



Subgroup to the European Research Area Forum 'Inclusive gender equality in the European Research Area'

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#### Contents

Abbreviations4				
	work for the integration and evaluation of inclusive analysis in research and innovation content	. 5		
1. Intro	duction	5		
2. Cont	ext for and objective of developing principles	5		
2.1.	Policy developments at the EU level	5		
2.2.	Societal challenges that require inclusive gender analysis in R&I	7		
	ress achieved at the national and research funding nisation levels	10		
3.1.	Specific policies at the national level	10		
3.2.	RFO policies	11		
	areas of concern in advancing the implementation and ke of inclusive gender analysis in R&I content	11		
4.1.	Towards a common terminology	11		
4.2.	The lack of mandate at the national level	13		
4.3.	The need for comprehensive policies	13		
4.4.	Dealing with a variety of questions in application templates	14		
4.5.	The need to be equipped with proper indicators	15		
4.6.	Having the business enterprise sector on board	15		
4.7.	Research assessment reform of quality	16		
	ciples for integrating and evaluating inclusive gender ysis in R&I content	17		
5.1.	Embrace inclusive gender analysis	17		
5.2.	Adopt a whole-sector approach through national guidelines	17		
5.3.	Effective monitoring and evaluation for qualitative, long-term impact	18		
5.4.	Consistency and comprehensiveness of RFOs' policies	18		
5.5.	Harmonising procedures among RFOs to facilitate the work of the research and innovation community	19		
5.6.	Enhance capacities to increase creativity in knowledge production	19		
5.7.	Inclusive research content assessment	20		
6. Final	statement	20		

Annex 1. What does inclusive gender analysis in R&I mean?	. 21
Annex 2. Framework for monitoring and evaluating the integration of inclusive gender analysis in R&I	. 22
Annex 3. Consistent inclusive gender analysis in R&I for funding agencies	. 25
References	. 27

#### **Abbreviations**

Abbreviation	Definition
AI	artificial intelligence
BES	business enterprise sector
CoARA	Coalition for Advancing Research Assessment
ERA	European Research Area
GEP	gender equality plan
HEI	higher education institution
R&I	research and innovation
RFO	research funding organisation
RPO	research-performing organisation

#### 1. Introduction

The aim of this document is to provide guidance to national authorities and research and innovation (R&I) funding organisations on policy measures to ensure the effective implementation and evaluation of the integration of the gender dimension into R&I content from an intersectional perspective.

This document is one of the deliverables of the ERA Policy Agenda 2022–2024 (¹) related to the Action 5 'Promote gender equality and foster inclusiveness, taking note of the Ljubljana Declaration'. It has been developed by the Task Force on Gender Dimension in R&I created within the ERA Forum (²) Subgroup on Inclusive Gender Equality in the European Research Area (hereafter, the ERA Action 5 subgroup).

The ERA Action 5 subgroup (³) brings together representatives of 22 Member States, 3 associated countries, 14 ERA stakeholder organisations and various representatives of the European Commission to make joint progress towards the key priorities of ERA Action 5.

This document was drafted between March and October 2024 and addresses the fourth key priority of the ERA Action 5: 'Develop principles for the integration and evaluation of the gender perspective in research and innovation content in cooperation with national research funding organisations'. Its contents are not binding.

#### 2. Context for and objective of developing principles

#### 2.1. Policy developments at the EU level

The integration of the gender dimension into R&I content has been one of the ERA objectives for gender equality in R&I since the publication of the 2012 Commission communication (<sup>4</sup>) that identified 'gender equality and gender mainstreaming in research' as one of the core ERA priorities.

Horizon 2020 was the first research framework programme to set gender equality as a crosscutting issue, with one of the underpinning objectives being to integrate the gender dimension

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<sup>(1)</sup> European Commission: Directorate-General for Research and Innovation, European Research Area Policy Agenda – Overview of actions for the period 2022–2024, Publications Office of the European Union, Luxembourg, 2021, <a href="https://commission.europa.eu/system/files/2021-11/ec\_rtd\_era-policy-agenda-2021.pdf">https://commission.europa.eu/system/files/2021-11/ec\_rtd\_era-policy-agenda-2021.pdf</a>. This document was annexed to General Secretariat of the Council, Future Governance of the European Research Area (ERA) – Council conclusions, Council of the European Union, Brussels, 2021, <a href="https://data.consilium.europa.eu/doc/document/ST-14308-2021-INIT/en/pdf">https://data.consilium.europa.eu/doc/document/ST-14308-2021-INIT/en/pdf</a>.

<sup>(2)</sup> For more information, see <a href="https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&groupID=3833">https://ec.europa.eu/transparency/expert-groups-register/screen/exper

<sup>(3)</sup> For more information, see <a href="https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&fromMainGroup=true&groupID=103813">https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups-

<sup>(4)</sup> European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A reinforced European research area partnership for excellence and growth, COM(2012) 392 final of 17 July 2012, <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52012DC0392">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52012DC0392</a>.

into R&I content, leading to an increased number of 'gender-flagged' topics across the programme. Researchers were invited to consider the gender dimension in research proposals, while evaluators assessed its integration.

Horizon Europe goes further, by making the integration of the gender dimension into R&I content a requirement by default and assessing it under the 'Excellence' award criterion, unless the topic description explicitly specifies otherwise. In addition, the integration of the gender dimension into research and teaching content is one of the recommended thematic areas to be addressed by gender equality plans (GEPs), the development of which has become mandatory for research organisations applying for funding under the programme (5).

Many initiatives have been funded by the European Commission to support these efforts, including (i) those facilitating the alignment of agendas and mutual learning among Member States and associated countries regarding sex/gender analysis policies (<sup>6</sup>) and (ii) those providing training, methodological guidance and successful examples of innovative research that integrate sex/gender analysis (<sup>7</sup>).

Another important aspect introduced by Horizon Europe, in line with the Commission communication on a new ERA for research and innovation (8) and the Gender Equality Strategy 2020–2025 (9), is the opening of gender equality policies in R&I to intersections with other potential grounds for discrimination, such as race and ethnicity, disability, age and sexual orientation. This aspect has been addressed in particular through specific funding for projects focusing on intersectional research (10) and an increased inclusion of this perspective in Horizon Europe call topics.

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<sup>(5)</sup> European Commission, Horizon Europe Work Programme 2023–2025 – 13. General annexes, 2024, 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.

<sup>(6)</sup> Project (grant agreement ID 741874) information available at <a href="https://cordis.europa.eu/project/id/741874">https://cordis.europa.eu/project/id/741874</a> and project website available at <a href="https://gender-net-plus.eu/">https://gender-net-plus.eu/</a>. For this grant's predecessor (grant agreement ID 618124), see project information available at <a href="https://cordis.europa.eu/project/id/618124">https://cordis.europa.eu/project/id/618124</a>.

See, for example, European Commission: Directorate-General for Research and Innovation, Gendered Innovations - How gender analysis contributes to research: Report of the expert group 'Innovation through gender', Publications Office of the European Union, Luxembourg, 2013, https://op.europa.eu/en/publicationdetail/-/publication/d15a85d6-cd2d-4fbc-b998-42e53a73a449/language-en; European Directorate-General for Research and Innovation, Gender in EU-funded Research, Publications Office of the European Union, Luxembourg, 2014, https://op.europa.eu/en/publication-detail/-/publication/c118ea10-58fa-4173-a2c4-65c746918c20/language-en; European Commission: Directorate-General for Research and Innovation, Gendered Innovations 2 - How inclusive analysis contributes to research and innovation: Policy review, Publications Office of the European Union, Luxembourg, 2020, https://op.europa.eu/publication-detail/-/publication/33b4c99f-2e66-11eb-b27b-01aa75ed71a1; European Institute for Gender Equality, 'Gender equality in academia and research - GEAR tool', European Institute for Gender Equality website, n.d., accessed https://eige.europa.eu/gender-mainstreaming/toolkits/gear/integration-gender-dimension-6 January 2025, research-and-teaching-content; and grant agreement ID 824585 (see project information available at https://cordis.europa.eu/project/id/824585).

<sup>(8)</sup> European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A new ERA for research and innovation, SWD(2020) 214 final of 30 September 2020, <a href="mailto:eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0214">eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0214</a>.

<sup>(9)</sup> European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A union of equality: Gender Equality Strategy 2020–2025, COM(2020) 152 final of 5 March 2020, <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152</a>.

<sup>(10)</sup> See, for example, projects funded under Horizon Europe Cluster 2 available at <a href="https://cordis.europa.eu/search?q=contenttype%3D%27project%27%20AND%20programme%2Fcode%3D%27hORIZON-CL2-2021-DEMOCRACY-01-03%27&p=1&num=10&srt=/project/contentUpdateDate:decreasing (accessed 6 January 2025) and <a href="https://cordis.europa.eu/search?q=contenttype%3D%27project%27%20AND%20programme%2Fcode%3D%2">https://cordis.europa.eu/search?q=contenttype%3D%27project%27%20AND%20programme%2Fcode%3D%2</a>

The need to strengthen the integration of the gender dimension into Horizon Europe was underlined by its relatively low level of integration into Horizon 2020. According to the She Figures 2021 report (<sup>11</sup>), only around 1.7 % of all Horizon 2020 project publications at the European level integrated the gender dimension (and 0.2 % integrated an intersectional perspective) (<sup>12</sup>). However, the share of projects that indicated that they included a gender dimension increased with each successive work programme (<sup>13</sup>), and, overall, according to the Horizon 2020 final evaluation report, 23 % of projects included a gender dimension (<sup>14</sup>).

The recognition of various grounds of discrimination that may intersect with sex/gender variables in the content of R&I is one of the most important current developments. Indeed, in recent years, several new terms have emerged in an attempt to reflect the broader perspective of the gender dimension in R&I from an intersectional perspective. For the purposes of this document, as will be further explained in section 4, the term 'inclusive gender analysis in R&I content' is introduced to refer to the gender dimension in R&I from an intersectional perspective, taking advantage of the recognition of the term 'inclusiveness' in the ERA Policy Agenda 2022-2024. The terminology used here complements the terminology applied by the European Commission ('integration of a gender dimension into research and innovation content') in the context of Horizon Europe and the ERA Policy Agenda. Building on all the developments, experiences and efforts achieved in recent years to promote the integration of inclusive gender analysis into R&I content, ERA Action 5 subgroup representatives recognise that renewed joint efforts are needed to make the most of this important objective of gender equality policies in R&I. However, these representatives also note that the field of inclusive gender analysis in R&I content is evolving in a context marked by important societal challenges that have not yet received the necessary attention.

#### 2.2. Societal challenges that require inclusive gender analysis in R&I

Although inclusive gender analysis in R&I content is relevant for all research fields, the **principles for the integration and evaluation of the gender perspective in R&I content** will be implemented in the global context of an unprecedented climate crisis and multifaceted developments in artificial intelligence (AI). Both challenges require inclusive gender analysis to be integrated into R&I content broadly, and a common approach in the ERA.

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05%27&p=1&num=10&srt=/project/contentUpdateDate:decreasing (accessed 6 January 2025).

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

<sup>(12)</sup> The methodology used data from the EU Open Data Portal (now data.europe.eu) obtained by searching for explicit references to women and men or gender differences in all available text fields (abstracts, titles, objectives, results, etc.) linked to the project ID. For intersectionality, a shortlist of keywords—'intersectional\*,'disabilit\*','ethnic','LGBT\*,'race' OR 'racis\*','socio-economic', 'religion', 'belief', 'class', 'social origin', 'sexual orientation', 'vulnerable group' OR 'vulnerable population' – was used.

<sup>(13)</sup> The level of integration of the gender dimension into R&I content was measured by tracking the number of 'gender-flagged' topics across the programme.

<sup>(14)</sup> European Commission, Report from the Commission to the European Parliament and the Council – Ex post evaluation of Horizon 2020, the EU framework programme for research and innovation, SWD(2024) 30 final of 29 January 2024, <a href="https://research-and-innovation.ec.europa.eu/knowledge-publications-tools-and-data/publications/all-publications/final-evaluation-horizon-2020\_en.">https://research-and-innovation.ec.europa.eu/knowledge-publications-tools-and-data/publications/all-publications/final-evaluation-horizon-2020\_en.</a> See also European Commission: Directorate-General for Research and Innovation, Know-Center, Maastricht University and PPMI, Evaluation study on the implementation of cross-cutting issues in Horizon 2020 – Study in support of the ex-post evaluation of the European framework programme for research and innovation Horizon 2020, Publications Office of the European Union, Luxembourg, 2023, <a href="https://op.europa.eu/en/publication-detail/-/publication/2beeded1-d1d4-11ed-a05c-01aa75ed71a1">https://op.europa.eu/en/publication-detail/-/publication/2beeded1-d1d4-11ed-a05c-01aa75ed71a1</a>.

For decades, researchers have been providing evidence for the challenges posed by a changing climate (15), thus contributing to raising awareness on the climate crisis. However, there has not always been gender-sensitive research in this interdisciplinary field. In order to reach the knowledge that society needs to face the climate crisis, R&I should incorporate sex, gender and intersectional analysis into R&I content, and this has several implications.

One of the most basic aspects is to investigate the (potentially different) effects of the environmental crisis on different genders, and particularly on the most vulnerable groups of people. Science and research for society have a key role to play in highlighting who bears the brunt of the consequences of the environmental crisis, thus incorporating an intersectional perspective. The EU has pointed out the necessary gender perspective in energy and transport use (16), with these being just two examples that research with a gender dimension in R&I content has brought to light. However, discussions on the impact of climate change have many angles and involve many (interdisciplinary) research fields: (i) in the health field. the environment has an increasingly important role as a health determinant and women's bodies have been shown to be more vulnerable to pollutants than men's (17); (ii) in the changes experienced by agri-food systems, it is important to analyse women's participation as farmers and landowners; (iii) when addressing socioenvironmental disasters, the fact that women quite often bear the heaviest care burden needs to be considered (18); and (iv) the uneven distribution of unpaid household and care work, where women as a group take greater responsibility than men as a group, as well as the normative coding of technology as a male domain, has consequences for the impacts that different individuals have on the climate (19).

As women are under-represented in decision-making positions, it is important to recognise women's agency – enabling and supporting women to voice and articulate their realities, giving them the mandate to participate in discussions and decision-making related to the green transition  $(^{20})$  – and, in particular, to acknowledge the involvement of younger generations in the climate change movement. Indeed, norms around femininity and masculinity in the Global North may affect both women's and men's attitudes towards climate change  $(^{21})$ , therefore, a further exploration is required to ensure the promotion of attitudes

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<sup>(15)</sup> See, for example, <a href="https://www.ipcc.ch/reports/">https://www.ipcc.ch/reports/</a>.

<sup>(16)</sup> European Institute for Gender Equality, Gender Equality Index 2023 – Towards a green transition in transport and energy, Publications Office of the European Union, Luxembourg, 2023, <a href="https://eige.europa.eu/publications-resources/publications/gender-equality-index-2023-towards-green-transition-transport-and-energy?language content entity=en; and European Institute for Gender Equality, #3StepsForward: Why the Green Deal needs a gender perspective, European Institute for Gender Equality website, 8 March 2023, accessed 6 January 2025, <a href="https://eige.europa.eu/newsroom/news/3stepsforward-why-green-deal-needs-gender-perspective">https://eige.europa.eu/newsroom/news/3stepsforward-why-green-deal-needs-gender-perspective</a>.

<sup>(17)</sup> Westergaard, N., Gehring, U., Slama, R. and Pedersen, M. 'Ambient air pollution and low birth weight – Are some women more vulnerable than others?', Environment International, Vol. 104, 2017, pp. 146–154; Clougherty, J. E., 'A growing role for gender analysis in air pollution epidemiology', Environmental Health Perspectives, Vol. 118, Issue 2, 2009, pp. 167–176; and Butter, M. E., 'Are women more vulnerable to environmental pollution?', Journal of Human Ecology, Vol. 20, Issue 3, 2016, pp. 221–226.

<sup>(18)</sup> Research on climate-induced migration highlights that women and children are often more vulnerable to displacement and face greater challenges in accessing safe housing and resources during and after migration.

<sup>(19)</sup> These topics were addressed in GENDERACTION Policy Brief on Missions no. 5: Accelerating the transition to a climate prepared and resilient Europe, 2021, <a href="https://h2020.genderaction.eu/wp-content/uploads/2021/07/GENDERACTION Mission-Boards">https://h2020.genderaction.eu/wp-content/uploads/2021/07/GENDERACTION Mission-Boards</a> 5 Climate.pdf.

<sup>(20)</sup> For a discussion on women's unequal participation in decision-making in relation to climate-related planning and policymaking, see GENDERACTION Policy Brief No. 21: A Sustainability Approach to Horizon Europe Cluster 4 and 5, 2021, <a href="https://h2020.genderaction.eu/wp-content/uploads/2021/09/GENDERACTION PolicyBrief 21 SDG Cluster-4">https://h2020.genderaction.eu/wp-content/uploads/2021/09/GENDERACTION PolicyBrief 21 SDG Cluster-4</a> 5.pdf.

<sup>(21)</sup> Sand, J., utredare, Nationella sekretariatet för genusforskning, för Nordisk information för kunskap om kön (NIKK), Klimat, kön och konsumtion – En forskningsöversikt med genusperspektiv på hållbara livsstilar, Nordiska ministerrådet, 2022, <a href="https://nikk.no/wp-content/uploads/2022/10/2022-Klimat-kon-konsumtion-okt.pdf">https://nikk.no/wp-content/uploads/2022/10/2022-Klimat-kon-konsumtion-okt.pdf</a>.

that address climate change, including care values, are used without reproducing gender stereotypes.

With regard to the challenges posed by AI and emerging technologies, several studies have shown that bias in general and gender bias in particular are present at all stages of AI development and arise from a variety of factors, including but not limited to the design of algorithms and decisions related to how data are collected, coded and used to train algorithms. Both direct and indirect gendered effects might occur, but indirect gendered effects may not have a visible impact, yet they reinforce and perpetuate gender and intersectional biases

Therefore, conducting inclusive gender analysis is vital to understanding how gender and other intersectional factors operate within Al systems. Incorporating gender analysis into Al design helps to ensure that Al technologies are inclusive and responsive to the needs of different groups. It encourages researchers and innovators to critically examine how their algorithms may impact different genders and other intersectional factors and take responsibility for addressing any potential harms or biases. Furthermore, gender-aware Al models can improve accuracy and performance by accounting for gender-specific factors. This fosters diversity and inclusion in the design and use of Al systems.

The same also holds for emerging technologies like augmented and extended reality, quantum computing and the internet of things. The complexity of indirect gendered effects that might be found in emerging technologies may not reach the threshold for existing regulations, like the EU AI Act, which is why enforcing inclusive gender analyses in the R&I funding process is vital. Moreover, AI guidelines on the responsible use of generative AI in research, adopted by the ERA Forum (<sup>22</sup>), put forth the following principles acknowledged by the ERA Action 5 subgroup: (i) reliability in relation to AI involves being aware of possible equality and non-discrimination issues in relation to bias and inaccuracies; and (ii) the responsible use of generative AI should take into account the limitations of the technology, its environmental impact and its societal effects (bias, diversity, non-discrimination, fairness and prevention of harm).

In 2021, Member States, associated countries and the European Commission as signatories of the Ljubljana Declaration (<sup>23</sup>) committed to 'addressing the challenges of the digital and green twin transitions in a gender equal and inclusive manner, to ensure this transition is also just, triggering new inclusive ways of life for all, and new opportunity for jobs and for research'. For this to happen, ERA Action 5 subgroup representatives acknowledge that integrating inclusive gender analysis into R&I is a necessary condition for the success of the twin transitions and for all fields of research.

Therefore, the ERA Action 5 subgroup calls on national authorities and R&I funding organisations to build on the progress of recent years, recognise the pressing challenges and promptly adopt specific and comprehensive policies for the integration and evaluation of inclusive gender analysis in R&I content. The aim of this document is to provide a common

(23) Slovenian Presidency of the Council of the European Union, Ljubljana Declaration – Gender equality in research and innovation, 2021, <a href="https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/PSEU/Ljubljana-Declaration-on-Gender-Equality-in-Research-and-Innovation-endorsed\_final.pdf">https://www.gov.si/assets/ministrstva/MIZS/Dokumenti/PSEU/Ljubljana-Declaration-on-Gender-Equality-in-Research-and-Innovation-endorsed\_final.pdf</a>.

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<sup>(22)</sup> European Commission: Directorate-General for Research and Innovation, 'Guidelines on the responsible use of generative AI in research developed by the European Research Area Forum', European Commission website, 20 March 2024, accessed 6 January 2025, <a href="https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/guidelines-responsible-use-generative-ai-research-developed-european-research-area-forum-2024-03-20 en.">https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/guidelines-responsible-use-generative-ai-research-developed-european-research-area-forum-2024-03-20 en.</a>

set of principles for the design of consistent, effective policies on the integration of inclusive gender analysis into R&I content, for a whole-sector approach (<sup>24</sup>).

## 3. Progress achieved at the national and research funding organisation levels

The ERA Action 5 subgroup welcomes the progress achieved in recent years in the integration and evaluation of the gender dimension in R&I content, as outlined in the GENDERACTIONplus benchmarking and assessment report on guidelines for sex/gender analysis that informs this section (25). While progress has varied across the ERA and often lacks an intersectional approach, acknowledging the achievements and drawing on lessons learned from past experiences align with the mission of the ERA Action 5 subgroup. Although the majority of innovative practices and ideas have come from research funding organisations, some Member States of the ERA have also taken actions to influence their respective R&I systems.

#### 3.1. Specific policies at the national level

One of the most promising practices at the national level for advancing the integration of inclusive gender analysis into R&I content is having national mandates to enforce policies aimed at integrating sex/gender analysis into R&I content. For example, in Sweden, a government instruction (2016) (26) mandates that governmental research funding organisations (RFOs) are responsible for integrating sex/gender analysis into their funding schemes. This instruction is part of the Swedish Research Council's obligation to provide support for basic and applied research of the highest scientific quality in all research fields, including innovation.

Additionally, several countries have implemented policies within broader national strategies or directives to promote inclusive gender analysis in R&I content. The Gender Equality Strategy of Czechia (27) includes measures to address both sex and gender in the content of research, development and innovation in R&I projects and the gender perspective in the content of education. In Spain, the 2022 Law of Science, Technology and Innovation (28) encourages public agents of the R&I system to implement measures to achieve the integration of a gender dimension into the content of R&I.

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<sup>(24)</sup> Witt, A., Politis, M. and Womersley, K., 'A whole sector approach to policy change will accelerate integration of sex and gender in research', *BMJ*, Vol. 383, 2023, <a href="https://doi.org/10.1136/bmj.p2913">https://doi.org/10.1136/bmj.p2913</a>.

<sup>(25)</sup> Trine Rogg, K., Lydia, G. and Jana, D., *Deliverable 4.1 – Benchmarking and assessment report on guidelines for sex/gender analysis*, GENDERACTIONplus, 2023, <a href="https://doi.org/10.5281/zenodo.12795890">https://doi.org/10.5281/zenodo.12795890</a>.

<sup>(26)</sup> Ordinance (2009:975) from the Ministry of Education with instructions for the Swedish Research Council (in Swedish only), 2009, accessed 7 January 2025, <a href="https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/forordning-2009975-med-instruktion-for\_sfs-2009-975/">https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/forordning-2009975-med-instruktion-for\_sfs-2009-975/</a>.

<sup>(27)</sup> Office of the Government of the Czech Republic, Gender Equality Strategy for 2021–2030, 2021, pp. 58–61, https://www.vlada.cz/assets/ppov/gcfge/Gender-Equality-Strategy-2021-2030.pdf. See measures under strategic objective 2 'Expanding the content of education, science and research to include a gender perspective'.

<sup>(28)</sup> Law 17/2022 that modifies Law 14/2011 of Science, Technology and Innovation (in Spanish only), <a href="https://www.boe.es/buscar/act.php?id=BOE-A-2022-14581">https://www.boe.es/buscar/act.php?id=BOE-A-2022-14581</a>.

#### 3.2. RFO policies

While having national policies is certainly helpful for establishing consistent initiatives on inclusive gender analysis in R&I content, the design and implementation of these policies is often delegated to RFOs.

Most of the RFOs mapped in the ERA by GENDERACTIONplus have taken some concrete actions to support the integration of an Inclusive Gender Analysis in R & I Content, which indicates this domain is considered an essential component of the role of RFOs. Moreover, the adoption of specific, targeted policies on the gender dimension of R&I content is becoming more common in the ERA. Thus, significant changes in the organisational culture of RFOs, sponsored over the years by the European Commission and the representative groups of the ERA (<sup>29</sup>), means that any influential RFO needs to have a policy on the gender dimension of R&I in place, and this is a successful outcome of policies on gender equality in the R&I field.

Another area where progress has been observed in several RFOs is in the establishment of processes to monitor and evaluate policies for the integration of sex/gender analysis into R&I content. The evaluations of these policies have revealed positive changes in terms of the quantity, quality and aim of sex/gender analysis in research proposals, thus showing the potential of a consistent monitoring and evaluation framework.

The field of inclusive gender analysis in R&I content has evolved in recent years, albeit at different speeds, and the experience of different initiatives and mapping exercises funded by the European Commission (30) has shown that, once RFOs declare that they are planning future actions, they take further steps so that their plans become a reality.

# 4. Main areas of concern in advancing the implementation and uptake of inclusive gender analysis in R&I content

#### 4.1. Towards a common terminology

The terminological challenges are on two different levels. First, one frequent mistake is to confuse the gender dimension in research content with the composition of the staff (e.g. gender balance in research teams, review committees and research applications). These are two distinct issues of equal importance but with profound specificities. The gender dimension should not be confused with gender balance.

Second, one of the most important developments in the field of the gender dimension in R&I in recent years has been the integration of an intersectional perspective in the content of R&I. This has posed a challenge in terms of terminology that considers an intersectional approach. Thus, terms that were commonly used as synonymous in the ERA context, including by Horizon Europe, such as 'gender dimension in R&I' and 'sex/gender analysis', need to be considered for reassessment.

(29) The Helsinki Group (1999–2017) and its successor the Standing Working Group on Gender in Research and Innovation (2017–2021).

<sup>(30)</sup> See GENDERNET Plus, (2021) and Trine Rogg, K., Lydia, G. and Jana, D., *Deliverable 4.1 – Benchmarking and assessment report on guidelines for sex/gender analysis*, GENDERACTIONplus, 2023, <a href="https://doi.org/10.5281/zenodo.12795890">https://doi.org/10.5281/zenodo.12795890</a>.

Several new terms have recently emerged in the North American context that aim to stress the necessary intersectional perspective, including 'sex, gender and diversity analysis' (Hunt et al., 2022) and 'gender-based analysis plus' (Canadian Institutes of Health Research) (<sup>31</sup>). There is a need to explore the adoption of a common terminology among national authorities and funding agencies of the ERA in order to avoid confusion among stakeholders and institutions. The need for clear guidelines and definitions targeting both researchers and evaluators has been recommended by European projects such as GENDERACTIONplus (<sup>32</sup>) and by the GENDER-NET Plus community (<sup>33</sup>). In light of this, the term 'inclusive gender analysis in R&I' is proposed by this document, acknowledging the existing diversity of terms and emphasising that effective implementation is the ultimate goal.

# Key concepts around inclusive gender analysis in research and innovation R&I

The **gender dimension in R&I** and **sex/gender analysis** have been used as synonyms in EU policy on gender equality in R&I. Both terms have referred to the use of sex and/or gender aspects (<sup>34</sup>) – when appropriate – in all phases of a R&I project. This means taking into account the biological characteristics (sex) of women, men and intersex persons and the – changing – social and cultural features (gender) of women, men and non-binary and transgender people (<sup>35</sup>).

Intersectionality describes overlapping or interdependent systems of discrimination related to age, disabilities, ethnicity, gender, geographical location, sex, socioeconomic status, sexuality, etc. (36). Thus, expressions that have appeared in policy documents, such as sex, gender and intersectional analysis and gender dimension in R&I from an intersectional perspective, try to reflect this new approach towards intersectionality.

While intersectionality is the analytical tool examining how overlapping social identities and systems of discrimination (e.g. gender, disability) interact and affect individuals' experiences, **inclusive** (<sup>37</sup>) research relates to the integration of

(32) Trine Rogg, K., Lydia, G. and Jana, D., *Deliverable 4.1 – Benchmarking and assessment report on guidelines for sex/gender analysis*, GENDERACTIONplus, 2023, <a href="https://doi.org/10.5281/zenodo.12795890">https://doi.org/10.5281/zenodo.12795890</a>.

<sup>(31)</sup> Government of Canada, 'Gender-based Analysis Plus (GBA Plus)', Government of Canada website, 4 December 2024, accessed 7 January 2025, <a href="https://www.canada.ca/en/women-gender-equality/gender-based-analysis-plus.html">https://www.canada.ca/en/women-gender-equality/gender-based-analysis-plus.html</a>.

<sup>(33)</sup> See Cederrot, C. R., Earp, B. D., Gomez Prada, H. C., Jarach, C. M., Lir, S. A. et al., 'Integrating gender analysis into research: Reflections from the Gender-Net Plus workshop', eClinicalMedicine, Vol. 74, 2024.

<sup>(34)</sup> For an in-depth understanding of the concepts of sex and gender, taking into account that they involve different aspects, are interconnected and must be understood as non-binary within the EU policy framework on gender equality in R&I, see European Commission: Directorate-General for Research and Innovation, Gendered Innovations 2. How inclusive analysis contributes to research and innovation: Policy review, Publications Office of the European Union, Luxembourg, 2020, <a href="https://op.europa.eu/publication-detail/-/publication/33b4c99f-2e66-11eb-b27b-01aa75ed71a1">https://op.europa.eu/publication-detail/-/publication/33b4c99f-2e66-11eb-b27b-01aa75ed71a1</a>.

<sup>(35)</sup> GENDERACTIONplus, Glossary, n.d., https://genderaction.eu/wp-content/uploads/2024/01/Glossary.pdf.

<sup>(36)</sup> Schiebinger, L., Klinge, I., Sánchez de Madariaga, I., Paik, H. Y., Schraudner, M. et al. (eds), 'Intersectionality', Gendered Innovations in Science, Health & Medicine, Engineering and Environment website, n.d., accessed 7 January 2025, <a href="http://genderedinnovations.stanford.edu/terms/intersectionality.html">http://genderedinnovations.stanford.edu/terms/intersectionality.html</a>.

<sup>(37)</sup> Inclusiveness can take many forms. For instance, multimode surveys are more inclusive of older respondents who may be less likely to answer an online survey. Multilingual questionnaires are more inclusive of people from indigenous groups or regional minorities or foreign-born individuals. Adapted survey questionnaires facilitate the

diverse perspectives and experiences into R&I, to ensure that the design, implementation and outcomes reflect the needs/perspectives of different groups. Inclusive research has clear added value (38) in that all individuals, regardless of their socioeconomic status, ethnicity, age, social background, (dis)ability, sex or gender, are considered throughout the research process, from design to data collection and analysis and dissemination of the results. Therefore, for the purposes of these principles, **inclusive gender analysis in R&I** refers to the consideration of diverse factors of inequality that may intersect with sex/gender in a given object of study, as well as to the need to include diverse target groups and end users in R&I projects.

See also the infographic in Annex 1. 'WHAT DOES INCLUSIVE GENDER
ANALYSIS IN R&I MEAN?'

#### 4.2. The lack of mandate at the national level

National directives aimed at integrating inclusive gender analysis into R&I are scarce among members of the ERA. Moreover, the few policies that do exist are primarily directed towards public research funding agencies, which means that others involved in the R&I system, for example private funders, public and private research-performing organisations (RPOs) and higher education institutions (HEIs), are not called on in relation to integrating inclusive gender analysis into R&I and teaching content. This leads to fragmented and isolated efforts that, while providing promising practices that contribute to moving forward, do not guarantee a substantial change in the whole R&I system.

National structures for R&I policies have great potential to develop impactful policies on inclusive gender analysis in R&I content, with a comprehensive approach in terms of scope, content and diversity of actors. Moreover, national authorities have a major responsibility for framing the discourse about inclusive gender analysis in R&I content, establishing coordination and monitoring mechanisms, mobilising the business enterprise sector (BES) and actors beyond RFOs, and ensuring the integration of a gender dimension into teaching content.

The last point refers to the current status of sex, gender and intersectionality education at the higher education level. In all areas of knowledge, academics, researchers and engineers are not yet trained in methods of sex and gender analysis (Swedish Secretariat for Gender Research, 2021). This is particularly crucial for doctoral schools of all research areas, as an investment in the future.

#### 4.3. The need for comprehensive policies

As stated above, most initiatives and policies promoting the integration of inclusive gender analysis into R&I are being currently developed by RFOs. Most take diverse actions, ranging from developing guidelines for applicants to launching funding programmes on gender

participation of people with disabilities. Another approach to inclusive research is participatory research (see Vaughn, L. M. and Jacquez, F., 'Participatory research methods – Choice points in the research process', *Journal of Participatory Research Methods*, Vol. 1, Issue 1, <a href="https://doi.org/10.35844/001c.13244">https://doi.org/10.35844/001c.13244</a>), which is more common in health research and social sciences.

<sup>(38)</sup> Walmsley J, Strnadová I, Johnson K (2017) The added value of inclusive research. *Journal of Applied Research in Intellectual Disabilities* 31: 751–759..

studies. Certainly, the most common measure is requiring applicants to specify how they have considered sex/gender in the content of their research proposals.

While it is positive that different types of institutions are taking actions to promote inclusive gender analysis in R&I, this does not lead directly to comprehensive and specific policies. Moreover, a large number of initiatives on the topic does not necessarily mean that a consistent, well-designed policy covering different stages of the funding cycle is in place. In fact, the lack of consistent policies in the field of inclusive gender analysis in R&I content is a well-known problem. GENDER-NET Plus and GENDERACTIONplus projects' mapping have demonstrated that the majority of measures implemented by RFOs address the stages of the launch of the call and of the submission of applications, followed by measures directed at the assessment stage. However, the monitoring and evaluation phases are covered by measures implemented by RFOs to a much lesser extent. This lack of a systematic approach in the activities of RFOs can lead to insufficient integration of inclusive gender analysis in the research projects funded and their outcomes. The lack of attention paid to monitoring and evaluation also hinders continuous improvement in the design of interventions, further limiting the positive impacts of the policy.

Moreover, policies are inconsistently implemented across different RFOs and national agencies. While some RFOs may have clear guidelines and criteria for addressing inclusive gender analysis in R&I, others might lack such policies or fail to enforce them consistently, as stated above. This leads to variability in how inclusive gender analysis considerations are treated, with some projects receiving funding despite insufficient integration of an inclusive gender perspective. The lack of uniform enforcement mechanisms across RFOs further exacerbates this inconsistency, as there are no clear repercussions for failing to meet inclusive gender analysis requirements.

#### 4.4. Dealing with a variety of questions in application templates

Since the eighth research framework programme (Horizon 2020) started to promote the inclusion of a question asking applicants to specify for flagged topics how they are considering sex/gender aspects in their research, the inclusion of questions by RFOs on sex/gender analysis has become more and more common. However, the mapping of sex/gender analysis policies and exchanges among members of the ERA Action 5 subgroup have shown that there is considerable variety in the way funding agencies pose these questions.

While some of the questions inquire about the relevance of sex and/or gender in the planned R&I project, only a minority of funding agencies have started to consider inclusiveness aspects as well. Two elements that most RFOs have in common are the use of an open question and the requirement to justify both positive and negative replies regarding the relevance of sex and gender.

The questions about how R&I projects integrate inclusive gender analysis will shape the kind of data that can be collected and thus the indicators that can be used for the monitoring and evaluation of policy implementation. This is why posing questions in application templates without a thorough design of evaluation indicators is a matter of concern. Moreover, the variety of questions used poses challenges for the researchers and evaluators who take part in the funding processes of different institutions, both nationally and internationally. Reviewers have often pointed out that the assessment of the gender dimension of an R&I

proposal is more demanding than that of other aspects because inclusive gender analysis policies are implemented in different ways in various RFOs, and the indicators also vary (39).

#### 4.5. The need to be equipped with proper indicators

Lack of monitoring indicators and lack of consistency in addressing inclusive gender analysis in R&I throughout different stages of the funding cycle are two problems that are mutually reinforcing. The absence of specific guidelines and indicators leaves room for inconsistencies in how inclusive gender analysis is addressed across different R&I programmes. For instance, data collected on inclusive gender analysis in R&I content must necessarily be aligned with the indicators designed to follow up progress brought about by an intervention. Only in this way can comprehensive monitoring and evaluation be carried out.

While collecting relevant data by RFOs is key to monitoring progress of an internal policy to promote inclusive gender analysis in R&I, national structures lack common standards on the inclusive gender analysis indicators needed to generate statistics on the topic. Currently, at the European Commission level, the gender dimension in R&I is represented by only three indicators, namely the percentage of a country's publications with a gender dimension, the percentage of Horizon 2020 projects integrating a gender dimension into their content and, more recently, the share of Horizon Europe topics that do not integrate the gender dimension into their content (<sup>40</sup>). The small number of indicators, compared with other fields of gender equality policies in R&I (e.g. women's representation in R&I systems), adds to a lower level of validity for those few indicators assessing the gender dimension in R&I (<sup>41</sup>).

Therefore, introducing a more robust set of indicators for measuring achievements in implementing inclusive gender analysis is needed, ideally combining quantitative indicators documenting the extent of changes with qualitative indicators capturing their long-term impact more thoroughly. To be able to monitor the progress in addressing inclusive gender analysis in R&I, these indicators will also need to focus on other axes of inequality beyond that of sex and gender and incorporate an inclusiveness approach.

#### 4.6. Having the business enterprise sector on board

The business enterprise sector (BES) plays a significant role in generating new knowledge and fostering innovation. With the rapid development of emerging technologies, which are working their way into every part of society, affecting health care, mobility and transport, and engineering, among other things, getting the BES on board in systematically integrating inclusive gender analysis into their R&I development processes has become imperative. The AI index report from 2024 shows that industry dominates frontier AI research: 'In 2023, industry produced 51 notable machine learning models, while academia contributed only

<sup>&</sup>lt;sup>39</sup> Schiffbänker, H., Sauer, A., Peterson, H., van den Besselaar, P., Meuser, M. et al. (2023), D 6.3 Research paper on gendered practices in grant allocation processes: Reforming peer review practices – Lessons from the implementation of gender equality policies in research funding organisation, Joannuem Research, Graz, https://www.joanneum.at/wp-content/uploads/2024/11/GRANteD-D6.3-Reforming-peer-review-practices-2023 pdf

<sup>(40)</sup> Percentage of Horizon Europe topics that are exempt from the mandatory requirement to integrate a gender dimension into their R & I contents, set as a default in Horizon Europe. Those topics have the policy monitoring flag 'Not gender relevant' set to 'yes'. Only research actions, innovation actions and cofund types of actions are considered.

<sup>(41)</sup> Wroblewski, A. (2023), Deliverable 5.1 – First report on monitoring ERA action implementation at national level, GENDERACTIONplus, <a href="https://genderaction.eu/wpcontent/uploads/2023/09/GENDERACTIONplus\_D5.1\_First-report-on-monitoring-ERA-action-implementation-at-national-level.pdf">https://genderaction.eu/wpcontent/uploads/2023/09/GENDERACTIONplus\_D5.1\_First-report-on-monitoring-ERA-action-implementation-at-national-level.pdf</a>.

15' (<sup>42</sup>). At the same time, pharmaceutical companies failing to take relevant sex and gender aspects into account have been forced to withdraw drugs from the market, as they proved to put women at greater risk of developing health problems, resulting in unnecessary suffering and great financial loss (<sup>43</sup>).

The BES has a huge relevance in developing solutions for society while acknowledging its diversity, and has much to gain in terms of companies' competitiveness from engaging in gender-oriented policy interventions. However, there is still room for improvement in terms of getting the BES on board (44) and contributing to a holistic approach to the promotion of inclusive gender analysis in R&I policies. For this to happen, there is a need to apply the GEP eligibility criterion in the framework programmes to BES beneficiaries so that they can benefit from getting access to a skilled workforce and innovative talents.

#### 4.7. Research assessment reform of quality

Research assessment reform in the framework of the Coalition for Advancing Research Assessment (CoARA) (<sup>45</sup>) has been one of the most important discussions at the ERA level of recent years. The 2022 Agreement on Reforming Research Assessment (<sup>46</sup>) addresses (1) the assessment of RPOs and research units, (2) individual researchers and research teams, and (3) research projects, awards and decisions. It is precisely in the last aspect that the content of R&I comes into play.

While the CoARA Agreement is aimed at ensuring, among other principles, gender equality and inclusiveness, including 'gender balance', the 'gender dimension in R&I' and 'diversity', inclusive gender analysis in R&I has not been as present as it should have been in discussions on improving practices in the assessment of research proposals. Specifically, gender has not been addressed as a point in the discussion regarding the validity of research and practices that ensure that validity (<sup>47</sup>). This is a great untapped opportunity to remind the research community that inclusive gender analysis in R&I is an integral part of ensuring research quality, integrity and societal impact.

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<sup>(42)</sup> Maslej, N., Raymond Perrault, L., Parli V., Reuel, A., Brynjolfsson, E., Etchemendy, J., Ligett, K., Lyons, T., Manyika, J., Niebles, J.K., Shoham, Y., Wald, R., Clark, J., Artificial Intelligence Index Report 2024, Al Index Report 2024, <a href="https://aiindex.stanford.edu/report/">https://aiindex.stanford.edu/report/</a>.

<sup>(43)</sup> Schiebinger, L., Klinge, I., Sánchez de Madariaga, I., Paik, H. Y., Schraudner, M. et al. (eds), 'Prescription drugs: Analyzing sex and gender', Gendered Innovations in Science, Health & Medicine, Engineering and Environment website, n.d., accessed 7 January 2025, <a href="https://genderedinnovations.stanford.edu/case-studies/drugs.html#tabs-2">https://genderedinnovations.stanford.edu/case-studies/drugs.html#tabs-2</a>.

<sup>(44)</sup> Karaulova, M., Wienand, C., Walker, D., Bührer, S., Reidl, S. et al. (2023), Gendered Innovations, Inspire, https://doi.org/10.5281/zenodo.10033625.

<sup>(45)</sup> Coalition for Advancing Research Assessment (CoARA), 'What is CoARA', CoARA website, n.d., accessed 7 January 2025, <a href="https://coara.eu/">https://coara.eu/</a>.

<sup>(46)</sup> Coalition for Advancing Research Assessment (CoARA), 'The Agreement full text', CoARA website, n.d., accessed 7 January 2025, <a href="https://coara.eu/agreement/the-agreement-full-text/">https://coara.eu/agreement/the-agreement-full-text/</a>.

<sup>(47)</sup> Moher, D., Bouter, L., Kleinert, S., Glasziou, P., Sham, M. H. et al., 'The Hong Kong principles for assessing researchers: Fostering research integrity', PLOS Biology, Vol. 18, Issue 7, 2020, https://doi.org/10.1371/journal.pbio.3000737.

# 5. Principles for integrating and evaluating inclusive gender analysis in R&I content

#### 5.1. Embrace inclusive gender analysis

- Acknowledge the limitations and blind spots of applying solely the sex/gender approach without integrating the ways in which sex/gender intersect with other grounds of discrimination, producing unique forms of experiences of inequality.
- Use a concept that is recognisable at the ERA level and that stresses the necessary
  intersectional perspective, such as 'inclusive gender analysis in R&I'. While 'gender
  analysis' comprises both sex and gender variables when appropriate, 'inclusive'
  refers to the intersectional factors of inequality that may be intersecting with
  sex/gender in a given object of study, as well as to the need to include diverse target
  groups and end users in co-creation methods and innovation projects. See also the
  infographic in Annex 1. 'WHAT DOES INCLUSIVE GENDER ANALYSIS IN R&I
- Develop guidelines with definitions of sex, gender and intersectionality in line with the 'inclusiveness' approach explained above and tailored to the R&I institution. In the case of RFOs, this means that the templates for proposals need to be reviewed in order to include a guiding question for applicants that considers inclusiveness in research content. For Member States and associated countries, this implies that national guidelines must have a well-conceived communication strategy with a clear and consistent discourse regarding inclusive gender analysis in R&I content as a matter of quality, bias control and inclusiveness, capable of permeating the entire R&I system.

#### 5.2. Adopt a whole-sector approach through national guidelines

- Adopt a comprehensive approach that acknowledges both the need to involve all actors of the ecosystem – including national structures for R&I, HEIs, scientific journals and the BES – in order to accelerate change towards integrating inclusive gender analysis into R&I content (Witt et al., 2023), and the crucial role of national authorities in achieving this objective.
- Create a structure, such as a specific national committee or working group, dedicated to promoting inclusive gender analysis in research, innovation and teaching content with the relevant stakeholders (public and private RFO and RPO representatives, editorial boards, experts). This national structure should contribute to identifying needs and gaps in relation to the integration and evaluation of inclusive gender analysis in both R&I content and teaching content at the national level.
- Develop a specific national strategy or a policy initiative to promote the integration
  of inclusive gender analysis into R&I content in cooperation with public and private
  RFO and RPO representatives and national structures in charge of higher education
  and research evaluation. This strategy or policy should include specific and concrete
  actions to promote the integration of inclusive gender analysis into R&I content and
  teaching content.
- Within this strategy or policy initiative, national authorities should:
  - affirm a new culture in R&I and HEIs, highlighting the relevance for achieving high-quality standards of R&I through a systematic approach to integrating inclusive gender analysis into R&I and teaching content;
  - clearly state standard principles and clear concepts for a full understanding of integrating inclusive gender analysis into R&I content and teaching content;

- establish a clear mandate and directives for RFOs to ensure that they
  develop a specific, tailored policy to promote inclusive gender analysis in
  R&I content throughout the whole research funding cycle;
- o develop and disseminate tools and methods for the effective implementation and close monitoring of the approach to integrating inclusive gender analysis into R&I content, targeting researchers and evaluators:
- define appropriate monitoring and evaluation indicators for RPOs and RFOs in line with the common standards defined in these principles;
- encourage RFOs and RPOs to include the promotion of inclusive gender analysis in R&I content as a priority field of action in their GEPs;
- o set a specific budget and allocate sufficient resources at the national authority level for implementing this strategy or policy.
- Ensure the implementation, close monitoring and evaluation of the national strategy or policy initiative by the national structure, which should be equipped with the corresponding competences.

#### 5.3. Effective monitoring and evaluation for qualitative, long-term impact

- Plan in advance how the policy to promote the integration of inclusive gender analysis into R&I will be monitored and evaluated. For national structures, this will mean instructing different kinds of actors in the R&I system to ensure a coordinated approach. Transparency and reporting will be essential for effective monitoring and evaluation.
- At the ERA level, establish a set of quantitative and qualitative indicators to measure
  the achievement of the set objectives and provide information on their character.
  Indicators to capture considerations of other axes of diversity and inequality (e.g.
  ethnicity, age, sexual orientation) in gender analyses undertaken should be included.
- Set up a dedicated expert group at the ERA level that involves the European Commission, Member States and associated countries, RFOs, umbrella organisations and gender experts in order to support the implementation of the new objectives and follow up on the performance against these new indicators.
- Establish a framework for monitoring and evaluating the integration of inclusive gender analysis in R&I at the RFO level. This framework should systematically address a mixed-method approach in all its phases, that is, (i) pre- and post-proposal assessment; (ii) in evaluation and monitoring during the project life cycle; and (iii) during outcome evaluation. Quantitative analysis not only assesses the level of progress in achieving the intended policy goals and understanding the magnitude of the issue but also plays a critical role in the pre- and post-evaluation phases and decision-making processes. For instance, a significant disparity between the number of incoming applications acknowledging the importance of inclusive gender analysis and the number of funded applications demonstrating the same may reveal biases in evaluation and decision-making. Such a framework should also consider feedback loops for continuous improvement and addressing common challenges, as detailed in the infographic in Annex 2 'FRAMEWORK FOR MONITORING AND EVALUATING THE INTEGRATION OF THE INCLUSIVE GENDER ANALYSIS IN R&I.

#### 5.4. Consistency and comprehensiveness of RFOs' policies

 Address all phases of the funding research cycle for coherence and systematic support of integrating inclusive gender analysis into R&I. This applies to national authorities, which will need to define broad guidelines for RPOs and RFOs and monitor and evaluate their mandates, as well as to RFOs. In order to ensure consistency through the whole funding cycle, ranging from the design of the call to demonstrating the impact of the research funded, a systematic approach is required, as suggested in the infographic 'CONSISTENT INCLUSIVE GENDER ANALYSIS IN R&I FOR FUNDING AGENCIES' in Annex 3.

- Develop gender-responsive funding schemes, calls for proposals and grants that emphasise the integration of inclusive gender analysis into R&I content.
- Provide both applicants and reviewers with instructions, guidance and examples, to assist applicants in preparing their submissions and support reviewers in their evaluations

## 5.5. Harmonising procedures among RFOs to facilitate the work of the research and innovation community

- Follow the common standards established by these principles so that all procedures included in the RFO policy ranging from how to formulate questions in the application form for submitting proposals to monitoring and evaluating the impact of the interventions will move in the same direction as those of other institutions, including not only different RFOs but also actors at the national and EU levels. Related to this, all RFOs in the ERA should use similar terminology where possible, acknowledging these principles' approach in order to move towards common standards.
- Recognise that common standards make it easier for reviewers to adapt to new
  policies in practice and later enable a better comparability of impacts in evaluations
  (<sup>48</sup>). However, harmonising procedures does not mean direct transfer from one
  institution to another without taking into account autonomy and context. Similarly,
  harmonising procedures does not prevent national structures / RFOs from testing
  new bold, ambitious measures and becoming a reference model.

#### 5.6. Enhance capacities to increase creativity in knowledge production

- Acknowledge the potential impact of sex, gender and intersectionality education in HEIs in order to improve sex, gender and inclusiveness reporting in research applications, innovation solutions and scientific publications (<sup>49</sup>).
- Ensure that training programmes for doctoral students and early career researchers in all research fields include sex, gender and intersectionality.
- Increase sex, gender and intersectionality knowledge and capacity building efforts targeted at key actors across the R&I ecosystem, and particularly those directly involved in the funding process (applicants, evaluators, advisors, R&I managers, etc.).

<sup>&</sup>lt;sup>48</sup> Schiffbänker, H., Sauer, A., Peterson, H., van den Besselaar, P., Meuser, M. et al. (2023), D 6.3 Research paper on gendered practices in grant allocation processes: Reforming peer review practices – Lessons from the implementation of gender equality policies in research funding organisation, Joannuem Research, Graz, https://www.joanneum.at/wp-content/uploads/2024/11/GRANteD-D6.3-Reforming-peer-review-practices-2023.pdf.

<sup>&</sup>lt;sup>49</sup> Barr, E., Lo Chin, E., Newman, C. B., Rojek, M. K., Sleeper, R. et al. (2023), 'Reflecting on progress in and establishing benchmarks for sex and gender health education', *Academic Medicine*, Vol. 99, Issue 1, pp. 16–21

- Enhance capacities in relation to sex, gender and intersectionality as a way to support the implementation of one of the recommended content areas for GEPs in Horizon Europe.
- Embrace these principles through the allocation of funds for specific programmes/initiatives on gender studies, to foster the production of novel gender-related and intersectional knowledge. This in turn should form part of the curriculum reviews from a gender perspective in order to close the cycle of knowledge.

#### 5.7. Inclusive research content assessment

- Make integrating inclusive gender analysis into R&I a key part of debates aimed at
  moving towards high-quality and responsible research and innovation. The criteria
  used to assess which projects and research are funded should recognise all
  contributions to high-quality research, particularly those related to inclusive gender
  analysis.
- Ensure that practices for the assessment of R&I proposals consider the following as part of the CoARA-related initiatives:
  - criteria for the selection of R&I projects should consider the integration of inclusive gender analysis into R&I;
  - o understanding quality encompasses inclusive gender analysis;
  - o more impactful projects are those that meet the needs of the entire population in its diversity;
  - guidance for reviewers should address criteria and indicators for assessing the extent of integration of inclusive gender analysis into R&I and be supported by enough dedicated training;
  - information requested from applicants should include sex, gender and inclusiveness aspects, as detailed above.
- Facilitate discussions and mutual learning between specialists in research assessment reform and gender equality structures at the institutional level, so that both strategies reinforce each other to boost the integration of inclusive gender analysis into R&I.
- Guarantee that, in the review process, evaluating the extent of integration of
  inclusive gender analysis into R&I is part of the assessment of a proposal's overall
  quality, so that the science and innovation to be funded will be of the highest quality,
  integrity and social impact.

#### 6. Final statement

Representatives of Member States, associated countries and umbrella organisations in the ERA Action 5 subgroup fully endorse the principles developed, and detailed above, and call on national authorities and funding agencies of the ERA for support in implementing them.

Being fully aware of the need to have all sectors and stakeholders in national R&I systems on board for the success of these principles, and also of the need to align agendas in this field, the ERA Action 5 subgroup urges that efforts dedicated to integrating inclusive gender analysis into R&I policies continue in the ERA Policy Agenda 2025–2027.

#### Annex 1. What does inclusive gender analysis in R&I mean?

# WHAT DOES INCLUSIVE GENDER ANALYSIS IN R&I MEAN?

A FRAMEWORK TOWARDS INCLUSIVE GENDER ANALYSIS IN R&I



Sex/gender analysis in the content of R&I throughout the whole R&I project and the whole R&I funding process

INCLUSIVE GENDER ANALYSIS IN R&I



Intersectional factors of inequality that may be intersecting with sex/gender in the object of study



Including diverse target groups and end users in research and innovation projects

#### BY USING INCLUSIVE GENDER ANALYSIS IN R&I

- We acknowledge the limitations and blind spots of applying solely a sex/gender approach
- We echo academic debates on gender issues and bring them to the policy design
- We embrace the European
   Commission framework of intersectionality as a principle of R&I policies
- We promote the involvement of citizens, patients and users of all genders in the development of new knowledge and solutions

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# Annex 2. Framework for monitoring and evaluating the integration of inclusive gender analysis in R&I

# FRAMEWORK FOR MONITORING AND EVALUATING THE INTEGRATION OF INCLUSIVE GENDER ANALYSIS IN R&I

#### PROPOSAL ASSESSMENT PHASE



#### **QUANTITATIVE INDICATOR**

Proportion of applicants acknowledging relevance of incluisve gender aspects in the content of their project proposal



#### **QUALITATIVE INDICATOR**

Quality of inclusive gender analysis

#### **OBJECTIVE**

Monitor the proportion of applicants who identify that inclusive and gender aspects are relevant to their project



Evaluate the quality of the inclusive gender analysis provided by applicants who answer "yes" to the relevance question

#### **MECHANISM**

Proposal templates should include a mandatory question asking applicants about the inclusive gender analysis of their research and innovation proposal



Applicants who acknowledge relevance must provide a motivation and analysis detailing how sex and gender considerations impact their research design, methods, and outcomes



#### YES/NO RESPONSE

Applicants must indicate whether sex and gender aspects are relevant to their project's content and justify "no" answers



#### **EVALUATION CRITERIA**

The quality of the analysis is assessed based on its relevance, depth, and coherence with the project's goals. A thorough analysis of the motivation for negative answers is also conducted



#### **DATA COLLECTION**

Track responses to assess how many applicants are addressing relevance across different fields, programmes and sectors

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# EVALUATION AND MONITORING DURING THE PROJECT LIFE CYCLE





#### **OBJECTIVE**

Track the proportion of funded projects that claimed gender relevance during the proposal phase and ensure that these are followed through during project implementation



Evaluate the quality of the inclusive gender analysis performed at key stages of the project

#### **MECHANISM**

Periodic reports from funded projects should include updates on how inclusive gender aspects are being addressed. Comparison with initial claims allows for monitoring compliance



Use periodic evaluations and final reporting to assess the integration of inclusive gender analyses in project outcomes





#### **DEPTH OF ENGAGEMENT**

Check whether the gender analysis remained consistent, relevant, and informed during the project's implementation





#### **CORRECTIVE ACTION**

Provide feedback where the inclusive gender analysis is lacking or underveloped

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#### FEEDBACK LOOPS FOR CONTINUOUS IMPROVEMENT

### ADJUSTING COMMUNICATION AND TRAINING

Based on the monitoring of the quantitative indicator (where gaps are identified), targeted communication, workshops, and updated guidelines should be offered to applicants in fields or sectors where the inclusive gender analysis is often overlooked

#### EVALUATION OF ASSESSMENT PRACTICES

Regularly review how evaluators assess the qualitative aspect of proposals, providing training to ensure evaluators competence

#### ADDRESSING COMMON CHALLENGES

#### CONFLATION WITH GENDER BALANCE

Provide clearer guidance in proposal templates to distinguish between gender balance in teams and inclusive gender analysis in project content. This will minimize applicants confusing the two and improve the quality of proposals

#### INFORMED DECISION-MAKING

Ensure that evaluators and applicants are informed about the difference between simply answering "yes" to gender relevance and providing a thorough, research-based inclusive gender analysis and how these indicators are evaluated

#### **OUTCOME EVALUATION**

### ASSESSING PROJECT RESULTS

In the final evaluation, the integration of the inclusive gender analysis should be a key factor in determining the success of the project. This will involve reassessing both quantitative and qualitative aspects to see if the project's initial inclusive gender analysis were integrated and reflected in the project outcomes

#### **IMPACT**

Beyond compliance, assess how the inclusion of inclusive gender analysis contributed to the scientific, social, or economic impact of the project

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# Annex 3. Consistent inclusive gender analysis in R&I for funding agencies

# CONSISTENT INCLUSIVE GENDER ANALYSIS IN R&I FOR FUNDING AGENCIES

SEX, GENDER AND INCLUSIVENESS IN THE CONTENT OF R&I



# DESIGN OF THE CALL

- Train the staff
- Specify gender and inclusiveness issues related to the topic
- Include inclusive gender analysis in R&I as an evaluation criterion
- Encourage gender expertise within teams

- Include questions on inclusive gender analysis in R&I
- Collect disaggregated data on applications related to inclusive gender analysis in R&I

# APPLICATION TEMPLATES





# PROMOTION OF THE CALL

- Launch campaigns to promote inclusive gender analysis in R&I
- Provide guidelines and materials
- Nominate a contact point to support applicants

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- Provide training and guidelines for evaluators
- Ensure gender expertise in evaluation panels
- Include a specific section in evaluation summary reports

# EVALUATION OF PROPOSALS





# FUNDING DECISION

- Include inclusive gender analysis in R&I as part of the proposal's overall quality
- Collect disaggregated data on inclusive gender analysis in R&I in the ranking list

- Define monitoring indicators on inclusive gender analysis in R&I
- Collect quantitative and qualitative data
- Publish monitoring and evaluation data and results

#### MONITORING AND EVALUATION





#### POLICY EVALUATION

- Use mixed methods and indicators
- Count on gender experts
- Reach conclusions and make adjustments
- Show impact through promotion activities

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#### References

Barr, E., Lo Chin, E., Newman, C. B., Rojek, M. K., Sleeper, R. et al. (2023), 'Reflecting on progress in and establishing benchmarks for sex and gender health education', *Academic Medicine*, Vol. 99, Issue 1, pp. 16–21.

Cederrot, C. R., Earp, B. D., Gomez Prada, H. C., Jarach, C. M., Lir, S. A. et al., 'Integrating gender analysis into research: Reflections from the Gender-Net Plus workshop', eClinicalMedicine, Vol. 74, 2024.

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

GENDER-NET Plus (n.d.), Deliverable 6.2 – Comparative analytical report on existing national and regional initiatives on the integration of the gender dimension in research content, <a href="https://gender-net-plus.eu/wp-content/uploads/2023/06/D6.2.-Comparative-analysis report MICINN def.pdf">https://gender-net-plus.eu/wp-content/uploads/2023/06/D6.2.-Comparative-analysis report MICINN def.pdf</a>.

Hunt, L., Nielsen, M. W. and Schiebinger, L. (2022), 'A framework for sex, gender, and diversity analysis in research', *Science*, Vol. 377, Issue 6614, pp. 1492–1495, <a href="https://doi.org/10.1126/science.abp9775">https://doi.org/10.1126/science.abp9775</a>.

Karaulova, M., Wienand, C., Walker, D., Bührer, S., Reidl, S. et al. (2023), *Gendered Innovations*, Inspire, <a href="https://doi.org/10.5281/zenodo.10033625">https://doi.org/10.5281/zenodo.10033625</a>.

Schiffbänker, H., Sauer, A., Peterson, H., van den Besselaar, P., Meuser, M. et al. (2023), D 6.3 Research paper on gendered practices in grant allocation processes: Reforming peer review practices – Lessons from the implementation of gender equality policies in research funding organisation, Joannuem Research, Graz, <a href="https://www.joanneum.at/wp-content/uploads/2024/11/GRANteD-D6.3-Reforming-peer-review-practices-2023.pdf">https://www.joanneum.at/wp-content/uploads/2024/11/GRANteD-D6.3-Reforming-peer-review-practices-2023.pdf</a>.

Swedish Secretariat for Gender Research (2021), *The Gender Dimension in Research and Innovation: Results from a global survey on research funding organisations*, University of Gothenburg, Gothenburg, <a href="https://www.gu.se/sites/default/files/2021-04/The%20Gender%20Dimension%20in%20Research%20and%20Innovation.pdf">https://www.gu.se/sites/default/files/2021-04/The%20Gender%20Dimension%20in%20Research%20and%20Innovation.pdf</a>.

Trine Rogg, K., Lydia, G. and Jana, D. (2023), *Deliverable 4.1 – Benchmarking and assessment report on guidelines for sex/gender analysis*, GENDERACTIONplus, https://doi.org/10.5281/zenodo.12795890.

Witt, A., Politis, M. and Womersley, K. (2023), 'A whole sector approach to policy change will accelerate integration of sex and gender in research', *BMJ*, Vol. 383, <a href="https://doi.org/10.1136/bmj.p2913">https://doi.org/10.1136/bmj.p2913</a>.

Wroblewski, A. (2023), *Deliverable 5.1 – First report on monitoring ERA action implementation at national level*, GENDERACTIONplus, <a href="https://genderaction.eu/wp-content/uploads/2023/09/GENDERACTIONplus">https://genderaction.eu/wp-content/uploads/2023/09/GENDERACTIONplus</a> D5.1 First-report-on-monitoring-ERA-action-implementation-at-national-level.pdf.

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This document was developed by the European Research Area Forum Subgroup on Inclusive Gender Equality in the European Research Area, in close cooperation with the European Commission, with the aim to provide guidance to national authorities and research and innovation funding organisations on policy measures to ensure the effective implementation and evaluation of the integration of the gender dimension into research and innovation content from an intersectional perspective.

Research and innovation policy

