Guideline
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GENDER ACTION+

ADDRESSING RESISTANCES TO POLICIES PROMOTING SEX/GENDER ANALYSIS IN RESEARCH AND INNOVATION CONTENT

A Guideline for Research Funding Organisations and National Authorities

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Introduction

Resistances to gender equality policies and the process of their implementation in the field of research and innovation (R&I) are a well-recognised and widely researched problem (e.g. Lombardo & Mergaert 2013; Mergaert & Lombardo 2014; Sağlamer et al. 2016). A less explored issue, however, is the resistance to the integration of sex/gender analysis into the content of R&I and the specific forms of this resistance, even though this resistance is an important reason why the implementation of policies in this area has been hindered. The aim of this document is to describe the different forms of resistance experienced by gender equality agents in research funding organisations (RFOs) and national authorities – whether it be resistance expressed by colleagues whose cooperation is necessary for the successful implementation of the respective policies, or resistance on the part of researchers submitting proposals, project evaluators, and any other relevant actors. This paper is based on interviews and group discussions with representatives of these two types of organisations. The focus is primarily on the specific arguments that are commonly used in acts of resistance, and the aim is to use the gained insights to propose lines of argumentation and practical steps to support gender equality agents in RFOs and national authorities in strategically addressing resistance in their daily work and achieving policy goals related to the integration of sex/gender analysis (or inclu-

sive gender analysis) in R&I.[1] The argumentation lines developed may also be used by other actors involved in promoting sex/gender analysis in R&I and developing effective communication strategies, such as research performing organisations (RPOs), umbrella organisations, and National Contact Points.

Statement of the issue

The requirement that researchers and innovators take into account (biological) sex and/or (socially and culturally formed) gender differences in the content of their work and its outcomes has become an established component of national and supranational policies governing R&I and associated institutional practices in recent years. The European Commission (EC) has played a pivotal role in this development and in encouraging researchers to integrate sex/gender analysis in the projects that it funds.[2] Considering the possible role of sex and/or gender differences in the content of R&I is currently required not only by many national RFOs (see Korsvik et al. 2023; Schiebinger et al. 2011–2025; White et al. 2021) but also by scientific journals, especially in the fields of medicine and biology (for an overview, see Schiebinger et al. 2011–2025).

Proponents of policies for integrating sex/gender analysis into R&I (when applicable) link this endeavour to an improved quality of research. By taking into account the possible role of sex and/or gender, they argue, the validity of the results increases due to a deepened understanding of the researched subject and diverse people's needs, behaviours, and attitudes. Greater transparency may also enhance the reproducibility and generalisability of research. Proponents of these policies present evidence that better knowledge of differences that may be related to sex or gender yields outcomes (the produced knowledge, technologies, or innovations) that are of greater relevance for different user groups and a more socially equitable distribution of the benefits of R&I. The increased relevance of research results and created products or services helps

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1 | In recent years, there has been a growing emphasis on the importance of an **inclusive gender analysis in R&I** (e.g. EC 2020, 2025). This refers to the need to consider an intersectional perspective (i.e., to focus also on other social categories that may intersect with gender and sex, such as ethnicity, age, or disability) and the diversity of target groups and end users (EC 2025). Despite these developments, the text is primarily concerned with resistances to sex/gender analysis as such, as only a minority of the organisations interviewed are currently working with intersectional aspects. However, for most of the proposed argumentation lines and practical steps, there are clear implications for inclusive gender analysis as well.

2 | In the EU's ninth framework programme for R&I, Horizon Europe, it has become mandatory for applicants in all calls, unless explicitly stated otherwise, to describe how the gender dimension is taken into account in their project's content (if applicants do not consider this dimension to be relevant in their research, they need to provide a justification). Moreover, having a gender equality plan in place has become an eligibility criterion for certain categories of entities, while activities for promoting the integration of the gender dimension into research and teaching content have been defined as one of the recommended areas of its content. See https://research-and-innovation.ec.europa.eu/strategy/strategy-research-and-innovation/democracy-and-rights/gender-equality-research-and-innovation_en.

to expand the range of users of these results, products, and services and increases business opportunities (Schiebinger et al. 2011–2025; EC 2020; Hunt et al. 2022).

Despite the benefits, long-term efforts, and continuous improvements,[3] there are still many **shortcomings in the effective implementation of policies aimed at promoting the integration of sex/gender analysis in R&I**. Various studies from EU and other countries have documented a lack of understanding of what integrating sex/gender analysis entails, as well as misconceptions on the part of both researchers and the evaluators of research proposals. These misconceptions include conflating a sex/gender analysis of the content of research with having a gender balance in research teams, the perception that a sex/gender analysis is only relevant in certain research fields, and a limited understanding of what constitutes a comprehensive sex/gender analysis (e.g. Håkansson & Sand 2021; Haverfield & Tannenbaum 2021; van Hagen et al. 2021; Korsvik et al. 2023; Schiffbänker, Sauer & Peterson 2024). One of the key factors hindering implementation and contributing to the insufficient understanding is the resistance to sex/gender analysis and gender equality measures more broadly.

Understanding resistances to gender equality policies

As defined by Lombardo and Mergaert (2013: 299), resistance is *'a phenomenon that emerges during processes of change – such as when gender equality policies are implemented – and that is aimed at maintaining the status quo and opposing change'*. Resistance may be triggered by any organisational change. Promoting gender equality is, however, likely to invoke particular resistance, as it often challenges existing practices, power dynamics, and cultural frameworks, as well as personal beliefs about masculinity and femininity (Lombardo & Mergaert 2013; Tildesley, Lombardo & Verge 2022). Because it is rooted in feminist positions, it is often seen as a reflection of an ideological programme unrelated to 'real' or 'rationally based' needs.

Given the significant role of resistance in the processes of implementing measures to support gender equality in R&I (and in other fields), the topic has been the subject of numerous studies (e.g. Lombardo & Mergaert 2013; Mergaert & Lombardo 2014; Sağlamer et al. 2016; Tildesley, Lombardo & Verge 2022; Ferguson & Mergaert 2022). These studies highlight the multiplicity of factors that may contribute to or amplify resistance. While some of these factors are more closely linked to the **institutional context** and others to the **personal motives** of those expressing resistance, they can be understood as a continuum. Among the factors associated with the institutional context are limited financial and human resources or a specific institutional culture. The spectrum of more personal motives for resistance includes a lack of gender awareness, being uncomfortable with gender issues, conformity with the status quo, and feeling uncomfortable with changes. An example of a factor that is connected to the setting and culture of institutions as well

3 | For instance, the ex-post evaluation of the Horizon 2020 programme (EC 2024) states that the proportion of proposals indicating the gender dimension as relevant for the project content increased in every work programme (while 23% of proposals in the 'gender-flagged' topics across the programme overall took the gender dimension into account).

as with personal beliefs is the understanding of meritocracy. There tends also to be an interplay between different factors.

As also documented, resistance occurs in multiple forms. These forms can be classified along two main axes: as **active/passive** or **explicit/implicit** forms of resistance. Active resistance refers to actions aimed at preventing implementation, such as devaluation, denial of the need for change, ridicule, or denial of access to resources. Passive resistance involves acts of non-cooperation, the withholding of information, or creating an uncomfortable climate. The distinction between explicit and implicit resistance refers to the degree of overtness of the resistance. Implicit resistance is harder to identify and address (Sağlamer et al. 2016; Ferguson & Mergaert 2022).

The specific nature of resistances to policies promoting sex/gender analysis in R&I

While resistances related to the efforts to integrate sex/gender analysis in R&I content are shaped by factors to other gender equality measures, such as those promoting gender balance, they may employ **specific discourses that form specific barriers to the implementation process**. It is the specific arguments used in acts of resistance that is the primary focus of this paper, namely the arguments that gender equality agents in RFOs and national authorities face within their organisational setting or from their external stakeholders. As Ferguson and Mergaert (2022: 3) point out: *'Categorising resistances is important, as it allows us to plan and act strategically according to the specific form and content of resistance.'* Therefore, the objective of this paper is to use the gained insights to propose argumentation lines of argument and practical steps that may support these actors (or gender equality agents) in addressing resistances and assist them in achieving policy goals related to the integration of sex/gender analysis (or inclusive gender analysis) in R&I.

Data sources

This paper draws methodologically on data collected in **three short group discussions** with fourteen representatives of national authorities responsible for the gender equality agenda and expert organisations supporting the implementation of gender equality policies. In addition, **six expert interviews** were held with nine employees of RFOs. All discussions and interviews were conducted online between March and December 2024. Most of the participants belonged to the organisations involved in the GENDERACTION-plus project as beneficiaries or associated partners, some of them as allied partners. When recruiting participants, the aim was to include organisations and countries with different levels of experience in implementing policies to integrate sex/gender analysis in R&I. The countries covered in the discussions and interviews included Austria, Belgium, the Czech Republic, Estonia, Germany, Ireland, Italy, Malta, Norway, Poland, Romania, Slovakia, Sweden, and Switzerland. Different stages of advancement and diverse cultural environments can give rise to different discourses of resistance. It is this diversity that this paper seeks to capture in order to propose both arguments and practical tools for actors from different cultural and organisational settings.

Who is the source of the resistances?

In the context of RFOs, whose representatives were the ones with whom this issue was discussed most, a higher level of resistance was typically observed among **proposal evaluators and researchers** than among staff or management.

It is not possible to draw deeper conclusions about the possible impact of the specific scientific discipline of researchers and evaluators on the nature of the discourse or level of resistance, as participants stated that they did not have enough evidence to make such claims. However, several of them pointed out that while it might commonly be assumed that **social scientists** would better understand how to integrate a sex/gender analysis and be more open to it, this appeared not to be true. On the contrary, one interviewee expressed the view that there is greater acceptance of the requirement to integrate sex/gender analysis in the **life sciences**: *'I think that in the life sciences there is a basic consensus that it is important to consider this. I think this is because gender medicine has now made some progress and it is recognised that we have less knowledge about female diseases or how women react to certain medications.'* Here, however, it can probably be assumed that this is primarily due to a consideration of sex (rather than gender), which does not pose a major challenge to biological optics because the general significance of sex attributes (such as hormones or chromosomes) is recognised in the framework of biology.

An interesting observation from another RFO was that understanding and resistances can vary among different types of actors involved in research: *'We could say that there are different levels of resistance within different types of project partners. I mean, the lowest level of resistance comes from civil society. They are very used to working with this kind of question. And the highest level of resistance would be from **industry**, very male-dominated sectors and branches. They may not understand the relevance of these perspectives.'*

Recommendations:

- Given that the level of resistance appears to be closely linked to the level of understanding of what sex/gender analysis entails, overcoming resistance requires paying attention to disciplinary or sectoral differences when establishing a communication strategy – whether by emphasising specific arguments (e.g. highlighting the potential to expand the range of users of an outcome and market potential over the argument about social justice) or choosing specific examples to illustrate the benefits of integrating sex/gender analysis.

- It should not be automatically assumed that in the social sciences there is greater acceptance of the requirement to integrate sex/gender analysis in R&I (and a better understanding of what this integration entails). A communication strategy (including concrete examples) should also be developed for the social sciences.

COMMON ARGUMENTS AGAINST PROMOTING SEX/GENDER ANALYSIS IN THE CONTENT OF R&I (AND HOW TO ADDRESS THEM)

1. Resistances to sex/gender analysis as part of more general anti-gender attitudes

This form of resistance does not consist of one specific discourse but rather comprises a broader set of attitudes that underpin most other forms of resistance. However, while other discourses of resistance seek to make a more profound argument for the supposed uselessness or fallacy of integrating sex/gender analysis, these attitudes are **primarily manifested in the simple rejection of sex/gender analysis as ideologically motivated**. Experience with them was mentioned primarily (but not solely) by interviewees from countries and/or organisations where policies for promoting sex/gender analysis were introduced relatively recently. One interviewee from an RFO described the approach some evaluators of project proposals adopted after a sex/gender analysis assessment was included among the evaluation criteria as follows (referring to both implicit and explicit resistances): *'Many evaluators rolled their eyes. They just heard "gender" and were already resistant to it. These are the people who do not even listen to the explanation of the issue at the information seminar. Some are determined that they simply will not evaluate this in the project proposal. That it is nonsense.'* She also described how, in the beginning, some evaluators used vulgarisms in their assessments, so the organisation had to send them back for revision. Another interviewee shared that some researchers even perceived efforts to integrate the sex/gender analysis as 'gender washing': *'We got quite a wide spectrum of feedback, but what they had in common was that they sounded like themes from an anti-gender campaign [...]. We heard things like: "Yes, but why should we care? This is not important for research. Why is your institution pushing this issue? Isn't it ideological?".'*

It is evident that these attitudes, which identify sex/gender analysis with an ideological programme or, in some cases, as an 'ideological import', are resistant to change because they are part of more general cultural values and beliefs. However, as these attitudes can greatly complicate practical policy implementation and increase the organisational burden (the amount of work that needs to be done to ensure a sufficient understanding of the issue and a correct assessment of proposals), they need to be addressed proactively, even though deeper attitudinal changes presuppose a more general cultural shift. In this respect, the interviewees saw the introduction of a gender equality plan as an eligibility criterion in Horizon Europe, with the gender dimension in R&I being one of the recommended focus areas, as a positive step that allowed synergies to mitigate against resistance at the organisational level. The interviewees also saw the advantage of being able to refer to a clear mandate in this area stemming from national policies (where such a mandate exists).

Counterarguments and recommended steps:

- **Use a variety of examples** from a wide range of different scientific disciplines that offer a good illustration of the benefits of integrating sex/gender analysis – examples that

will be **readily comprehensible and relevant to everyone's life experience**. Include examples that show the **benefits of integrating sex/gender analysis in R&I for men**.[4] Point out that something that has an impact on the lives of everyone is not ideological.

- **Seek clear support** for the integration of sex/gender analysis **at the level of organisational leadership** and use this support to communicate the topic internally and to external stakeholders whose cooperation you need to secure.

- **Train staff** on the topic to equip them with the necessary arguments to be able to explain the rationale and benefits of promoting sex/gender analysis in R&I when confronted with resistances (especially those who, given their agenda, may face resistances on the 'frontline').

- **Make an active reference to the mandate to promote sex/gender analysis** that has been given to your organisation by a relevant national policy (or to commitments arising from supranational policies). Highlight also relevant contributions made by other actors within the R&I ecosystem to leverage synergies.

2. The requirement to conduct sex/gender analysis as an attack on the freedom of scientific research

One important argument mobilised in acts of resistance that was mentioned in the interviews is that the requirement to consider the potential role of sex and/or gender is contrary to the freedom of scientific research, which is defined in the 2020 Bonn Declaration on Freedom of Scientific Research[5] (among its other aspects) as *'the right to freely define research questions, choose and develop theories, gather empirical material and employ sound academic research methods, to question accepted wisdom and bring new ideas'* (p. 1). Resistance to the requirement for sex/gender analysis thus relates to the **interference of science policy in research**, which is sometimes perceived as 'artificial' in relation to the research intentions of the researchers themselves and as interference with their independence to determine their own approach. Referring to resistance among her colleagues, one employee of an RFO described this perspective as follows: *'The resistances have not really been to the content of this idea. It has been said that "yes, of course, it's very important that the gender dimension be included, but this is something for the researchers themselves to think about. They are the experts who are planning their studies and we have to trust them that they know".'*

This discourse usually has, at the same time, a background of a more general anti-gender discourse. Some of the interviewees described this as a 'deliberate misunderstanding',

4 | One such example is osteoporosis in men, which until recently was poorly understood, and this had a negative impact on its diagnosis and treatment – for more details, see the 'Osteoporosis Research in Men' section of the Gendered Innovations project website (Schiebinger et al. 2011–2025).

5 | https://www.humboldt-foundation.de/fileadmin/user_upload/Bonn_Declaration_en_final.pdf

which may also include, for example, the argument that gender research (i.e. reorientation towards gender studies) is required. However, the integration of sex/gender analysis rarely leads to changes in the core of the research itself. At the same time, this view **overlooks other forms of political governance of research**, which could be seen as similar in principle, but which do not usually encounter similar resistance. As Johansson Wilén (2024: 7), who identified a similar discourse in the Swedish context, remarked: *'While most critics argue for the separation between political ideals and academic endeavour, the defence of academic ideals seems to be triggered by the fact that values connected to gender equality are introduced, since an introduction of other values that may conflict with free academic endeavour – such as sustainability or economic growth – are not typically criticized as being politically charged.'*

The coordinates for research are shaped at many levels – from political priorities and the criteria for assessing research and research organisations at the national level to the topics prioritised by research funding programmes and their evaluation criteria. The call for the integration of sex/gender analysis (or for inclusive gender analysis) can be understood (rather than as an **attempt to influence research topics) as an attempt at instituting research governance aimed at improving the quality of research**. Like other principles and standards aimed at ensuring that research is conducted ethically and produces reliable results, the requirement to include gender analysis aims to ensure methodological soundness that will contribute to achieving a more accurate picture of the object of study and more responsible research in terms of the relevance of the knowledge produced for different groups in society.

Counterarguments and recommended steps:

- **Point out that the aim** of the measures to promote the integration of sex/gender analysis (or inclusive gender analysis) **is not to influence the subject of the research or its objectives**, but to support methodological soundness[7] and to ensure that attention is paid to the possible diversity of the end users of the research results or those affected by them.

- **Highlight other factors that inevitably influence research** – from the political prioritisation of certain issues, such as economic growth or sustainability, to national research evaluation criteria, the focus of research funding programmes, or their evaluation criteria.

- **Mention also other pillars of research governance**, such as standards for ethical conduct, scientific integrity, and rigour that aim to ensure the validity and reliability of findings, maintain public trust, and maximise societal benefits.

6 | This argument is developed in more depth in the next section.

3. Questioning the positive impact of incorporating sex/gender analysis on the quality of research

If the previous discourse of resistance was about expressing resistance to the influence of political demands on the content of research and the research process, this discourse is closely linked to it in that it questions the benefits of integrating sex/gender analysis for the quality of research. It is concerned with the belief that the implementation of a given measure will de facto **divert research attention away from aspects of the researched subject that would be most promising in terms of knowledge development** and other potential benefits of research. This argument was framed by one interviewee as 'spoiling research with ideology', and in the group discussion it was described as a 'zero-sum game' in the sense that focusing on areas of knowledge where the gender dimension seems relevant will lead to the omission of other, potentially more important findings. One participant gave an example from the field of teaching the humanities, where adding a gender perspective could, as argued from this perspective, result in a situation where students will be taught about 'random female influences' rather than about Beethoven or Shakespeare (seen as representing the concept of quality). A similar line of argument is also developed by Steven Epstein (2007), who – focusing specifically on the politics of inclusion in medical research – argues that attention to the gender dimension leads to a proliferation of findings about difference, the real value of which is often marginal. According to him, it also reinforces a binarising lens that emphasises differences between men and women, which may in turn reinforce stereotyping or discrimination.

Arguing that efforts to ensure the highest possible quality of research and incorporating sex/gender analysis are mutually inconsistent creates an **artificial contradiction**. The integration of sex/gender analysis should not be seen as limiting knowledge, but as a **way to deepen understanding of the researched subject** and thus increase the validity of the research. It allows researchers to identify differences that might otherwise be overlooked (Schiebinger et al. 2011–2025; White et al. 2021). A well-known example of this effect, where attention to sex and gender variables has contributed to a more accurate picture of a particular phenomenon, is cardiovascular diseases, where the result has been increased knowledge about their pathophysiology and clinical manifestations and the optimising of treatments to better match concrete (sexed and gendered) people (see EUGenMed et al. 2016). With an enhanced understanding of the role of sex and gender in the subject under study (which implies the inclusion of women and men or female and male animal models or tissues in the research sample), **the risk of false conclusions is reduced** and reproducibility and generalisability are improved (White et al. 2021).

When considering the relationship between research quality and the integration of sex/gender analysis, it is important to ask what defines research quality or excellence. Although the definition of research quality may depend in part on the specific discipline, research area, and paradigm, common lists of criteria include attributes such as (in addition to those mentioned above) rigorous methods of data collection and analysis, originality, and impact, both in terms of contributing to theory and advancing knowledge and in terms of positively influencing practice and policy (Bakioglu & Kurnaz 2009; Laudel 2024; Ochsner 2022; Timonen et al. 2024). As proponents of respective policies argue, integrating sex/gender analysis in research may contribute to most of these aspects. Sampling techniques that include participants of all genders in the research sample and both female and male

animal models or tissues improve scientific rigour and **enhance the transparency and reproducibility of research** (White et al. 2021; Hunt et al. 2022). As Tannenbaum et al. (2019) pointed out, one of the key reasons for the limited reproducibility in experimentation is inconsistency in methodological reporting, while a lack of transparency in reporting sex- and gender-related variables makes it difficult to reproduce experiments where these variables affect experimental results. Lack of attention to sex and gender effects also compromises the generalisability of studies. Similarly, sex/gender analysis (and considering intersectional perspectives) undoubtedly contributes to **increasing the impact** of R&I. A sex/gender analysis increases the attention devoted to potential differences in characteristics and needs of the users of or those affected by the research results, and thereby enhances their societal relevance. Lastly, as the Gendered Innovations project (Schiebinger et al. 2011–2025) has long demonstrated and illustrated with concrete examples from various fields, the integration of sex/gender and intersectional analysis in research has the potential to offer new perspectives and open new paths of discovery – and it can thus also **contribute to the originality of research**.

Counterarguments and recommended steps:

- **Highlight the different ways in which sex/gender analysis can improve the quality of research** – increasing rigour in data collection and analytical methods, increasing reproducibility and generalisability, contributing to the advancement of knowledge, and positively influencing practice through increased societal relevance (use the examples above or referenced sources).

- RFOs in particular should **provide methodological guidance** to researchers to ensure that the integration of sex/gender analysis is subject to **the same standards of rigour as other areas of research**. Only then will it be seen as a legitimate part of how quality science is done. The reporting of differences should always be based on solid scientific reasoning (it should not be based, for example, on separate analyses within sex groups, even if they are underpowered, as this may lead to false positive discoveries).[7]

- In the case of basic research in particular, it is not possible to fully predict how findings will be applied in the future, which may modulate their significance in a fundamental way. Nevertheless, to prevent the production of evidence on differences that is of limited substantive value, RFOs should clearly communicate that the over-interpretation of findings on sex and gender differences should be avoided.

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7 | For a detailed discussion of these aspects, including specific recommendations applicable to the study of sex differences in biomedical research but with implications for other disciplines, see Rich-Edwards et al. (2018) and Rich-Edwards & Maney (2023). The 'Analyzing Sex' and 'Analyzing Gender' sections of the Gendered Innovations project website (Schiebinger et al. 2011–2025) also provide useful methodological guidelines. Exemplary practice in this regard has been established by the Canadian Institutes of Health Research, which publishes a 'Meet the Methods series' to equip researchers with practical tips and tools for integrating sex/gender analysis and an intersectional perspective in research.

4. Arguing that sex/gender analysis is of marginal relevance for most scientific fields and topics

Another very common argument in acts of resistance is that the gender perspective is not relevant to many disciplines or research topics. As was described in a group discussion with representatives of national authorities, researchers sometimes argue: 'I don't work with people', which indicates a lack of understanding of the perspective. The automatic expectation on the part of researchers that 'this is probably not relevant to our project' (not uncommon also in the social sciences, which do 'work with people') leads to a lack of 'real reflection' on the possible implications. In general, however, the usefulness of sex/gender analysis as such is not entirely questioned, but this analysis is **seen as something that is relevant mainly in medicine** and possibly in some other fields, such as history. It is argued that a policy requiring researchers to consider the relevance of a gender perspective to their research by default makes little sense and places an unnecessary burden on researchers, evaluators, and other actors.

Based on the interviews, this argument seems to be quite common within organisations promoting sex/gender analysis in research (it was mentioned as one of the most common forms of resistance among colleagues involved in implementation). For example, as one interviewee expressed it: *'I think the main resistance was that they minimised the importance of the subject. Otherwise, they understand that this is of value.'* However, there are many examples of how research into **areas where such discoveries had not been anticipated** has led to insights into sex/gender differences that have had a real impact on people's lives. Examples include research into the effects of environmental chemicals, which have been shown to disproportionately affect women by increasing the risk of menstrual disorders, breast cancer, and other reproductive disorders (Kolluru 2021), or evidence of sex differences in the way nanomaterials interact with biological systems, affecting both therapeutic efficacy and toxicity (Hajipour et al. 2021). These findings highlight the need to apply sex/gender analysis.

Counterarguments and recommended steps:

- Train staff involved in implementing policies that promote the integration of sex/gender analysis, and **ensure that** this **training uses** diverse examples from different disciplines, including **examples where the gender relevance is less obvious** (see, for example, Tannenbaum et al. 2019).

- Make sure to use a variety of examples from diverse disciplines in communication with researchers, evaluators, and other stakeholders.

- If you are just starting to take action to promote sex/gender analysis in your organisation (for example, introducing this perspective in a funding call), in order **to minimise internal resistance, focus first on scientific fields in which the positive impacts of sex/gender analysis are more obvious**. The understanding and acceptance of the sex/gender analysis you have built will then make it easier to transfer it to areas where its application is potentially more challenging.

5. Pointing to the increased burden placed on researchers, evaluators, and RFOs

Another common argument against requiring the integration of sex/gender analysis in R&I content is the burden that this step imposes on researchers, evaluators of research proposals, and, by extension, RFOs themselves. This argument is mainly made within RFOs. Although it is undoubtedly an expression of resistance, it can also be seen as the result of common efforts of RFOs to anticipate the impact of the new conditions they are establishing, motivated by their need to ensure a sufficient level of understanding and perceived legitimacy among all actors involved. Both the already high workloads of researchers (further exacerbated by the administrative demands of grant competitions) and the need to ensure the consistent evaluation of proposals are taken into account.

In some cases, the interviewees referred to the allegedly **'overly complicated' character of the evaluation criterion in its commonly used form** (e.g. the requirement to justify in the proposal why sex/gender analysis is not considered relevant to the content of the project). One interviewee from an organisation in which the practice of requiring sex/gender analysis has not yet taken hold described the discussion in her RFO as follows: *'It was seen as just increasing bureaucracy and just making it more difficult for the researchers, because the forms are already too long'*. However, the argument of the increased burden on researchers (or other groups) was also mentioned by RFOs in which the requirement to include sex/gender analysis has been in place for a longer period of time. Highlighting the very component of resistance that is specific to sex/gender analysis, one interviewee remarked: *'They apply with so many complex and challenging proposals, but suddenly they think that this aspect or this question is "so complicated".'*

Counterarguments and recommended steps:

- Think about other criteria for evaluating proposals and **identify ones that might also be perceived as complicated in principle but are nonetheless already well-established**.[8] Use comparisons with these criteria when addressing arguments about the 'excessive complexity' of the criterion requiring sex/gender analysis to be carried out.

- **Try to make the instructions as clear as possible** for both the applicants and the evaluators (use simple language, checklists etc.). Also use visual forms of communication (e.g. diagrams or videos).

- **Use concrete examples from different scientific disciplines** to illustrate the importance of conducting sex/gender analysis to different groups (for example, refer to case studies presented on the Gendered Innovations webpage).

8 | An example of such a criterion could be the requirement for basic research projects to comprehensively describe impact pathways and theories of change that predict future societal outcomes.

- If it is not within your capacity to develop your own support materials, refer researchers and evaluators to some already established ones (such as the Gendered Innovations webpage or resources from other RFOs).

- Foster mutual learning between experienced researchers/reviewers and newcomers to the field.

- To reap the benefits of synergies, **refer to the work of other organisations that have successfully worked with sex/gender analysis in research content** (national or international RFOs, RPOs, or umbrella organisations). Use similar language and 'best practices' to facilitate understanding and acceptance of the issue.

6. Sex/gender analysis as a tick-box exercise with no real impact

Closely related to the previous argument that supporting the integration of sex/gender analysis in R&I content places an additional burden on researchers, evaluators, and RFOs is the argument that requiring researchers to consider the relevance of sex/gender analysis in a project proposal will lead to it becoming a 'tick-box exercise'. What this means is that the requirement is of little purpose, as the activity will be carried out with minimal effort invested and merely as a **formal exercise to meet policy requirements, but without any real change in R&I practice**. This concern, which in RFOs reflects worries about limited capacity, may have a counterpart in researchers who do not take the requirement to integrate sex/gender analysis seriously because they see it primarily as an effort by RFOs to be 'politically correct'.

Within RFOs, tick-box arguments may stem from more general anti-gender attitudes. However, they often reflect a genuine concern about anti-gender attitudes and a lack of awareness in the R&I ecosystem as such – a concern that this will lead to **low levels of cooperation from researchers and evaluators**, which in turn will increase the demand for guidance on integrating sex/gender analysis in R&I content.

Counterarguments and recommended steps:

- As an RFO, **give due weight to sex/gender analysis** in the content of R&I – adequately communicate the conditions you are creating for researchers in this regard, as well as the known **benefits of integrating sex/gender analysis**.

- **Focus on increasing the understanding of the issue among the evaluators of R&I proposals** and ensuring they correctly understand what to evaluate and how (see also the recommendations in the previous part). Consider training evaluators, possibly introduce testing for them, or ensure that a gender expert assists the evaluation panels.

- **Establish a framework for monitoring and evaluating the integration of sex/gender analysis** (or inclusive gender analysis), focusing not only on the research proposal stage but also on the stages of the implementation of the research and the assessment of its outcomes (see EC 2025).

7. Arguing that sex/gender analysis is too narrow a focus given the other societal needs that could be addressed

Another type of argumentation identified against the requirement to integrate sex/gender analysis into the content of R&I touches on two levels. Neither of them denies the legitimacy of research governance in terms of ensuring that research addresses societal concerns. However, the specific focus on promoting the integration of sex/gender analysis in research content is seen as too narrow or marginal a focus in context of the other needs of society. On one level this argumentation refers to other, presumably more important, issues that research should take into account. One interviewee from an RFO described this attitude as follows: 'Why do it for this [gender] dimension and not for sustainability or ethical questions or other topics?' Others make similar references to the importance of addressing climate change or poverty.

On a second level this argumentation questions the prioritisation of the gender dimension over other possible aspects of human diversity. Both of these levels can also be intertwined, as an excerpt from another interview demonstrates: 'One thing that we heard several times, both internally and externally, is that it is not only gender that matters. There are so many other aspects that are important. Why do we focus so much on gender when there are so many other aspects? Why don't we work with diversity? That's a very common discourse.'

Experience with these types of arguments was expressed by representatives of national authorities, as well as by RFOs. One claim these arguments implicitly share is that the integration of sex/gender analysis in R&I content is promoted 'at the expense' of other potentially important concerns – that is, an exclusionary logic is purposefully employed. However, such logic is not an inherent aspect of the promotion of sex/gender analysis. On the contrary, the integration of sex/gender analysis can be seen as an important step that has historically contributed to the consideration of the potential role of other human characteristics (such as ethnicity, class, or age) or axes of inequality in research, especially through the emphasis on an intersectional perspective.

Counterarguments and recommended steps:

- Point out that promoting the integration of sex/gender analysis in research content is **one of many levels that research governance is concerned with and that are important** – alongside, for example, ethical considerations, the collaboration of different stakeholders (scientists, industry representatives, the public), and a focus on societal challenges such as sustainability and climate change.

- **Show that these are not mutually exclusive priorities** but are part of the same effort to align science with societal values (and to balance this with scientific autonomy). Other stakeholders or colleagues can add a focus on other important topics.

- Acknowledge the possible limitations of focusing on a sex/gender perspective alone (despite its broad relevance already supported by research evidence) and demonstrate that the emphasis on sex/gender analysis in research content has historically been an **important factor in drawing attention to the possible role of other human characteristics or other axes of inequality** in research as well.

- **Emphasise the benefits of conducting an 'inclusive gender analysis'**, where 'inclusive' refers to other factors of inequality that may intersect with sex/gender in the issue under study, as well as to the need to involve different target groups and end users (EC 2025).

8. More than resistances: arguments about the implications that integrating the sex/gender analysis has on the number of research subjects and costs of research

The last group of arguments, which cannot be perceived primarily as resistances because they touch on aspects that can indeed make the integration of sex/gender analysis difficult, are about the need to increase the number of research subjects in order to ensure the possibility of comparisons between sex/gender groups, the undesirable ethical aspects associated with this step, and the increase in the financial costs of research. While these arguments are sometimes mobilised in the interests of more general resistances, they need to be addressed as substantive issues in the activities of RFOs and national authorities, and how they may conflict with the policy objectives of promoting sex/gender analysis in research needs to be acknowledged.

An example relating to the need for more research subjects is provided by the following statement by one of the interviewees from an RFO: *'For the life sciences, they say, if we need to have female and male mice, we will need a bigger budget, because this costs more money.'* This interviewee also pointed to the argument that the requirement for sex/gender analysis is in **conflict with another policy** – the principles of the 3Rs aimed at (i.a.) **reducing the number of animals used for research**.[9] In the context of the use of animals in research, two interviewees simultaneously touched on **the issue of the exclusion of females from research**, which has been linked to the assumption that females would produce data that are too variable because of their reproductive cycle (e.g. Tannenbaum et al. 2019). One interviewee mentioned the experience that the requirement to consider sex/gender analysis (which would assume a mixed research sample) was viewed negatively because it would disrupt the consistency of a dataset in relation to data collected in the past, and the other referred to the financial and time demands of starting a new animal line.

These arguments apply, of course, not only to research in the life sciences using animal models, but also to research involving human subjects. Here, the ethical dilemmas can take on additional complexity. Epstein (2007) summarised some of the common critiques in relation to medical research, noting that from an ethical perspective, integrating sex/gender analysis means exposing certain groups, such as children, to the risk of medical experimentation in large numbers. These risks are further exacerbated if the aim is to focus on a broader spectrum of diversity (for example, to apply an intersectional perspective), as the demands on research sample sizes increase. Efforts to ensure diversity in terms of race

9 | The principles of the 3Rs refer to Replacement (avoiding or replacing the use of animals in areas where they otherwise would have been used), Reduction (minimising the number of animals used consistent with scientific aims), and Refinement (minimising the pain, suffering, distress, or lasting harm that research animals might experience). More information can be found on the webpage of the National Centre for the Replacement, Refinement & Reduction of Animals in Research: https://nc3rs.org.uk/who-we-are/3rs.

and ethnicity, and the interpretive focus on them, increase the perceived significance of these characteristics, which can lead to their essentialisation and reinforce biases.

Questions about the impact of efforts to systematically account for the role of sex and/or gender (and possibly the interaction of other characteristics) on the required size of research samples have been debated in the literature for some time (as have questions about what claims can and cannot be made based on samples of certain sizes). For example, as noted by Tannenbaum et al. (2019), **including females and males, women and men, in a study does not automatically require doubling the number of experimental participants**. The authors present specific experimental designs that may be more efficient and, as a result, allow for much smaller increases in sample sizes. As they also state: 'Analysing data by sex or gender enhances the likelihood of detecting meaningful effects that, in turn, help to reduce confounding, increase reproducibility and reduce the cumulative number of experiments required.' (Tannenbaum et al. 2019: 138) Thus, they point to **the possibility of a reduction in the number of animal or human participants in the longer term** resulting from the accumulation of more precisely targeted studies.

Counterarguments and recommended steps:

- National authorities and RFOs should **clearly communicate the potential implications of promoting the integration of sex/gender analysis in research for research working with different sample sizes**. This should include setting out a framework for when an increase in sample size is recommended in view of the potential benefits of the research. In such cases, RFOs should clearly state their acceptance of the additional costs associated with increasing the sample size.

- RFOs (in particular) should provide general guidance to researchers to ensure that they pay sufficient attention to sample size considerations (in relation to the application of sex/gender analysis) when planning research and analysing its results.[10] **In the case of studies that remain too small to be able to test sex and gender differences** (where it is not possible to adjust the sample size adequately), **explicit claims about existing sex or gender differences should not be made**. However, the resulting data should be presented so that any sex or gender differences can be explored by other studies in the future.

- **RFOs should also provide methodological guidance on how to design research studies to minimise the number of subjects needed.**[11]

- At the policy level, ways should be sought to **harmonise policies aimed at integrating sex/gender analysis** into the content of research **with policies aimed at mini-**

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10 | As pointed out by Rich-Edwards et al. (2018), who focus on these issues in the context of health research, unless these considerations are taken into account before the research is conducted, most studies will lack the statistical power to examine associations separately for males/men and females/women and to detect sex/gender differences.

11 | Useful guidance in this regard is provided (for the life sciences) by the Canadian Institutes of Health Research: https://cihr-irsc.gc.ca/e/51257.html.

mising the number of animals used in research studies. The search for innovative approaches and alternative methods in the design of research studies should also be encouraged where possible.

Conclusions

The aim of this text is to summarise the most common arguments of resistances to the integration of sex/gender analysis in R&I content that hinder this policy's implementation in RFOs and national authorities, and to propose counterarguments and practical steps to address these resistances strategically. The arguments identified can be seen, at the same time, as underpinning more passive and implicit resistances faced by gender equality agents in these organisations that may be more subtle and difficult to decipher. As is evident, resistances often reflect more deeply rooted anti-gender attitudes present in society, which are difficult to address (and beyond the capacity of national authorities and RFOs). There is also not always a clear boundary between resistances and arguments that are a reflection of the difficulty of implementing the policy in the complexity of practice (which is something RFOs in particular must contend with). Moreover, there are often links between the two. It is therefore crucial to actively create conditions that facilitate the implementation of policies aimed at integrating sex/gender analysis (or inclusive gender analysis) in practice, strengthen their perceived meaningfulness and usefulness, and help address other critical points (for example, the publication and dissemination of a detailed database of examples of R&I from a wide range of disciplines or of methodological guidance for different disciplines can be an important help). In addition to these steps, which will contribute to strengthening the perceived legitimacy of the policies, the issue requires strong backing in national and supranational science policies to ensure successful implementation in practice, which will also strengthen synergies in the R&I ecosystem.

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