a powerful source of information about the state of play of GEP implementation in Member States and associated countries. Moreover, this report identified eight crucial challenges, among which was the need to focus on inclusiveness and intersectional inequalities. The work carried out by the ERAC SWI GRI is now being followed by a subgroup of the ERA Forum dedicated to ERA Action 5, which kicked off its activities in March 2023. It has become a core operational element of the ERA governance structure, as it is a Commission expert group, with appointed representatives from Member States and observers (associated countries and EU-level umbrella stakeholder organisations). The core aim of this subgroup on inclusive gender equality in the ERA is to support the implementation of Action 5 of the ERA policy agenda 2022-2024. Among the tasks to be performed are (1) establishing a policy dialogue towards a common understanding of intersectionality in R & I gender equality policies while promoting the specificities of each country with regard to how best to reach the aim of this new ERA policy development, and (2) facilitating the regular collection of sex- and/or gender-disaggregated data for the She Figures publication and, where possible, of inclusive gender equality indicators in the field of R & I, in collaboration with national statistical offices. These tasks are crucial for the promotion of inclusive GEPs and the monitoring of their implementation. For these tasks, the ERA Action 5 subgroup will build upon policy support projects funded under the Horizon Europe programme part dedicated to strengthening the ERA (Widening Participation and Strengthening the

-

⁽¹²⁵⁾ European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg, p. 22 (https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf).

⁽¹²⁶⁾ The EMM includes the policy platform, ERA scoreboard, ERA Dashboard, EU-level report and country reports.

⁽¹²⁷⁾ ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

European Research Area (Widera)). Chiefly, two key ongoing projects are promoting the new ERA objectives on gender equality and inclusiveness. Building on the Horizon 2020 project GENDERACTION. the overall goal of Horizon Europe-funded GENDERACTIONplus (2022-2025) is contributing to the coordination of gender equality and inclusiveness objectives in line with the new ERA through the development of a policy COP and a research funders COP. This project covers intersectionality and inclusiveness, as it will review policies related to intersectionality and diversity in R & I in the ERA, Member States and associated countries. The second Widera- funded project, INSPIRE (2022–2026), aims to develop a sustainable centre of excellence that develops innovative, research-based, inclusive gender equality policies and tools for the academic world. INSPIRE will centre its activity on developing new and relevant indicators for inclusive GEP development, and conducting a GEP-monitoring survey throughout Europe while identifying key configurations of GEP success and failure. Moreover, a major contribution of this project is that it will fill key knowledge gaps as a result of case studies on intersectional policies, an area in which there is a substantial lack of information and research.

The European Commission also launched a call for a **pilot European innovation gender and diversity index coordination and support action**, which will collect, harmonise and share diversity data across the innovation ecosystem and promote other aspects of diversity. The expected impacts of the development of such an index are the identification of gender and diversity gaps among innovation actors, the design of relevant measures, the assessment of progress, the enablement of better-informed investment decisions and the encouragement of diversity at all levels across the innovation ecosystem. Among the activities included in this project to achieve the expected impacts is a pilot innovation gender and diversity index, which will be developed based on agreed definitions and indicators and can be applied to start-ups / small and medium-sized enterprises and to innovation investment actors in the EU. This will be a crucial source of information for monitoring gender equality progress in R & I in the Member States and associated countries.

Despite these initiatives setting the path towards inclusiveness in gender equality, there are still a number of key challenges. A core challenge regarding inclusiveness and inclusive GEPs is **the lack of a common definition of inclusive GEPs** and the implications of this. Although intersectionality refers to the interrelation between gender discrimination and other forms of discrimination on the basis of characteristics such as racial and ethnic origin, socioeconomic background or sexual orientation, an inclusive GEP is a broader non-defined concept. That is the reason why the two abovementioned projects will play a crucial role in defining the concept and scope of inclusive GEPs.

Another crucial challenge, related to that mentioned above, is the lack of systematic data collected to measure gender equality with an intersectional approach. The lack of indicators as well as constraints based on data privacy are core barriers to the collection of high-quality data. Ultimately, the core impact of this is the inability to monitor and measure progress over time, and the inability to establish the baseline situation in order to understand the starting point with regard to inclusive GEPs.

As a result of these barriers, and as evidenced by the report *Approaches to inclusive gender equality in research and innovation* (R & I) (128), it is challenging to move actions beyond general commitments to diversity and inclusion and towards tangible structural change. This is evident in the early stages of implementation of inclusive GEPs. Therefore, this policy brief, building on the work carried out previously by the abovementioned initiatives, aims to suggest key indicators to measure inclusiveness in GEP implementation. Developed with an awareness of the existing limitations and barriers to implementing these indicators and also of the challenges of the early performance stages, these suggested indicators are aimed at opening the debate for key stakeholders and actors in the field. Therefore, these suggestions should be understood as a future-looking exercise to foster the discussion and implementation of inclusive data collection on GEPs in R & I organisations.

3.5. Indicators

This section proposes an overview of key indicators for measuring progress in gender equality and the implementation of inclusive GEPs and gender equality policies at the EU and national levels. After a comprehensive analysis of the main data available in the most relevant online databases and methodological and monitoring reports, which is included in Annex 2 of the main report, Table 8 sets out the list of proposed indicators to be included in the ERA scoreboard and Dashboard that will also feed into the reports at the EU and national levels, based on their relevance for measuring progress on gender equality. The table includes not only the selected indicators, but also their definitions, data sources, geographical coverage and data availability across years. Moreover, it also highlights whether the indicator is new and presents the relation between the indicators and the different ERA targets.

The proposed indicators are also informed by the findings of the European Commission report on Approaches to inclusive gender equality in research and innovation (R & I) and by policy brief 5, developed in the context of this study, about 'Intersectional approaches to achieving inclusive gender equality - promising practices and remaining barriers'. These findings indicate that there are a number of examples of policies, initiatives and inclusive GEPs that target specific characteristics in conjunction with gender (e.g. ethnicity, disability, social status and sexual orientation) in the R & I sector. Often, however, these do not adopt a comprehensive approach to intersectionality – namely one that proposes a clear strategy, concrete targeted actions and a tailored monitoring framework to understand the intersection of gender with other personal characteristics in R & I and address the emerging inequalities. The approach to inclusive GEPs and intersectionality varies across countries and institutions, and there is a need for the ERA scoreboard and Dashboard to include comparable indicators across Member States that can be collected without significant additional burden for national authorities. Table 8 therefore includes a selection of indicators that could be collected across countries and institutions/organisations notwithstanding differences in the content of their inclusive GEPs and other similar policies. It includes examples of existing indicators at the national level, mainly from non-EU countries. It also includes new proposed intersectional indicators crossing gender or sex dimensions with other grounds of discrimination such as nationality or disability.

⁽¹²⁸⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).

Table 8 offers an overview of existing indicators, collected at the EU level from databases such as Eurostat or from the *She Figures* report, that have enabled the identification of the main gaps in data collection regarding inclusive GEPs. The existing available data focuses on gender equality in career progression, leadership positions and teaching content but lacks information regarding GEP implementation, intersectionality and GBV and sexual harassment. Moreover, the intersectional approach involves the inclusion of vulnerable groups suffering from the additional burden of discrimination and, relatedly, GBV. As a result, the following table proposes a list of indicators that could be collected that would cover not only inclusive GEP implementation but also GBV due to its existing interrelation with inclusiveness. Additional insights on GBV and its incidence in vulnerable groups are provided under policy brief 4 on 'Gender-based violence, including sexual harassment, in research and innovation'.

Table 8. Proposed indicators

Indicator	Description	Level	Data source	Geographical coverage	Data availability/ frequency (a)	New indicator	ERA target
Composite indicator on the number and proportion of inclusive GEPs, per country	This indicator measures the prevalence of inclusive GEPs based on a number of characteristics, including whether or not: • other grounds of discrimination are included in the objectives of GEPs in addition and related to gender; • data on other grounds of discrimination is collected intersecting with data collected on gender; • measures aimed at other grounds of discrimination are included within those aimed at gender; • analysis and evaluation consider other grounds of discrimination within gender.	EU and national (b)			Yearly	X	Inclusive GEPs

Indicator	Description	Level	Data source	Geographical coverage	Data availability/ frequency (a)	New indicator	ERA target
Graduated doctoral degrees, by age, subject area and gender	This indicator will account not only for gender differences, but also for other intersectional dimensions (e.g. age).	National	National statistics institutes such as Statistics Norway (°)	Currently collected in Norway, could be extended to Member States and associated countries	Yearly		Inclusive GEPs
Researchers by sector of performance, country of citizenship and gender	This indicator will account not only for gender differences across researchers and sectors, but also for other intersectional dimensions (e.g. migration background).	National	National statistics institutes such as the UK Higher Education Statistics Agency	Currently collected in the UK, could be extended to Member States and associated countries	Yearly		Inclusive GEPs
Number of academic staff (excluding atypical) by their disability and ethnicity status	This indicator measures disability across academic staff. Disability is a personal characteristic subject to inequality and discrimination. Therefore, its monitoring is a way to include intersectionality	National	National statistics institutes such as the UK Higher Education Statistics	Currently collected in the UK, could be extended to Member States and associated	Yearly		Inclusive GEPs

Indicator	Description	Level	Data source	Geographical coverage	Data availability/ frequency (a)	New indicator	ERA target
	in the ERA scoreboard.		Agency (d)	countries			
Nationality ratio by academic discipline area	Migration background is another personal characteristic subject to discrimination. As a result, it is essential to have data and monitor migration backgrounds in R & I organisations, which are subject to a high degree of mobility within the staff.	National	National statistics institutes such as Ireland's HEA (e)	Currently collected in Ireland, could be extended to Member States and associated countries	Yearly (f)		Inclusive GEPs
Number of countries with specific legislation or policy on sexual harassment and GBV in universities and RPOs	Understanding the national policies on GBV targeting universities, research institutes and RFOs, and policies adopted by RFOs, is key to measuring gender equality progress in the ERA.	EU	Collected in UniSAFEsafe (⁹)	Currently collected in 33 countries (all Member States and selected associated and non-EU countries: Canada, Iceland, Serbia, Türkiye, UK, USA).	Yearly (f)		GBV

Indicator	Description	Level	Data source	Geographical coverage	Data availability/ frequency (a)	New indicator	ERA target
Number of organisations with GBV protocols/ regulations	GBV is a crucial challenge in all countries. However, there is a systemic lack of data on GBV. As a result, monitoring the existence of protocols or regulations that target GBV to overcome this challenge is relevant for the ERA scoreboard.	National	National statistics institutes	New indicator, currently not collected	Should be collected on a yearly basis	X	GBV

- (a) For the proposed indicators that are not being collected for any country or are being collected only for some of them, the data frequency refers to the suggested frequency of collection of data on that indicator.
- (b) The ERA scoreboard is calculated using aggregate data at the national level to calculate the EU-level indicator scores. Consequently, indicators calculated at the national level feed into the scoreboard and the ERA Dashboard and associated reports (which require national-level data).
- (c) https://www.ssb.no/en/statbank/table/13523/.
- (d) https://www.hesa.ac.uk/news/01-02-2022/sb261-higher-education-staff-statistics.
- (e) https://hea.ie/policy/gender/race-equality/.
- (f) Data on these indicators have been collected through a one-time survey in 2021, but, if routinely collected by all Member States, they should be collected on a yearly basis.
- (9) https://unisafe-gbv.eu/national-reports/.

3.6. Conclusions and considerations for further actions

This section outlines key policy implications and recommendations with respect to defining indicators to be included in the new EMM to measure progress in gender equality and inclusive GEPs throughout the ERA to reflect progress on the implementation of Action 5 of the ERA policy agenda 2022–2024. The target group of this policy brief involves EU and national policymakers, as they are the competent actors to promote the collection of the required data to be included in the ERA scoreboard in the field of gender equality and inclusive GEPs. Ultimately, the recommendations of this policy brief are the proposed list of indicators that should start being collected at the national and EU levels and can be included in the ERA scoreboard and Dashboard. Nonetheless, in view of the limited available indicators and the associated challenges, qualitative indicators are also encouraged. As a result, this section places a greater focus on relevant policy implications that should be highlighted and presents some recommendations deriving from them.

Table 9. Proposed recommendations

Target group	Recommendation
EU-level policymakers	 A greater promotion of data collection regarding intersectional data is required at the EU institutional level. The existing systemic lack of data on personal and social characteristics that intersect to form complex inequalities (gender, ethnicity, age, sexual orientation, social status, etc.) requires EU efforts to promote data collection at both the EU level and, ultimately, the national level. In this sense, EU guidelines or regulations are crucial to ensure a common approach across all Member States (a). As a result, intersectional data availability would be collected and available across all Member States (and potentially countries associated to Horizon Europe), enabling comparable data to be included in the ERA scoreboard. The EMM should take into account current Horizon Europe WIDERA-funded projects, such as the INSPIRE project, which started in 2022 (b). INSPIRE aims to be the EU's sustainable centre of excellence on inclusive gender equality in R & I. The research programme includes developing new relevant indicators for inclusive GEP development, including on intersectionality, which would be another potential source of data collection that could support sustainable/systemic data collection and complement the proposed indicators.
National-level policymakers	• Further support is needed for the work of national statistics institutes on data collection and for their collaboration with EU institutions, and the need for data on GBV, sexual harassment and intersectionality must be highlighted. National statistics institutes as well as other organisations collecting data on R & I at the national level are key providers of EU data (e.g. Eurostat databases and She Figures data rely on national statistics for much of the data provided). Therefore, their role is essential for obtaining data on gender to include in the ERA. As a result, more support is required with the aim of increasing their infrastructure and ability to monitor intersectionality, GBV, sexual

- harassment and gender equality at the national level, given the difficulty of collecting this type of data.
- Efforts should be focused on addressing the current limitations related to data collection on GBV and intersectionality. The indicators GBV. including sexual harassment. proposed cover intersectionality, which are sensitive data. As a result, there are limitations to the collection of these data, linked to the legal, social and historic background of each country, which will likely lead to differences in the representativeness and reliability of the data collected in different countries. Where possible, data collection at the national level should cover other grounds of discrimination in addition to sex and/or gender. Comparative analysis between countries should take into account national contexts and legislation in the definition of indicators, and also in their analysis, to properly understand the progress achieved.
- (a) See Beeckmans, J. (2023), 'The future of gender equality plans is intersectional', Inspire (https://www.inspirequality.eu/article/future-gender-equality-plans-intersectional).
- (b) https://cordis.europa.eu/project/id/101058537.

3.7. Bibliography

ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

European Commission (n.d.), 'European Centre of Excellence on inclusive gender equality in research and innovation: Creating knowledge and engaging in collaborative action' (https://cordis.europa.eu/project/id/101058537).

European Commission (2022), 'Towards inclusive gender equality in research and innovation' (https://apre.it/wp-content/uploads/2022/07/KI0122349ENN.en_.pdf).

European Commission, DG Research and Innovation (2019), *ERA Progress Report 2018 – Data gathering and information for the 2018 ERA monitoring – Technical report*, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/b9dcaeb4-34c5-11e9-8d04-01aa75ed71a1/language-en/format-PDF/source-search).

European Commission, DG Research and Innovation (2021), *European Research Area Policy Agenda – Overview of actions for the period 2022–2024*, Publications Office of the European Union, Luxembourg (https://research-area-policy-agenda-2021.pdf).

European Commission, DG Research and Innovation (2021), 'She Figures 2021 – The path towards gender equality in research and innovation (R&I)' (https://data.europa.eu/doi/10.2777/759686).

Genderaction (2021), 'Genderaction position paper on the relevance of monitoring for effective gender equality policy implementation' (https://genderaction.eu/wp-content/uploads/2021/09/GENDERACTION_Position-Paper-4_ERA-Monitoring.pdf).

Ozbilgin, M. and Gundogdu, N. (2020), *Targeted-MPI Evaluation Plan*, Targeted-MPI (https://targeted-mpi.eu/wp-content/uploads/2022/03/TARGETED-MPI_WP5-D5.1 TARGETED-MPI Evaluation Plan.pdf).

Wroblewski, A. (2021), *Monitoring of ERA Priority 4 Implementation – Update and final assessment*, Genderaction (https://genderaction.eu/wp-content/uploads/2021/09/GENDERACTION WP3 final report.pdf).

3.8. Annex 1. Overview of the existing indicators collected at the EU level on gender equality

The policy brief has provided examples of key EU initiatives for the promotion of data collection and the monitoring of inclusive GEPs. There also exist several online databases at the EU level that periodically collect reliable data on several fields. However, these databases are completely centred around R & I, sex/gender or the gender dimension in R & I, demonstrating the lack of data collection on inclusiveness.

Eurostat (129) is the statistical office of the EU with the aim of providing high-quality statistics and data on the EU. It produces EU statistics in partnership with national statistics institutes and other national authorities in the Member States. Science and technology is one of the key thematic areas covered by this database, with a focus on R & I. It gathers data on research and development (R & D) personnel, by sector of performance and gender, and employment levels in high-tech industries and knowledge-intensive services, among others. Similarly, the **OECD** (130) database also provides relevant data. This database not only covers the EU-27, but also extends its geographical coverage to OECD countries. The OECD also collected key qualitative information regarding initiatives on R & I and gender equality with the **OECD science, technology and innovation policy survey** (131).

In addition, **EIGE** has developed a Gender Statistics Database (¹³²). This database is a comprehensive knowledge centre for gender statistics and information on various aspects of (in)equality between women and men. It collects and compiles data from different sources, including Eurostat and the European Commission, into a single database with a gender focus. It covers EU policies and strategies, the Gender Equality Index, women and men in decision-making, GBV and gender mainstreaming.

The following list provides a comprehensive overview of gender equality in R & I indicators currently being collected by the main international databases. It evidences that data are primarily focused on certain areas such as women's representativeness in R & I, whereas inclusiveness is mostly overlooked.

⁽¹²⁹⁾ For the Eurostat database, see https://ec.europa.eu/eurostat/web/main/data/database.

⁽¹³⁰⁾ For statistics from the OECD, see https://stats.oecd.org/.

⁽¹³¹⁾ García, L. V. and Serve, B. (2022), 'Ending women's under-representation in science, technology, and innovation activities', OECD (https://stiplab.github.io/datastories/gender/policy_note.html).

⁽¹³²⁾ For EIGE's gender statistics database, see https://eige.europa.eu/gender-statistics/dgs.

Table 10. Overview of key existing indicators on gender equality collected at the EU level

Indicator	Definition	Data source	Geographical coverage	Data available
Glass Ceiling Index	The Glass Ceiling Index is a relative index comparing the proportion of women in academia (grades A, B and C) to the proportion of women in top academic positions (grade A positions, equivalent to full professorships in most countries) in a given year. The Glass Ceiling Index can range from 0 to infinity. A score of 1 indicates that there is no difference between women and men for being promoted. A score of less than 1 means that women are over-represented at grade A level and a score of more than 1 points towards a glass ceiling effect, meaning that women are under-represented in grade A positions.	Women in Science database (She Figures reports)	AT, BA, BE, CH, CY, DE, DK, ES, FI, FR, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK	Every 3 years
Proportion (%) of women among researchers by sector of	Proportion of women in the business enterprise sector, government sector, higher	Eurostat	EU-27, BA, CH, CN, IS, JP, ME, MK, NO, RS,	1980–2021 (yearly)

Indicator	Definition	Data source	Geographical coverage	Data available
performance and professional position	education sector and private non-profit sector. The professional positions include researchers, technicians and equivalent staff, other, total and total excluding researchers.		RU, TR, UK	
Proportion of research organisations that take actions or measures towards gender equality	This indicator relies on web- scraping techniques to capture the proportion of research organisations whose websites report that they have taken actions and measures towards gender equality	She Figures 2021 report	AT, BA, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, IE, IL, IS, IT, LT, MT, NL, NO, PL, PT, SE, SI, SK, TR	2020
Research funding success rate differences between women and men, by sector	This indicator measures the difference in research funding success between men and women across the different fields of R & D.	She Figures 2021 report, Women in Science database	AT, BE, BG, CH, CY, DE, DK, EE, ES, FI, HU, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, UK	Every 3 years, latest 2019
Share of R & D personnel and researchers in total active population and employment by sector of performance and gender	This indicator measures the researchers' proportion in the active population across sectors and gender.	EIGE, Eurostat	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FR, GR, HR, HU, IE, IS, IT, LT, LU, LV, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TR, UK	2011–2020 (yearly)

Indicator	Definition	Data source	Geographical coverage	Data available
Share of women researchers, by professional position	Proportion of women who work as researchers, technicians and equivalent staff, other, total and total excluding researchers.	Eurostat as presented in She Figures report	EU-27, BA, CH, CN, IS, JP, ME, MK, NO, RS, RU, TR, UK	2011–2020 (yearly)
Doctorate students in science and technology fields	This indicator measures the proportion of students participating in the second stage of tertiary education in science and technology fields of study, as a percentage of the population of 20–29-year-olds. The educational fields include the following: science, mathematics and computing, and engineering, manufacturing and construction.	EIGE, Eurostat	AT, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, UK	2003–2012
Proportion of researchers in the higher education sector working under precarious working contracts, by gender	This indicator compares the proportion of women researchers and the proportion of men researchers on 'precarious working contracts' in the higher education sector. Researchers with 'precarious working contracts' include those with no contracts, fixed-term contracts of up to 1 year,	MORE survey, European Commission	AT, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IS, IT, LT, LU, LV, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, UK	2012 and 2016

Indicator	Definition	Data source	Geographical coverage	Data available
	or other contracts.			
Gender differences in the international mobility of researchers during their PhD	This indicator shows the percentage shares of internationally mobile women researchers. In this context, 'internationally mobile' researchers are those who during their PhD studies have moved for 3 months or more to a country other than the one where they completed or will obtain their PhD.	MORE survey, European Commission	AT, BE, BG, CH, CZ, DE, DK, EE, ES, FI, FR, HR, HU, IE, IT, LT, LU, NL, NO, PL, PT, RO, SE, SI, SK, UK	2012 and 2016
Gender differences in the international mobility of researchers in post- PhD career	This indicator shows the percentage shares of internationally mobile women researchers during their post-PhD career. In this context, 'internationally mobile' researchers are those who have worked abroad for 3 months or more at least once in the past decade. The indicator combines researchers at career stages R2–R4 (post-PhD) in all fields of education.	MORE survey, European Commission	AT, BE, BG, CH, CY, CZ, DK, DE, EE, EL, ES, FI, FR, HR, IE, IT, LT, HU, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, UK	2012 and 2016 (now discontinued)
Women-to-men ratio of	This indicator is the average	She Figures, European	AL, AM, AT, BA, BE,	Every 3 years, latest

Indicator	Definition	Data source	Geographical coverage	Data available
the average number of publications (all authorships) in all fields of R & D, by seniority level	yearly ratio of the total publications authored by women to the total publications authored by men in all fields of R & D, by seniority level of the authors. Values represent the average yearly ratio for the period 2013–2017 (indicated by the middle year, 2015).	Commission	BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FO, FR, GE, HR, HU, IE, IL, IS, IT, LT, LU, LV, ME, MD, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TN, TR, UA, UK	2019
Percentage of country's publications with a sex or gender dimension in their research content, by field of R & D	This indicator shows the number of a country's publications that have a sex or gender dimension in their research content, divided by the total number of publications from this country and then converted to a percentage. The gender dimension implies analysing and taking into account the possible differences between men and women (biological characteristics as well as social and cultural features), or boys and girls, in the R & I content of the project.	She Figures, European Commission	AL, AM, AT, AU, BA, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FO, FR, GE, HR, HU, IE, IL, IS, IT, LT, LU, LV, MD, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TN, TR, UK	2003, 2006, 2009, 2012, 2015, 2018, 2021
Women-to-men ratio of	The indicator shows the	EIGE, European	AL, AM, AT, BA, BE,	Only for 2015

Indicator	Definition	Data source	Geographical coverage	Data available
authorships in all fields of R & D	average yearly ratio of womento-men authorships during the period 2013–2017 (indicated by the middle year, 2015).	Commission	BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FO, FR, GE, HR, HU, IE, IL, IS, IT, LT, LU, LV, MD, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TN, TR, UA, UK	
Compound annual growth rate (%) of women-to-men ratio of corresponding authorship, by field of R & D	This indicator shows the compound annual growth rate (%) of the women-to-men ratio of authorships by field of R & D, for the period 2008–2017 (indicated by the middle year, 2012). The compound annual growth rate is a measure of growth over multiple time periods. It provides the mean annual growth over the entire defined period.	EIGE, European Commission	AL, AM, AT, BA, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FO, FR, GE, HR, HU, IE, IL, IS, IT, LT, LU, LV, MD, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TN, TR, UA, UK	Only for 2012
Women-to-men ratio of inventorships, all International Patent Classification sections	This indicator is the ratio between the number of inventions produced by women (women inventorships) and the corresponding number of those produced by men (men inventorships), or equivalently, the ratio of the proportion of	EIGE, European Commission	AL, AM, AT, BA, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FO, FR, GE, HR, IE, IL, IS, IT, LT, LU, LV, HU, MD, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TN, TR, UK	Only for 2012 and 2015

Indicator	Definition	Data source	Geographical coverage	Data available
	women inventorships (in total inventorships) to the corresponding proportion for men, in 2010–2013 (indicated by the year 2012) and 2013–2017 (indicated by the year 2015).			
Proportion of women graduates in tertiary (ISCED levels 5–8) and vocational (ISCED levels 3–4) education and training in the fields of STEM and in the fields of education, health and welfare – of all graduates in the study field	The share of women graduates out of all graduates in STEM fields of education indicates the gender composition of a persistently men-dominated study field.	EIGE, Eurostat	AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK	Only for 2015
Employment in technology and knowledge-intensive sectors at the national level, by gender	This indicator measures the proportion of people employed in knowledge-intensive sectors compared to the total employed population by gender.	Eurostat	AT, BE, BG, CH, CS, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HR, HU, IE, IS, IT, LT, LU, LV, ME, MK, MT, NL, NO, PL, PT, RO, RU, SE, SI, SK, UK	2012–2021

Indicator	Definition	Data source	Geographical coverage	Data available
Researchers by sector of performance, country of citizenship and gender	This indicator measures the proportion of researchers on the basis of sector of performance, gender and citizenship. Therefore, this indicator can measure inequalities on the basis of country of origin.	Eurostat	AT, BA, BE, BG, CH, CN, CS, CY, CZ, DE, DK, EE, GR, ES, FI, FR, HR, HU, IE, IS, IT, JP, LT, LU, LV, MK, MT, NL, NO, PL, PT, RO, RU, SE, SI, SK, TR, UK, US	2011–2020

NB: ISCED, International Standard Classification of Education.

4. Policy brief 4. Gender-based violence, including sexual harassment, in research and innovation

4.1. Summary

- GBV, including sexual harassment, has gained increasing attention over the years, particularly following the #MeToo movement that garnered international attention in late 2017 and highlighted the sheer number of women who have been personally impacted by GBV.
- The R & I sector is not immune to the broader social context that enables GBV.
 Furthermore, the characteristics of the sector, such as gender imbalances, hierarchical
 power structures and hypercompetitive atmospheres, make GBV a particularly acute
 problem within the sector. As GBV can manifest in unique ways within R & I, sector specific measures need to be adopted.
- This brief concludes by providing recommendations for policymakers at both the EU and national levels, as well as RPOs, RFOs and HEIs, on how to ensure that GEPs are effective against GBV. This includes placing a greater priority on collecting data on the prevalence of and contributing factors to GBV, raising awareness of the need to address GBV, tailoring measures to focus on the root causes of violence and harassment, such as cultural norms and structural inequalities, and ensuring that enough resources are devoted within GEPs to specifically address GBV.

4.2. Background and relevance

GBV has been at the forefront of the international political agenda for a long time. The first international definition of GBV was included in the 1993 United Nations Declaration on the elimination of violence against women, as 'Any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life' (133). The 2011 Council of Europe's Convention on Preventing and Combating Violence against Women and Domestic Violence, known as the Istanbul Convention, is a human rights treaty against GBV signed by all Member States and ratified by 21 Member States (134), and it uses the same 1993 definition (135). At the EU level, Articles 2 and 3 of the Treaty on European Union (136),

-

⁽¹³³⁾ United Nations General Assembly (1993), Declaration on the elimination of violence against women, A/RES/48/104 (https://digitallibrary.un.org/record/179739?ln=en).

⁽¹³⁴⁾ On 10 May 2023, Members of the European Parliament voted to approve the European Union's accession to the Convention on Preventing and Combating Violence against Women and Domestic Violence, concluding Parliament's role in the process. The Council concluded the EU's accession to the convention on 1 June 2023. Council of the European Union (2023), 'Combatting violence against women: Council adopts decision about EU's accession to Istanbul Convention', press release (https://www.consilium.europa.eu/en/press/press-releases/2023/06/01/combatting-violence-against-women-council-adopts-decision-about-eu-s-accession-to-istanbul-convention/).

⁽¹³⁵⁾ Council of Europe (2011), Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence, CETS No. 210 (https://rm.coe.int/168008482e).

⁽¹³⁶⁾ Consolidated version of the Treaty on European Union (OJ C 202, 7.6.2016, p. 13) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02016M/TXT-20200301).

Articles 8 and 10 of the Treaty on the Functioning of the European Union (137), and Articles 21 and 23 of the Charter of Fundamental Rights of the European Union (138) prohibit discrimination on the basis of sex and recognise the principle of equality between women and men; however, they do not specifically mention GBV. More recently, the EU's **Gender Equality Strategy 2020–2025** (139) explicitly positions addressing gender inequalities, including GBV, as a policy priority. This was followed by the 8 March 2022 Commission proposal for a **directive on combating violence against women and domestic violence** (140), which aims to establish minimum standards in EU law and strengthen the actions taken by Member States to address GBV. The text has been discussed in the Council and Parliament and the adoption of compromise text is expected before the 2024 European Parliament elections.

The EU's gender equality strategy introduced new measures to strengthen gender equality specifically in the field of R & I, including providing targeted funding through Horizon Europe to support gender mainstreaming and announcing the Commission's introduction of new measures to strengthen gender equality in Horizon Europe through the GEP eligibility criterion (141). This requirement came into force for calls with deadlines in 2022, following an initial 1-year grace period. It requires public bodies, HEIs and research organisations from Member States and associated countries to provide an organisation-level plan of actions and initiatives to support structural and cultural progress towards gender equality. There are five thematic areas that the Commission recommends be covered by applicants' GEPs, including having measures against GBV, including sexual harassment.

A number of parallel actions have been launched in recent years to draw further attention to gender equality in R & I, as well as GBV, more specifically. The **Ljubljana Declaration on Gender Equality in Research and Innovation** (142), spearheaded by the Slovenian Presidency of the Council, explicitly calls for addressing and counteracting GBV in R & I, alongside five additional priority areas to make progress towards gender equality. The declaration was endorsed in November 2021 by the European Commission and 25 Member States, as well as 10 associated countries or candidates to association to Horizon Europe. **Action 5 of the ERA Policy Agenda 2022–2024**, adopted by the Council on 26 November 2021 (143), is dedicated to promoting gender equality and fostering inclusiveness in the ERA and takes note of the Ljubljana Declaration. One of its deliverables is to devise a 'strategy to counteract gender-based violence including sexual harassment in the European R & I

⁽¹³⁷⁾ Consolidated version of the Treaty on the Functioning of the European Union (OJ C 326, 26.10.2012, p. 47) (http://data.europa.eu/eli/treaty/tfeu 2012/oj).

⁽¹³⁸⁾ Charter of Fundamental Rights of the European Union (OJ C 326, 26.10.2012, p. 391) (http://data.europa.eu/eli/treaty/char_2012/oj).

⁽¹³⁹⁾ European Commission (2020), Communication of 5 March 2020 – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

⁽¹⁴⁰⁾ European Commission (2022), Proposal for a directive on combating violence against women and domestic violence (COM(2022) 105 final) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52022PC0105).

⁽¹⁴¹⁾ Ibid

⁽¹⁴²⁾ Slovenian Presidency of the Council of the European Union (2021), Ljubljana Declaration – Gender equality in research and innovation (https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/PSEU/Ljubljana-Declaration-on-Gender-Equality-in-Research-and-Innovation-endorsed_final.pdf).

⁽¹⁴³⁾ Council of the European Union, Permanent Representatives Committee (2021), Conclusions on the future governance of the European research area (ERA), Brussels, 19 November (https://data.consilium.europa.eu/doc/document/ST-14126-2021-INIT/en/pdf).

system and to assure gender equality in working environments through institutional change in any research funding or performing organisation' (144). In order to kickstart efforts under ERA Action 5, the Czech Presidency of the Council of the EU organised a conference in November 2022 on 'ending gender-based violence in academia' (145). A 'call for action to end gender-based violence' was launched at the conference that provides specific recommendations for RPOs, RFOs, Member States and the European Commission on how to effectively address GBV in R & I (146). This call for action builds in particular on the first mappings and findings, including the largest prevalence survey carried out in the EU, of the Horizon 2020–funded project UniSAFE, which is dedicated to addressing GBV in academia in Europe. Under the 2023–2024 WIDERA work programme of Horizon Europe, and its programme part devoted to strengthening the ERA, a topic has been devised specifically to support policy efforts to address GBV in R & I with the aim of facilitating the implementation of a zero-tolerance approach towards GBV in the ERA. The selected project will build on UniSAFE and support ERA Action 5 objectives.

4.3. Evidence base and key sources of information

Table 11 provides an overview of the key sources used to inform this policy brief. Additional sources consulted are included in footnotes.

Table 11. Key sources of information

Type of source	Description	
Primary sources of information		
Online survey on 'Gender equality plans in research and innovation organisations' (<i>n</i> = 303)	 Public and private HEIs. Public RPOs without an educational component. Private RPOs without an educational component. Public RFOs. 	
Interviews with key stakeholders	 Interviews with over 70 key stakeholders: EU-level institutions/policymakers researchers in academic institutions / research communities in the EU 	

_

⁽¹⁴⁴⁾ European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg (https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf).

⁽¹⁴⁵⁾ For more information on the Czech Presidency of the Council, see https://czech-presidency.consilium.europa.eu/en/events/ending-gender-based-violence-in-academia-toward-gender-equal-safe-and-inclusive-research-and-higher-education/.

⁽¹⁴⁶⁾ For the full call for action, see https://genderaction.eu/wp-content/uploads/2022/11/Call-for-Action GBV-2022_final.pdf.

Type of source	Description
Type of source	European research associations and universities
	 national R & I agencies and organisations
	 public and private RFOs
	• public and private RPOs.
Expert consultation	The steering group of this study, made up of experts in the field of gender equality in R & I, has reviewed and provided input on this policy brief.
Secondary sources of information	on
She Figures reports (a)	A triennial report led by DG Research and Innovation within the European Commission that follows the 'chronological journey' of women from their graduation from doctoral studies to their incorporation into the labour market and their role in the decision-making process. It covered data from 44 countries in its latest edition (2021).
UniSAFE (b)	UniSAFE: is a Horizon 2020 project funded under the Science with and for Society work programme. The project aims to provide up-to-date and reliable data on GBV in universities and research organisations. The main publications consulted for this brief include:
	 Gender-based violence and its consequences in European academia – First results from the UnisafeSAFE survey (°);
	 Inventory of policies and measures to respond to GBV in European universities and research organisations (d);
	 Report on the European Policy Baseline (e);
	 'UnisafeSAFE policy brief 1' (f);
	 Report on case studies on the effects and consequences of institutional responses to gender- based violence along the 7Ps in research performing organisations (9);
	 Report on the Multi-level Analysis and Integrated Dataset (h);
	 Individual experiences and observation of gender- based violence in academia – Executive summary of

Type of source	Description
	the analysis of interviews with researchers at higher risk to gender-based violence (i).
ERAC SWG GRI	The ERAC SWG GRI integrated gender into R & I content and programmes. The three main studies consulted for this policy brief include:
	 Mobilising to eradicate gender-based violence and sexual harassment: A new impetus for gender equality in the European Research Area (i);
	 Sexual harassment in the research and higher education sector – National policies and measures in EU Member States and associated countries (k);
	Gender Equality Plans as a Catalyst for Change (¹).
	The ERAC SWG GRI is no longer operational. A new group has been established under the ERA Forum to implement the ERA Policy Agenda for 2022–2024 Action 5 (subgroup on inclusive gender equality in the ERA) which will build on the ERAC SWG GRI and UniSAFE work and additional Horizon Europe WIDERA-funded projects.
Harassment in Dutch Academia – Exploring manifestations, facilitating factors, effects and solutions (^m)	Commissioned by the Dutch Network of Women Professors, this study, led by academics from Radboud University, aimed to create a foundation of knowledge on the harassment women academics face and what the contributing factors are.

- (a) https://ec.europa.eu/assets/rtd/shefigures2021/index.html.
- (b) https://unisafe-gbv.eu.
- (°) Lipinsky, A., Schredl, C., Baumann, H., Humbert, A. and Tanwar, J. (2022), Gender-based violence and its consequences in European academia First results from the Unisafe survey, Unisafe (https://unisafe-oby.eu/wp-content/uploads/2022/11/UniSAFE-survey prevalence-results 2022.pdf).
- (d) Huck, A., Andreska, Z., Dvořáčková, J. and Linková, M. (2022), Inventory of policies and measures to respond to GBV in European universities and research organisations, Unisafe (https://zenodo.org/record/5939082#.Ywi4wbRByUn).
- (e) Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., et al. (2021), Report on the European Policy Baseline, Unisafe (https://zenodo.org/record/5780037#.YzQ1zXZByUm).
- (f) Unisafe (2022), 'Unisafe policy brief 1' (https://doi.org/10.5281/zenodo.7333222).
- (9) Ranea-Triviño, B., Pajares, L., Bustelo, M. and Jaquetto Pereira, B. C. (2022), Report on case studies on the effects and consequences of institutional responses to gender-based violence along the 7Ps in research performing organisations, Unisafe (https://doi.org/10.5281/zenodo.7585857).
- (h) Humbert, A. L., Ovesen, N., Simonsson, A., Strid, S., Hearn, J., Huck, A., et al. (2022). Report on the Multi-level Analysis and Integrated Dataset, Unisafe (https://doi.org/10.5281/zenodo.7540229).
- (i) Blažytė, G. and Pilinkaité Sotirovič, V. (2023), Individual experiences and observation of gender-based violence in academia Executive summary of the analysis of interviews with researchers at higher risk to gender-based violence, Unisafe (https://doi.org/10.5281/zenodo.7643496).

- (i) ERAC SWG GRI (2020), Mobilising to eradicate gender-based violence and sexual harassment: A new impetus for gender equality in the European research area, Brussels (https://data.consilium.europa.eu/doc/document/ST-1206-2020-INIT/en/pdf).
- (k) ERAC SWG GRI (2020), Sexual harassment in the research and higher education sector National policies and measures in EU Member States and associated countries, Brussels (https://genderaction.eu/wp-content/uploads/2020/06/SWGGRI Sexual-Harassment-in-the-Research-Higher-Ed.-National-Policies-Measures.pdf).
- (¹) ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).
- (m) Naezer, M., van den Brink, M. and Benschop, Y. (2019), Harassment in Dutch Academia Exploring manifestations, facilitating factors, effects and solutions, Dutch Network of Women Professors, Utrecht (https://www.lnvh.nl/uploads/moxiemanager/LNVH rapport Isquo Harassment in Dutch academia Exploring manifestations facilitating factors effects and solutions rsquo .pdf).

4.4. Gender-based violence in research and innovation

Although universities, research institutions and workplaces around the world devoted increased attention to GBV following the #MeToo movement, with official statements being issued along with promises to spearhead change, this continues to be a widely unaddressed topic in the R & I sector. **GBV includes physical, sexual or psychological violence directed against a person based on their gender or which impacts a particular gender disproportionately (147)**. Definitions of GBV often include gender discrimination, such as sexist stereotypical prejudices and demeaning comments, sexual harassment, such as sexual comments or inappropriate conduct, and sexual violence, such as rape or attempted rape (148). While these forms of GBV occur across sectors, more subtle forms of violence and harassment may manifest uniquely in higher education and research. Some examples of this include the denial of authorship, blocking access to spaces and information, or interfering with career progression (149). Further, understandings of GBV must also take into consideration the violence faced by women that is based on other factors, such as racism, ableism or homophobia, that may or may not be experienced alongside sexual harassment or sexual violence (150).

R & I institutions are not immune to the broader social factors that facilitate GBV. Within EU society, it is estimated that half of all women have experienced sexual harassment and one third of all women have experienced physical or sexual violence since the age of 15, based on an EU-wide survey conducted by the European Union Agency for Fundamental Rights (151). A more recent EU-wide survey on GBV in academia led by

⁽¹⁴⁷⁾ European Commission (n.d.), 'What is gender-based violence?' (https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-based-violence/what-gender-based-violence_en).

⁽¹⁴⁸⁾ ERAC SWG GRI (2020), 'Mobilising to eradicate gender-based violence and sexual harassment: A new impetus for gender equality in the European research area', Brussels (https://data.consilium.europa.eu/doc/document/ST-1206-2020-INIT/en/pdf).

⁽¹⁴⁹⁾ Naezer, M., van den Brink, M. and Benschop, Y. (2019), Harassment in Dutch Academia – Exploring manifestations, facilitating factors, effects and solutions, Dutch Network of Women Professors, Utrecht (https://www.lnvh.nl/uploads/moxiemanager/LNVH_rapport__lsquo_Harassment_in_Dutch_academia_Exploring_manifestations_facilitating_factors_effects_and_solutions_rsquo_.pdf).

⁽¹⁵⁰⁾ Imkaan (2019), The value of intersectionality in understanding violence against women and girls, UN Women, Europe and Central Asia, Istanbul (https://eca.unwomen.org/en/digital-library/publications/2019/10/the-value-of-intersectionality-in-understanding-violence-against-women-and-girls).

European Union Agency for Fundamental Rights (2014), Violence against Women: An EU-wide survey – Main results, Publications Office of the European Union, Luxembourg (https://fra.europa.eu/sites/default/files/fra_uploads/fra-2014-vaw-survey-main-results-apr14_en.pdf).

UniSAFE, the largest of its kind with over 42 000 responses, found that 73 % of staff and 58 % of students who responded to the survey had experienced GBV since joining their institution (152). The most common forms of GBV reported were psychological violence (57 %), such as receiving abusive comments or being interrupted, and sexual harassment (31 %) (153). Further review of the data found that prevalence was relatively consistent across countries and RPOs, with variance only ranging from 0 % to 2 % (154).

A number of additional ad hoc studies provide further evidence that GBV is as common in R & I as it is in broader society. A national survey of higher education staff in Ireland found that a large proportion of staff, up to half of respondents depending on the form of harassment, indicated being a victim of sexual harassment in the previous 4 years (155). In Slovakia, the first national survey of its kind found that as many as 76 % of students reported having experienced sexual harassment while studying (156). Furthermore, a prevalence study conducted across Swedish universities found that 38 % of respondents had been exposed to at least one form of sexual harassment during their time working or studying in higher education (157). According to internationally conducted research on universities, at least 25 % of women students have reported experiencing GBV while in higher education (158).

For examples, see: Johnson, P. A., Widnall, S. E. and Benya, F. F. (2018), Sexual Harassment of Women -

⁽¹⁵²⁾ Lipinsky, A., Schredl, C., Baumann, H., Humbert, A. and Tanwar, J. (2022), *Gender-based violence and its consequences in European academia – First results from the Unisafe survey*, Unisafe (https://unisafe-gbv.eu/wp-content/uploads/2022/11/UniSAFE-survey prevalence-results 2022.pdf).

⁽¹⁵³⁾ Ibid.

⁽¹⁵⁴⁾ Humbert, A. L., Ovesen, N., Simonsson, A., Strid, S., Hearn, J., Huck, A., et al. (2022), Report on the multi-level analysis and integrated dataset, Unisafe (https://doi.org/10.5281/zenodo.7540229).

⁽¹⁵⁵⁾ For example, 52 % of respondents described being treated differently because of their gender, 47 % described being put down or condescended to because of their gender, 35 % experienced sexist remarks, 21 % had been repeatedly told sexual stories or jokes and 12 % had experienced unwanted sexual contact in a way that made them feel uncomfortable. Statistics from: MacNeela, P., Dawson, K., O'Rourke, T., Healy-Cullen, S., Burke, L. and Flack, W. F. (2022), Report on the national survey of staff experiences of sexual violence and harassment in Irish HEIs, Higher Education Authority, Dublin (https://www.gov.ie/pdf/?file=https://assets.gov.ie/214119/81fe23f3-55db-4506-b818-1ccb506a6e07.pdf#page=null).

⁽¹⁵⁶⁾ Valkovičová, V., Kuruc, A., Ropovik, I. and Karkošková, S. (2021), Sexual Harassment in Universities – Research report, Slovak Institute for Labour and Family Research, Bratislava (https://ivpr.gov.sk/wp-content/uploads/2022/01/IVPR 2021 Sexualne obtazovanie na vysokych skolach.pdf).

⁽¹⁵⁷⁾ Rudolfsson, L., Dahlman-Wright, K., Löfgren, C., Toropova, A. and Björklund, C. (2022), Survey on gender-based violence and sexual harassment in the Swedish higher education sector, Karolinska Institutet, Stockholm (https://ki.se/media/247264/download).

Climate, culture, and consequences in academic sciences, engineering, and medicine, The National Academies Press, Washington, DC (https://doi.org/10.17226/24994); Vladutiu, C. J., Martin, S. L. and Macy, R. J. (2010), 'College- or university-based sexual assault prevention programs: A review of program outcomes, characteristics, and recommendations', Trauma Violence and Abuse, Vol. 12, No 2, pp. 67–86 (https://www.researchgate.net/publication/49719476_College- or University-Based Sexual Assault Prevention Programs A Review of Program Outcomes Characteristics and Recommendations); Voth Schrag, R. J. (2017), 'Campus based sexual assault and dating violence: A review of study contexts and participants', Affilia: Journal of Women and Social Work, Vol. 32, No 1, pp. 67–80 (https://journals.sagepub.com/doi/abs/10.1177/0886109916644644?journalCode=affa). As found in: ERAC SWG GRI (2020), Mobilising to eradicate gender-based violence and sexual harassment: A new impetus for gender equality in the European research area, Brussels (https://data.consilium.europa.eu/doc/document/ST-1206-2020-INIT/en/pdf).

GBV and sexual harassment are known to be more prevalent among groups more vulnerable to social exclusion (¹⁵⁹); however, sector-specific statistics on GBV that can be disaggregated by racial or ethnic origin, age, sexual orientation, gender identity, disability status, language, immigration or other status are nearly non-existent. The survey conducted through the UniSAFE project therefore provided rare insights on the prevalence of GBV among vulnerable groups in R & I (¹⁶⁰).

- **69** % of respondents who identified as an ethnic minority reported experiencing GBV compared with 61 % of respondents who did not identify as an ethnic minority.
- 72 % of respondents who declared having a disability or chronic illness reported experiencing GBV compared with 60 % of respondents who did not mention having a disability or chronic illness.
- **68** % of respondents who identified as asexual, lesbian, gay, bisexual, or queer reported experiencing GBV compared with 60 % of respondents who identified as heterosexual.
- 74 % of respondents who identified as non-binary and 66 % of women reported experiencing GBV compared with 56 % of men.

Given that intersectional data on the prevalence of GBV at the national and institutional levels remains largely unavailable, policy brief 3 on 'Measuring progress at European Union and national levels on inclusive gender equality plans and policies' suggested specific indicators to be included within inclusive GEPs to enhance this data collection.

RPOs and HEIs have unique organisational structures with a low number of high-level, permanent positions, which often leads to **gender imbalances**, **structured inequalities** and **a culture of hypercompetition**. These interact to make sexual harassment particularly prevalent (¹⁶¹). The latest *She Figures* report notes that a higher proportion of women researchers work under precarious or part-time working contracts when compared with men (¹⁶²). Furthermore, the report shows that while women make up 40 % of academic staff across the EU, senior positions in academia, which are most often permanent positions, are overwhelmingly held by men. Early career researchers or internationally mobile researchers are more vulnerable to GBV because they typically have fewer formal affiliations and their

_

⁽¹⁵⁹⁾ European Union Agency for Fundamental Rights (2014), Violence against Women: An EU-wide survey – Main results, Publications Office of the European Union, Luxembourg (https://fra.europa.eu/sites/default/files/fra_uploads/fra-2014-vaw-survey-main-results-apr14_en.pdf).

⁽¹⁶⁰⁾ Lipinsky, A., Schredl, C., Baumann, H., Humbert, A. and Tanwar, J. (2022), Gender-based violence and its consequences in European academia – First results from the Unisafe survey, Unisafe (https://unisafe-gbv.eu/wp-content/uploads/2022/11/UniSAFE-survey prevalence-results 2022.pdf).

⁽¹⁶¹⁾ For examples, see: ERAC SWG GRI (2020), Mobilising to eradicate gender-based violence and sexual harassment: A new impetus for gender equality in the European research area, Brussels (https://data.consilium.europa.eu/doc/document/ST-1206-2020-INIT/en/pdf); Naezer, M., van den Brink, M. and Benschop, Y. (2019), Harassment in Dutch Academia – Exploring manifestations, facilitating factors, effects and solutions, Dutch Network of Women Professors, Utrecht (https://www.lnvh.nl/uploads/moxiemanager/LNVH_rapport_lsquo_Harassment_in_Dutch_academia_Exploring_manifestations_facilitating_factors_effects_and_solutions_rsquo_.pdf).

⁽¹⁶²⁾ European Commission, DG Research and Innovation (2021), She Figures 2021 (https://ec.europa.eu/assets/rtd/shefigures2021/index.html).

working conditions are more precarious and heavily depend upon their thesis advisors in the case of PhD candidates (163).

The hierarchies of power in R & I, or who holds influence and who does not, are structured by gender, racial or ethnic origin and age. This power matters because employees in more vulnerable positions are more likely to be targets of sexual harassment and less likely to be taken seriously (164). A study of GBV prevalence in Swedish universities found that women PhD students were the respondent group that reported the most exposure to sexual harassment (165). Employees in powerful positions are also more likely to be given the benefit of the doubt or protected against accusations (166). More vulnerable employees, particularly those with intersecting marginal identities, are unlikely to have built up the same social capital, and are more likely to work under more precarious conditions. These structured inequalities make speaking out against GBV, either experienced or witnessed, particularly daunting, as they heighten the risk of reports not being taken seriously and negative professional repercussions occurring.

GBV is widely known to be an under-reported experience. Only 13 % of respondents to the UniSAFE survey on GBV in academia chose to report it (¹⁶⁷). When asked why they chose not to report the incident, the most common reasons given were that they felt the incident was not serious enough to report (47 %), they did not recognise the behaviour as violence (31 %), and they did not believe action would be taken if they did report it (26 %). Additional reasons victims choose not to report their experience include not feeling safe and fearing retaliation, witnessing past institutional responses that failed to hold perpetrators accountable, and hypercompetitive cultures that may lead to victims feeling that they will not have social support if they do come forward (¹⁶⁸). Victims fearing retaliation have legitimate reason to feel this way, as an experimental study found that women who reported sexual harassment were less likely to be recommended for a promotion when compared to other women with the same qualifications (¹⁶⁹). Furthermore, there is still a common trend of

⁽¹⁶³⁾ Naezer, M., van den Brink, M., and Benschop, Y. (2019), Harassment in Dutch Academia – Exploring manifestations, facilitating factors, effects and solutions, Dutch Network of Women Professors, Utrecht (https://www.lnvh.nl/uploads/moxiemanager/LNVH rapport Isquo Harassment in Dutch academia Exploring manifestations facilitating factors effects and solutions rsquo.pdf).

⁽¹⁶⁴⁾ Blažytė, G. and Pilinkaité Sotirovič, V. (2023), Individual experiences and observation of gender-based violence in academia – Executive summary of the analysis of interviews with researchers at higher risk to gender-based violence, Unisafe (https://doi.org/10.5281/zenodo.7643496).

⁽¹⁶⁵⁾ Rudolfsson, L., Dahlman-Wright, K., Löfgren, C., Toropova, A. and Björklund, C. (2022), Survey on gender-based violence and sexual harassment in the Swedish higher education sector, Karolinska Institutet, Stockholm (https://ki.se/media/247264/download).

⁽¹⁶⁶⁾ Ibid

⁽¹⁶⁷⁾ Lipinsky, A., Schredl, C., Baumann, H., Humbert, A. and Tanwar, J. (2022), Gender-based violence and its consequences in European academia – First results from the Unisafe survey, Unisafe (https://unisafe-gbv.eu/wp-content/uploads/2022/11/UniSAFE-survey prevalence-results 2022.pdf).

⁽¹⁶⁸⁾ Naezer, M., van den Brink, M., and Benschop, Y. (2019), Harassment in Dutch Academia – Exploring manifestations, facilitating factors, effects and solutions, Dutch Network of Women Professors, Utrecht (https://www.lnvh.nl/uploads/moxiemanager/LNVH_rapport_lsquo_Harassment_in_Dutch_academia_Exploring_manifestations_facilitating_factors_effects_and_solutions_rsquo_.pdf).

⁽¹⁶⁹⁾ Hart, C. G. (2019), 'The penalties for self-reporting sexual harassment', *Gender and Society*, Vol. 33, No 4, pp. 534–559 (https://doi.org/10.1177/0891243219842147).

organisations making efforts to hide incidents of GBV, rather than address them, in order to protect the image of the institution (¹⁷⁰).

Exposure to GBV in the work environment can lower professional performance, lessen the quality of working conditions overall, and ultimately impact the 'excellence' of the R & I produced (171) (172). GBV, particularly cases of sexual assault, has a significant impact on the emotional, physical and psychological well-being of victims. This impact on well-being can result in absence, diminished performance or an inability to work, which can compound to create a negative economic impact on victims for months or years after the assault (173) (174). Findings from the UniSAFE project found that 70 % of those who reported experiencing GBV indicated experiencing social exclusion; one interviewee described this exclusion as being treated as if they were difficult to work with and overly paranoid (175). Talent can be lost across the sector due to exposure to GBV and harassment, undermining efforts to close gender gaps and achieve gender equality (176). Staff who reported experiencing GBV in the Unisafe survey were more likely than staff who did not to have felt dissatisfied with their job (67 % versus 35 %), considered leaving the academic sector (40 % versus 23 %), and changed or tried to change their institution (24 % versus 8 %) (177).

When the structural and cultural causes of GBV are left unaddressed, this violence is more likely to persist. In a qualitative study of women academics in the Netherlands, victims of sexual harassment reported that **the harassment was rarely a single, isolated incident, but was ongoing harassment that lasted for months or even years** (178). This finding was further corroborated by interviews conducted through the UniSAFE project, which again found that incidents of GBV were often repeated over the course of months or years, and that the violence experienced was often a combination of different forms of violence

_

⁽¹⁷⁰⁾ Blažytė, G. and Pilinkaité Sotirovič, V. (2023), Individual experiences and observation of gender-based violence in academia – Executive summary of the analysis of interviews with researchers at higher risk to gender-based violence, Unisafe (https://doi.org/10.5281/zenodo.7643496).

⁽¹⁷¹⁾ Strid, S. (2021), 'On the importance of addressing gender-based violence in universities and research organisations', Unisafe (https://unisafe-gbv.eu/blog/on-the-importance-of-addressing-gender-based-violence-in-universities-and-research-organisations/).

⁽¹⁷²⁾ Unisafe (2022), 'Unisafe policy brief 1' (https://doi.org/10.5281/zenodo.7333222).

⁽¹⁷³⁾ Loya, R. M. (2015), 'Rape as an economic crime: The impact of sexual violence on survivors' employment and economic well-being', *Journal of Interpersonal Violence*, Vol. 30, No 16, pp. 2793–2813 (https://doi.org/10.1177/0886260514554291).

⁽¹⁷⁴⁾ Humbert, A. L., Ovesen, N., Simonsson, A., Strid, S., Hearn, J., Huck, A., et al. (2022). Report on the Multi-level Analysis and Integrated Dataset, Unisafe (https://doi.org/10.5281/zenodo.7540229).

⁽¹⁷⁵⁾ Ibid

⁽¹⁷⁶⁾ ERAC SWG GRI (2020), Sexual harassment in the research and higher education sector – National policies and measures in EU Member States and associated countries, Brussels (https://genderaction.eu/wp-content/uploads/2020/06/SWGGRI_Sexual-Harassment-in-the-Research-Higher-Ed.-National-Policies-Measures.pdf).

⁽¹⁷⁷⁾ Lipinsky, A., Schredl, C., Baumann, H., Humbert, A. and Tanwar, J. (2022), *Gender-based violence and its consequences in European academia – First results from the Unisafe survey*, Unisafe (https://unisafegbv.eu/wp-content/uploads/2022/11/UniSAFE-survey_prevalence-results_2022.pdf).

⁽¹⁷⁸⁾ Naezer, M., van den Brink, M., and Benschop, Y. (2019), Harassment in Dutch Academia – Exploring manifestations, facilitating factors, effects and solutions, Dutch Network of Women Professors, Utrecht (https://www.lnvh.nl/uploads/moxiemanager/LNVH rapport Isquo Harassment in Dutch academia Exploring manifestations facilitating factors effects and solutions rsquo .pdf).

and harassment (¹⁷⁹). Organisations in R & I, in alignment with all other sectors, have a responsibility to provide safe working environments, free from violence and harassment.

4.5. The role of gender equality plans and other instruments in preventing gender-based violence, including sexual harassment

Overall, there are insufficient policies in R & I organisations to adequately address GBV. Even though there has been an increase in the development of GBV policies in recent years, the majority of both public and private institutions do not include specific provisions to address this issue (180) (181). A recent review of European RFOs found that none of those examined had policies that explicitly addressed GBV, although some were in the process of developing new measures (182). Of those policies that do exist within RPOs, intersectional aspects are rarely incorporated beyond mentioning that certain groups are more vulnerable (183). Horizon Europe's new eligibility criterion imposing requirements on HEIs and research organisations to have a GEP in place, and recommending the uptake of measures against GBV, aims to contribute to changing this. Furthermore, the collaboration between the Commission, Member States, associated countries and stakeholder organisations in the framework of the ERA Forum subgroup on ERA Action 5 aims to develop inclusive GEPs and policies that will counteract GBV specifically.

GEPs aim to promote gender equality through systemic institutional and cultural change. The latest *She Figures* report notes that in 2020, 19 out of 27 Member States had more than 50 % of their higher education websites reporting measures and actions to strengthen gender equality, either through GEPs or similar policies (¹⁸⁴). The proportions were lower for public research organisations; however, these values are expected to have increased since the GEP provisions became mandatory in Horizon Europe in 2022. Effective GEPs bring gender mainstreaming to each level of an organisation to address the structures and cultures that sustain gender inequality. This is especially crucial to violence prevention efforts, as workplace cultures and asymmetric power structures are some of the most important factors that increase the prevalence and severity of GBV (¹⁸⁵). In a survey conducted for this study, 'measures combatting gender-based violence including sexual harassment' was ranked third out of five by respondents as the thematic area considered to

⁽¹⁷⁹⁾ Blažytė, G. and Pilinkaité Sotirovič, V. (2023), Individual experiences and observation of gender-based violence in academia – Executive summary of the analysis of interviews with researchers at higher risk to gender-based violence, Unisafe (https://doi.org/10.5281/zenodo.7643496).

⁽¹⁸⁰⁾ ERAC SWG GRI (2020), Sexual harassment in the research and higher education sector – National policies and measures in EU Member States and associated countries, Brussels (https://genderaction.eu/wp-content/uploads/2020/06/SWGGRI_Sexual-Harassment-in-the-Research-Higher-Ed.-National-Policies-Measures.pdf).

⁽¹⁸¹⁾ Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., et al. (2021), Report on the European Policy Baseline, Unisafe, 2021 (https://zenodo.org/record/5780037#.YzQ1zXZByUm).

⁽¹⁸²⁾ Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., et al. (2021), Report on the European Policy Baseline, Unisafe, 2021 (https://zenodo.org/record/5780037#.YzQ1zXZByUm).

⁽¹⁸³⁾ Huck, A., Andreska, Z., Dvořáčková, J. and Linková, M. (2022), Inventory of policies and measures to respond to GBV in European universities and research organisations, Unisafe (https://zenodo.org/record/5939082#.Ywi4wbRByUn).

⁽¹⁸⁴⁾ European Commission, DG Research and Innovation (2021), *She Figures 2021 – Policy briefs*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

⁽¹⁸⁵⁾ ERAC SWG GRI (2020), Mobilising to eradicate gender-based violence and sexual harassment: A new impetus for gender equality in the European research area, Brussels (https://data.consilium.europa.eu/doc/document/ST-1206-2020-INIT/en/pdf).

benefit the most from involvement in an EU-funded project related to GEPs, and the overall organisational culture was ranked first (186).

There is significant variation across GEPs in terms of how they are designed and implemented. Although GEPs are required, the various themes to be addressed are only recommended. The survey conducted for this study found that measures against GBV, including sexual harassment, were reported to be present in 89 % of GEPs (169 of 189 respondents), whereas other measures, such as targeting gender equality in recruitment and career progression, were reported to be present in 100 % of GEPs (187). However, even if more women are present and hold more high-level positions, gender and violence prevention theorists do not expect this alone to change the prevalence of GBV (188). GEPs must include specific provisions that target the factors that facilitate GBV, such as a hypercompetitive culture, a lack of support systems, and unconscious gender biases, in order to properly address the problem.

Although an increasing number of institutions are motivated to address GBV, there are a number of challenges and barriers that can make this difficult, including inadequate data on the issue, a culture that facilitates GBV, and a lack of institutional will.

A lack of representative data makes it impossible to understand the prevalence of GBV, how it manifests and how it is being addressed across the EU. A review of RPO responses to GBV conducted by the UniSAFE consortium found that there was an overall lack of monitoring and evaluation mechanisms included in their policies (189). Many countries have conducted ad hoc data collection through one-off surveys or administrative data reviews, but there is no consistent multinational- or national-level data on GBV or sexual harassment regularly collected within the EU. There are further challenges to addressing this data gap at the national and institutional levels, including the lack of a centralised data collection system that ensures consistent formatting and data collection across institutions, these data not being required to be collected or shared, a lack of resources necessary to set up monitoring systems, and the known under-reporting of GBV (190).

Addressing gender inequality and preventing GBV will require changing the cultures that enable them. A 2016 Eurobarometer survey on GBV found that 27 % of respondents felt that rape could be justifiable in certain situations, with significant variation across Member States (¹⁹¹). Although this statistic may be different today following recent widespread international conversations around GBV, particularly around sexual harassment due to the #MeToo movement, this shows that even the most violent and harmful forms of GBV can be excused by a proportion of the population. **This culture limits the reporting of**

⁽¹⁸⁶⁾ Survey conducted as part of the study, 'Pilot assessment activities for the European Knowledge and Support Facility on gender equality plans in research and innovation organisations', September 2022.

⁽¹⁸⁷) Ibid.

⁽¹⁸⁸⁾ Medeiros, K. (2021), 'Sexual harassment in academia: A matter of power (imbalance)', *Elephant in the Lab* (https://doi.org/10.5281/zenodo.4606740).

⁽¹⁸⁹⁾ Ranea-Triviño, B., Pajares, L., Bustelo, M. and Jaquetto Pereira, B. C. (2022), Report on case studies on the effects and consequences of institutional responses to gender-based violence along the 7Ps in research performing organisations, Unisafe (https://doi.org/10.5281/zenodo.7585857).

⁽¹⁹⁰⁾ Ending Sexual Violence and Harassment in Third-Level Education (2019), *It Stops Now Toolkit* (https://www.nwci.ie/images/uploads/lt Stops Now Toolkit-FA-Website.pdf).

⁽¹⁹¹⁾ European Commission, DG Communication (2016), Special Eurobarometer 449 – Gender-based violence, Brussels (https://europa.eu/eurobarometer/surveys/detail/2115).

incidents, increases the prevalence of GBV and can further harm victims if they do not feel that their community supports them. These broader cultural factors are largely intertwined with the final barrier discussed below, namely a lack of support for or active resistance to addressing GBV (192).

A lack of institutional will can be a primary reason for a lack of progress in addressing and preventing GBV; this can present as either a 'dragging of the feet' by the relevant parties or as active resistance to measures being implemented. For example, resources must be available for the implementation of GEPs to ensure that they are effective. Funding organisations do not always prioritise gender equality initiatives, particularly if it is not a priority at the national level. Furthermore, amongst R & I stakeholders specifically, stereotypes related to gender roles, the illusion that gender equality has already been achieved, the view that equality efforts are not merit-based, and the belief that GBV is a private issue that should not be addressed by institutions are all still prevalent, thus undermining prevention and support efforts (193). This was a key finding from the UniSAFE case studies on institutional responses to GBV – a lack of recognition of the issue and occasional resistance placed those advocating for progress in uncomfortable situations and made it more difficult for them to continue this work over the long term (194).

While there are a number of areas that can limit the effectiveness of GEPs, there are also key enabling factors that can increase their ability to properly tackle the factors that facilitate GBV. **Providing adequate resources** to fund monitoring and support activities, **establishing awareness of the value** of targeting GBV and sexual harassment, and **addressing the root causes** can increase the impact of initiatives introduced through GEPs.

In order to develop GEPs and ensure that they are properly implemented, resources must be provided and solid policy frameworks should be established at EU, national and institutional levels. As outlined in Section 4.2, there have been a number of recent EU-level actions in this area, such as the activities under Action 5 of the ERA 2022–2024 policy agenda and the forthcoming policy support project funded through the 2023–2024 WIDERA work programme of Horizon Europe to facilitate a zero-tolerance approach to GBV within the ERA (195). The importance of action at the national level can be seen through the pattern that institutional policies and initiatives rarely exist in the absence of national policies, or of their own accord, whereas when these frameworks do exist, evidence suggests that they facilitate the development of actions beyond what is required by the

⁽¹⁹²⁾ Ranea-Triviño, B., Pajares, L., Bustelo, M. and Jaquetto Pereira, B. C. (2022), Report on case studies on the effects and consequences of institutional responses to gender-based violence along the 7Ps in research performing organisations, Unisafe (https://doi.org/10.5281/zenodo.7585857).

⁽¹⁹³⁾ ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

⁽¹⁹⁴⁾ Ranea-Triviño, B., Pajares, L., Bustelo, M. and Jaquetto Pereira, B. C. (2022), Report on case studies on the effects and consequences of institutional responses to gender-based violence along the 7Ps in research performing organisations, Unisafe (https://doi.org/10.5281/zenodo.7585857).

⁽¹⁹⁵⁾ European Commission (2023), Horizon Europe Work Programme 2023-2025 – Widening participation and strengthening the European research area, Brussels (https://ec.europa.eu/info/fundingtenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-11-widening-participation-and-strengthening-the-european-research-area horizon-2023-2024 en.pdf).

policy (¹⁹⁶). In order to ensure that a GEP is effective, a recent review of existing GEPs has found that the most important requirements are establishing a national legal framework and providing resources for data collection and capacity building (¹⁹⁷). Finally, there must be a high degree of awareness of GBV in R & I, as well as a common understanding of how GEPs can properly address this, with buy-in from employees and management.

To address GBV specifically, interventions must focus on the root causes – harmful cultural norms and structural inequalities. A gender-transformative and intersectional approach can effectively tackle gender stereotypes and harmful norms (198). This is reflected in the recent call for action against GBV in higher education and research launched following the Czech Presidency conference on the topic. The call for action highlights the importance of addressing organisational culture and intersectionality, as well as capitalising on the recent momentum to address GBV (199). Furthermore, support systems that cut across the hierarchies of higher education and research institutions can protect vulnerable groups and limit the power that senior members of staff have over newer colleagues. Finally, the development of a GEP is only the first step to creating institutional change – a method for quality assurance must be followed during implementation to ensure that interventions are effective.

4.6. Identified good practices and way forward

To facilitate the development of thorough and effective GEPs, the European Commission's DG Research and Innovation developed a guidance (200) which provides suggestions for the types of measures that can be taken to target the recommended thematic areas, including measures against GBV. Various categories of measures are put forward, including examining the prevalence of GBV, addressing employee behaviours, encouraging reporting, establishing a structure for investigations, providing support to victims, taking disciplinary action and creating a culture of zero tolerance. Table 11 provides examples of measures or actions that HEIs, RPOs and RFOs can take for each of the categories recommended in the Horizon Europe guidance. These have been identified based on the desk review conducted for this brief, focusing on good practices in the sector and recommendations from practitioners (201).

⁽¹⁹⁶⁾ Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., et al., Report on the European Policy Baseline, Unisafe, 2021 (https://zenodo.org/record/5780037#.YzQ1zXZByUm).

⁽¹⁹⁷⁾ ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

⁽¹⁹⁸⁾ European Parliament (2019), European Parliament resolution of 10 March 2022 on the EU gender action plan III, 2021/2003(INI) (https://www.europarl.europa.eu/doceo/document/TA-9-2022-0073_EN.pdf).

⁽¹⁹⁹⁾ For the full call for action, see https://genderaction.eu/wp-content/uploads/2022/11/Call-for-Action_GBV-2022_final.pdf.

⁽²⁰⁰⁾ European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

⁽²⁰¹⁾ For example, see: ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf); Huck, A., Andreska, Z., Dvořáčková, J. and Linková, M. (2022), Inventory of policies and measures to respond to GBV in European universities and research organisations, Unisafe (https://zenodo.org/record/5939082#.Ywi4wbRByUn); and European Commission, DG Research and Innovation (2021), Horizon Europe Guidance on Gender Equality Plans, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

Table 12. Examples of measures against GBV, including sexual harassment, to be included in GEPs

Category of action	Examples
Examining prevalence	 Establish monitoring and evaluation procedures for GEP implementation.
	 Develop an understanding of the prevalence of GBV at the institution, such as by conducting a survey, collecting administrative data on the number of reports of GBV, or consulting national- or multinational-level statistics.
	 Provide financial support to projects seeking to address, prevent or examine the prevalence of GBV.
Addressing behaviours	 Establish a code of conduct that specifically addresses different forms of GBV.
	 Provide tested and proven training sessions, such as those developed by community practitioners or similar institutions, including through the use of interactive theatre, on behaviours associated with GBV as well as bystander interventions that empower staff to safely intervene.
Encouraging reporting	 Create clear, visible and robust reporting channels that proactively address barriers to reporting, such as the desire for anonymity or cultural barriers.
	 Disseminate information on how to report across various channels, such as by targeting social media or websites frequented by students and staff.
	 Take reports seriously and provide adequate support to victims – positive staff perception of institutional responses to reporting further encourages reporting (a).
Establishing methods for investigation	 Set a clear, easily accessible policy for investigative procedures that includes timelines and arrangements to ensure that they are independent and fair.
Providing support to victims or witnesses	 Establish methods of support for victims and witnesses, such as GBV-specific counselling services, support groups, activities and hotlines.
	 Ensure that support services implement an intersectional approach that also provides context-sensitive support for victims of racism, homophobia, ableism and other forms of violence.
	Designate a safe contact for victims who is highly trained

	on GBV and experienced in providing victim support.
	 Include signposting across various channels on where to access this support, including in all awareness-raising campaigns, training sessions or other related activities.
Taking disciplinary measures	 Create a policy for the disciplinary procedures for perpetrators at an organisational level that includes how it can be raised to police or other relevant institutions.
	 Establish or expand the remit of disciplinary commissions to include trained and experienced experts on GBV that consult on active cases.
	 Withhold funding and awards from those who violate the agreed code of conduct, such as perpetrators of violence or harassment (b).
Establishing a culture of zero tolerance	 Conduct communication activities, such as awareness- raising campaigns or events that feature local experts, that aim to increase staff understanding of the various forms of GBV, how to prevent them, and the support that is available to victims (c).
	 Establish networks across staff that cultivate an inclusive and welcoming environment across the organisational hierarchy, particularly targeting potentially vulnerable staff.
	 Encourage staff to spearhead cultural change through modelling positive behaviour, intervening against negative behaviours and cultivating a culture amongst colleagues that is intolerant of GBV and discrimination.
	 Designate a specific staff member, or several staff members across the organisation, such as the safe contact who provides support to victims, to be responsible for ensuring that the initiatives established to combat GBV are properly funded, implemented and effective.

- (a) Naezer, M., van den Brink, M. and Benschop, Y. (2019), Harassment in Dutch Academia Exploring manifestations, facilitating factors, effects and solutions, Dutch Network of Women Professors, Utrecht (https://www.lnvh.nl/uploads/moxiemanager/LNVH_rapport_lsquo_Harassment_in_Dutch_academia_Exploring_manifestations_facilitating_factors_effects_and_solutions_rsquo_pdf).
- (b) For an example, see National Science Foundation (n.d.), 'Stopping harassment and assault' (https://www.nsf.gov/od/oecr/promising_practices/index.jsp).
- (c) For guidance, see Madesi, V., Polykarpou, P., Mergaert, L. and Wuiame, M. (2023), Awareness-raising campaigns on gender-based violence: A step-by-step guide for universities, Unisafe (https://doi.org/10.5281/zenodo.7798894).

Table 12 is only a subset of examples of measures that can be included in GEPs to address GBV. Good practices are presented below to provide examples of how some of

these measures have been put into practice at a national, institutional or project level. These practices have been chosen based on their alignment with the recommendations presented in this policy brief and their relevance to GEPs and R & I.

The national practices presented below include laws or federal initiatives that have facilitated actions specifically targeting GBV.

- **France's** Law on the Transformation of **the** Public Service (²⁰²) imposes requirements on universities and research institutions to adopt GEPs that explicitly address GBV and sexual harassment, as well as to report on the prevalence of GBV, including sexual harassment. In July 2019, 95 % of institutions affiliated with the Ministry of Higher Education, Research and Innovation had specific counselling services and training sessions on GBV and sexual harassment (²⁰³).
- The Irish HEA's Centre for Excellence on Equality, Diversity and Inclusion (204) has a division dedicated to advancing equality, diversity and inclusion (EDI) in the higher education sector. In 2022, the centre published surveys on the prevalence of sexual violence in Irish higher education, which were followed up by a national implementation plan (205) to end sexual violence and harassment in higher education. It also oversees the implementation of the government's policy framework (206) for promoting consent and preventing sexual violence in higher education, which aims to address institutional structures by adapting processes, cultivating cultural change through awareness raising and fostering respect, and establishing national prevalence statistics through monitoring procedures. All publicly funded HEIs have action plans to end sexual violence and harassment and progress is monitored nationally by the HEA.
- The Institute for Labour and Family Research in Slovakia (²⁰⁷) conducted a national survey that found a high prevalence of sexual harassment in universities, and then prepared a guide for universities on how to address unfair treatment, as well as a free training programme (²⁰⁸) on the prevention of sexual harassment. The research was also

(202) Loi no 2019-828 du 6 août 2019 de transformation de la fonction publique, 6 August 2019 (https://www.legifrance.gouv.fr/dossierlegislatif/JORFDOLE000038274919/

(204) For more information on the centre, see https://hea.ie/policy/gender/.

(205) HEA (n.d.), 'Ending sexual violence and harassment in higher education institutions – Implementation plan 2022–2024', Dublin (https://hea.ie/assets/uploads/2021/04/HEA ESVH Implementation Plan FINAL.pdf).

(206) Government of Ireland (n.d.), Safe, Respectful, Supportive and Positive – Ending sexual violence and harassment in Irish higher education institutions, Dublin (https://assets.gov.ie/24925/57c394e5439149d087ab589d0ff39c92.pdf).

(207) For more on the institute, see https://ivpr.gov.sk/.

(208) See the survey at https://ivpr.gov.sk/wp-content/uploads/2022/01/IVPR 2021 Sexualne obtazovanie na vysokych skolach.pdf; see the guide at https://ivpr.gov.sk/wp-content/uploads/2021/02/Co so sexualnym obtazovanimPrirucka pre vysoke skoly.pdf; see the training programme at https://ivpr.gov.sk/ponuka-bezplatneho-online-vzdelavania-prevencia-sexualneho-obtazovania/.

⁽²⁰³⁾ ERAC SWG GRI (2020), Sexual harassment in the research and higher education sector – National policies and measures in EU Member States and associated countries, Brussels (https://genderaction.eu/wpcontent/uploads/2020/06/SWGGRI Sexual-Harassment-in-the-Research-Higher-Ed.-National-Policies-Measures.pdf).

followed up by a national project (²⁰⁹) that aims to set up support systems for victims in public and private institutions.

- Sweden provides national support for knowledge production on GBV. Multiple studies over the years have been funded or initiated by the Swedish government to produce knowledge on GBV. For example, the Swedish Research Council commissioned an international study on sexual harassment (210) in academia, the Swedish Council for Higher Education published a report on international prevention efforts in academia (211), and the Research and Collaboration Programme on Genderbased Violence, an initiative led by three universities, carried out a first-of-its-kind national study on GBV (212) in academia.
- The National Science Foundation (NSF) (213) in the United States provides a good example of how RFOs can set requirements for their beneficiaries to address GBV within their institutions. Following a recommendation from the US National Academies of Sciences, Engineering, and Medicine in their explorative report (214) on sexual harassment in R & I, the NSF established new requirements (215) for NSF-funded studies, including mandatory notifications of sexual misconduct accusations against principal investigators or co-principal investigators of NSF-funded studies.

At an institutional level, innovative measures targeting GBV, either through a GEP or separately, include the following.

- The Basque Country University established a protocol against GBV (²¹⁶). The university led a year-long, participatory process to design a protocol that responded to the needs described by the university community. The protocol includes several innovative aspects: a broad definition of GBV, a support process for victims, including a specifically trained gender violence advisor, and a newly created Commission on Gender-Based Violence.
- The **University of Geneva** published a guide (²¹⁷) on how to identify sexual harassment and what to do if it occurs, highlighting the resources available both within the university and externally. The measures outlined in the guide are part of a university-wide system to establish a zero-tolerance culture and ensure no one can plead ignorance.

(210) Swedish Research Council (2018), Sexual Harassment in Academia – An international research review, Stockholm (https://www.vr.se/english/analysis/reports/our-reports/2018-11-30-sexual-harassment-in-academia.html).

⁽²⁰⁹⁾ For more information, see https://www.zastavmenasilie.gov.sk/.

⁽²¹¹⁾ Swedish Council for Higher Education (2020), Efforts to Prevent Sexual Harassment in Academia – An international research review, Stockholm (https://www.uhr.se/globalassets/_uhr.se/publikationer/2020/uhr-efforts-to-prevent-sexual-harassment-in-academia.pdf).

⁽²¹²⁾ Rudolfsson, L., Dahlman-Wright, K., Löfgren, C., Toropova, A. and Björklund, C. (2022), Survey on gender-based violence and sexual harassment in the Swedish higher education sector, Karolinska Institutet, Stockholm (https://ki.se/media/247264/download).

⁽²¹³⁾ See the foundation's website at https://www.nsf.gov/.

⁽²¹⁴⁾ See the report at https://www.nationalacademies.org/our-work/sexual-harassment-in-academia.

⁽²¹⁵⁾ For more information on these requirements, see https://new.nsf.gov/stopping-harassment.

⁽²¹⁶⁾ See the university's website at https://www.ehu.eus/documents/2007376/9945919/UPVEHU-protocol-to-prevent-gender-based-violence.pdf/6dfb581a-829d-4742-4c3b-e1cac5ec2995?t=1657716812037.

⁽²¹⁷⁾ See the guide at https://www.gendercampus.ch/en/document/dont-turn-a-blind-eye.

Finally, a number of Horizon projects that relate to the development of GEPs are listed below. Each of these projects has developed tools or reports related to GBV measures that could be useful.

- The Athena project (²¹⁸) is a Horizon 2020 project that is implementing GEPs in eight RPOs and RFOs. Through their preparatory work, it has developed a compendium (²¹⁹) that presents GEP best practices by thematic area, including measures that address sexual harassment and gender-based discrimination.
- Equal4Europe (²²⁰) is a Horizon 2020 project that is developing and implementing GEPs in research organisations and universities. It has created a tracking tool (²²¹) for GEPs to help institutions in the process of setting one up keep track of all the elements that need to be covered, including actions related to addressing GBV.
- UniSAFE: Ending Gender-Based Violence is a Horizon 2020 project that aims to provide up-to-date and reliable data on GBV in universities and research organisations. It has developed reports on institutional and national policies (222) addressing GBV, and over the course of the project additional reports on the most impactful institutional responses to GBV. The project also developed a questionnaire that universities can use to examine the prevalence of GBV amongst staff and students, as well as step-by-step guidance on how to conduct an effective awareness-raising campaign (223). Finally, the project aims to provide recommendations for institutions and policymakers on how to best address GBV in R & I.
- GENDERACTIONplus (²²⁴) is a Horizon Europe project that kicked off in June 2022; it builds upon the previous Horizon 2020–funded Genderaction (²²⁵) project to advance gender equality in R & I policy and has a work package dedicated to GBV, including sexual harassment. The deliverables of this project are not yet available; however, its work will be influential in advancing gender equality in R & I in the coming years.

Some of the key priorities for ensuring that GEPs properly address GBV are **establishing** protocols for the collection of representative and consistent data on GBV, ensuring

⁽²¹⁸⁾ See the project website at https://www.athenaequality.eu.

⁽²¹⁹⁾ Athena (2021), GEPs Best Practices Compendium – Transforming HEIs/ RPOs/RFOs through gender equality plans – A compendium of best practices examples of transformative GEP measures (https://www.athenaequality.eu/wp-content/uploads/2022/09/ATHENA-D4.1-GEPs-best-practices-compendium_v1.0.pdf).

⁽²²⁰⁾ See the project website at https://equal4europe.eu/.

⁽²²¹⁾ For more on the tracking tool, see https://equal4europe.eu/research-9-tracking-tool-for-gender-equality-plans/.

⁽²²²⁾ Huck, A., Andreska, Z., Dvořáčková, J. and Linková, M. (2022), Inventory of policies and measures to respond to GBV in European universities and research organisations, Unisafe (https://zenodo.org/record/5939082#.Ywi4wbRByUn); Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., et al. (2021), Report on the European Policy Baseline, Unisafe (https://zenodo.org/record/5780037#.YzQ1zXZByUm).

⁽²²³⁾ Lipinsky, A. Schredl, C., Baumann, H., Lomazzi, V., Freund, F., Humbert, A. L., et al. (2021), Final Unisafe Survey Questionnaire, Unisafe (https://zenodo.org/records/7220636#.Y6BusXbMl2z); Madesi, V., Polykarpou, P., Mergaert, L. and Wuiame, M. (2023), Awareness-raising campaigns on gender-based violence: A step-by-step guide for universities, Unisafe (https://doi.org/10.5281/zenodo.7798894).

⁽²²⁴⁾ See the project website at https://genderaction.eu/.

⁽²²⁵⁾ For more on the previous project, see https://h2020.genderaction.eu/.

awareness of GBV within R & I to cultivate the institutional willingness to address the problem, and providing the resources necessary to facilitate system-level and cultural change.

4.7. Conclusions and considerations for further actions

Addressing GBV, including sexual harassment, in R & I has been defined as a priority for the ERA. To make progress in this regard and to ensure that GEPs are effective, a number of recommendations are provided in Table 13 for policymakers at both the EU and national levels, as well as for management at funding bodies, research organisations and universities to address, prevent and monitor GBV. Overall, expert opinions provided and literature reviewed throughout the study highlighted the need for actors at all levels to place a greater priority on the **prevention** of GBV, rather than only addressing and monitoring cases after they occur.

Table 13. Recommendations for policymakers, research organisations and universities

Target group	Recommendation
EU level	 Extend the Horizon Europe GEP criterion to apply to all R & I institutions, for example, including private research- funding bodies, and to require, rather than recommend, addressing GBV as a thematic area.
	 Monitor the number and contents of Horizon Europe projects that cover GBV in R & I in order to understand how the R & I sector and organisations are addressing the issue.
	 Within the framework of ERA policy agenda 2022–2024 Action 5, collect EU-level data that can be disaggregated by sector, racial or ethnic origin, sexual orientation, age and disability status on GBV and related policies. This can be facilitated by the development of a common monitoring framework for universities and RPOs to examine the prevalence of GBV in a way that ensures consistency and comparability of data across organisations and countries.
National level	 National authorities should require that all research institutions and universities report annually on their measures to address GBV.
	 Collect national-level data on the prevalence of GBV, including sexual harassment, which can be disaggregated by sector, racial or ethnic origin, sexual orientation, age and disability status, in order to enable the correct measurement of progress and evaluation of policies and their impact.
	 Provide targeted funding to projects and initiatives that aim to monitor, address and prevent GBV.
	 National funding bodies should introduce measures that target GBV, such as through clauses or codes of conduct

Target group	Recommendation	
	that researchers must adhere to in order to receive funding.	
Research organisations and universities	 Raise awareness on the prevalence of GBV, including sexual harassment, the importance of addressing it in R & I, and the factors that contribute to it, such as specific cultural norms. It is recommended that this include both local awareness campaigns and staff and student requirements to follow verified training and educational programmes. 	
	 Ensure that measures to address GBV included in GEPs have been shown to be effective and address the root causes of violence, such as the examples provided in . 	
	• Table 12.	
	 Cultivate less hierarchical cultures by increasing collaboration across professional levels, such as through committees or mentoring networks. 	
	 Introduce reporting procedures that ensure all levels of staff feel safe to report incidents of violence or harassment. These should include measures to prevent re-victimisation and ensure confidentiality, provide dedicated resources for case handling and victim support, and establish a clear process that avoids overly complicated bureaucracy. 	
	 Incorporate intersectional perspectives into all internal human resources policies and provide additional, tailored support to particularly vulnerable groups. 	
	 Devote at least the same level of attention and volume of resources to GBV, including sexual harassment, as those dedicated to addressing research misconduct. 	

4.8. Bibliography

Blažytė, G. and Pilinkaité Sotirovič, V. (2023), *Individual experiences and observation of gender-based violence in academia* – *Executive summary of the analysis of interviews with researchers at higher risk to gender-based violence*, Unisafe (https://doi.org/10.5281/zenodo.7643496).

Ending Sexual Violence and Harassment in Third-Level Education (2019). *It Stops Now Toolkit* (https://www.nwci.ie/images/uploads/lt Stops Now Toolkit-FA-Website.pdf).

ERAC SWG GRI (2020), Mobilising to eradicate gender-based violence and sexual harassment: A new impetus for gender equality in the European research area, Brussels (https://data.consilium.europa.eu/doc/document/ST-1206-2020-INIT/en/pdf).

ERAC SWG GRI (2020), Sexual harassment in the research and higher education sector—National policies and measures in EU Member States and associated countries, Brussels (https://genderaction.eu/wp-content/uploads/2020/06/SWGGRI Sexual-Harassment-in-the-Research-Higher-Ed.-National-Policies-Measures.pdf).

ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

European Commission (n.d.), 'What is gender-based violence?' (https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-based-violence en).

European Commission, DG Communication (2016), *Special Eurobarometer 449 – Gender-based violence*, Brussels (https://europa.eu/eurobarometer/surveys/detail/2115).

European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

European Commission, DG Research and Innovation (2021), *She Figures 2021 – Policy briefs*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/078011).

European Union Agency for Fundamental Rights (2014), *Violence against Women: An EU-wide survey – Main results*, Publications Office of the European Union, Luxembourg (https://fra.europa.eu/sites/default/files/fra_uploads/fra-2014-vaw-survey-main-results-apr14_en.pdf).

Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., Strid, S., Hearn, J., Husu, L., Allori, A. and Wuiame, N. (2021), *Report on the European Policy Baseline*, Unisafe (https://zenodo.org/record/5780037#.YzQ1zXZByUm).

Ferguson, L. and Mergaert, L. (2022), 'Resistances to structural change in gender equality', Supera (https://www.superaproject.eu/wp-content/uploads/2022/02/Resistances-to-Structural-Change-in-Research-and-Innovation_v02.pdf).

Hart, C. G. (2019), 'The penalties for self-reporting sexual harassment', *Gender and Society*, Vol. 33, No 4, pp. 534–559 (https://doi.org/10.1177/0891243219842147).

Huck, A., Andreska, Z., Dvořáčková, J. and Linková, M. (2022), *Inventory of policies and measures to respond to GBV in European universities and research organisations*, Unisafe (https://zenodo.org/record/5939082#.Ywi4wbRByUn).

Humbert, A. L., Ovesen, N., Simonsson, A., Strid, S., Hearn, J., Huck, A., Andreska, Z., Linková, M., Pilinkaité Sotirovič, V., Blažytė, G. and Pereira, B. (2022). *Report on the Multi-level Analysis and Integrated Dataset*, Unisafe (https://doi.org/10.5281/zenodo.7540229).

Imkaan (2019), *The value of intersectionality in understanding violence against women and girls*, UN Women, Europe and Central Asia, Istanbul (https://eca.unwomen.org/en/digital-library/publications/2019/10/the-value-of-intersectionality-in-understanding-violence-against-women-and-girls).

Lipinsky, A., Schredl, C., Baumann, H., Humbert, A. and Tanwar, J. (2022), *Gender-based violence and its consequences in European academia – First results from the Unisafe survey*, Unisafe (https://unisafe-gbv.eu/wp-content/uploads/2022/11/UniSAFE-survey_prevalence-results_2022.pdf).

Loya, R. M. (2015), 'Rape as an economic crime: The impact of sexual violence on survivors' employment and economic well-being', *Journal of Interpersonal Violence*, Vol. 30, No 16, pp. 2793–2813 (https://doi.org/10.1177/0886260514554291).

MacNeela, P., Dawson, K., O'Rourke, T., Healy-Cullen, S., Burke, L. and Flack, W. F. (2022), Report on the national survey of staff experiences of sexual violence and harassment in Irish HEIs, Higher Education Authority, Dublin (https://www.gov.ie/pdf/?file=https://assets.gov.ie/214119/81fe23f3-55db-4506-b818-1ccb506a6e07.pdf#page=null).

Medeiros, K. (2021), 'Sexual harassment in academia: A matter of power (imbalance)', *Elephant in the Lab* (https://doi.org/10.5281/zenodo.4606740).

Naezer, M., van den Brink, M., and Benschop, Y. (2019), *Harassment in Dutch Academia – Exploring manifestations, facilitating factors, effects and solutions*, Dutch Network of Women Professors, Utrecht (https://www.lnvh.nl/uploads/moxiemanager/LNVH rapport Isquo Harassment in Dutch academia Exploring manifestations facilitating factors effects and solutions rsquo pdf).

Ranea-Triviño, B., Pajares, L., Bustelo, M. and Jaquetto Pereira, B. C. (2022), Report on case studies on the effects and consequences of institutional responses to gender-based violence along the 7Ps in research performing organisations, Unisafe (https://doi.org/10.5281/zenodo.7585857).

Rudolfsson, L., Dahlman-Wright, K., Löfgren, C., Toropova, A. and Björklund, C. (2022), Survey on gender-based violence and sexual harassment in the Swedish higher education sector, Karolinska Institutet, Stockholm (https://ki.se/media/247264/download).

Strid, S. (2021), 'On the importance of addressing gender-based violence in universities and research organisations', Unisafe (https://unisafe-gbv.eu/blog/on-the-importance-of-addressing-gender-based-violence-in-universities-and-research-organisations/).

Unisafe (2022), 'Unisafe policy brief 1' (https://doi.org/10.5281/zenodo.7333222).

Valkovičová, V., Kuruc, A., Ropovik, I. and Karkošková, S. (2021). *Sexual Harassment in Universities – Research report*, Slovak Institute for Labour and Family Research, Bratislava (https://ivpr.gov.sk/wp-

content/uploads/2022/01/IVPR_2021_Sexualne_obtazovanie_na_vysokych_skolach.pdf).

5. Policy brief 5. Intersectional approaches to achieving inclusive gender equality – promising practices and remaining barriers

5.1. Summary

- Building on progress achieved in advancing gender equality in R & I through the
 implementation of GEPs in the ERA, the European Commission has committed to
 supporting the development of *inclusive* GEPs with the objective of advancing greater
 equality, non-discrimination and inclusion of all individuals within higher education and
 R & I organisations, regardless of their personal and social characteristics.
- The number of actions across Member States that address other characteristics beyond gender and intersecting inequalities in the R & I sector is relatively small but growing. At the national level, policies and legislation address gender equality, discrimination and inequalities within the framework of broader policy approaches aimed to promote EDI, whereas intersectional frameworks that approach gender equality and other personal and social characteristics in an integrated manner are still rare.
- At the institutional level, intersectional approaches are still in the initial stages of development and thus not widespread among research organisations and HEIs. As a promising first step towards the development of intersectionality in R & I, RPOs are increasingly developing and implementing relevant actions supporting gender equality from an intersectional perspective.
- There are several key challenges for the implementation of inclusive GEPs due to a range of interacting factors related to the national policy and legal framework supporting gender equality, the lack of systematic and comparable data on diversity characteristics, and individual preferences and attitudes towards the diversity of individuals in top management positions in different institutions.
- Several actions can be taken by EU- and national-level policymakers as well as
 research organisations and public bodies. These include supporting the development,
 effective implementation and adequate monitoring and evaluation of the progress of
 inclusive GEPs, promoting the expansion of equality data in R & I within the constraints
 imposed by data protection laws, and continuing dissemination activities on the GEP
 eligibility criterion in Horizon Europe.

5.2. Background and relevance

GEPs and related measures have been implemented in the ERA to tackle gender inequalities and promote changes in structures, processes and resource allocations that support this goal. One of the more recent initiatives at the EU level has been support for inclusive GEPs and policies (226), in line with the communication on 'A new ERA for

⁽²²⁶⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).

research and innovation' (227) and the ERA policy agenda 2022–2024 Action 5: 'Promote gender equality and foster inclusiveness' (228). The ERA policy agenda also considers the Ljubljana Declaration on gender equality in research and innovation (229), as endorsed by 25 of the EU-27, most associated countries and the European Commission itself.

GEP implementation has been supported by the European Commission through the FP7 and Horizon 2020 over the past decade. Since the 2021–2022 work programme, Horizon Europe's cross-cutting WIDERA) programme aims to 'support those EU countries that continue to lag behind in research and innovation to increase the performance of their research and innovation systems' (230). It funds projects advancing the concept of inclusive GEPs and policies (e.g. INSPIRE and GENDERACTIONplus). Indeed, one of the main goals of INSPIRE is to develop knowledge and tools informed by an intersectional approach (231). In addition, the European Commission supports research institutions, Member States and associated countries in complying with the GEP eligibility criterion by providing guidance, training and mutual learning opportunities.

Inclusive approaches to gender equality aim to achieve institutional and structural change by addressing the different patterns of discrimination and inequality in relation to social categories that are at play within R & I and in society at large. The approach to **inclusive gender equality in R & I** acknowledges that 'other characteristics such as racial and ethnic origin, disability, socioeconomic background or sexual orientation interact and can reinforce intersectional and specific forms of discrimination that may limit the impact of measures focused only on one characteristic' (²³²). This approach can also encompass other characteristics such as religion, caring responsibilities and contract type, which can affect individual experiences of discrimination.

Intersectionality (233) is a key feature of the EU's commitment to inclusiveness as underpinned by the EU's gender equality strategy for 2020–2025 (234). It provides the conceptual framework for a more sophisticated understanding of **how individuals**'

_

⁽²²⁷⁾ European Commission (2020), Commission communication – A new ERA for research and innovation (COM(2020) 628 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0628&qid=1630498105830).

⁽²²⁸⁾ European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg (https://commission.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf).

⁽²²⁹⁾ Slovenian Presidency of the Council of the European Union (2021), Ljubljana Declaration – Gender equality in research and innovation (https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/PSEU/Ljubljana-Declaration-on-Gender-Equality-in-Research-and-Innovation- endorsed final.pdf).

⁽²³⁰⁾ European Commission, DG Research and Innovation (2021), 'Horizon Europe – Widening participation and spreading excellence across Europe – Boosting research and innovation performance throughout the Union', Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/229120).

⁽²³¹⁾ Beeckmans, J. (2023), 'The future of gender equality plans is intersectional', Inspire (https://www.inspirequality.eu/article/future-gender-equality-plans-intersectional).

⁽²³²⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).

⁽²³³⁾ Defined by EIGE as an 'analytical tool for studying, understanding and responding to the ways in which sex and gender intersect with other personal characteristics/identities, and how these intersections contribute to unique experiences of discrimination' (https://eige.europa.eu/thesaurus/terms/1263).

⁽²³⁴⁾ European Commission (2020), Commission communication – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

identities and intersecting patterns of discrimination shape inequalities (²³⁵) and moves the debate beyond single categories of analysis (e.g. sex/gender, age, ethnicity). Inclusive approaches to gender equality can be categorised as intersectional when they view the intersection of different personal characteristics as the basic driving force of inequality.

Equality, diversity and inclusion (EDI) approaches, on the other hand, do not focus on a specific axis of inequality such as gender. Inclusive EDI strategies rather aim to simultaneously address multiple characteristics to ensure inclusiveness and diversity and eliminate discrimination (²³⁶). At the forefront of this typology of approaches lies the process of understanding and addressing existing patterns of discrimination and inequality on the basis of personal characteristics and social identities, which is a prerequisite for enhancing the inclusion of socially disadvantaged groups and minorities. Systemic inequalities, including differences in power, status and resources, are an underlying issue to be addressed in order to reduce obstacles to the inclusion of individuals who still face discrimination due to one or several personal or social characteristics.

Nonetheless, EDI approaches do not necessarily take into account the intersections between different characteristics and often focus on characteristics separately. For this reason, such approaches may be overly narrow and overlook an individual's multifaceted identities, running the risk of creating silos of activity and thus potentially limiting the knowledge otherwise produced by identifying relevant intersections (²³⁷).

A large majority of Member States as well as non-EU countries associated to Horizon Europe have committed to supporting inclusive gender equality in R & I through Action 5 of the ERA policy agenda 2022–2024 and through their endorsement of the Ljubljana Declaration on gender equality in research and innovation. ERA Action 5 aims to promote gender equality and inclusiveness through inclusive GEPs and policies that develop an intersectional approach (238). The Ljubljana Declaration prompts countries to support several priority areas, including ensuring 'fair, open, inclusive and gender equal career paths in research', and to 'consider intersectional perspectives on gender inequalities' (239). These key policy documents follow the adoption in September 2020 of the Commission communication on 'A new ERA for research and innovation' (240), which reinforced the European Commission's commitment to promote gender equality by supporting the development of inclusive GEPs with Member States and stakeholders, in line with the

-

⁽²³⁵⁾ Palmén, R. (2021), 'ACT on intersectionality', Zenodo (http://doi.org/10.5281/zenodo.5602859).

⁽²³⁶⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).

^{(&}lt;sup>237</sup>) Ibid.

⁽²³⁸⁾ European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda — Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg (https://ec.europa.eu/info/sites/default/files/research_and_innovation/strategy_on_research_and_innovation/documents/ec_rtd_era-policy-agenda-2021.pdf).

⁽²³⁹⁾ Slovenian Presidency of the Council of the European Union (2021), Ljubljana Declaration – Gender equality in research and innovation (https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/PSEU/Ljubljana-Declaration-on-Gender-Equality-in-Research-and-Innovation- endorsed final.pdf).

⁽²⁴⁰⁾ European Commission (2020), Commission communication – A new ERA for research and innovation (COM(2020) 628 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0628&qid=1630498105830).

objectives of the Horizon Europe framework programme for R & I, where supporting funding is made available.

Against this backdrop, inclusive GEPs aim to **drive institutional change in R & I** organisations and to support equal opportunities and non-discrimination, paying particular attention to intersecting inequalities and multiple concurrent systems of discrimination. This policy brief highlights promising initiatives at the national level and reflects on the key features and objectives of and approaches to the monitoring of inclusive GEP-supporting policies. It also provides policy considerations for EU and national policymakers, as well as research organisations and public bodies.

5.3. Evidence base and key sources of information

Table 14 provides an overview of the key sources used to inform this policy brief. Detailed information is included in the footnotes.

Table 14. Main sources of information

Sources of information Interviews and an Over 70 interviews with: online survey on EU-level institutions/policymakers 'Gender equality plans in research researchers in academic institutions / research communities in the and innovation EU organisations' (n = 303). For European research associations and universities more details, see national R & I agencies and organisations Annex 2 of the main report for public and private RFOs this study public and private RPOs. The online survey (non-representative sample) was conducted during August-September 2022 among public and private RPOs (with an educational component), public RFOs, ministries and other national or regional authorities. Selected questions within the survey were specifically focused on inclusive GEPs and intersectional approaches to gender equality. The analysis of the findings from the survey were used to inform this policy brief. Expert Experts in the field of GEPs have reviewed the policy brief and provided useful feedback, insights and input that have been included consultation in the policy brief.

Secondary literature and policy documents

- European Commission, Approaches to inclusive gender equality in research and innovation (R & I).
- EIGE GEAR tool (focusing on the information related to intersectionality) (a).
- ERAC SWG GRI, Gender Equality Plans as a Catalyst for Change.
- National policies/strategies addressing EDI from an intersectional perspective (e.g. the Austrian national development plan for public universities 2019–2024, the Netherlands' national action plan for greater diversity and inclusion in higher education and research, the KIF's recommendations for gender balance, and France's action plan against hatred and anti-LGBT+ discrimination).
- Inclusive GEPs implemented at the institutional level (including at Linneaus University, the University of Bergen and Bocconi University).
- Relevant projects funded at the EU or national level to develop intersectional approaches to gender equality (e.g. the German Federal Ministry of Education and Research's Mission-MINT, Science Foundation's Ireland STEM Passport for Inclusion, and Horizon Europe's GENDERACTIONplus).

(a) https://eige.europa.eu/gender-mainstreaming/toolkits/gear.

NB: KIF, Committee for Gender Balance and Diversity in Research.

5.4. Inclusive gender equality plans and other measures promoting an intersectional approach – key features and objectives

Actions that address other characteristics beyond gender and intersecting inequalities in the R & I sector have been adopted in a relatively small number of Member States. Although such measures are still in the initial stages of development, there is growing momentum, further supported by the new ERA policy framework. There are, nonetheless, extensive national policies and legislation addressing gender equality, discrimination and inequalities in higher education and R & I.

5.4.1. National-level initiatives

At the national level, **gender equality initiatives with an intersectional perspective** are generally being designed **within the framework of broader policy approaches aimed to promote equality, diversity, and inclusion** in the R & I sector. These are not necessarily structured GEPs, but can support their implementation and impact. Examples include measures focused on attracting talent and career progression, research funding, enabling an inclusive work environment, combating discrimination and harassment, the development

of organisational governance, and research content and curricula (²⁴¹). Some of these policies approach gender equality in conjunction with other types of characteristics that can result in inequalities and discrimination.

In **Austria**, the Austrian national development plan for public universities 2019–2024 aims, among other objectives, to achieve a gender balance among all members of universities, improve social inclusion and establish a diversity-oriented culture of equality in universities (242). A specific objective is the implementation of the legal requirement to develop a **university equality plan** during 2017–2024 (in accordance with the 2004 Universities Act (243)). Actions related to intersectional perspectives on gender equality are also taken in the context of the Austrian national strategy on the social dimension of higher education. The strategy considers actions for improving access to higher education for under-represented groups and those with specific needs, from a perspective that considers the interaction of 'diversity markers' (these can be **gender**, **ethnic/migrant origin**, **disability and/or chronic illness**, **a lower socioeconomic background**, **care responsibilities**, **or leaving school early**) (244).

In the **Netherlands**, the 2020 national action plan for greater diversity and inclusion in higher education and research (²⁴⁵) formulates several key objectives for 2025, including: supporting the development and alignment of GEPs across relevant institutions and with national policies on diversity and inclusion; more effectively embedding diversity and inclusion in the wider instruments and processes related to quality assurance, accreditation, inspection and recruitment; and expanding monitoring of key indicators about students and staff in higher education and research. The action plan believes that 'an **intersectional and integrated approach**' is necessary to support the achievement of these objectives, as it helps tackle intersecting forms of inequality stemming from visible (e.g. gender, cultural background, ethnicity) and less visible (e.g. **disability, psychological illness, chronic illness, sexual preference, socioeconomic background, beliefs, religion, talents, working style, education, experience**) features (²⁴⁶).

In **Norway**, the Committee for Gender Balance and Diversity in Research (KIF) promotes gender equality and ethnic diversity in research through various actions and recommendations, which take into account how **gender and ethnicity** in particular interact

_

⁽²⁴¹⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).

⁽²⁴²⁾ Federal Ministry of Education, Science and Research (2018), Austrian National Development Plan for Public Universities 2019–2024, Vienna (https://www.bmbwf.gv.at/dam/jcr:dd33ff38-f6c4-406f-84be-ed2a64db4d6d/GUEP 2019-2024-EN Version 2017.pdf).

⁽²⁴³⁾ Federal Ministry of Education, Science and Research (n.d.), 'Universities' (https://www.bmbwf.gv.at/en/Topics/Higher-education---universities/Higher-education--system/Universities.html#:~:text=The%20Universities%20Act%20(%20UG%20)%20entered,financed%20by% 20the%20public%20purse).

⁽²⁴⁴⁾ Federal Ministry of Education, Science and Research (2018), Austrian National Development Plan for Public Universities 2019–2024, Vienna (https://www.bmbwf.gv.at/dam/jcr:dd33ff38-f6c4-406f-84be-ed2a64db4d6d/GUEP_2019-2024-EN_Version_2017.pdf).

⁽²⁴⁵⁾ Government of the Netherlands (2020), 'National action plan for greater diversity and inclusion in higher education and research', The Hague, pp. 12–14 (https://www.government.nl/documents/reports/2020/09/01/national-action-plan-for-greater-diversity-and-inclusion-in-higher-education-and-research).

^{(&}lt;sup>246</sup>) Ibid., p. 9.

and lead to inequalities in HEIs and research institutes. These actions and recommendations include, among others: the development of gender equality action plans or other diversity policies with elements that have proven effective over time; formal commitments to prioritising diversity and inclusion actions at the organisational level; the creation of specific roles or structures that are responsible and accountable for the implementation and review of actions; investing in an analysis of the needs and information already available at the organisational level; embedding of training on gender and diversity in institutions/organisations; reviewing recruitment and promotion criteria; and reviewing research content from a gender and diversity perspective (247).

In **France**, combating discrimination is one of the strategic priorities of the Ministry for Higher Education, Research and Innovation. The 2020–2023 action plan against hatred and anti-LGBT+ discrimination aims to tackle discrimination in higher education and research, implementing specific provisions of the Education Code (Article L.123–2) (²⁴⁸). It focuses on several key objectives with specific areas of action around **gender equality and sexual orientation**, involving key ministries and other public institutions: for example, enabling access to rights regarding the private and family life of LGBT+ people; allowing access to healthcare for LGBT+ people; tackling hate crime and hate speech; and promoting inclusive education.

These examples indicate that **countries focus on policies and actions that target specific characteristics in conjunction with gender** (e.g. ethnicity, disability, social status, sexual orientation). These interventions more closely fit within the umbrella of inclusive strategies towards inclusive gender equality, or more widely, towards EDI. **However, they do not adopt a comprehensive approach to intersectionality**, one which proposes a clear approach, concrete targeted actions and a tailored monitoring framework to address the intersection of several personal characteristics that shape the experiences of discriminated subgroups. Intersectionality is nonetheless acknowledged by the interventions discussed above as a powerful guiding principle in the design of equality policies.

5.4.2. Funding streams

European-level RFOs (e.g. the European Social Fund) have developed gender equality actions that are part of the grant funding process, but they have generally not extended these to include other characteristics. On the other hand, national-level RFOs have in some cases gone a step further and expanded their funding strategies to include other categories alongside gender. Box 1 includes some examples.

⁽²⁴⁷⁾ Committee for Gender Balance and Diversity in Research (n.d.), 'KIF Committee's recommendations for gender balance', Oslo (https://kifinfo.no/en/kif-committees-recommendations-gender-balance).

⁽²⁴⁸⁾ Ministry of Higher Education and Research (2021), 'Le guide "Lutter contre la haine et les discriminations anti-LGBT+ dans l'enseignement supérieur et la recherche", Paris (https://www.enseignementsup-recherche.gouv.fr/fr/le-guide-lutter-contre-la-haine-et-les-discriminations-anti-lgbt-dans-l-enseignement-superieur-et-la-49280).

Box 1. Examples of funding strategies aligned with intersectional principles

The funding scheme Mission-MINT – Women Shape the Future (a), by the Federal Ministry of Education and Research in Germany, supports, through concrete actions, goals such as the equal participation of women in science and R & I, thereby decreasing disadvantages linked to gender, origin or disabilities. Mission-MINT's actions are focused on supporting young women (including those with characteristics such as a migrant background or disabilities, as well as single parents) to access technical fields, retaining them in institutions and supporting their advancement to management positions in companies and research departments (b).

The Magnus Hirschfeld Foundation (°) in Germany is an independent research institute that carries out research and funding projects on sexual and gender diversity. With its stream on intersectionality research, the institute explores the interconnections between different individual characteristics (gender / gender identity, sexual orientation, social, ethnic and religious background, age and disabilities) in different socioeconomic and social contexts.

In Ireland, Science Foundation Ireland funds the STEM Passport for Inclusion, led by Maynooth University, which aims to support young women from disadvantaged backgrounds to access STEM careers using mentoring sessions and activities that allow them to develop skills in computational thinking, AI and ethical responsibilities, computer science and prototype design (d). The foundation is also planning to collect baseline data for different protected groups to support actions to promote equality in funding and developmental activities (b).

- (a) Mission-MINT is funded under the topic of 'Increasing the proportion of women in the MINT research and innovation process: Strengthening self-efficacy, initiative and creativity' (Erhöhung des Frauenanteils im MINT-Forschungs- und Innovationsprozess: Selbstwirksamkeit, Eigeninitiative und Kreativität stärken) (https://www.bmbf.de/bmbf/shareddocs/bekanntmachungen/de/2021/08/2021-08-19-Bekanntmachung-Mint.html).
- (b) European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).
- (c) Magnus Hirschfeld Foundation (n.d.), 'About the foundation' (https://mh-stiftung.de/about-the-foundation').
- (d) Maynooth University (n.d.), 'STEM Passport for Inclusion' (https://www.maynoothuniversity.ie/all-institute/all-projects/stem-passport-inclusion).
- NB: These initiatives were identified in the 2022 European Commission report *Approaches to inclusive gender equality in research and innovation (R&I)*.

The 2022 report published by the European Commission (²⁴⁹) highlighted a number of initiatives in support of inclusive GEPs and policies under **Horizon Europe**. Among these, the 'Widening participation and strengthening the European Research Area' (WIDERA) Work Programme supports several inclusive **gender equality projects and actions** in support of the creation and dissemination of knowledge in relation to inclusiveness and intersectionality, as well as R&I content. Among the projects that started in 2022 are:

(249)	Ibid.			

- **INSPIRE** (250): The sustainable centre of excellence on inclusive gender equality in R & I will gather the knowledge and innovative practices of equality experts and practitioners, including intersectionality, in its 'think tank' approach to advancing and disseminating knowledge on inclusive gender equality policies in R & I, filling the existing knowledge gaps in intersectional policies and encouraging the sharing of good practices on intersectionality. Through its third thematic Knowledge and Support Hub on intersectionality, INSPIRE will investigate how R & I institutions can progressively shift to truly inclusive intersectional GEPs fostering change towards equality.
- **GENDERACTIONplus** (²⁵¹): Building on the achievements of the Horizon 2020 project GENDERACTION (2017–2021), the ERAC Standing Working Group on Gender in Research and Innovation (SWG GRI), and the Horizon 2020 funded ACT project (2018 2021), this ERA policyrelated project includes a thematic work package on intersectionality and inclusiveness which will map the existing national-level policies and practices on intersectionality, diversity and inclusiveness in the ERA, benchmark the use of related terminology, and increase awareness of intersectionality and inclusiveness in R & I. Other activities within the work package include the identification of strategies for inclusive research careers, the development of an overview of policy guidelines and data collection, and the formulation of policy advice on intersectionality, diversity and inclusion for different ERA stakeholders.

Other initiatives financed under the WIDERA 2022 work programme include calls such as 'Support to the implementation of inclusive gender equality plans' (252), which aims to expand the minimum GEP requirements for eligibility in Horizon Europe to the implementation of actions that integrate an intersectional or diversity approach to gender equality. Moreover, four peer-mentoring projects aimed at supporting the implementation of inclusive GEPs and funded under WIDERA 2022 started in 2023: *AGRIGEP*, (253), SUPPORTER, (254), BUDGET IT (255) and NEXUS (256). While the latter three projects focus specifically on intersectionality, AGRIGEP aims to foster gender equality in the agricultural sector.

_

⁽²⁵⁰⁾ European Commission (n.d.), 'European Centre of Excellence on Inclusive Gender Equality in Research and Innovation: Creating knowledge and engaging in collaborative action' (https://ec.europa.eu/info/fundingtenders/opportunities/portal/screen/how-to-participate/orgdetails/999999999/project/101058537/program/43108390/details).

⁽²⁵¹⁾ Genderactionplus (2022), 'We are back as Genderactionplus!' (https://genderaction.eu/we-are-back-as-genderactionplus).

⁽²⁵²⁾ European Commission (n.d.), 'Support to the implementation of inclusive gender equality plans' (https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-widera-2024-era-01-11).

⁽²⁵³⁾ European Commission (n.d.), 'Assessment and implementation of agriculture and life science universities' first gender equality plans in widening countries' (https://cordis.europa.eu/project/id/101094158).

⁽²⁵⁴⁾ European Commission (n.d.), 'Securing sports education through innovative and inclusive gender equality plans' (https://cordis.europa.eu/project/id/101094529).

⁽²⁵⁵⁾ European Commission (n.d.), 'Building gender equality through gender budgeting for institutional transformation' (https://cordis.europa.eu/project/id/101094391).

⁽²⁵⁶⁾ European Commission (n.d.), 'Twinning research and innovation institutions to design and implement inclusive GEPs' (https://cordis.europa.eu/project/id/101094949).

Funded under the WIDERA 2021–2022 work programme, the new EU Award for Gender Equality Champions (257) awarded the first prize of Inclusive Gender Equality Champion to South East Technical University (Ireland) for having developed the most innovative inclusive GEP. South East Technical University's gender equality action plan was rewarded for addressing intersections with other social categories such as ethnicity, social origin, sexual orientation and gender identity (LGBTQI+) or disability. Support for inclusive gender equality in R & I continues under the WIDERA 2023–2024 work programme, with new iterations of this prize being already being planned for 2023 and 2024, in commitment to Action 5 of the ERA policy agenda 2022–2024.

Further initiatives within the WIDERA 2023–2024 work programme include the call 'Policy coordination to support all aspects of inclusive gender equality plans and policies in the ERA' (258), which contributes to the development of a sustainable network of national representatives from all Member States and associated countries to support the implementation of the gender equality and inclusiveness objectives of the ERA. In regard to **inclusive R & I content**, the **living lab for gender-responsive innovation** (259), which began in January 2023 and is funded under a 2022 call for proposals, also considers intersectionality in the development of new innovative solutions.

5.4.3. Institutional gender equality plans with intersectional approaches

Institutional GEPs that specifically adopt an intersectional approach and develop concrete actions are not yet widespread in HEIs and research organisations. The explicit rationale behind the majority of institutional plans reviewed for this study is described in terms of EDI, rather than intersectionality. There are nonetheless promising examples of plans adopting an inclusive approach to gender equality and/or equality and diversity at the institutional level that have developed in the past few years and represent a first step towards the development of intersectional approaches to gender equality in R & I. These strategies focus simultaneously on a wide range of personal characteristics and identities with the aim of increasing inclusiveness for students, teachers and staff and eliminating existing discrimination.

⁽²⁵⁷⁾ European Commission (n.d.), 'EU Award for Gender Equality Champions' (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/prizes/eu-award-gender-equality-champions_en).

⁽²⁵⁸⁾ European Commission (n.d.), Policy coordination to support all aspects of inclusive gender equality plans and policies in the ERA' (https://cordis.europa.eu/programme/id/HORIZON_HORIZON-WIDERA-2024-ERA-01-10).

⁽²⁵⁹⁾ European Commission (n.d.), 'Living lab for gender-responsive innovation' (https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-widera-2022-era-01-80).

Box 2. Examples of institutional GEPs informed by intersectional approaches

The Linnaeus University (Sweden) GEP (a) focuses on intersectionality, within which gender lays the foundation for equality policies, but not without consideration of the other identity structures it intersects with to shape individuals' experiences of discrimination and inclusion. This approach acknowledges the complexity of the human condition, where different factors interact with each other (class, gender identity or gender expression, ethnicity, religion or other fundamental belief, functionality, sexual orientation and age).

The University of Bergen (Norway) diversity and inclusion action plan for 2017–2022 (b) commits to promoting equality and diversity at all levels of management, eliminating discrimination and addressing exclusion on the basis of gender, ethnicity, national origin, language, religion and beliefs, functional abilities, sexual orientation, gender identity or age. The strategy aims to review the scientific careers of employees with impaired functional abilities; provide targeted measures for refugees (scholars at risk and students at risk); and promote the use of trainee schemes for people with impaired functional abilities, people with immigrant backgrounds and refugees.

The University of Helsinki (Finland) equality and diversity plan for 2021–2024 (°) focuses on promoting cultural sensitivity, anti-racism, equality of religion and belief, accessibility, special arrangements and equal assessment practices, and the equality of gender and sexual minorities, in addition to multiculturalism, linguistic diversity and equality of age, within the university community. The equality and diversity committee oversees this strategy and monitors and evaluates the progress achieved across three key areas: the promotion of inclusion and a thriving study and work culture; the promotion of equal leadership work; and the promotion of social equality efforts.

The Bocconi University (Italy) inclusive GEP supports the university's strategic plan for 2021–2025 and the honour code for the Bocconi community. The GEP focuses on implementing an integrated approach to increasing the diversity and inclusion of students, staff and faculty, considering gender identity, disability and mental health, sexual orientation, geographical diversity (national/ethnic background) and religion as key diversity markers (d).

The Radboud University (Netherlands) diversity, equity and inclusion strategic plan for 2021–2025 (e) includes gender equality and reducing inequalities among its key priorities, allocating targeted financial and human resources to ensure its implementation and the monitoring of its different areas of action. The plan considers the diversity, equality and inclusion enablers of education, research and impact. Disability, migrant background and refugee status, and LGBTQI+ and gender identity are specifically addressed in the plan. The 2020 diversity, equity and inclusion progress brief highlights that the plan implementation should be informed by intersectionality considerations to help address power imbalances in education and research.

Cyprus University of Technology's equality plan for 2020–2024 (f) aims to fight cross-cutting inequalities and stereotypes that are reproduced on the basis of intersectional aspects, including gender, race, age, minority, disability, sexuality and socioeconomic status. One of the main pillars of the university's equality plan is the integration of gender and intersectionality into the content of research and curricula, with the goal of increasing excellence, accessibility and inclusion in research and teaching through the identification of courses with a significant imbalance of specific groups and intersections of characteristics in the student population, and the introduction of intersectional equality issues in research

methodology.

The Utrecht University (Netherlands) equality, diversity and inclusion strategy and action plan for 2021–2025 (9) aims to increase equality, diversity and inclusiveness in the university by focusing on several diversity markers. The action plan's key objectives, implemented through a variety of activities and operationalised through several related key performance indicators, include enabling a more inclusive curriculum and facilitating integrated reporting of diversity data to gather information about student and staff population by gender, migration background, socioeconomic background and LGBTQI+ and disability characteristics.

The Vilnius University (Lithuania) GEP for 2021–2025 (h) was developed as part of the SPEAR project funded by Horizon 2020. Under the GEP, the university is implementing gender equality measures through its diversity and equal opportunities strategy for 2020–2025 (h), which considers characteristics such as gender, disability and nationality.

The University of Amsterdam (Netherlands) diversity document (!) outlines the university's mission to promote a diverse and inclusive culture, where diversity is considered a key contributor to the quality of teaching and research and academic excellence. The university's inclusive approach recognises and accepts the differences between its students and staff in terms of age, ethnicity, socioeconomic background, sexual orientation, disabilities and chronic illnesses, taking into account these differences and their interconnectedness in teaching and research. It conducts research into the potential negative impact of personnel policy on specific groups, with particular focus on the intersectionality of different characteristics, while promoting good practices in the retention of women, staff members from a migration background and individuals with a disability through an intersectional perspective.

- (a) Linnaeus University (n.d.), 'Gender equality plan' (https://lnu.se/globalassets/block---gemensamma/universitetsledningens-kansli/lika-villkor/gender-equality-plan-2022-en.pdf).
- (b) University of Bergen (n.d.), 'Diversity and inclusion action plan 2017–2022' (https://ekstern.filer.uib.no/ledelse/Handlingsplan Mangfold Inkl ENG.pdf).
- (°) University of Helsinki (2021), 'Equality and diversity plan 2021–2024' (https://www.helsinki.fi/assets/drupal/2021-05/UH Equality Diversity Plan 2021 2024.pdf).
- (d) Bocconi University (2021), 'Inclusive gender equality plan' (https://www.unibocconi.eu/wps/wcm/connect/a956d365-6faa-45b2-8aec-7f740cf0c1f4/Report%2BIGEP.pdf?MOD=AJPERES&CVID=nXzMFGz).
- (e) Radboud University (2022), 'Diversity, equity and inclusion plan (DEI) 2021–2025' (https://www.ru.nl/sites/default/files/2023-01/Plan-DEI-EN-2022.pdf).
- (¹) Cyprus University of Technology (2022), 'Action plan of Cyprus University of Technology (2022–2024)' (https://www.cut.ac.cy/digitalAssets/497/497140_100gender_equality_plan.pdf).
- (9) Utrecht University (2020), 'Strategy and action plan 2021–2025' (https://www.uu.nl/sites/default/files/UU-EDI-Strategy-and-Action-Plan.pdf).
- (h) Vilnius University (2020), 'Vilnius University gender equality plan 2021–2025' (https://www.vu.lt/site_files/Apie_VU/VU_Gender_Equality_Plan_2021-2025.pdf).
- (¹) Vilnius University (2020), 'Vilnius University diversity and equal opportunities strategy 2020–2025' (https://www.vu.lt/site_files/Apie_VU/VU_%C4%AFvairov%C4%97s_ir_lygi%C5%B3_galimybi%C5%B3_2020-2025_met%C5%B3_strategija_EN_v3.pdf.
- (i) University of Amsterdam (2019), 'UvA diversity document' (https://www.uva.nl/en/about-the-uva/about-the-uva/about-the-uva/about-the-university/diversity-and-inclusion/policy-framework/policy-framework.html).

These university-level interventions are promising examples of inclusive strategies and often openly acknowledge intersectionality as a guiding principle. Alongside the approaches outlined above, it is worth highlighting the additional research into EDI and inclusive policy approaches at the institutional level that was previously conducted by two key European umbrella organisations of HEIs: the **EUA** and the **League of European Research Universities** (LERU).

As part of the INVITED (²⁶⁰) project, the EUA gathered quantitative data on the institutional approaches to diversity, equity and inclusion of 159 HEIs in 36 European systems, analysing the content of these strategies, their internal and external drivers, the institutional structures leading the development and promotion of such strategies, and their monitoring. The diversity dimensions most commonly addressed by institutions include **disability**, **gender**, **ethnic/cultural/migration background**, **socioeconomic background**, **sexual identity**, **educational background**, **caring responsibilities**, **religious beliefs and age**. However, most institutional strategies analysed did not include intersectional considerations in their approach. Nonetheless, some institutions recognised the importance of intersectionality and viewed it as the next step forward in their work towards diversity, equality and inclusion (²⁶¹).

In its 2019 report (²⁶²), LERU provides an overview of recent research evidence on EDI issues in academia and of the benefits of strategic EDI and intersectional approaches to universities in order to encourage university leaders to build their capacity to recognise and address the specific challenges of EDI at research institutions. The report also presents several good practices of concrete EDI actions from LERU universities, including engagement from university leadership, communication and training activities, monitoring, and awareness-raising campaigns.

As with previous national-level initiatives, further actions are still needed to support the design of a comprehensive intersectional approach to understanding and addressing the intersection of several personal characteristics and how they shape complex inequalities.

5.5. Monitoring and evaluation of inclusive gender equality actions

In this subsection, we illustrate with several examples the type of monitoring that is done in some of the institutions that have inclusive GEPs or similar measures, as well as the limitations of the monitoring frameworks currently in place. Policy brief 3 provides a concrete list of suggested indicators that would support institutions to further develop their monitoring frameworks.

In some cases, inclusive gender equality measures and GEPs are accompanied by concrete indicators to support their implementation and track progress. Even in such cases,

⁽²⁶⁰⁾ European University Association (n.d.), 'Invited' (<a href="https://www.eua.eu/our-work/projects/eu-funded-projects/invited.html#:~:text=The%20INVITED%20project%20aimed%20to%20support%20universities%20in,frameworks%20empower%20universities%20to%20fulfil%20their%20social%20responsibility).

⁽²⁶¹⁾ Claeys-Kulik, A.-L., Jørgensen, T. E. and Stöber, H. (2019), Diversity, equity and inclusion in European higher education institutions – Results from the Invited project, European University Association, Brussels (https://eua.eu/downloads/publications/web_diversity%20equity%20and%20inclusion%20in%20european%20 higher%20education%20institutions.pdf).

⁽²⁶²⁾ Buitendijk, S., Curry, S. and Maes, K. (2019), *Equality, diversity and inclusion at universities: The power of a systemic approach*, League of European Research Universities, Leuven (https://www.leru.org/files/LERU-EDI-paper_final.pdf).

however, there are limited data available about the implementation process and its impact on intersecting inequalities.

Box 3 includes examples of indicators on which data are collected to measure progress as part of institutional GEPs and institutional approaches towards diversity and inclusion. In all the strategies outlined – with the exception of Maastricht University and the University of Bordeaux, where data are cross-analysed in intersection with other personal characteristics – data are still collected and analysed separately. The data are based on statistics about personal characteristics, survey data and qualitative feedback from staff and students.

Box 3. Examples of intersectional and inclusive data collection strategies

As part of its efforts towards diversity and inclusion, Maastricht University combines genderand nationality-specific data with information that it was already monitoring (a). Maastricht University's academic affairs and human resources departments, in consultation with the diversity an inclusion office, now ensure the inclusion of such data for all scientific positions and non-scientific decision-making positions in the university's biannual strategic personnel reports. This motivates faculty leaders to look at intersectional patterns that may require particular attention within their own faculty.

Under its GEP (^b), the University of Bordeaux commits to collecting robust intersectional data. For this purpose, it launched and oversaw qualitative research to understand potential forms and experiences of intersectional discrimination faced by university staff, researchers and teacher-researchers.

Vilnius University publishes annual monitoring data on gender, disability, age, citizenship, sexual orientation, and religion and belief (°). Data on equal opportunities and diversity started to be collected in 2018. A study of 'Diversity and Equal Opportunities in Vilnius University in 2018–2019' highlighted some key actions areas, including how to prevent sexual harassment and discrimination based on age, nationality, religion, and social and family status, and the need to define and collect data on indicators regarding various grounds for discrimination (d).

As part of its inclusive GEP (e), Bocconi University collected extensive qualitative and quantitative data on the profile of staff and students in order to inform the development of a diversity and inclusion strategy. The data were integrated into the inclusive GEP and include the experiences, perceptions and outcomes of staff and students in relation to their personal characteristics (gender, nationality, gender identity and disability) (f).

The University of Utrecht's strategy and action plan for 2021–2025 (g) sets out the objective of developing the integrated reporting of diversity data about students and staff by gender, migration background, socioeconomic background and LGBTQI+ and disability characteristics. Monitoring and annual reporting on key indicators (e.g. the composition of faculty and department boards, appointments of directors of education and research, academic staff positions from an EDI perspective) is included as a key objective, to measure progress on EDI.

Trinity College Dublin publishes yearly equality monitoring reports (h) that provide statistics in relation to the admissions, recruitment and promotion processes for its students and employees, disaggregated by the nine grounds for discrimination under Irish equality law: age, civil status, disability, ethnicity, family status and gender, membership of the travelling

community, religion, nationality and sexual orientation. Indicative estimates are provided on ethnicity, religion and sexual orientation because of difficulties in collecting and sharing the existing data due to existing data protection regulations.

- (a) Maastricht University (n.d.), 'Gender equality plan' (https://www.maastrichtuniversity.nl/about-um/diversity-inclusivity/gender-equality-plan).
- (b) University of Bordeaux (2022), 'Gender equality plan (2022–2024)' (https://www.u-bordeaux.fr/download_file/force/5d006469-9564-4126-83f6-b89fb0dc2070/1627).
- (°) Vilnius University (n.d.), 'Equal opportunities' (https://www.vu.lt/en/about-vu/equal-opportunities#monitoring-of-diversity-and-equal-opportunities-situation-in-vilnius-university).
- (d) Vilnius University (n.d.), 'Analysis of diversity and equal opportunities in Vilnius University in 2018–2019' (https://www.vu.lt/site_files/Apie_VU/Analysis_of_Diversity_and_Equal_Opportunities_in_Vilnius_University_in_2018-2019_en.pdf).
- (e) Bocconi University (2021), 'Inclusive gender equality plan' (https://www.unibocconi.eu/wps/wcm/connect/a956d365-6faa-45b2-8aec-7f740cf0c1f4/Report%2BIGEP.pdf?MOD=AJPERES&CVID=nXzMFGz).
- (¹) Bocconi University's data are not collected intersectionally due to a lack of sufficient responses, but the university has committed to collecting them intersectionally in the future.
- (9) Utrecht University (2020), 'Strategy and action plan 2021–2025' (https://www.uu.nl/sites/default/files/UU-EDI-Strategy-and-Action-Plan.pdf).
- (h) Trinity College Dublin (2020), 'Equality monitoring report 2019–2020' (https://www.tcd.ie/equality/assets/docs/AEMR/AEMR_2019-20_FINAL.pdf).

The **online survey** conducted for this study also asked respondents to select the **indicators that should be collected** to monitor progress on inclusive GEPs (see Section 3.5 for a more detailed discussion on indicators and a suggested list). Of the online survey respondents, 65 % selected at least one indicator as worth monitoring along with sex- and gender-disaggregated data for the monitoring of inclusive GEPs. The suggested indicators are listed in Table 15.

Table 15. The share of organisations identifying certain indicators for future data collection and analysis in conjunction with sex- or gender-disaggregated data to monitor inclusive GEPs in R & I organisations (n = 189)

Data to be collected to monitor inclusive GEPs and analysed in conjunction with sex- or gender-disaggregated data	Share of organisations
Indicators on country of birth, racial origin, ethnicity and migrant status	46 %
Indicators on disability, e.g. physical, sensory, mental and combined disability	43 %
Indicators on socioeconomic status	42 %
Indicators on family type, including non-heteronormative parents	37 %
Indicators on sexual orientation and gender identity	33 %
Indicators on religion and belief	23 %

NB: Multiple answers were possible.

Source: Survey on gender equality plans in research and innovation organisations implemented from 18 August to 30 September 2022 as part of the study 'Pilot assessment activities for the European Knowledge and Support Facility on gender equality plans in research and innovation organisations', commissioned by DG Research and Innovation.

5.6. Remaining barriers to the take-up and effective implementation of inclusive gender equality plans adopting an intersectional approach

There are a number of barriers that have limited substantive progress in the take-up and effective implementation of an intersectional approach in inclusive GEPs, which are discussed at length in the study's report. They include, among others: the lack of a shared understanding of inclusive approaches to gender equality and GEPs; challenges in understanding and operationalising intersectionality, leading to the consideration of grounds for discrimination in silos rather than in intersection with each other, especially at the level of national legislation (263); theoretical awareness and understanding of the complex intersections between gender and other characteristics and their outcomes for individuals in R & I, but a lack of experience in policy and practice (264); the need for robust, systematically collected and disaggregated data that takes into account intersectional aspects; insufficient financial, human and organisational resources, lacking sustainability; the lack of genuine commitment to achieving inclusive GEP objectives at the level of top leadership of R & I institutions/organisations and accountability for outcomes; fragmented actions supporting inclusive GEP objectives that lack political and policy support; and overall cultural resistance to adopting inclusive measures.

Challenges in **relation to data collection and monitoring of progress on the implementation of inclusive GEPs** in particular (see policy brief 3) include the poor quality of data on various characteristics and/or limited analytical capacities at the organisational level as well as the lack of a clear conceptual framework to guide this analysis in an integrated way; concerns about sensitive data and the protection of privacy, particularly with small datasets; and potential reputational risks to the organisation, including to prospective and current staff and students, when presenting negative outcomes as well as when signalling that sensitive data are collected for analysis (²⁶⁵). Further barriers were identified through the online survey conducted for this study and the dissemination event held on 15 March 2023, including: the legality of certain data collection, particularly regarding ethnicity and religion, in specific national contexts (e.g. ethnic or racial data in Germany due to the use of the country's census data by the Nazis (²⁶⁶), and the lack of records on

⁽²⁶³⁾ These findings were reinforced by the remarks made by panellists during the dissemination event held on 15 March 2023. Ecorys (2023), Dissemination event conducted as part of this study, 'Pilot assessment activities for the European Knowledge and Support Facility on gender equality plans in research and innovation organisations', 15 March.

⁽²⁶⁴⁾ Ibid

⁽²⁶⁵⁾ European Commission, DG Research and Innovation (2022), Approaches to inclusive gender equality in research and innovation (R & I), Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).

⁽²⁶⁶⁾ Although this has now started to change, at the German Research Foundation in particular, with researchers pushing for missing ethnicity data – for more information, see Boytchev, H. (2023), 'Diversity in German science: Researchers push for missing ethnicity data', *Nature* (https://www.nature.com/articles/d41586-023-00955-9).

ethnicity or religion in Norway's administrative data); concerns that gender data collection on sexual orientation, religious belief or family type are inappropriate due to discrimination against these groups; and the lack of a standardised approach in collecting data in different departments of the same institution and difficulties in establishing procedures for the analysis and evaluation of such complex data.

5.7. Conclusions and considerations for further actions

The development of inclusive GEPs and policies is still in the early stages, but there are clear indications that intersectionality is becoming a guiding principle for an increasing number of gender equality policies and plans. The EU-level framework for action and the available financial instruments support this positive trend. Table 16 includes several key recommendations for different target audiences.

Table 16. Recommendations for policymakers and institutions

Target group	Considerations for policy actions
EU-level policymakers (e.g. European Commission, ERA Forum subgroup dedicated to Action 5 – 'Promote gender equality and foster inclusiveness')	 Continue to support the development, effective implementation and adequate monitoring and evaluation of progress of inclusive GEPs. Key actions could include coordinating, guiding and capacity-building activities to enhance knowledge and approaches to inclusive gender equality policies and practices in the R & I sector; enabling mutual learning between governments, organisations and other stakeholders and the sharing of good practice; and enabling access to financial instruments to support sustainable outcomes.
	 Support the expansion of equality data in European R & I, the consistency of monitoring approaches and methodologies and integrated analysis through consultation with key stakeholder groups.
	 Continue dissemination activities on the GEP eligibility criterion in Horizon Europe as well as the focus on expanding the minimum mandatory GEP requirements to the implementation of actions that integrate an intersectional approach to gender equality.
	 Ensure continued and improved coordination with actions and approaches taken at the national/regional level which aim to develop (inclusive) GEPs.
	 While acknowledging limitations linked to data protection, consider ways to collect voluntary and confidential data on the personal characteristics of research teams in Horizon Europe applications and awards, in consultation with key stakeholder groups. Any measures should provide for adequate awareness raising about the purposes of requests to disclose potentially sensitive information.

	 Encourage national authorities, RPOs and RFOs to (1) conduct assessments of gender equality policies and plans and their outcomes on gender equality, and (2) make necessary adjustments to further enable an integrated approach in objectives, actions and data collection and analysis that consider how gender intersects with other characteristics and creates inequalities.
National-level policymakers (e.g. national authorities, national funding bodies)	 Enable national funding instruments to complement EU- level funding streams that support the development, implementation and evaluation of inclusive GEPs.
	 Consider introducing or reviewing national-level policies that are linked to GEPs and can further enable their development and implementation at scale. National-level policies can set favourable conditions for inclusive GEPs (including a conceptual framework discussing intersectionality tailored to the national context) and lead to the higher uptake of inclusive GEPs at the institutional level.
	 Create momentum for the development and effective implementation of GEPs by encouraging collaboration and knowledge exchange between stakeholders at the national level about intersectionality and inclusive GEPs, for instance through involvement in the GENDERACTIONplus project, and through the establishment of working groups or networks where lessons learned, good and less positive practices, challenges and successful approaches can be shared.
	 Support the set-up and improvement of monitoring and evaluation frameworks to track progress in implementing inclusive GEPs, enable lessons to be learned and policies to be readjusted following early and longer-term outcomes and impact. The collection and analysis of data across various diversity markers in an integrated way can enable the development of robust intersectional evidence that can guide equality actions.
Research organisations/institutions, public bodies (e.g. HEIs, RPOs)	 Set up and reinforce existing diversity, equality and inclusion strategies with a view to clarifying the approach to intersectionality and how it is reflected in the actions that implement the strategies, and how any data to track progress is collected and analysed.
	 Assess training needs for staff and students that address inequalities and unconscious biases for gender and other characteristics.

Assess recruitment, retention and progression policies to

- review and revise (if needed) the process, to support equal opportunities for students, researchers and staff with different personal and social characteristics, including at senior levels.
- Review research funding eligibility criteria to incentivise improved consideration of intersectionality in research proposals/projects, as well as identify inequalities in the distribution of research funding and how these can be addressed.
- Participate in the four thematic Knowledge and Support
 Hubs within the INSPIRE project and its three COPs with
 the objective of creating innovative, practice-based
 knowledge across four thematic areas, among which is
 intersectionality.
- A key step for collecting equality data across different personal characteristics (often regarded as sensitive data) will be to ensure the trust of the target groups, which can be addressed through adequate information at organisational/institutional level. Collecting data directly at the institutions will allow self-reported data to be gathered, avoiding national-level constraints.

5.8. Bibliography

Association for Women's Rights in Development (2004), 'Intersectionality: A tool for gender and economic justice', *Women's Rights and Economic Change*, No 9 (https://www.awid.org/sites/default/files/atoms/files/intersectionality_a_tool_for_gender_and_economic_justice.pdf).

Bergen University (n.d.), 'Diversity and inclusion action plan 2017–2022' (https://ekstern.filer.uib.no/ledelse/Handlingsplan Mangfold Inkl ENG.pdf).

Bocconi University (2021), 'Inclusive gender equality plan' (https://www.unibocconi.eu/wps/wcm/connect/a956d365-6faa-45b2-8aec-7f740cf0c1f4/Report%2BIGEP.pdf?MOD=AJPERES&CVID=nXzMFGz).

Buitendijk, S., Curry, S. and Maes, K. (2019), *Equality, Diversity and Inclusion at Universities: The power of a systemic approach*, League of European Research Universities, Leuven (https://www.leru.org/files/LERU-EDI-paper final.pdf).

Claeys-Kulik, A.-L., Jørgensen, T. E. and Stöber, H. (2019), *Diversity, equity and inclusion in European higher education institutions – Results from the Invited project*, European University

Association,

Brussels (https://eua.eu/downloads/publications/web_diversity%20equity%20and%20inclusion%20in%20institutions.pdf).

Committee for Gender Balance and Diversity in Research (n.d.), 'KIF Committee's recommendations for gender balance', Oslo (https://kifinfo.no/en/kif-committees-recommendations-gender-balance).

Council of the European Union, Permanent Representatives Committee (2021), Conclusions on the future governance of the European research area (ERA), Brussels, 19 November (https://data.consilium.europa.eu/doc/document/ST-14126-2021-INIT/en/pdf).

Cyprus University of Technology (2022), 'Action plan of Cyprus University of Technology (2022–2024)'

(https://www.cut.ac.cy/digitalAssets/497/497140_100gender_equality_plan.pdf).

Ecorys (2022), Pilot assessment activities for the European Knowledge and Support Facility on gender equality plans in research and innovation organisations – Draft analytical impact report.

Ecorys (2023), Dissemination event conducted as part of this study, 'Pilot assessment activities for the European Knowledge and Support Facility on gender equality plans in research and innovation organisations', 15 March.

EIGE (n.d.), 'France' (https://eige.europa.eu/gender-mainstreaming/countries/france).

EIGE (n.d.), 'Intersectionality' (https://eige.europa.eu/thesaurus/terms/1263).

ERAC SWG GRI (2021), *Gender Equality Plans as a Catalyst for Change*, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

European Commission (n.d.), 'Assessment and implementation of agriculture and life science universities' first gender equality plans in widening countries' (https://cordis.europa.eu/project/id/101094158).

European Commission (n.d.), 'Building gender equality through gender budgeting for institutional transformation' (https://cordis.europa.eu/project/id/101094391).

European Commission (n.d.), 'EU Award for Gender Equality Champions' (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/prizes/eu-award-gender-equality-champions_en).

European Commission (n.d.), 'European Centre of Excellence on Inclusive Gender Equality in Research and Innovation: Creating knowledge and engaging in collaborative action' (https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/org-details/999999999/project/101058537/program/43108390/details).

European Commission (n.d.), 'Living lab for gender-responsive innovation' (https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-widera-2022-era-01-80).

European Commission (n.d.), 'Policy coordination to support all aspects of inclusive gender equality plans and policies in the ERA' (https://cordis.europa.eu/programme/id/HORIZON HORIZON-WIDERA-2024-ERA-01-10).

European Commission (n.d.), 'Securing sports education through innovative and inclusive gender equality plans' (https://cordis.europa.eu/project/id/101094529).

European Commission (n.d.), 'Support to the implementation of inclusive gender equality plans' (https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-widera-2024-era-01-11).

European Commission (2020), Commission communication – A new ERA for research and innovation (COM(2020) 628 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0628&gid=1630498105830).

European Commission (2020), Commission communication – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

European Commission, DG Research and Innovation (2019), *ERA Progress Report 2018 – Data gathering and information for the 2018 ERA monitoring – Technical report*, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/b9dcaeb4-34c5-11e9-8d04-01aa75ed71a1/language-en/format-PDF/source-search).

European Commission, DG Research and Innovation (2021), *European Research Area Policy Agenda – Overview of actions for the period 2022–2024*, Publications Office of the European Union, Luxembourg (https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf).

European Commission, DG Research and Innovation (2021), 'Horizon Europe – Widening participation and spreading excellence across Europe – Boosting research and innovation performance throughout the Union', Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/229120).

European Commission, DG Research and Innovation (2021), She Figures 2021 – Gender in research and innovation – Statistics and indicators, Publications Office of the European

Union, Luxemburg (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1).

European Commission, DG Research and Innovation (2022), *Approaches to inclusive gender equality in research and innovation (R & I)*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/004694).

European University Association (n.d.), 'Invited' (https://www.eua.eu/our-work/projects/eu-funded-

<u>projects/invited.html#:~:text=The%20INVITED%20project%20aimed%20to%20support%20universities%20in,frameworks%20empower%20universities%20to%20fulfil%20their%20social%20responsibility).</u>

Federal Ministry of Education and Research (2021), 'Bekanntmachun' (https://www.bmbf.de/bmbf/shareddocs/bekanntmachungen/de/2021/08/2021-08-19- Bekanntmachung-Mint.html).

Federal Ministry of Education, Science and Research (n.d.), National strategy on the social dimension of higher education – Towards more inclusive access and wider participation, Vienna (https://www.bmbwf.gv.at/dam/jcr:e7d0d22f-8b28-431f-969a-1657c91ca734/National Strategy BF english.pdf).

Federal Ministry of Education, Science and Research (n.d.), 'Universities' https://www.bmbwf.gv.at/en/Topics/Higher-education---universities.html).

Federal Ministry of Education, Science and Research (2018), *Austrian National Development Plan for Public Universities 2019–2024*, Vienna (https://www.bmbwf.gv.at/dam/jcr:dd33ff38-f6c4-406f-84be-ed2a64db4d6d/GUEP 2019-2024-EN Version 2017.pdf).

Genderactionplus (2022), 'We are back as Genderactionplus!' (https://genderaction.eu/we-are-back-as-genderactionplus/).

Government of the Netherlands (2020), 'National action plan for greater diversity and inclusion in higher education and research', The Hague (https://www.government.nl/documents/reports/2020/09/01/national-action-plan-for-greater-diversity-and-inclusion-in-higher-education-and-research).

Maastricht University (n.d.), 'Gender equality plan' (https://www.maastrichtuniversity.nl/about-um/diversity-inclusivity/gender-equality-plan).

Magnus Hirschfeld Foundation (n.d.), 'About the foundation' (https://mh-stiftung.de/about-the-foundation/).

Maynooth University (n.d.), 'STEM Passport for Inclusion' (https://www.maynoothuniversity.ie/all-institute/all-projects/stem-passport-inclusion).

Ministry of Higher Education and Research (2020), 'Installation du Comité stratégique "Diversité sociale dans l'enseignement supérieur", Paris (https://www.enseignementsuperieur-diversite-sociale-dans-lenseignement-superieur-46892).

Ministry of Higher Education and Research (2021), 'Le guide "Lutter contre la haine et les discriminations anti-LGBT+ dans l'enseignement supérieur et la recherche", Paris

(https://www.enseignementsup-recherche.gouv.fr/fr/le-guide-lutter-contre-la-haine-et-les-discriminations-anti-lgbt-dans-l-enseignement-superieur-et-la-49280).

Palmén, R. (2021), 'ACT on intersectionality', Zenodo (http://doi.org/10.5281/zenodo.5602859).

Radboud University (2022), 'Diversity, equity and inclusion plan (DEI) 2021–2025' (https://www.ru.nl/sites/default/files/2023-01/Plan-DEI-EN-2022.pdf).

Slovenian Presidency of the Council of the European Union (2021), Ljubljana Declaration – Gender equality in research and innovation (https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/PSEU/Ljubljana-Declaration-on-Gender-Equality-in-Research-and-Innovation-endorsed final.pdf).

University of Amsterdam (2019), 'Diversity policy of the University of Amsterdam' (https://www.uva.nl/en/about-the-uva/about-the-university/diversity-and-inclusion/policy-framework.html).

University of Bordeaux (2022), 'Gender equality plan (2022–2024)' (https://www.ubordeaux.fr/download file/force/5d006469-9564-4126-83f6-b89fb0dc2070/1627).

Utrecht University (2020), 'Strategy and action plan 2021–2025' (https://www.uu.nl/sites/default/files/UU-EDI-Strategy-and-Action-Plan.pdf).

Vilnius University (n.d.), 'Analysis of diversity and equal opportunities in Vilnius University in 2018–2019'

(https://www.vu.lt/site files/Apie VU/Analysis of Diversity and Equal Opportunities in Vi Inius_University_in_2018-2019_en.pdf).

Vilnius University (n.d.) 'Equal opportunities' (https://www.vu.lt/en/about-vu/equal-opportunities#monitoring-of-diversity-and-equal-opportunities-situation-in-vilnius-university).

Vilnius University (2020), 'Vilnius University diversity and equal opportunities strategy 2020–2025'

(https://www.vu.lt/site_files/Apie_VU/VU_%C4%AFvairov%C4%97s_ir_lygi%C5%B3_galimybi%C5%B3_2020-2025_met%C5%B3_strategija_EN_v3.pdf).

Vilnius University (2020), 'Vilnius University gender equality plan 2021–2025' (https://www.vu.lt/site files/Apie VU/VU Gender Equality Plan 2021-2025.pdf).

6. Policy brief 6. The role of organisational structure in ensuring the effective development and implementation of gender equality plans

6.1. Summary

The objective of this policy brief is to provide an overview of the role of organisational structure (267) within R & I organisations in ensuring the effective development and implementation of GEPs. Focusing on three issues, this policy brief will first consider the practical key factors in GEP development and implementation, followed by a discussion of organisational structures and practices which support the effective development and implementation of GEPs. The policy brief will then present how internal and external organisational networks can be a key factor for the successful and sustainable implementation of GEPs. Finally, this policy brief will present its conclusions and policy recommendations. The summary of the key issues and policy recommendations includes the following.

- Key factors in developing and implementing GEPs include human, financial or other resources. These are needed to support the planning and implementation of GEPs and are essential for the sustainability of gender equality policies and plans.
- Implementing structures of gender equality in complex systems requires long-term practices. Previous work through the Horizon 2020 CASPER project (268) (also referenced in policy brief 2) proposed indicators, known as 'impact drivers', for assessment related to the impact of GEP implementation. This impact driver model acts as a tool for (self-)assessing the sustainable implementation of gender equality structural transformation in RPOs. The developed list of 12 impact drivers specifically includes the indicators on organisational structure and organisational governance and provides examples of good practice.
- Senior leadership is essential in supporting sustainable GEP implementation, linking to
 policy brief 7 which is focused on the role of support from senior leadership in GEP
 development and implementation.
- COPs have been identified as one good practice that facilitates organisational memory and knowledge sharing. Institutional- and national-level good practice examples of networking demonstrate ways in which internal and external networks can facilitate GEP development and implementation through capacity building and problem solving.
- Policy recommendations are targeted towards EU- and national-level policymakers as well as research organisations, HEIs and public bodies. They include funding or facilitating initiatives that build gender competences across all stakeholders, providing

_

⁽²⁶⁷⁾ Organisational structures within this policy brief are considered within the context of GEP development and implementation and include how activities are coordinated, the structure of designated roles and responsibilities within an organisation, the involvement of senior management, and having designated structures such as bodies or units responsible for the progress of GEPs.

⁽²⁶⁸⁾ Mergaert, L., Cacace, M. and Linková, M. (2022) 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', Social Sciences, Vol. 11, No 9, p. 379. (https://www.researchgate.net/publication/362912860 Gender Equality Impact Drivers Revisited Assessing Institutional Capacity in Research and Higher Education Institutions).

guidance on resource allocation for GEP development and implementation, supporting networking to encourage knowledge sharing related to effective organisational structure and sustainable transformation, and creating actionable steps to embed gender equality principles within organisational structures.

6.2. Background and relevance / scope of the problem

With the launch of Horizon Europe and its newly introduced eligibility criterion, HEIs, research organisations and public bodies from Member States and associated countries must have GEPs in place for funding calls. Consequently, in 2022 there was an increase in organisations developing and implementing GEPs in order to access this key funding for R & I. The sustainable implementation of GEPs ensures their longevity and commitment to long-term gender-equal structural change. Establishing gender equality structures in R & I organisations depends on having an organisational structure in place that can effectively facilitate the implementation of GEP through the appropriate allocation of resources and support.

The EIGE gender mainstreaming toolkit on institutional transformation (269) provides guidance on establishing gender mainstreaming support structures for institutional transformation and highlights that support should be embedded within organisational structures (270). While the EIGE gender mainstreaming toolkit is aimed towards institutions in the public sector with governing executive power (e.g. ministries), the principles for effective gender mainstreaming and institutional change can be similarly applied to GEP work. Examples of recommended organisational structures that can support GEP development and implementation include the direct involvement of senior management, monitoring processes, and establishment of a separate or decentralised unit/body, such as assigned gender equality officers or teams (271). Similar recommendations are indicated in the GEAR tool, which is specifically aimed at research and academia and provides resources for GEP development and implementation (272). Within the context of this policy brief, organisational structure that can ensure the effective development and implementation of GEPs is considered to be that in which gender equality work can be embedded within organisational hierarchy. This structure can more effectively engage all stakeholders, delegate GEP work and facilitate sustainable GEP implementation through organised procedures, responsibilities and accountability (273) (274).

Undertaking gender equality work without a supporting organisational structure can hinder the development and progress of the work. One issue is that GEP development and

⁽²⁶⁹⁾ EIGE (n.d.), 'Gender institutional transformation' (https://eige.europa.eu/gender-mainstreaming/toolkits/gender-institutional-transformation).

⁽²⁷⁰⁾ EIGE (2016), Institutional Transformation – Gender mainstreaming toolkit, Publications Office of the European Union, Luxembourg (https://eige.europa.eu/sites/default/files/documents/mh0716094enn.pdf).

^{(&}lt;sup>271</sup>) Ibid.

⁽²⁷²⁾ EIGE (n.d.), 'Gender Equality in Academia and Research – GEAR tool' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear).

⁽²⁷³⁾ EIGE (n.d.), 'Success factors for gender equality plan development and implementation' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/success-factors-realising-gender-equality-plan).

⁽²⁷⁴⁾ Mergaert, L., Cacace, M. and Linková, M. (2022) 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', Social Sciences, Vol. 11, No 9, p. 379. (https://www.researchgate.net/publication/362912860 Gender Equality Impact Drivers Revisited Assessing Institutional Capacity in Research and Higher Education Institutions).

implementation work is often disproportionately allocated, falling to committed volunteers whose work goes unrecognised and unrewarded (275). Relying on a few dedicated individuals can undermine the stability of GEP implementation as it is dependent on those individuals maintaining their motivation or role in the organisation (276). Moreover, when there are no clearly assigned roles, responsibilities or accountability for GEP development and implementation, this might result in a lack of formal recognition of the work within the organisation (277). Even when GEPs are signed off on by senior leadership, those implementing GEPs can face resistance from various stakeholders, and the lack of cooperation and coordination of an organisation can limit institutional change (278).

An absence of dedicated resources has been highlighted as an organisational barrier to implementing GEPs (²⁷⁹). Insufficient financial resource allocation impedes the progress of GEPs, and funds are not always easily available or sustained, particularly when GEP work is not formally recognised or included in structural processes. Committing financial and human resources is integral to the successful implementation of GEPs. Having adequate and sustained resources can greatly support the planning, promotion and mobilisation of collaborative efforts across organisations (²⁸⁰).

Without the appropriate expertise, collaboration and common understanding, GEP development and implementation can be challenging, even when organisational structures support participatory and inclusive practices. Building and having access to organisational networks of internal and external actors can provide additional support to GEP work, facilitating action and capacity building, and expanding available resources, such as expertise (²⁸¹). Strengthening opportunities to network supports the ERA objective for inclusive GEPs at the geographic and sectoral levels by ensuring that countries can collaborate and share knowledge and experience across organisations and borders (²⁸²). Efforts to implement GEPs can be undermined when national policy or culture and

⁽²⁷⁵⁾ As indicated by multiple RPO and RFO stakeholders, interviews conducted online, September 2022. See also: Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

⁽²⁷⁶⁾ Interview with an RPO stakeholder, conducted online, September 2022.

⁽²⁷⁷⁾ Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

^{(&}lt;sup>278</sup>) Ibid.

⁽²⁷⁹⁾ EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality plans.pdf).

⁽²⁸⁰⁾ EIGE (2022), 'Gender equality plans in academia and research: Roadmap to effective implementation' (https://eige.europa.eu/publications/gender-equality-plans-academia-and-research-roadmap-effective-implementation).

⁽²⁸¹⁾ Cacace, M., Balahur, D., Bleijenbergh, I., Falcinelli, D., Friedrich, M. and Schmidt, E. K. (2015), Structural transformation to achieve gender equality in science – Guidelines, Deliverable No 8.3 (https://eige.europa.eu/sites/default/files/guidelines_stages_4.pdf).

⁽²⁸²⁾ European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg (https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf).

organisational measures to advance gender equality are not compatible (²⁸³). Engagement at the EU, national and sectoral levels can alleviate some of the challenges faced in organisations where the sociopolitical climate of their countries does not align with the objectives of their GEP (²⁸⁴).

6.3. Evidence base and key sources of information

The primary sources of information that inform this policy brief include stakeholder interviews, survey data and consultation with key experts in the field of GEPs to validate our findings and provide insights on the policy brief. The secondary sources of information include the review of relevant literature, such as reports from EIGE, the European Commission and Horizon 2020 projects such as TARGET and ACT. These sources provide guidance, success factors and findings on GEP implementation in R & I. Additional sources are referenced in the footnotes. Table 17 provides an overview of the key sources used to inform this policy brief.

Table 17. Sources of information

Primary sources of information				
Type of source	Description			
Interviews with key stakeholders	Interviews with over 70 key stakeholders:			
	EU-level institutions/policymakers			
	 researchers in academic institutions / research communities in the EU 			
	European research associations and universities			
	national R & I agencies and organisations			
	 public and private RFOs 			
	• public and private RPOs.			
Online survey on 'Gender equality plans in research and innovation organisations' (<i>n</i> = 303). For more details, see Annex 2 of the main report for this study	Survey on 'Gender equality plans in research and innovation organisations' implemented on 18 August–30 September 2022. The online survey (non-representative sample) was conducted among public and private RPOs (with an educational component such as teaching being one of the activities an organisation undertakes, as well as research), public RFOs, ministries and other national or regional			

⁽²⁸³⁾ Target (2021), 'Successful GEP implementation depends on national frameworks: Institutional engagement alone is not enough' (https://www.gendertarget.eu/2021/11/30/successful-gep-implementation-depends-on-national-frameworks-institutional-engagement-alone-is-not-enough-target-geecco-policy-brief/).

149

_

^{(&}lt;sup>284</sup>) Ibid.

	authorities. The survey included targeted questions that specifically addressed the allocation of resources to GEPs and organisational structure associated with GEPs. The analysis of the survey findings was used to shape and inform the content of this policy brief.			
Expert consultation	The steering group of this study, made up of experts in the field of gender equality in R & I, has reviewed and provided input to this policy brief.			

Secondary sources of information

Type of source	Description
Background information and publications	 EIGE, 'Gender equality plans in academia and research: success factors and obstacles' (a)
	 EIGE, 'Gender equality plans in academia and research: roadmap to effective implementation' (b)
	 European Commission, Horizon Europe Guidance on Gender Equality Plans (°)
	 GENDERACTION Guidance for national and regional authorities for the creation and implementation of the European Commission GEP requirements' (d)
	TARGET Results of and lessons learned (e)
	 Thomson, A. et al., 'Fostering collaborative approaches to gender equality interventions in higher education and research: the case of transnational and multi-institutional COPs' (f)
	Campanini Vilhena, F. et al., Twitter #SpeedUpChange Campaign Celebrating 11th of February 2021 (9)

- (a) EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality plans.pdf).
- (b) EIGE (2022), 'Gender equality plans in academia and research: Roadmap to effective implementation' (https://eige.europa.eu/publications/gender-equality-plans-academia-and-research-roadmap-effective-implementation).
- (°) European Commission, DG Research and Innovation (2021), Horizon Europe Guidance on Gender Equality Plans, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).
- (d) Genderaction (2021), 'Guidance for national and regional authorities for the creation and implementation of the European Commission GEP requirements', Deliverable No 5.4 (https://genderaction.eu/wp-content/uploads/2021/12/741466 Guidance-on-GEP-implementation-fornational-authorities-in-MS.pdf).
- (e) Target (2021), 'Results of and lessons learned from Target' (https://irihs.ihs.ac.at/id/eprint/5960/1/wroblewski-2021-results-lessons-target.pdf).

- (¹) Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).
- (9) Campanini Vilhena, F., Ezquerechocha Diez, M., García Muñoz, I., López Belloso, M., Fernández, L., Sanz, B., et al. (2021), Twitter #SpeedUpChange Campaign Celebrating 11th of February 2021, Genderaction and Gearing Roles (https://gearingroles.eu/wp-content/uploads/2021/06/11-Feb-2021-Campaign-Report-16.06-final-version.pdf).

6.4. Resources as enabling and challenging factors in gender equality plan development

This section examines the practical key enabling factors for developing and implementing GEPs, which include human, financial or other resources (e.g. information technology resources, institutional premises and equipment for training). These resources are needed to support the planning and implementation of GEPs and, vitally, ensure the sustainability of gender equality policies and plans (²⁸⁵). Understanding the enabling factors and potential challenges of GEP development is crucial to the effective and sustainable implementation of policies.

The online survey on 'Gender equality plans in research and innovation organisations' conducted for this study (286) provides further insights into the allocation of resources dedicated to GEPs by different organisations in both the development and implementation stages. Respondents to the survey (n = 303) included representatives of public and private HEIs (59 %), public and private RPOs (21 %), RFOs (7 %), regional authorities (4 %) and others (10 %). The majority of respondents indicated that their organisations are located within the countries that had joined the EU by 2004, excluding the United Kingdom (EU-14) (60 %) while the remainder are located in the countries that joined the EU from 2004 onwards (EU-13) (29 %) and non-EU countries (11 %). Moreover, 55 % of respondents indicated that their organisations have under 1 000 employees, while almost a third of respondents' organisations (31 %) have between 1 000 and 5 000 employees, and only 14 % have over 5 000 employees.

Our survey revealed that the most significant barriers encountered when implementing GEPs were primarily associated with a lack of or limited resources, both human (a limiting factor for 44 % of respondents) and financial (45 % of respondents). Results from the survey reveal that the allocation of financial and human resources greatly varies across the organisations surveyed. Larger organisations, such as HEIs with over 250 employees, tend to dedicate more human resources to both the development and implementation of GEPs. Over 85 % of respondents indicated that human resources played a pivotal role in GEP-related efforts. In comparison, smaller organisations, such as public and private RPOs, allocate fewer resources. The survey also highlighted significant variations in the costs and time invested in GEP development and implementation across organisations.

(286) Survey on gender equality plans in research and innovation organisations implemented from 18 August to 30 September, 2022.

⁽²⁸⁵⁾ EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality plans.pdf).

Financial resources play a critical role in the development of GEPs as they enable the acquisition of other essential resources such as information technology resources. institutional premises and equipment for training. While some countries, such as Switzerland and Ireland, have established national funding schemes for the development of GEPs, this is often not the case (287). However, there are alternative funding opportunities, notably through EU-funded projects, that support GEP development. For example, our survey demonstrated that organisations that participated in EU-funded projects (specifically, the FP7 Science in Society and/or the Horizon 2020 Science with and for Society work programmes) related to GEPs or received external funding to support the implementation of GEPs dedicated more human resources compared with those that did not receive such funding or engage in such projects. As another example, financial support from structural funds as part of the EU cohesion policy can be utilised by Member States to support the development and implementation of GEPs. Funding for RPOs from the Czech operational programme Research, Development and Education (288), funded through the European Social Fund and European Regional Development Fund, was taken up by many RPOs in Czechia and was the first step in promoting gender equality within these organisations (289). Moreover, the Technology Agency of the Czech Republic cited that its collaboration with the Horizon 2020-funded Geecco project (290) and the access to funding through the project acted as a catalyst for the RFO to implement gender equality actions (291). The Horizon 2020-funded project SPEAR (292) was similarly referenced as the key facilitating factor in implementing a GEP at Vilnius University (293), enabling access to funding and international networks.

Finally, the survey showed that organisations that introduced GEPs before 2012 dedicated more human resources during their development stage (70 % versus 58 %) and more time and money (over € 90 000) towards the implementation of their GEPs, compared with those that introduced GEPs after 2012 (²⁹⁴). Importantly, other factors might also influence the resources spent (e.g. size of organisation, motivation to have impactful GEP) and the underlying factors contributing to these variations remain uncertain. An additional factor that could also influence the disparities of resources spent could be the limited availability of

⁽²⁸⁷⁾ ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

⁽²⁸⁸⁾ Ministry of Education, Youth and Sports of the Czech Republic (2021), *Programme Johannes Amos Comenius* (2021–2027), Prague (https://opvvv.msmt.cz/download/file5940.pdf).

⁽²⁸⁹⁾ Interview with an RFO stakeholder, conducted online, September 2022.

⁽²⁹⁰⁾ European Commission (n.d.), 'Gender equality in engineering through communication and commitment' (https://cordis.europa.eu/project/id/741128).

⁽²⁹¹⁾ Interview with an RFO stakeholder, conducted online, September 2022.

⁽²⁹²⁾ European Commission (n.d.), 'Supporting and implementing plans for gender equality in academia and research' (https://cordis.europa.eu/project/id/824544).

^{(&}lt;sup>293</sup>) Interview with a HEI stakeholder, conducted online, September 2022.

⁽²⁹⁴⁾ A causal link between year and resources was out of the scope of this study and thus was not tested. The information presented is based on survey results showing differences in the resources spent by different groups based on the year of GEP establishment and supported by the interviews showing that the early implementation of a GEP was resource intensive because of a lack of guidance and knowledge.

guidance and information regarding GEP development and implementation in the past, leading to a resource-intensive trial-and-error approach (²⁹⁵).

The survey findings indicate that organisations with a monitoring structure in place for GEP implementation or those that have established a specific institutional structure to oversee GEP implementation allocate more human resources to the development and implementation of GEPs compared to organisations that have not established such mechanisms or structures. Although the presence of dedicated GEP-related structures does not necessarily imply an increase in human resources, nor does it account for the invisible and unrecognised GEP work (such as those who sacrifice other work obligations or volunteer their personal time (296)) that may still occur, it does suggest that having dedicated GEP-related structures can facilitate the recognition and appropriate allocation of GEP work and the necessary human resources. However, relying solely on dedicated structures is not sufficient to guarantee the effective implementation of GEPs. Stakeholder perceptions revealed that even when resources are allocated to GEPs, they are not always accessed or promoted to their full potential (297). For example, one stakeholder from an RFO highlighted that not all staff members were consistently aware of the resources available to them as part of gender equality measures, such as childcare funds or procedures for reporting harassment. Therefore, it is essential to enhance the visibility and promotion of GEP activities throughout the entire organisation, even when resources are readily available.

6.5. The state of play of organisational structures established to develop and implement gender equality plans

The introduction of the GEP eligibility criterion, which is a prerequisite for accessing Horizon Europe funding, has prompted certain research organisations to speedily create and implement GEPs, or revise existing gender equality policies, to meet the basic criteria (²⁹⁸). Essentially, the four mandatory GEP requirements (building blocks) encompass (1) the publication of a formal GEP on the organisation's website, (2) dedicated resources and expertise on equality within the organisation, (3) the collection and monitoring of sex- and gender-disaggregated data and (4) awareness raising and training (²⁹⁹). As the practical key enabling factors have been discussed, this section will explore how organisational structure can be more broadly considered in gender equality structural transformation.

⁽²⁹⁵⁾ Insights from an Irish RPO stakeholder highlight the early engagement of their organisation in GEP development and implementation, which required them to independently explore implementation processes (interview conducted in September 2022).

⁽²⁹⁶⁾ As indicated by multiple RPO and RFO stakeholders, interviews conducted online, September 2022. See also: Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J, et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

⁽²⁹⁷⁾ Interview with an RFO stakeholder, conducted online, September 2022.

⁽²⁹⁸⁾ Interview with an RPO stakeholder, conducted online. September 2022.

⁽²⁹⁹⁾ Genderaction (2021), 'Guidance for national and regional authorities for the creation and implementation of the European Commission GEP requirements', Deliverable No 5.4 (https://genderaction.eu/wp-content/uploads/2021/12/741466 Guidance-on-GEP-implementation-for-national-authorities-in-MS.pdf).

6.5.1. Commonalities of gender equality structures

While some organisations are still in the process of or have recently adopted formal GEPs. it is essential to consider the commonalities of structures dedicated to gender equality in organisations that have already implemented GEPs. These include gender-equalityspecific institutional structures such as a gender equality committee, a working group, a single gender equality officer (as part of organisational leadership or at lower levels of an organisation), a dedicated office for gender equality, or a team. Survey results provide further insights in this regard, revealing that 79 % of respondent organisations established a specific institutional structure (e.g. gender equality office(r), working group on gender equality, etc.) to implement their GEP, while 17 % did not. Importantly, reasons given in the survey for why specific structures had not been established included the presence of preexisting structures, such as a diversity office, to which the GEP could be delegated. Another reason was the possibility of assigning the GEP to a team already working on gender issues. Lack of sufficient funds and resources to support a dedicated GEP implementation structure was another factor explaining the lack of a specific structure. In some cases, establishing a GEP was not a priority for the organisation or there was a lack of political willingness to create a dedicated structure for the GEP. The survey finds that the implementation of GEPs is sometimes undervalued in terms of resource allocation. In addition, resources are sometimes not allocated directly to GEP implementation but instead to more general departments, such as diversity and equality offices, which absorb the allocated resources. This can mean that GEP implementation is not effectively prioritised as a standalone issue within these departments.

Gender equality committees and working groups for gender equality emerged as the most commonly established institutional structures to implement GEPs (39 % each), followed by the creation of a gender equality officer position or equivalent at a lower level in the organisation (27 %) and the creation of an office for gender equality or equivalent (26 %). Organisations that participated in EU-funded projects related to GEPs displayed a higher tendency to establish an office for gender equality or equivalent (28 %); a gender equality officer position or equivalent, as part of the organisation's leadership team (30 %); and a gender equality team (28 %). In contrast, organisations that did not participate in EU-funded projects had lower rates of establishing these structures (18 %, 20 % and 14 % respectively). Participating in EU-funded projects presents an opportunity for organisations to access additional financial resources dedicated to building gender-focused organisational structures for GEP implementation. These funds can support the establishment and functioning of dedicated offices, officer positions and teams that drive gender equality efforts within the organisation.

Moreover, organisations that adopted their first GEP before 2012 were more inclined to establish an office for gender equality or equivalent (55 % compared with 22 %), a gender equality officer position or equivalent at a lower level in the organisation (52 % compared with 21 %), and a gender equality committee (70 % compared with 32 %). In contrast, they were less likely to create a working group on gender equality (18 % compared to 44 %) compared to organisations that adopted their GEP at a later stage. These survey findings suggest that organisations with a longer-established GEP have learned over time about the importance of specific gender equality structures in supporting GEP implementation. On the other hand, organisations with more recently adopted GEPs might be underestimating the resources required for effective implementation or facing limitations in resource allocation.

6.5.2. How organisational structure supports GEP development and implementation

The sustainable implementation of GEPs requires consideration of the structural components of an organisation, which can either facilitate or hinder change (300). One approach to framing the negotiation of structural transformation is to consider change across four levels: the interpretive level (creating awareness, building capacity, establishing a shared understanding of the problem); the symbolic level (improving the visibility of women in science, eliminating harmful stereotypes, supporting gender-sensitive language initiatives); the institutional level (changing norms and procedures, renewing structures, building new associations such as women's networks); and the operational level (translating goodwill into timely and effective actions, such as monitoring, problem solving and accountability) (301).

Considered approaches should be made to GEP implementation across the four levels to ensure that organisational structures are well equipped to support the implementation of GEPs. In the past it has been suggested that GEP work can be dealt with as a box-ticking exercise (302). GEPs and policies should be effectively integrated and implemented at all levels of the organisational structure, including top leadership, administrative roles, research staff and student body.

Highlighting good-practice examples of institutional change, the Horizon 2020–funded Casper project developed and tested the impact driver model, geared towards the institutional change processes of gender equality. The Impact Driver model consists of 12 indicators (303) designed for the (self-)assessment of the impact and sustainable implementation of GEPs. Impact drivers cover a broad perspective of the landscape of an organisation's hierarchy and processes (304). Several of the impact drivers directly relate to

_

⁽³⁰⁰⁾ Mergaert, L., Cacace, M. and Linková, M. (2022), 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', *Social Sciences*, Vol. 11, No 9, p. 379 (https://www.mdpi.com/2076-0760/11/9/379).

⁽³⁰¹⁾ For more information see: Cacace, M., Balahur, D., Bleijenbergh, I., Falcinelli, D., Friedrich, M. and Schmidt, E. K. (2015), Structural transformation to achieve gender equality in science – Guidelines, Deliverable No 8.3 (https://eige.europa.eu/sites/default/files/guidelines_stages_4.pdf).

⁽³⁰²⁾ Stakeholder interviews, conducted online, September 2022. See also: Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', Journal of Gender Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804); Mergaert, L., Cacace, M. and Linková, M. (2022), 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', Social Sciences, Vol. 11, No 9, p. 379 (https://www.mdpi.com/2076-0760/11/9/379).

⁽³⁰³⁾ The complete list of identified impact drivers is as follows: (1) core team of change agents, (2) capacity/skills of the change agents for driving institutional change for gender equality, (3) leadership actively committed to gender equality / gender-mainstreaming, (4) availability of resources, (5) data collection and statistical analysis, (6) involvement of internal stakeholders, (7) involvement of external stakeholders and experts, (8) coverage of different dimensions/areas of gender equality institutional change, (9) transparency and accountability, (10) institutional policymaking based on a robust understanding of gender equality, (11) organisational culture and (12) organisational governance. See also: Mergaert, L., Cacace, M. and Linková, M. (2022), 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', Social Sciences, Vol. 11, No 9, p. 379 (https://www.mdpi.com/2076-0760/11/9/379).

⁽³⁰⁴⁾ Mergaert, L., Cacace, M. and Linková, M. (2022), 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', *Social Sciences*, Vol. 11, No 9, p. 379 (https://www.mdpi.com/2076-0760/11/9/379).

organisational structure. These range from active and committed leadership, availability of resources, transparency and accountability to organisational culture and governance. Within the scope of organisational structure, this policy brief touches upon several of the identified impact drivers which are discussed in more detail throughout the brief. Impact drivers can provide guidance on the broad qualitative indicators needed to assess and establish organisational structural change.

Inequalities are entrenched across many organisational levels and procedures, as described above. Institutional and cultural change requires a broad scope and can take a long time to materialise (305). GEPs and associated policies which are limited in scope and do not provide long-term actionable goals will not be able to change such complex systems and cultures (306). The Horizon 2020–funded TARGET project recommends that 'slowing down the process' can be used as a strategy to encourage sustainable change and overcome resistance within organisations. At the organisational governance level, this could comprise ensuring the consistent and long-term prioritisation of gender equality, which can often be overlooked when resetting organisational goals. Moreover, at an operational level, gender equality actions can face resistance if gender equality is not expressed as an organisational value (307). This might be alleviated through a more considered and 'slower' approach to change the culture. As an impact driver, organisational culture involves expressing gender equality as an organisational value, both formally and informally. Change in organisational culture should be considered integral to the sustainable implementation of GEPs and a means of overcoming potential resistance to GEPs (308).

The TARGET project highlights the importance of establishing strong structures for gender equality in successfully implementing GEPs (³⁰⁹). Securing approval for a GEP from the organisation's governing bodies is a pivotal aspect. Furthermore, active commitment from leadership is identified as an impact driver, as it signals that gender equality is a priority. This commitment should be formally expressed in agendas or strategic documents, reflected in the public discourse of leaders, and demonstrated visibly by leadership (³¹⁰).

In addition to the impact drivers already mentioned, there are other factors that can incentivise the transformation of organisational structures to better support GEP development and implementation. RFOs have the ability to foster a **gender equality and gender friendly research culture** within the institutions they fund. For example, the German Research Foundation introduced voluntary self-commitments for its member organisations to adopt gender equality policies in line with their own policies. This is achieved through the implementation of the research-oriented standards on gender equity and diversity. Furthermore, the German Research Foundation employs a focused monitoring and evaluation framework that enables them to provide evidence-based

⁽³⁰⁵⁾ Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

⁽³⁰⁶⁾ Ibid.

⁽³⁰⁷⁾ Mergaert, L., Cacace, M. and Linková, M. (2022), 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', *Social Sciences*, Vol. 11, No 9, p. 379 (https://www.mdpi.com/2076-0760/11/9/379).

^{(&}lt;sup>308</sup>) Ibid.

⁽³⁰⁹⁾ Ibid.

⁽³¹⁰⁾ Ibid.

recommendations to funding applicants. This includes, for example, suggestions on achieving gender balance within research teams. By influencing the composition and structure of research teams or requiring specific commitments from research institutions, these recommendations ensure the impact of GEPs or associated policies. Similarly, national-level policies play a crucial role in ensuring the integration of gender equality principles within public bodies. For example, in Ireland, the HEA requires HEIs to publish gender equality action plans and report progress annually. Furthermore, the HEA oversees the implementation of the Athena SWAN Charter, which is a prerequisite for research funding eligibility. This requirement is enforced by Ireland's main RFOs (the Irish Research Council, Science Foundation Ireland and the Health Research Board), which adhere to the recommendations put forth by the HEA (311).

6.5.3. How organisational structure can help to overcome challenges of gender equality plan development and implementation

A key criticism of the GEP development and implementation process is the significant workload it requires, often without receiving the necessary resources. This issue is compounded by the fact that the responsibility for developing and implementing GEPs often falls on individuals from the under-represented gender (312). Membership in COPs can alleviate the burden faced by the limited number of dedicated individuals involved in GEP development and implementation. COPs provide an external support network that fosters the cultivation of gender competences and facilitates the establishment of transformative practices (313). The establishment of a favourable organisational culture characterised by mutual respect plays a pivotal role in overcoming cultural resistance towards genderequality-related changes or plans, thus fostering an environment conducive to cooperative action (314). While the bottom-up approach, driven by committed departments or individuals, is widely acknowledged for its value (315), it is essential to engage all levels of the organisational structure to effect comprehensive change. Embracing a collaborative approach that combines bottom-up and top-down strategies proves most effective in transforming the organisational culture and facilitating GEP implementation. This approach ensures that gender equality efforts permeate the entire organisation, fostering a shared commitment and collective responsibility towards achieving gender equality (316).

Transparency plays a critical role in the successful implementation of GEPs, driving institutional change and fostering a culture of accountability. However, transparency across the entire GEP implementation procedure is not consistently observed. For example, within GEP monitoring and evaluation frameworks, the evaluation can be compromised when evaluation procedures are controlled by senior-level committees or councils, leading

⁽³¹¹⁾ Higher Education Authority (2019), 'HEA statement on Athena SWAN Charter in Ireland', Dublin (https://hea.ie/assets/uploads/2019/07/HEA-Statement-on-Athena-SWAN-Charter-in-Ireland-.pdf).

⁽³¹²⁾ Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', Journal of Gender Studies, Vol. 31, No 1, pp. 36-54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

⁽³¹³⁾ Ibid.

⁽³¹⁴⁾ Interview with an RFO stakeholder, conducted online, September 2022.

⁽³¹⁵⁾ Interview with a stakeholder, conducted online, September 2022.

Cacace, M., Balahur, D., Bleijenbergh, I., Falcinelli, D., Friedrich, M. and Schmidt, E. K. (2015), Structural transformation to achieve gender equality in science -Guidelines, Deliverable No 8.3 (https://eige.europa.eu/sites/default/files/guidelines_stages_4.pdf).

to less transparent processes (³¹⁷). There should be transparency and clarity for all stakeholders on the implementation of GEPs (³¹⁸). Additionally, internal monitoring and reporting should be made public. The implementation of GEPs should be considered a shared responsibility of stakeholders within an organisation. Transparent procedures, accompanied by well-defined roles and responsibilities, create a sense of accountability and encourage commitment to the implementation of GEPs.

Bureaucratic challenges have been noted in the implementation of gender equality requirements such as GEPs. One illustrative example is the UK's 2020 policy, titled 'Reducing bureaucratic burden in research, innovation and higher education' (319). The policy discouraged universities from applying to cause-related membership schemes (such as the Athena SWAN Charter). With the goal of reducing burdensome development and implementation of mandated schemes, the policy announced that funding organisations should not implement such requirements, as organisations already have to comply with national equality standards. Conversely, in Ireland, notable cooperation exists between national authorities and RFOs, RPOs and HEIs. This collaboration has proven effective in mitigating potential bureaucratic challenges associated with GEP implementation. For example, with multilevel support and engagement from experienced senior leadership there is less resistance to mandated changes and access to knowledge and good practice (320). These examples indicate the relevance of the involvement of national authorities in informing the organisational structure of organisations and facilitating the required structural changes that support the implementation of GEPs.

6.6. Internal and external organisational networks as a key factor for successful implementation

Given its cross-cutting nature, gender inequality can be best addressed through coordinated efforts. The CASPER project has identified the involvement of both internal and external stakeholders as crucial impact drivers (321). According to the impact driver model, internal stakeholder engagement (here referred to as internal networks) should involve active participation of leadership with core gender equality teams, as well as engagement with various internal stakeholder groups. External stakeholder involvement (here referred to as external networks) may include relevant external institutions and the utilisation of external gender expertise (322). This section will further discuss these key factors and explore how internal and external organisational networks can facilitate successful GEP implementation.

158

-

⁽³¹⁷⁾ Interview with multiple stakeholders, conducted 2022.

⁽³¹⁸⁾ EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality plans.pdf).

⁽³¹⁹⁾ Gov.uk (2020), 'Reducing bureaucratic burden in research, innovation and higher education' (https://www.gov.uk/government/publications/reducing-bureaucratic-burdens-higher-education/reducing-bureaucratic-burdens-on-research-innovation-and-higher-education).

⁽³²⁰⁾ Interview with an RPO stakeholder, conducted online, September 2022.

⁽³²¹⁾ Mergaert, L., Cacace, M. and Linková, M. (2022) 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', Social Sciences, Vol. 11, No 9, p. 379. (https://www.researchgate.net/publication/362912860 Gender Equality Impact Drivers Revisited Assessing Institutional Capacity in Research and Higher Education Institutions).

⁽³²²⁾ Ibid.

Internally, the ability to network across departments, coordinate efforts and enhance knowledge (e.g. through training or awareness-raising actions) greatly facilitates the successful implementation of GEPs. Engaging representatives from each department ensures that gender equality becomes an integral and pervasive subject within the institution (323). Internal networks can enhance professional growth, provide opportunities to share effective models of practice that are unique to each organisation, organise conferences and discussions and create opportunities for mentorship schemes (324). In order to reflect the unique requirements and conditions in many areas of an organisation, bottom-up processes that include all organisational stakeholders should be undertaken when implementing a GEP (325) to ensure that policies are relevant to local and lower-level settings (326). Having an established network within an organisation regarding the GEP can facilitate discussions with the appropriate internal stakeholders and help to bring about gender-equal structural change at multiple levels. To further elaborate on the four levels of change mentioned in the previous section, at the interpretive level, efforts are focused on building a common understanding of the issues at hand. At the symbolic level, steps are taken to challenge and rectify masculine frameworks within organisational systems, aiming to provide better support for under-represented genders. Furthermore, at the institutional and operational levels, intentions are translated into concrete actions, ensuring that committed actions are taken to bring about gender equality (327).

Similarly, external networks facilitate a collaborative space for organisations to coordinate efforts and address common concerns and overcome challenges of GEP development and implementation (328). Internal and external networks play a crucial role in facilitating essential capacity-building initiatives. These capacity-building activities encompass various aspects such as benchmarking good practices with other institutions, engaging in mutual learning exchanges, accessing educational and training programs or information hubs and generally enhancing competences (329). Importantly, having allocated funding can better facilitate access to network coordination and enhance exposure to knowledge and training opportunities.

The TARGET project also signposted the development of a COP as a key dimension in supporting GEP implementation, which should involve a broad range of stakeholders. Membership in COPs can also alleviate the burden faced when a limited number of dedicated individuals are involved in GEP development and implementation. COPs provide

⁽³²³⁾ Interviews with multiple RFO and RPO stakeholders, conducted online, September 2022.

⁽³²⁴⁾ OECD (2020), Policies and practices to promote women in leadership roles in the private sector, Paris (https://valored.it/wp-content/uploads/2021/04/2020-OECD-G20-Policies-and-Practices-to-Promote-Women-in-Leadership-Roles-in-the-Private-Sector.pdf).

⁽³²⁵⁾ EIGE (n.d.), 'Gender equality in academia and research' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/which-stakeholders-need-be-engaged-gep).

⁽³²⁶⁾ UN Women (n.d.), 'Coordination mechanisms, networks and partnerships' (https://wrd.unwomen.org/practice/topics/coordination#:~:text=A%20group%20of%20women%20participating,r isk%20reduction%20and%20resilience%20interventions).

⁽³²⁷⁾ Cacace, M., Balahur, D., Bleijenbergh, I., Falcinelli, D., Friedrich, M. and Schmidt, E. K. (2015), Structural transformation to achieve gender equality in science – Guidelines, Deliverable No 8.3 (https://eige.europa.eu/sites/default/files/guidelines_stages_4.pdf).

⁽³²⁸⁾ Interview with a stakeholder, conducted online, September 2022.

⁽³²⁹⁾ Genderaction (2021), 'Guidance for national and regional authorities for the creation and implementation of the European Commission GEP requirements', Deliverable No 5.4 (https://genderaction.eu/wp-content/uploads/2021/12/741466 Guidance-on-GEP-implementation-for-national-authorities-in-MS.pdf).

an external support network that fosters the cultivation of gender competences and facilitates the establishment of transformative practices (330). An evaluation of the ACT project, funded by Horizon 2020, revealed that an external COP membership can be instrumental in promoting gender equality agendas. A COP creates a space for organisational memory, fostering the maintenance and transfer of knowledge, and facilitates the development of gender competences. In the ACT project, for example, the COP encompassed **shared knowledge and best practices, workshops, discussions, conferences and contributions to online learning hubs** (331). If GEPs are to effectively transform institutions into structures that are gender equal, they require supporting organisational structures in which all stakeholders have the appropriate gender competences to do so. COPs are a means of building these competences and resources of gender expertise which can be built into organisational structures.

Several examples of good practices at the national level demonstrate actions that promote and facilitate GEP networks. These networks serve as platforms for organisations involved in or currently developing and implementing GEPs to collaborate and leverage shared resources. By engaging in such collaboration, these organisations can enhance their competences through capacity-building initiatives and foster knowledge sharing among peers., In Austria, for example, a funded model GEP has been created by an external gender expert in cooperation with 22 public universities (332). The model GEP aims to set the standard and has been made available to all public universities, while regular meetings between university representatives, experts and ministry representatives provide a platform for discussing the model (333). These networking meetings play a vital role for capacity building and problem solving regarding GEP development. In Norway, there is also some facilitation of networking through the KIF, which operates a website listing GEPs in HEIs and providing an overview of universities, colleges and research institutes with action plans for gender equality and diversity (334). Similarly, Switzerland has a dedicated website for evaluating GEPs and promotes cooperation projects that foster networking among HEIs (335). In Ireland, where policies and requirements exist with cooperation at the national and institutional levels, there is an enhanced network of knowledge and support, providing a strong foundation for future development (336).

Having dedicated resources can significantly enhance the ability to network effectively, thus increasing the knowledge-sharing capabilities of organisations and further supporting the successful implementation of GEPs. Signposted equal opportunities offices or personnel can enhance visibility to both external stakeholders and internal staff and students seeking information and support (337). This is similarly true at a national level, where the creation of

_

⁽³³⁰⁾ Ibid.

⁽³³¹⁾ Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

⁽³³²⁾ Ibid.

^{(&}lt;sup>333</sup>) Ibid

^{(&}lt;sup>334</sup>) Ibid.

^{(&}lt;sup>335</sup>) Ibid.

⁽³³⁶⁾ Interview with a stakeholder, conducted online, September 2022.

⁽³³⁷⁾ As observed following the appointment of a dedicated equal opportunities officer at the German Research Foundation. Interview with an RFO stakeholder, conducted online, September 2022.

dedicated resources and their provision to institutions widen the support network available to GEPs implementers, ultimately improving the overall process. In some countries, additional resources such as human resources are available to institutions implementing GEPs. In Czechia, the Centre for Gender and Science at the Institute of Sociology of the Czech Academy of Sciences has received funding from Horizon Europe for the period of 2021–2027 and supports Czech RPOs in implementing GEPs and addressing gender equality measures (338). The centre runs an e-learning training course, along with training and consultations covering all phases of GEPs, including audits, design, implementation and evaluation. Moreover, the centre runs a community for change with more than 450 members who are predominantly staff responsible for HR awards and GEPs. Similarly, in Spain, the state RFO (Agencia Estatal de Investigación) receives support from the Ministry of Science and Innovation. This support includes regular meetings with all gender equality contact points, aiming to improve collaboration, identify joint action points and establish cooperation mechanisms that support their collective efforts (339).

In addition, there are several examples of EU-level projects that have facilitated access to external organisational networks. One such example is the ACT initiative, which has been previously mentioned and is funded under Horizon 2020. ACT aims to promote gender equality and the implementation of GEPs by establishing COPs that encompass multiple research organisations. More examples of EU- and national-level external initiatives are set out in Annex 1.

6.7. Conclusions and recommendations

This section presents the conclusion and key policy recommendations concerning the establishment of dedicated organisational structures to effectively develop and implement GEPs in R & I organisations.

The target audiences for these policy recommendations include EU policymakers, national-level policymakers, research organisations, HEIs and public bodies. Key recommendations are listed in Table 18.

In conclusion, collaborative and transparent organisational structures should facilitate the effective implementation of GEPs. It is essential to establish appropriate organisational structures that include dedicated resources and expertise to prioritise gender equality policies, thus enabling organisations to navigate the bureaucratic challenges associated with GEP development and implementation more effectively. Furthermore, it is crucial to consider structural change across multiple levels and consider impact drivers as a valuable tool to support sustainable transformation throughout the GEP process. Both internal and external organisational networks have been perceived to be extremely beneficial in advancing gender equality and facilitating the implementation of concrete measures to accomplish established objectives. By establishing collaborations to promote gender equality, organisations can adhere to best practices and effectively address or navigate the challenges encountered during the development and implementation of a GEP.

Table 18. Recommendations for policymakers and institutions

161

⁽³³⁸⁾ Genderaction (2021), 'Guidance for national and regional authorities for the creation and implementation of the European Commission GEP requirements', Deliverable No 5.4 (https://genderaction.eu/wp-content/uploads/2021/12/741466 Guidance-on-GEP-implementation-for-national-authorities-in-MS.pdf).

⁽³³⁹⁾ Ibid.

Torget group	Recommendation
Target group	Recommendation
EU-level policymakers	 Provide guidance to Member States on resources required to support R & I organisations' compliance with GEP requirements. This should include guidance on financial, human and other resources required to increase awareness and provide realistic expectations for resource allocation for sustainable GEP development and implementation. Continue to develop and fund initiatives that facilitate gender equality networking across R & I organisations to enable transversal knowledge exchange and generate an EU-level discourse on gender equality. Create transparent guidance on the key enabling factors, such as impact drivers, of GEP development and implementation. This should include guidance on supporting transforming organisational structures and governance in R & I organisations.
National-level	Develop or expand funding initiatives that support GEP
policymakers	development and implementation in R & I.
	 Develop or continue to develop and fund initiatives that facilitate gender equality networking across R & I organisations to enable transversal knowledge exchange and generate national- and EU-level discourse on gender equality.
	 Facilitate and engage with GEP- or gender-equality-related networks and relevant stakeholders, for example, through the creation of information sharing hubs.
	 Ensure that national-level policies related to R & I organisations explicitly incorporate gender equality principles and expectations.
	 Provide clear guidelines and benchmarks for organisations to use to develop and implement GEPs in alignment with national policies.
	 Establish mechanisms to monitor and assess compliance with gender equality principles, including periodic audits and evaluations.
	 Collaborate with relevant stakeholders to translate gender equality principles into actionable steps, fostering a culture of accountability and sustained progress.
Research organisations, HEIs and public bodies	 Dedicate appropriate resources to GEP development and implementation, such as the establishment of specific gender equality structures which can ensure sustained gender equality commitment and progress.

- Embed gender equality principles within the governance framework of organisations with cooperation across all organisational levels to sustain long-term cultural change. Goodwill principles must be translated into actions in a reasonable timeframe and effective way.
- Facilitate and demonstrate internal stakeholder involvement.
 This should include engagement across all levels of an institution, including leadership.
- Facilitate and engage with GEP- or gender-equality-related external networks to support transversal knowledge exchange on best practices for impact drivers such as organisational structures and governance.
- Support internal networking within institutions to ensure the cooperative and cohesive implementation of GEPs across departments and levels.
- Establish mechanisms to monitor and assess compliance with gender equality principles, including periodic audits and evaluations.
- Acknowledge the efforts of gender equality work and reward gender equality work appropriately.

6.8. Bibliography

ACT (n.d.), 'Welcome to ACT' (https://act-on-gender.eu/).

Advance HE (2020), 'Advance HE responds to the NIHR's announcement on funding criteria, including Athena SWAN' (https://www.advance-he.ac.uk/news-and-views/advance-he-responds-nihrs-announcement-funding-criteria-including-athena-swan).

Cacace, M., Balahur, D., Bleijenbergh, I., Falcinelli, D., Friedrich, M. and Schmidt, E. K. (2015), *Structural transformation to achieve gender equality in science – Guidelines*, Deliverable No 8.3 (https://eige.europa.eu/sites/default/files/guidelines_stages_4.pdf).

Council of the European Union (2021), Council note – Virtual conference 'Deepening the ERA through gender equality' (8–9 July 2021) and Ljubljana Declaration on gender equality in research and innovation, Brussels, 21 September (https://data.consilium.europa.eu/doc/document/ST-12044-2021-INIT/en/pdf).

EIGE (n.d.), 'Gender equality in academia and research – GEAR tool' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/which-stakeholders-need-be-engaged-gep).

EIGE (n.d.), 'Success factors for gender equality plan development and implementation' (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/success-factors-realising-gender-equality-plan).

EIGE (2016), 'Institutional Transformation – Gender mainstreaming toolkit, Publications Office of the European Union, Luxembourg (https://eige.europa.eu/sites/default/files/documents/mh0716094enn.pdf).

EIGE (2022), 'Gender equality plans in academia and research: Roadmap to effective implementation' (https://eige.europa.eu/publications/gender-equality-plans-academia-and-research-roadmap-effective-implementation).

EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles'

(https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for g ender equality plans.pdf).

ERAC SWG GRI (2021), *Gender Equality Plans as a Catalyst for Change*, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

European Commission (n.d.), 'Gender equality in engineering through communication and commitment' (https://cordis.europa.eu/project/id/741128).

European Commission (n.d.), 'Supporting and implementing plans for gender equality in academia and research' (https://cordis.europa.eu/project/id/824544).

European Commission (2020), Commission communication – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

European Commission, DG Research and Innovation (2021), European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the

European Union, Luxembourg (https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec rtd era-policy-agenda-2021.pdf).

European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

Genderaction (2021), 'Guidance for national and regional authorities for the creation and implementation of the European Commission GEP requirements', Deliverable No 5.4 (https://genderaction.eu/wp-content/uploads/2021/12/741466 Guidance-on-GEP-implementation-for-national-authorities-in-MS.pdf).

German Research Foundation (2022) 'Summary and recommendations on the DFG's research-oriented equity and diversity standards', Bonn (https://www.dfg.de/resource/blob/175810/65e1475c45b94e4d52be80c7b65dca5c/fog-empfehlungen-2022-data.pdf).

Gov.uk (2020), 'Reducing bureaucratic burden in research, innovation and higher education' (https://www.gov.uk/government/publications/reducing-bureaucratic-burdens-on-research-innovation-and-higher-education).

Higher Education Authority (2019), 'HEA statement on Athena SWAN Charter in Ireland', Dublin (https://hea.ie/assets/uploads/2019/07/HEA-Statement-on-Athena-SWAN-Charter-in-Ireland-.pdf).

Mergaert, L., Cacace, M. and Linková, M. (2022), 'Gender equality impact drivers revisited: Assessing institutional capacity in research and higher education institutions', *Social Sciences*, Vol. 11, No 9, p. 379 (https://www.mdpi.com/2076-0760/11/9/379).

OECD (2020), *Policies and practices to promote women in leadership roles in the private sector*, Paris (https://valored.it/wp-content/uploads/2021/04/2020-OECD-G20-Policies-and-Practices-to-Promote-Women-in-Leadership-Roles-in-the-Private-Sector.pdf).

Papafilippou, V. (2020), "Women in...": Do internal and external women's networks contribute to equality in engineering?', CIPD Applied Research Conference, 22–23 January, Dublin (https://www.cipd.co.uk/lmages/womens-networks-engineering tcm18-76929.pdf).

Target (2021), 'Results of and lessons learned from Target' (https://irihs.ihs.ac.at/id/eprint/5960/1/wroblewski-2021-results-lessons-target.pdf).

Target (2021), 'Successful GEP implementation depends on national frameworks: Institutional engagement alone is not enough' (https://www.gendertarget.eu/2021/11/30/successful-gep-implementation-depends-on-national-frameworks-institutional-engagement-alone-is-not-enough-target-geecco-policy-brief/).

Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J. and Hassan, T. M. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

UN Women (n.d.), 'Coordination mechanisms, networks and partnerships' (https://wrd.unwomen.org/practice/topics/coordination#:~:text=A%20group%20of%20women%20participating,risk%20reduction%20and%20resilience%20interventions).

6.9. Annex 1. EU- and national-level initiatives promoting external gender equality networks in research and innovation

Table 19. EU- and national-level initiatives promoting external gender equality networks in R & I

External EU- and national-level initiatives aimed at promoting gender equality networks in R & I

Level of initiative	Name of the initiative	Year	Funder	Overview of project
EU level	ACT (a)	2018– 2021	European Commission Horizon 2020 programme	ACT attempts to improve gender equality in universities, research centres and RFOs. ACT promotes COPs to advance knowledge, collaborative learning and institutional change on gender equality in the ERA.
EU level	Forgen (b)	2019	European Commission Horizon 2020 programme	The Funding Organisations for Gender Equality (FORGEN) Community of Practice CoP was supported by the Horizon 2020 project ACT. It has since been associated with the GENDERACTIONplus project (2022–2024). It is dedicated to monitoring and improving gender equality implementation in R & I funding organisations across the ERA by bringing together gender equality practitioners in R & I funding to promote knowledge sharing.
EU level	GENDER- NET Plus (°)	2017– 2023	European Commission Horizon 2020 programme	The main goal of the GENDER-NET Plus ERA-NET Cofund is to enhance transnational collaborations among research-funding programme owners and managers, assist gender equality promotion through institutional transformation and integrate sex and gender analysis into research and funding programmes.

EU level	SPEAR (d)	2019– 2023	European Commission Horizon 2020 programme	SPEAR attempted to instigate institutional reform in nine RPOs located around Europe. Given the unrealised potential of collaborative stakeholder work to ensure gender equality in academia and research, SPEAR intended to launch a joint call to action with other sister projects to develop a sustainable exploitation pathway for the support tools and expertise developed by various GEP initiatives.
National level	CPED (°)	2011		In France, the CPED brings together various stakeholders (such as gender equality and diversity officers, project managers and equality-diversity vice-presidents, among others) from higher education and research institutes. CPED works to support the implementation of equality focused policies which impact staff and students.

- (a) https://act-on-gender.eu/project.
- (b) https://act-on-gender.eu/forgen-funding-organisations-gender.
- (b) https://act-on-gender.eu/for (c) https://gender-net-plus.eu/.
- (d) https://gender-spear.eu/.
- (e) https://www.cped-egalite.fr/cped/.

NB: Internal and external networks are defined in Section 6.6 'Internal and external organisational networks as a key factor for successful implementation'. CPED, Gender Equality Officers' Association (Conférence permanente des chargé(e)s de mission egalité et diversité).

7. Policy brief 7. The role of support from senior leadership in gender equality plan development and implementation

7.1. Summary

This policy brief focuses on the role of support from senior leadership in organisations in GEP development and implementation. An enabling governance framework with active involvement from top management is regarded as a key structural element in driving sustainable change, as it has the capacity to establish legally binding measures, provide positive incentives and enforce sanctions.

Gender competences at senior levels will be briefly discussed, followed by the role that senior leadership has to play in supporting successful GEPs and how senior leadership can alleviate common obstacles to GEP development and implementation. The key issues and policy recommendations can be summarised as follows.

- Lack of support from leadership within R & I institutions is a barrier to the successful development and implementation of GEPs. Those implementing GEPs often lack the authority or credibility to make changes and curb institutional and individual resistance to gender equality action. Support from leadership can provide legitimacy to plans and dedicate essential resources to ensure the successful development and implementation of GEPs. Crucially, without the support from senior leadership to aid effective implementation, the sustainability of GEPs is limited. The role of senior leadership support is interconnected with the establishment of good organisational structure, the focus of policy brief 6.
- Those in positions of management can take ownership of the problem of gender inequality, leading by example and taking action. Resistance at a senior level can result in inaction or uneven work allocation; building gender competences within senior leadership and management at all levels is integral to overcoming individual and institutional cultural barriers to change.
- Finally, the policy brief offers a series of recommendations for EU- and national-level
 policymakers, research organisations, HEIs and public bodies. These include actions
 which can be taken to encourage senior leadership within R & I institutions to fully
 support GEP implementation, ensure the accountability of actions, promote education
 and capacity building and visibly support gender equality policies.

7.2. Background and relevance / scope of the problem

The 2020 ERA communication reaffirmed its commitments to gender equality and gender mainstreaming. One of the key objectives of the EU gender equality strategy for 2020–2025 (340) is to achieve gender balance in decision-making (i.e. aiming for women to occupy between 40 % and 60 % of leadership positions) (341). However, gender balance in leadership positions is neither a sufficient indicator of gender equality, nor necessarily indicative of the successful implementation of GEPs in R & I organisations (342). Gender-equal structures within R & I can be hindered by inadequate management practices, which can lack gender competence and show a lack of awareness or indifference towards gender equality issues. This can perpetuate resistant cultures that hinder progress towards gender equality, regardless of the gender of the managers involved (343). A report by the ERAC SWG GRI (344) notes that unconscious biases affect recruitment and career progression, work–life balance, and leadership and decision-making within R & I organisations. Men's and women's work can be judged differently, with women often being assessed based on their social skills rather than their research abilities. This discrepancy is particularly evident in letters of recommendation and by appointment panels that lack gender balance (345).

The ERAC SWG GRI report (346) recognises mobilising support and resources to build capacities at the national level as one of eight challenges for Member States in adopting GEPs. While progress has been made, with the introduction of measures and actions as well as policy and legislative requirements for GEPs adoption, this alone does not necessarily indicate the achievement of institutional change (347). **Institutional change requires strong leadership commitment, which is crucial for the effective implementation and resilience of GEPs** (348). Clear and substantial support from top management is needed to effectively develop and implement GEPs in R & I. It is particularly important that senior leadership and authorities demonstrate willingness to actively engage in GEPs in order to ensure their successful integration into R & I institutions. Without such embedded support, there is a risk that GEPs may become superficial endeavours aimed solely at securing funding or meeting gender mainstreaming objectives, without having a substantial and lasting impact on the gender equality culture within R & I institutions.

Developing and implementing a GEP is facilitated when senior management is knowledgeable about gender equality issues, acknowledges the necessity of a GEP and

⁽³⁴⁰⁾ European Commission (2020), Commission communication – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

⁽³⁴¹⁾ European Commission, DG Research and Innovation (2021), She Figures 2021 – Gender in research and innovation – Statistics and indicators, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1).

⁽³⁴²⁾ Wroblewski, A. (2021), Monitoring of ERA Priority 4 Implementation – Update and final assessment, Genderaction (https://genderaction.eu/wp-content/uploads/2021/09/GENDERACTION_WP3_final_report.pdf).

⁽³⁴³⁾ ERAC SWG GRI (2019), Tackling Gender Bias in Research Evaluation: Recommendations for action for EU Member States, Brussels (https://data.consilium.europa.eu/doc/document/ST-1204-2019-INIT/en/pdf).

^{(&}lt;sup>344</sup>) Ibid.

⁽³⁴⁵⁾ Ibid.

⁽³⁴⁶⁾ ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

⁽³⁴⁷⁾ Ibid.

^{(&}lt;sup>348</sup>) Ibid.

actively supports its initiatives. National-level endorsement of GEPs or related R & I policies can additionally incentivise top management to engage in their development and implementation (see policy brief 6). However, even in these favourable circumstances, resistance may emerge. It is essential to acknowledge that signs of resistance are not necessarily specific reactions to gender equality topics but can be responses to change itself.

The introduction of the Horizon GEP eligibility criterion effectively addresses resistance by compelling R & I institutions to develop and implement GEPs while actively monitoring progress to secure funding. However, sustaining GEPs requires dedicated financial and human resources for their development and implementation. Allocating and distributing these resources more effectively can be achieved by involving authoritative decision-makers who possess the power to make resource-related decisions. The active involvement of top management is crucial to mitigate common pitfalls associated with the development and implementation of GEPs. Frequently, the burden of developing and implementing GEPs is disproportionately shouldered by women, placing them at the forefront of these endeavours. Many of them face the daunting task of navigating individual, institutional and cultural barriers that restrict their actions and impede the potential for meaningful change. Hence, the active support of senior leaders and top management is indispensable for the enduring effectiveness of GEPs, the allocation of necessary resources and the recognition of the workload and efforts required for institutional change.

7.3. Evidence base and key sources of information

The primary sources of information that inform this policy brief include various EU-based reports on the successful implementation of GEPs, stakeholder interviews and consultation with key experts in this field to validate our findings and provide useful insights to the policy brief. Additional sources are included in the footnotes. Table 20 provides an overview of the key sources used to inform this policy brief.

Table 20. Sources of information

Primary sources of Information					
Interviews with key stakeholders	Interviews with over 70 key stakeholders: EU-level institutions/policymakers researchers in academic institutions / research communities in the EU European research associations and universities national R & I agencies and organisations public and private RFOs public and private RPOs.				
Expert consultation	Experts on the field of GEPs have reviewed the policy brief and provided useful feedback, insights and input that have been included				

in the policy brief.

Secondary sources of information

Background information and reports

This includes various reports from the EU on the successful implementation of GEPs in R & I.

- EIGE, 'Roadmap to gender equality plans in research and higher education institutions – Success factors and common obstacles' (a)
- EIGE, 'Gender equality plans in academia and research: Success factors and obstacles' (b)
- EIGE, 'Gender equality plans in academia and research: Roadmap to effective implementation' (°)
- TARGET 'Successful GEP implementation depends on national frameworks: Institutional engagement alone is not enough' (d)
- ERA SWG GRI, Gender Equality Plans as a Catalyst for Change (e)
- Campanini Vilhena, F. et al., Twitter #SpeedUpChange Campaign Celebrating 11th of February 2021 (f)
- (a) EIGE (2016), 'Roadmap to gender equality plans in research and higher education institutions Success factors and common obstacles' (https://eige.europa.eu/sites/default/files/gear_roadmap_02_successfactors_obstacles.pdf).
- (b) EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality_plans.pdf).
- (°) EIGE (2022), 'Gender equality plans in academia and research: Roadmap to effective implementation' (https://eige.europa.eu/publications/gender-equality-plans-academia-and-research-roadmap-effective-implementation).
- (d) Target (2021), 'Successful GEP implementation depends on national frameworks: Institutional engagement alone is not enough' (https://www.gendertarget.eu/2021/11/30/successful-gep-implementation-depends-on-national-frameworks-institutional-engagement-alone-is-not-enough-target-geecco-policy-brief/).
- (e) ERAC SWG GRI (2021), Gender Equality Plans as a Catalyst for Change, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).
- (¹) Campanini Vilhena, F., Ezquerecocha Diez, M., García Muñoz, I., López Belloso, M., Fernández, L., Sanz, B., et al. (2021), Twitter #SpeedUpChange Campaign Celebrating 11th of February 2021, Genderaction and Gearing Roles (https://gearingroles.eu/wp-content/uploads/2021/06/11-Feb-2021-Campaign-Report-16.06-final-version.pdf).

7.4. Enhancing gender competence in senior leadership

This section highlights the significance of gender balance in senior leadership and the need to focus on building gender competence across all genders within these positions.

Gender balance in leadership and decision-making is one of five content-related building blocks recommended for inclusion in the Horizon Europe required GEP (349). Further, it is one of three main levels at which gender equality is addressed by Horizon Europe (350), as well as one of the three main objectives set under the ERA communication 2012 framework (351). The importance of inclusive leadership and the need for equal gender representation at senior levels in R & I are also highlighted by initiatives such as the #SpeedUpChange campaign. The campaign, launched at the 2021 International Day of Women and Girls in Science, was organised by the Horizon 2020 projects Gearing Roles (352) and GENDERACTION (353). One of its primary objectives was to gather insights from a diverse range of participants, including national government bodies, ministries and RFOs, on how to enhance support for gender equality in the field of R & I (354). The commitment of national authorities and RFOs to supporting gender representation at the senior levels of R & I within scientific evaluation panels, and in decision-making bodies in HEIs and RFOs, was stressed as a recommendation following analysis of the campaign results (355).

⁽³⁴⁹⁾ EIGE (2022), 'Gender equality plans in academia and research: Roadmap to effective implementation' (https://eige.europa.eu/publications/gender-equality-plans-academia-and-research-roadmap-effective-implementation).

⁽³⁵⁰⁾ The three main levels at which gender equality is considered in Horizon Europe are (1) GEPs as an eligibility criterion, (2) the integration of a gender dimension in R & I content and (3) increasing the gender balance throughout the programme, with the goal of 50 % women in Horizon Europe—related boards, expert groups, evaluation committees and research teams. For more information, see https://ec.europa.eu/info/research-and-innovation_en#the-commissions-gender-equality-strategy.

⁽³⁵¹⁾ The five recommended content-related building blocks that are proposed for inclusion in GEPs are as follows:

(1) work–life balance and organisational culture, which contribute to creating an enabling environment where everyone can thrive and have fulfilling careers (e.g. parental leave policies, flexible work arrangements, childcare, reintegration of staff after career breaks); (2) leadership and decision-making, which centres on organisational gender-balanced participation in leadership and formal and informal decision-making bodies and structures (e.g. gender quotas); (3) recruitment and career progression, which supports actions to avoid systemic and institutional/structural discrimination of women in their research careers (e.g. unconscious bias training for human resource managers, inclusive language for job vacancies); (4) adding a gender dimension to research and teaching content, to tackle and eliminate gender biases (e.g. sex/gender-based analysis, and intersectional analysis, across disciplines); and (5) measures against GBV, including sexual harassment, to put an end to this type of behaviour which tends to be underestimated in the R & I sector (e.g. surveys of prevalence, training, codes of conduct, complaint protocols). Detailed guidance on the recommended content-related GEP building blocks is also available in: European Commission, DG Research and Innovation (2021), Horizon Europe Guidance on Gender Equality Plans, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

⁽³⁵²⁾ For more information on the Gearing ROLES project, see https://gearingroles.eu/.

⁽³⁵³⁾ For more information on the Genderaction project, see https://genderaction.eu/.

⁽³⁵⁴⁾ Campanini Vilhena, F., Ezquerecocha Diez, M., García Muñoz, I., López Belloso, M., Fernández, L., Sanz, B., et al. (2021), Twitter #SpeedUpChange Campaign Celebrating 11th of February 2021, Genderaction and Gearing ROLES (https://gearingroles.eu/wp-content/uploads/2021/06/11-Feb-2021-Campaign-Report-16.06-final-version.pdf).

⁽³⁵⁵⁾ Ibid.

While achieving gender balance in decision-making positions is crucial, the presence of women in leadership roles alone does not serve as a reliable indicator of progress in gender equality, successful implementation of GEPs or a positive shift in organisational culture. It is imperative to develop gender competence in senior leadership to effectively address unconscious gender bias, understand gender equality and drive positive change.

Gender competence is explicitly stated in the mandatory requirements for a GEP in Horizon Europe. These initiatives are designed to enhance gender competence through training and capacity-building initiatives addressing unconscious gender bias in staff and leadership roles (356). Effective promotion of gender equality requires senior leaders, irrespective of their gender, to possess the essential gender competences. These competences enable them to fully grasp the importance of gender equality, prioritise it appropriately, take decisive action and assume accountability for addressing the issue (357). One study specifically emphasised the detrimental impact of middle managers who resist gender equality, as they hinder progress by impeding efforts to drive change and failing to take responsibility for promoting gender equality (358).

Support from senior leadership can provide **endorsement for initiatives and prioritise the promotion of activities and knowledge** (359). However, this commitment from management should encompass a shift in management culture, the development of key gender competences and a genuine belief in the importance of equality measures (360). Knowledge and understanding of gender equality issues within R & I should be established at all levels. Without this foundation, individuals in leadership positions, as well as others, may encounter difficulties in acknowledging the legitimacy of GEPs or related gender equality work. Gender competences can be developed through awareness-raising initiatives, training and coaching and can foster the acquisition of new skills, knowledge, interest and commitment to gender equality action (361).

The majority of gender equality work is undertaken by women, with a noted lack of engagement from others (362). The support of men for and their engagement in the process of change has been highlighted as a key factor of organisational culture that can support

_

⁽³⁵⁶⁾ EIGE (2022), 'Gender equality plans in academia and research: Roadmap to effective implementation' (https://eige.europa.eu/publications/gender-equality-plans-academia-and-research-roadmap-effective-implementation).

⁽³⁵⁷⁾ Lansu, M., Bleijenbergh, I. and Benschop, Y. (2020), 'Just talking? Middle managers negotiating problem ownership in gender equality interventions', *Scandinavian Journal of Management*, Vol. 36, No 2 (https://www.sciencedirect.com/science/article/pii/S0956522118300873).

⁽³⁵⁸⁾ Ibid.

⁽³⁵⁹⁾ EIGE (2016), 'Roadmap to gender equality plans in research and higher education institutions – Success factors and common obstacles' (https://eige.europa.eu/sites/default/files/gear_roadmap_02_successfactors_obstacles.pdf).

⁽³⁶⁰⁾ Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

⁽³⁶¹⁾ EIGE (n.d.), 'Gender equality competence development' (https://eige.europa.eu/thesaurus/terms/1170).

⁽³⁶²⁾ Sangiuliano, M. and Cortesi, A. (2019), Institutional Change for Gender Equality in Research – Lessons learned from the field, Edizioni Ca' Foscari, Venice (https://edizionicafoscari.unive.it/it/edizioni/libri/978-88-6969-335-9/).

equality change (³⁶³). Given that men occupy the majority of senior positions in R & I, it is essential to **improve engagement across all genders and increase the proportion of women in senior leadership positions** to tackle the 'subtle and implicitly gendered processes at the top management levels' (³⁶⁴). A lack of gender competence at a senior level poses challenges when attempting to dismantle the structures that perpetuate inequality (³⁶⁵).

The presence of resistance or indifference among senior leadership is often identified as a significant barrier to implementing gender equality measures and GEP (³⁶⁶). In the absence of gender competence, there are various incentives available to encourage greater engagement from senior leaders in promoting gender equality. For example, dedicated funding for advancing gender equality measures and the development and implementation of GEPs (e.g. Horizon 2020 funding such as SPEAR (³⁶⁷) or GEECCO (³⁶⁸)). It has been suggested that affiliation with notable European networks or prestigious funders (such as Horizon Europe–funded projects such as ACT COPs (³⁶⁹)) bolsters senior management's confidence in the credibility of measures (³⁷⁰).

When gender equality measures receive support, coordination or funding from recognised institutions, bodies or funders in the field, senior management is more likely to perceive these initiatives as legitimate. The involvement of respected entities not only lends credibility to the measures but also signifies broader recognition and support, assuring top management that gender equality work is backed by expertise and best practices.

RFOs are well positioned to introduce requirements to implement GEPs and associated measures. These requirements have an impact not only at the institutional level but also at the individual level, as people realise that their research grants for personal projects may be affected if they fail to comply with or demonstrate progress in the field of gender equality. This realisation is likely to foster active commitment from senior researchers and management (371). Even in cases where these actions are imposed, the support they generate significantly enhances the legitimacy of gender equality work. This heightened legitimacy makes it easier to overcome resistance within the organisation,

175

⁽³⁶³⁾ Higher Education Authority (2022), Gender Equality – Report of the expert group: Second HEA national review of gender equality in Irish higher education institutions, Dublin (https://hea.ie/assets/uploads/2022/03/Reportof-the-Expert-Group-2nd-HEA-National-Review-of-Gender-Equality-in-Irish-Higher-Education-Institutions.pdf).

⁽³⁶⁴⁾ Sangiuliano, M. and Cortesi, A. (2019), *Institutional Change for Gender Equality in Research – Lessons learned from the field*, Edizioni Ca' Foscari, Venice (https://edizionicafoscari.unive.it/it/edizioni/libri/978-88-6969-335-9/).

⁽³⁶⁵⁾ Bencivenga, R. and Drew, E. P. (2021), 'Promoting gender equality and structural change in academia through gender equality plans: Harmonising EU and national initiatives', *Gender*, Vol. 13, pp. 27–42 (https://www.researchgate.net/publication/350076371 Promoting gender equality and structural change in academia through gender equality plans Harmonising EU and national initiatives).

⁽³⁶⁶⁾ EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality plans.pdf).

⁽³⁶⁷⁾ For more information on the SPEAR project, see https://cordis.europa.eu/project/id/824544.

⁽³⁶⁸⁾ For more information on the Geecco project, see https://cordis.europa.eu/project/id/741128.

⁽³⁶⁹⁾ For more information on ACT COPs, see https://act-on-gender.eu/communities-practice.

⁽³⁷⁰⁾ Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. J., et al. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender* Studies, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

⁽³⁷¹⁾ Interview with a stakeholder, conducted online, September 2022.

which is crucial for the effective implementation and long-term sustainability of GEPs or associated policies (372).

However, it is important to consider that the introduction of requirements, such as the Horizon 2020 eligibility criterion, and the potential sanctions, such as loss of funding opportunities, can sometimes lead to an approach to GEP development and implementation that lacks thorough consideration. This approach may not result in real cultural change, which takes significantly longer to achieve (³⁷³). This further highlights the need to build gender competence within senior leadership.

7.5. How can support from senior leadership impact the successful development and implementation of gender equality plans?

Commitment from top leadership is recognised as one of the essential elements of the successful development and implementation of GEPs, alongside time and resources (374). When high levels of institutional support are present, it facilitates the smooth progression of GEPs, paving the way for their effective development and implementation. In contrast, relying solely on bottom-up approaches places a significant burden on staff, particularly those from the under-represented gender who advocate for and raise awareness of such initiatives. Indeed, in situations where lower-level staff members are solely responsible for the development and implementation of GEPs, they may lack the decision-making authority necessary for effective change. However, early involvement and commitment from senior leadership, given their positions of authority, can establish effective gender equality structures and overcome these barriers (375).

Therefore, in addition to the essential role played by dedicated individuals, top-down commitment and structured support from senior management are vital for overcoming common obstacles encountered when developing and implementing gender equality actions (376). Furthermore, as previously mentioned, insufficient resources, both human and financial, pose a significant barrier to the successful development and implementation of GEPs. Hence, it is crucial to secure the support of senior leadership, as those in positions of seniority are more likely to have the authority and influence to better **facilitate the availability of these resources within an institution** (377). Support from senior leadership can also better ensure the longevity of actions by prioritising a permanent body or dedicated team to support gender equality work efforts. The embedded commitment from senior leadership also safeguards GEPs and associated policies from being negatively

_

⁽³⁷²⁾ EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality plans.pdf).

⁽³⁷³⁾ Interview with a stakeholder, conducted online, September 2022.

⁽³⁷⁴⁾ Target (2021), 'Successful GEP implementation depends on national frameworks: Institutional engagement alone is not enough' (https://www.gendertarget.eu/2021/11/30/successful-gep-implementation-depends-on-national-frameworks-institutional-engagement-alone-is-not-enough-target-geecco-policy-brief/).

⁽³⁷⁵⁾ EIGE (2016), 'Roadmap to gender equality plans in research and higher education institutions – Success factors and common obstacles' (https://eige.europa.eu/sites/default/files/gear_roadmap_02_successfactors_obstacles.pdf).

⁽³⁷⁶⁾ EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality plans.pdf).

^{(&}lt;sup>377</sup>) Ibid.

impacted by leadership changes, budget cutbacks or other contextual factors, as gender equality work becomes incorporated into the organisational governance structure (378).

However, the existence of dedicated structures does not always guarantee a commitment to sustainable action. In some cases, resources may be allocated to GEPs solely to meet requirements for awards or status, and once those goals are achieved, the resources may be reallocated elsewhere (379). In these instances, just enough is done to meet the necessary requirements without further commitment to cultural and institutional change. Moreover, change in leadership can result in setbacks to gender equality work, as new management may need to be persuaded and negotiated with to provide support to the work, requiring renewed awareness raising and training to build gender competences at this level.

Resistance to gender equality initiatives can be observed at both the individual and institutional levels. This resistance can take many forms, including denying the existence of gender discrimination, formally adopting plans without the intention of supporting them (380) or incorrectly perceiving that efforts to promote gender equality have already been completed (381). In the face of cultural and anti-feminist backlashes, the visible support of senior leadership can counter the opposition and quieten the resistance to GEPs or actions (382). The support of senior leadership in R & I organisations in the face of resistance is especially relevant in countries where gender equality initiatives are not prioritised at the national level or where the sociopolitical climate resists gender equality action (383). In some cases, national rhetoric reinforces traditional and conservative values that perpetuate gender stereotypes and reinforce resistance to gender equality changes (384). Where there is an absence of national gender equality discourse in R & I, the implementation of GEPs can be greatly impeded (385).

Support from senior leadership is consistently a critical factor in all environments, regardless of national-level support. Even in contexts where the national climate is supportive, strong internal resistance can still emerge within institutions. In such instances, the resolute stance of senior management plays a key role in minimising the expression of

-

⁽³⁷⁸⁾ Ibid.

⁽³⁷⁹⁾ Interview with RPO stakeholder, conducted online, September 2022.

⁽³⁸⁰⁾ Target (2021), 'Results of and lessons learned from Target' (https://irihs.ihs.ac.at/id/eprint/5960/1/wroblewski-2021-results-lessons-target.pdf).

⁽³⁸¹⁾ Interview with an RFO stakeholder, conducted online, September 2022.

⁽³⁸²⁾ This was noted in a stakeholder interview with a HEI, conducted online, September 2022. See also: EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles' (https://eige.europa.eu/sites/default/files/documents/success factors and obstacles for gender equality plans.pdf).

⁽³⁸³⁾ Multiple stakeholders indicated that a culture of resistance to gender equality measures at both the national and institutional levels leads to the legitimacy of such plans being questioned by both co-workers and external actors. A stakeholder from an HEI in Lithuania, for instance, highlighted that there had once been strong resistance to GEPs and gender equality measures in general, but when they became a national requirement for all companies, the resistance quietened. Interviews conducted online, September 2022.

⁽³⁸⁴⁾ For example, stakeholders from an RPO in Poland and an HEI in Lithuania both cited traditional values as a source of resistance to the use of gender-inclusive language, or in some cases discourse on gender equality in general. Interviews conducted online, September 2022.

⁽³⁸⁵⁾ Target (2021), 'Successful GEP implementation depends on national frameworks: Institutional engagement alone is not enough' (https://www.gendertarget.eu/2021/11/30/successful-gep-implementation-depends-on-national-frameworks-institutional-engagement-alone-is-not-enough-target-geecco-policy-brief/).

opposing views. Moreover, the significance of senior management support becomes even more pronounced when national-level incentives for GEPs are limited. The unwavering commitment and active involvement of senior leaders are essential for providing support, fostering awareness and exerting authority to sustain gender equality policies and plans.

Additionally, efforts to implement GEPs can be undermined when institutional measures are not compatible with national policies that might counteract efforts or introduce additional barriers to implementation (386). In addition to the need for institutional support from senior leadership, experiences from the GEECCO and TARGET projects have shown that the 'willingness to develop and implement GEPs depends on incentives or pressure from external authorities' (387). These authorities, such as national authorities or funding bodies, are able to **provide the incentives that motivate the formal and sustainable adoption of GEPs** (388). When organisations are under no pressure to introduce or follow through with GEPs and policies, it can impede progress. Without accountability to a higher authority (e.g. at the state or national level) GEP actions may become deprioritised. **To address this, it is crucial for national authorities to ensure the credibility of monitoring and evaluation frameworks within R & I institutions. Their active engagement in the process by providing feedback and recommendations is essential. Additionally, fostering vertical cooperation among stakeholders is necessary to effectively sustain accountability and credibility in the implementation of gender equality policies.**

7.6. Conclusions and recommendations

This section outlines the conclusions and key policy recommendations with respect to the role of senior leadership in the development and implementation of GEPs in R & I institutions.

To ensure the enduring impact of GEPs and bring about real institutional change, it is crucial to garner the support of senior leaders and those in positions of authority. Their proactive engagement is essential in driving the necessary cultural transformation and providing the resources needed for effective implementation.

The target audiences for these policy recommendations include EU policymakers, national-level policymakers, research organisations, HEIs and public bodies. To bridge the gap between policy initiatives and everyday practices in R & I institutions, collaborative efforts are needed across different levels: the state (macro), HEI (meso) and situational (micro) levels. Building gender competences within senior leadership is vital to fostering their responsibility for gender equality and their active engagement with actions such as GEP development and implementation. Key recommendations are listed in Table 21.

Lack of support from leadership within R & I institutions is a barrier to the successful development and implementation of GEPs. Top-down commitments need to support bottom-up approaches to overcome common obstacles to GEP development and implementation. Those in positions of leadership and in decision-making roles are more capable of establishing gender equality structures, and their visible commitment and support can help alleviate bureaucratic challenges and cultural barriers, especially in countries where national incentives to adopt GEPs are lacking.

(387) Ibid.

(388) Ibid.

⁽³⁸⁶⁾ Ibid.

Table 21. Recommendations for policymakers and institutions

Target group	Recommendation
Target group	
EU-level policymakers	 Promote gender competence, education and capacity building for senior leadership, management positions and administration within R & I organisations to enhance their understanding of and commitment to supporting and implementing gender equality in R & I.
	 Continue to support national- and institutional-level initiatives that prioritise and promote gender balance in leadership and decision-making within R & I.
	 Encourage national authorities to align policy initiatives with gender equality policies and plans and ensure accountability of actions through monitoring and evaluation frameworks.
	 Foster partnerships with relevant stakeholders, such as women's organisations, research networks and diversity and inclusion experts, to leverage expertise and resources in developing comprehensive gender equality strategies that advance gender-sensitive leadership for R & I.
	 Strengthen collaboration and knowledge-sharing between EU- level policymakers and national authorities to facilitate the exchange of best practices and strategies for advancing gender equality and gender-sensitive leadership and supporting women leaders in R & I.
National-level policymakers	 Foster partnerships with relevant stakeholders, such as women's organisations, research networks and diversity and inclusion experts, to leverage expertise and resources in developing comprehensive gender equality strategies that advance gender-sensitive leadership for R & I.
	 Promote gender competence, education and capacity building for senior leadership, management positions and administration within R & I organisations to better build the understanding of the need to support and enact gender equality in R & I.
	 Establish clear accountability measures for governing authorities to lead gender equality change in R & I, ensuring that top management within R & I organisations are held accountable through robust monitoring and evaluation frameworks.
	 Specifically allocate national funding to the development and implementation of GEPs to facilitate stable resource provision and encourage support from senior leadership.

- Demonstrate full commitment to national provisions and regulations aimed at achieving a gender balance in leadership and decision-making in R & I.
- Foster a culture of gender equality within senior leadership by integrating gender equality goals and targets into performance evaluations, leadership development programs, and promotion criteria.
- Encourage senior leadership to actively participate in the design and monitoring of GEPs.
- Support senior leaders in implementing policies and practices that promote gender equality within their respective departments or areas of responsibility. This may involve providing them with guidance, resources and tools to identify and address gender biases, ensure equal opportunities for career advancement and foster an inclusive and respectful work environment.

Research organisations, HEIs and public bodies

- Clearly articulate and communicate the institution's commitment to gender equality by endorsing and publicly supporting GEPs and associated activities. This sends a strong message to internal and external stakeholders about the institution's dedication to fostering an inclusive and diverse environment. Establish and maintain permanent structures for capacity building on gender equality and inclusion targeted at senior management. This can include workshops, training programmes and mentoring opportunities to enhance their understanding of gender issues and their ability to effectively lead gender equality initiatives.
- Commit to and maintain stable and sustainable dedicated resources for GEP development and implementation.
- Support equal gender representation in senior leadership positions, management positions and senior administration roles to support sustainable gender equality progress.
- Monitor progress towards gender equality goals by collecting and analysing relevant data, sharing findings with senior management.
- Encourage collaboration and knowledge sharing among senior leaders in research organisations and public bodies.
- Recognise and celebrate exceptional leadership on advancing gender equality.

7.7. Bibliography

ACT (n.d.), 'Communities of practice' (https://act-on-gender.eu/communities-practice).

Bencivenga, R. and Drew, E. P. (2021), 'Promoting gender equality and structural change in academia through gender equality plans: Harmonising EU and national initiatives', *Gender*, Vol. 13, pp. 27–42 (https://www.researchgate.net/publication/350076371 Promoting gender equality and structural change in academia through gender equality plans Harmonising EU and national initiatives).

Campanini Vilhena, F., Ezquerecocha Diez, M., García Muñoz, I., López Belloso, M., Fernández, L., Sanz, B. and Tenglerová, H. (2021), *Twitter #SpeedUpChange Campaign Celebrating 11th of February 2021*, Genderaction and Gearing Roles (https://gearingroles.eu/wp-content/uploads/2021/06/11-Feb-2021-Campaign-Report-16.06-final-version.pdf).

Clavero, S. and Galligan, Y. (2021), 'Delivering gender justice in academia through gender equality plans? Normative and practical challenges', *Gender, Work and Organization*, Vol. 28, No 3, pp 1115–1132 (https://onlinelibrary.wiley.com/doi/full/10.1111/gwao.12658).

Council of the European Union (2021), Council note – Virtual conference 'Deepening the ERA through gender equality' (8–9 July 2021) and Ljubljana Declaration on gender equality in research and innovation, Brussels, 21 September (https://data.consilium.europa.eu/doc/document/ST-12044-2021-INIT/en/pdf).

EIGE (n.d.), 'Gender statistics database' (https://eige.europa.eu/gender-statistics/dgs).

EIGE (n.d.), 'National academies of science: Presidents and members of the highest decision-making body' (https://eige.europa.eu/gender-statistics/dgs/indicator/wmidm_educ_wmid_acadsci/bar).

EIGE (n.d.), 'Research funding organisations: Presidents and members of the highest decision-making body' (https://eige.europa.eu/gender-statistics/dgs/indicator/wmidm_educ_wmid_resfund/bar).

EIGE (2016), 'Roadmap to gender equality plans in research and higher education institutions – Success factors and common obstacles' (https://eige.europa.eu/sites/default/files/gear_roadmap_02_successfactors_obstacles.pdf).

EIGE (2022), 'Gender equality plans in academia and research: Roadmap to effective implementation' (https://eige.europa.eu/publications/gender-equality-plans-academia-and-research-roadmap-effective-implementation).

EIGE (2022), 'Gender equality plans in academia and research: Success factors and obstacles'

(https://eige.europa.eu/sites/default/files/documents/success_factors_and_obstacles_for_g ender_equality_plans.pdf).

ERAC SWG GRI (2019), *Tackling Gender Bias in Research Evaluation: Recommendations for action for EU Member States*, Brussels (https://data.consilium.europa.eu/doc/document/ST-1204-2019-INIT/en/pdf).

ERAC SWG GRI (2021), *Gender Equality Plans as a Catalyst for Change*, Brussels (https://data.consilium.europa.eu/doc/document/ST-1202-2021-INIT/en/pdf).

European Commission (n.d.), 'Gender Equality in Engineering through Communication and Commitment' (https://cordis.europa.eu/project/id/741128).

European Commission (n.d.), 'Supporting and Implementing Plans for Gender Equality in Academia and Research' (https://cordis.europa.eu/project/id/824544).

European Commission (n.d.), 'The Commission's gender equality strategy' (https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/democracy-and-rights/gender-equality-research-and-innovation_en#the-commissions-gender-equality-strategy).

European Commission (2020), Commission communication – A union of equality: Gender equality strategy 2020–2025 (COM(2020) 152 final), Brussels (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN).

European Commission, DG Research and Innovation (2019), *ERA Progress Report 2018 – Data gathering and information for the 2018 ERA monitoring – Technical report*, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/publication-detail/-/publication/b9dcaeb4-34c5-11e9-8d04-01aa75ed71a1/language-en/format-PDF/source-search).

European Commission, DG Research and Innovation (2021), *Horizon Europe Guidance on Gender Equality Plans*, Publications Office of the European Union, Luxembourg (https://data.europa.eu/doi/10.2777/876509).

European Commission, DG Research and Innovation (2021), *She Figures 2021*, Publications Office of the European Union, Luxembourg (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1).

Genderaction (2021), 'Guidance for national and regional authorities for the creation and implementation of the European Commission GEP requirements', Deliverable No 5.4 (https://genderaction.eu/wp-content/uploads/2021/12/741466 Guidance-on-GEP-implementation-for-national-authorities-in-MS.pdf).

German Research Foundation (2020), 'New measures to promote gender equality in science and academia' (https://www.dfg.de/en/research funding/announcements proposals/2020/info wissenscha ft 20 82/).

Higher Education Authority (n.d.), 'Senior Academic Leadership Initiative' (https://hea.ie/policy/gender/senior-academic-leadership-initiative/).

Horizon (2022), 'Gender equality in research and innovation' (https://ec.europa.eu/research-and-innovation/en/horizon-magazine/gender-equality-research-and-innovation).

Sangiuliano, M. and Cortesi, A. (2019), *Institutional Change for Gender Equality in Research – Lessons learned from the field*, Edizioni Ca' Foscari, Venice (https://edizionicafoscari.unive.it/it/edizioni/libri/978-88-6969-335-9/).

Target (2021), 'Results of and lessons learned from Target' (https://irihs.ihs.ac.at/id/eprint/5960/1/wroblewski-2021-results-lessons-target.pdf).

Target (2021), 'Successful GEP implementation depends on national frameworks: Institutional engagement alone is not enough' (https://www.gendertarget.eu/2021/11/30/successful-gep-implementation-depends-on-national-frameworks-institutional-engagement-alone-is-not-enough-target-geecco-policy-brief/).

Thomson, A., Palmén, R., Reidl, S., Barnard, S., Beranek, S., Dainty, A. R. and Hassan, T. M. (2021), 'Fostering collaborative approaches to gender equality interventions in higher education and research: The case of transnational and multi-institutional communities of practice', *Journal of Gender Studies*, Vol. 31, No 1, pp. 36–54 (https://www.tandfonline.com/doi/full/10.1080/09589236.2021.1935804).

Figure 1. Members of the highest decision-making body

Country		Mem	bers of the l	nighest decis	sion-making	body	
Country	2017	2018	2019	2020	2021	2022	Trend
AL	0	44.4	44.4	44.4	57.1	0	
AT	30.2	27.9	28.6	29.5	42.9	45.2	
BA	0	42.9	42.9	42.9	57.1	0	
BE	40	50	46.2	46.2	38.5	35.7	-Bas
BG	44.4	36.4	40	50	50	54.5	88
CY	25	25	25	22.2	22.2	25	
CZ	30	33.3	20	20	30	30	1111
DE	36.6	40.2	40.2	38.5	45.1	44	
DK	37	38.5	40.7	46.2	48	48.1	
EE	0	14.3	14.3	14.3	16.7	28.6	
EL	11.1	12.5	12.5	12.5	11.1	12.5	
ES	40	38.5	58.3	50	56.4	48.7	
EU-27	36.6	37.9	38.3	38.8	40.4	41.2	
FI	46.7	42.9	46.2	38.5	38.5	50	II
FR	36.8	47.4	30	40	40	45	-ILLER
HR	28.6	28.6	28.6	28.6	28.6	14.3	
HU	0	0	0	0	0	11.1	
IE	44.1	50	51.6	46.9	48.4	44.8	
IS	0	36.4	54.5	45.5	54.5	54.5	
IT	0	30.4	30.4	30.4	30.4	30.4	
LI	0	80	80	75	60	60	
LT	32.1	36.4	36.4	38.2	33.3	36.4	
LU	55.6	55.6	44.4	55.6	55.6	55.6	
LV	36.4	40.9	31.8	40.9	76.5	80.5	
ME	0	33.8	33.8	33.8	33.8	0	
MK	0	51.9	51.9	51.9	51.9	0	
MT	15.4	40	45.5	45.5	40	40	
NL	33.3	33.3	16.7	50	50	60	
NO	0	52.4	45.5	45.5	45.5	54.5	
PL	21	23.3	27.9	27.4	21	19.4	[]
PT	33.3	36.4	41.7	41.7	41.7	41.7	
RO	0	44.9	44.9	44.9	44.9	44.9	
RS	0	23.1	23.1	23.1	21.4	0	
SE	59.8	57.1	56	57.6	53.3	50	Inst.
SI	42.9	42.9	42.9	42.9	57.1	57.1	
SK	16.7	15.4	15.4	15.4	15.4	7.7	
TR	0	5.4	3.3	3.4	10.3	0	
UK	38.3	26.7	26.7	26.7	40	35.7	II
XK	0	28.6	28.6	28.6	28.6	0	

NB: Data unavailable for AM, CH, FO, GE, IL, MA, MD, TN and UA. Source: EIGE Gender Equality Database.

Figure 2. Presidents or chairs

Country	Presidents or chairs						
Country	2017	2018	2019	2020	2021	2022	Trend
AL	0	100	100	100	100	0	
AT	33.3	33.3	33.3	66.7	66.7	66.7	
BA	0	0	0	0	0	0	
BE	0	0	0	0	0	0	
BG	0	0	0	0	0	0	
CY	0	0	0	0	0	0	
CZ	50	50	50	0	0	0	
DE	25	25	25	50	50	50	
DK	33.3	33.3	0	33.3	33.3	33.3	
EE	0	0	0	0	0	0	
EL	0	0	0	100	0	100	
ES	66.7	66.7	100	100	33.3	100	
EU-27	34	31.9	32.4	39.2	34.2	39.2	
FI	50	0	50	100	50	100	
FR	0	0	0	0	0	0	
HR	0	0	0	0	0	0	
HU	0	0	0	0	0	0	
IE	66.7	100	100	33.3	66.7	33.3	
IS	0	100	100	0	0	0	
IT	0	28	28	28	28	28	
LI	0	0	0	0	0	0	
LT	0	0	0	0	0	0	
LU	100	100	0	100	100	100	
LV	0	0	0	100	100	100	
ME	0	0	0	0	0	0	
MK	0	100	100	100	100	0	
MT	0	0	0	0	0	0	
NL	0	0	0	0	0	0	
NO	0	50	50	50	50	50	
PL	0	0	50	0	0	0	
PT	0	0	0	66.7	33.3	66.7	
RO	0	0	0	0	0	0	
RS	0	0	0	0	0	0	
SE	66.7	66.7	66.7	55.6	55.6	55.6	
SI	0	0	0	100	100	100	
SK	0	0	0	0	0	0	
TR	0	0	0	0	0	0	
UK	0	0	0	0	0	0	
XK	0	100	100	0	100	0	

NB: Data unavailable for AM, CH, FO, GE, IL, MA, MD, TN and UA. Source: EIGE Gender Equality Database.

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct centres. You can find the address of the centre nearest you online (<u>europeanunion.europa.eu/contact-eu/meet-us en</u>).

On the phone or in writing

Europe Direct is a service that answers your questions about the European Union.

You can contact this service:

- —by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- —at the following standard number: +32 22999696,
- —via the following form: european-union.europa.eu/contact-eu/write-us en.

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website (european-union.europa.eu).

EU publications

You can view or order EU publications at <u>op.europa.eu/en/publications</u>. Multiple copies of free publications can be obtained by contacting Europe Direct or your local documentation centre (european-union.europa.eu/contact-eu/meet-us en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex (<u>eur-lex.europa.eu</u>).

EU open data

The portal <u>data.europa.eu</u> provides access to open datasets from the EU institutions, bodies and agencies. These can be downloaded and reused for free, for both commercial and non-commercial purposes. The portal also provides access to a wealth of datasets from European countries.

This document presents seven policy briefs that complement the main report of the study 'Impact of gender equality plans across the European Research Area'.

It covers the role of national and EU policies, examines the monitoring and evaluation of the gender equality plans (GEPs) eligibility criterion in Horizon Europe, and looks at the progress made towards inclusive GEPs and policies. It also focuses on counteracting gender-based violence in research and innovation (R&I), examines intersectional approaches to achieving inclusive gender equality in R&I, and discusses the role of organisational structure and leadership support in developing and implementing GEPs.

Research and Innovation policy

