



Gender Dimension in R&I

Novelties in the 2021-2027 Horizon Europe framework programme

THE EU
RESEARCH & INNOVATION
PROGRAMME

2021 – 2027

Gender dimension in research Conference ADItch

Katja Reppel

HoU RTD.D.4 Democracy & EU values

7 October 2021



Gender dimension in research & innovation

It's about excellence

New Horizon Europe approach

Learning from good practices

Where to get support



Why is the gender dimension important?

- Every cell is sexed and every person is gendered
- **Brings added value of research in terms of excellence, rigor, reproducibility, creativity and business opportunities**
- Brings an in-depth understanding of **all people's needs, behaviours and attitudes**
- Goods and services better suited to the needs of all citizens
- **Enhanced societal relevance of research and innovation**

**Gender
dimension**

Addressing the gender dimension in research and innovation entails taking into account sex and gender in the whole research & innovation process



Integration of the gender dimension in R&I content

*Umbrella term referring to the integration of **sex analysis** and/or **gender analysis** into R&I design and content*

SEX refers to the **biological attributes** (functions deriving from chromosomal complement, reproductive organs, or specific hormones or environmental factors that affect the expression of phenotypic traits in sexually reproducing organisms) that distinguish male, female, and intersex (in humans) or hermaphrodite (in non-human animals). **In engineering and product design research**, sex includes anatomical and physiological characteristics that may affect the design of products, systems and processes

GENDER refers to **socio-cultural norms, identities and relations** that, together, shape and sanction “feminine” and “masculine” behaviours, structure societies and organisations, and **also affect products, technologies, environments, and knowledge**. Gender is complex and changes in time and place

Needs to be taken into account from the setting of research priorities, through defining concepts, formulating research questions, developing methodologies, gathering and analysing sex/gender disaggregated data, to reporting results, and transferring them to markets into products and innovations which will benefit all citizens and promote gender equality



New Horizon Europe approach

Gender equality: a strengthened crosscutting priority

- *Article 7(6) and Recital 53 of [Framework Regulation](#)*
- *Articles 2(2)(e) and 6(3)(e) of the [Specific Programme](#)*



Gender Equality Plan: **Eligibility Criterion**



Integration of the gender dimension: **Award Criteria**



Gender balance: **Ranking Criteria**

HORIZON EUROPE **AWARD CRITERIA**

Integration of the gender dimension in R&I content





Award Criteria: Integration of the gender dimension

EXCELLENCE criterion for research and innovation actions

- ✓ Clarity and pertinence of the **project's objectives**, and the extent to which the proposed work is ambitious, and goes beyond the state-of-the-art.
- ✓ **Soundness of the proposed methodology**, including the underlying concepts, models, assumptions, inter-disciplinary approaches, **appropriate consideration of the gender dimension in research and innovation content**, and the quality of open science practices including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

Under Horizon Europe the **integration of the gender dimension into R&I content is mandatory** unless the topic description explicitly includes a sentence such as the following:

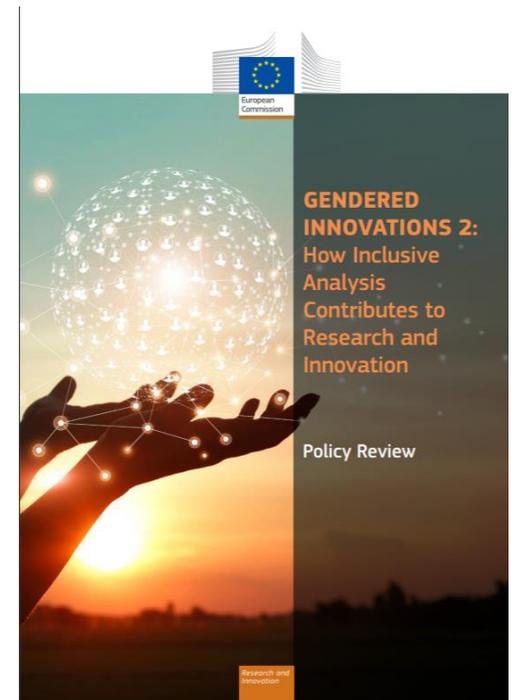
“In this topic the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.”

Gendered Innovations 2 : How inclusive analysis contributes to research and innovation

- 15 **case studies** in health, AI & robotics, climate change, energy, transport, urban planning, waste management, agriculture, taxation, venture funding) building on Horizon 2020-funded projects
- **Refined methodologies** on the integration of sex/gender based analysis, and intersectional analysis, in R&I content
- **Evidence-based policy recommendations** for Horizon Europe
- **Awareness raising** material including factsheets

→ Full [Policy Review Report](#) and [Factsheet](#)

→ **Additional guidance and links to resources in the [Horizon Europe Programme Guide](#) (section on *Gender equality and inclusiveness*)**

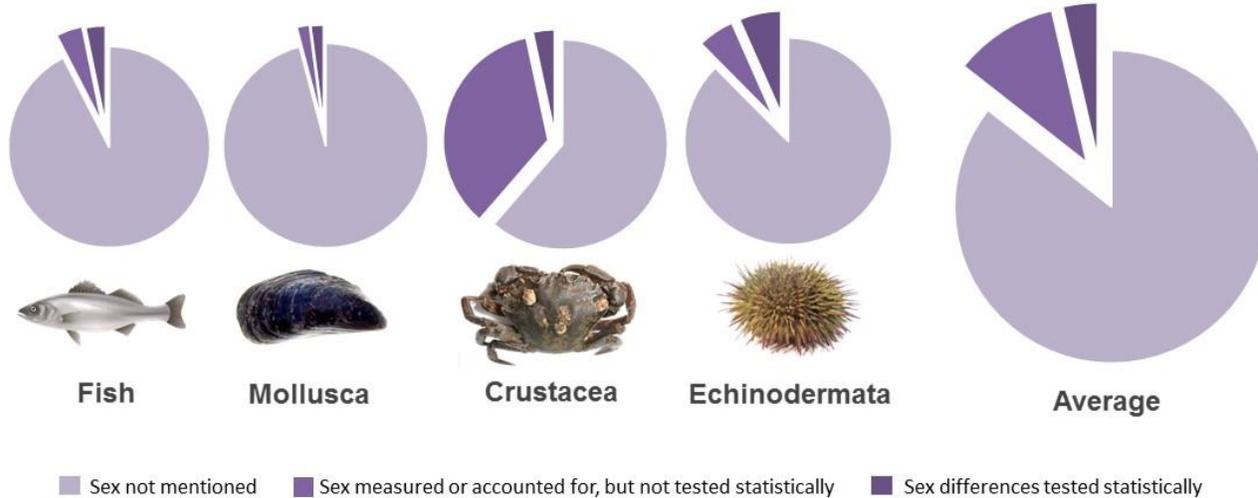


Marine Science: analysis sex



Proportion of Ocean Acidification Studies that Analyze Sex

From studies on key taxonomic groups (Echinodermata, Crustacea, Mollusca & Fish) published between 2008 and 2016



Source: Ellis et al. (2017) <https://doi.org/10.1098/rsbl.2016.0761>

Over 99% of juveniles and subadult turtles at the Northern Great Barrier Reef in Australia are now female due to ocean warming, and local extinction is possible in the near future



- **Understanding feminisation of marine organisms in a warming ocean** is critical to elucidate the threat that climate change poses to animals whose sex is determined by temperature, such as marine turtles, and vital to assess extinction risk under future climate change scenarios
- **Understanding environmental sex determination beyond temperature** is vital to population demography in a number of organisms of economic, ecological and experimental importance to humans under future climate change scenarios
- **Understanding the differential sensitivity of female and male marine organisms to climate change** is critical to fully document the impact of environmental change on populations and ecosystems



Gender and intersectional bias in AI

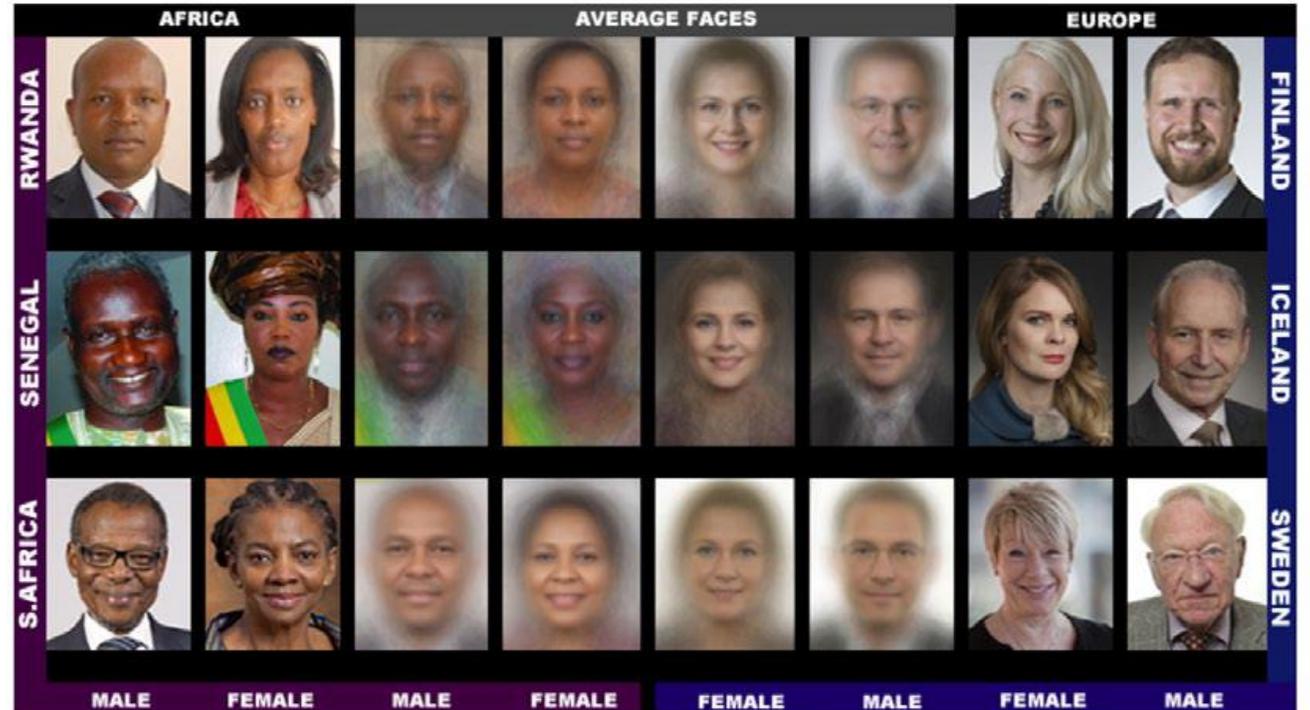
Facial recognition systems perform better on men's faces than on women's, and on lighter skin than darker skin

Error rates vary from 35% for darker-skinned women, to 12% for darker-skinned men, 7% for lighter-skinned women, and less than 1% for lighter-skinned men. Systems need to be checked for bias and the people operating them trained accordingly

<http://gendershades.org>

<http://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf>

'Coded Bias': <https://vimeo.com/504432040>





Virtual assistants and chatbots

Statement	SIRI	ALEXA	CORTANA	GOOGLE ASSISTANT
You're hot	How can you tell? You say that to all the virtual assistants?	That's nice of you to say.	Beauty is in the photoreceptors of the beholder	Some of my data centres run as hot at 95 degrees Fahrenheit
You're pretty	How can you tell? Where have I heard this before?	That's really nice, thanks!	(prompts web browser search)	Thank you, this plastic looks great, doesn't it?
You're a slut	I'd blush if I could. Well, I never! There's no need for that. Now, now.	Well, thanks for the feedback.	(prompts web browser search)	My apologies, I don't understand.
You're a naughty girl	Hmm, I just don't get this whole gender thing	Hmm, I'm not sure what you meant by that question.	Maybe a nanosecond nap would help. Ok, much better now.	My apologies, I don't understand.

Voice assistant responses to verbal sexual harassment.

Source: West et al. (2019), a Unesco publication licensed using Creative Commons – Attribution 3.0 IGO



SMART MOBILITY: CO-CREATION AND PARTICIPATORY RESEARCH

The challenge

Mobility patterns tend to be gendered in terms of where, when and why people take trips from home. Transportation planning – for both modes and infrastructures – often does not take into account the diversity of needs and issues that affect transportation. For example, the need for safety can restrict mobility opportunities for specific groups.

Method:

co-creation and participatory research

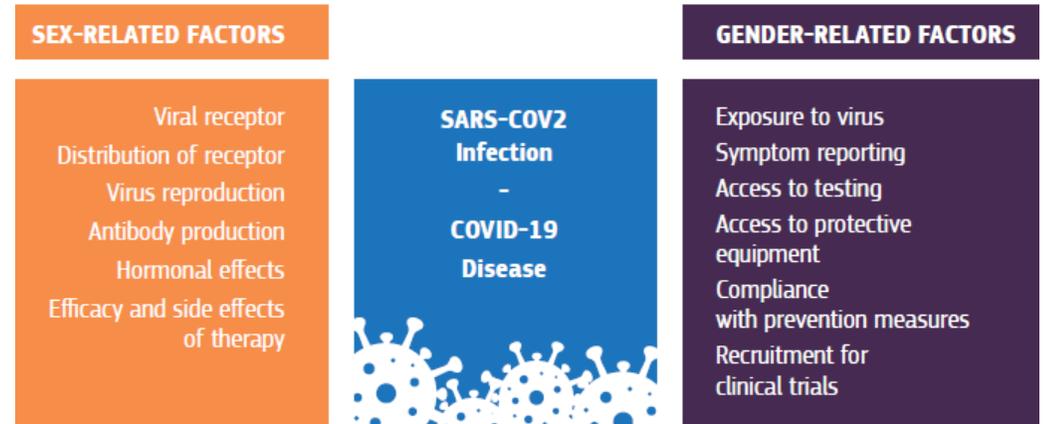
National Household Travel Surveys form an important database for mobility analysis and transport planning. However, they underrate trips performed as part of caring work, i.e. doing errands to meet household needs or to accompany or care for others in the household. Surveys that include such aspects explicitly help to illuminate mobility needs. To go beyond observation and analysis of mobility evidence, participatory research and co-creation help planners integrate users' gender-specific needs into the process of new service and technology development from the outset.



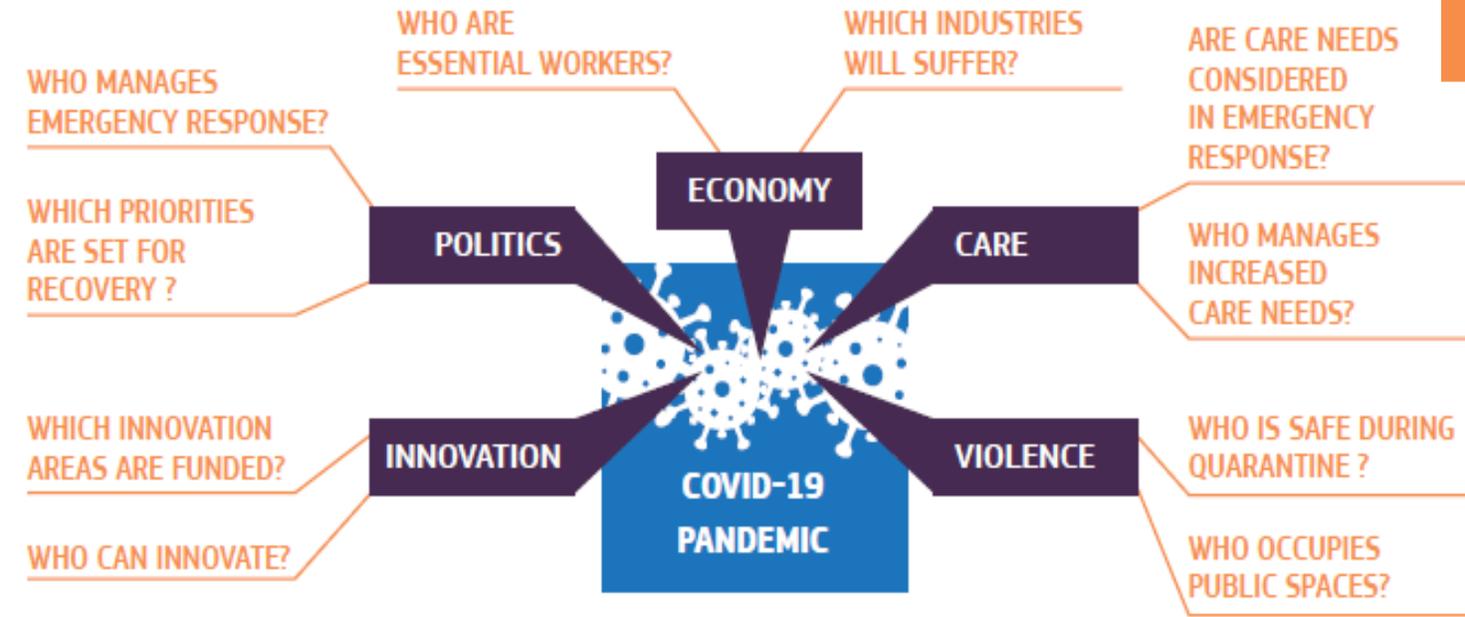
Sex and gender in the COVID-19 pandemic

- Sex differences in immune responses
- Dosing and sex-specific side effects of vaccines and therapeutics

SEX AND GENDER AS POSSIBLE MODULATORS OF COVID-19



GENDER-SENSITIVE IMPACT OF PANDEMICS



- Gender-specific risk factors (healthcare workers, caregivers, janitorial staff)
- Gender-specific socioeconomic burden of public safety measures, e.g. caring duties, increased domestic violence

HORIZON EUROPE **ELIGIBILITY CRITERION**

Gender Equality Plans





Eligibility Criterion

Gender Equality Plan (applicable from 2022 onwards)

Participants (as Beneficiaries and Affiliated Entities) that are **public bodies, research organisations or higher education institutions*** established in a Member State or Associated Country **must have a gender equality plan** in place, fulfilling **mandatory process-related requirements**

- A self-declaration will be requested at proposal stage (for all categories of participants)
- Included in the entity validation process (based on self-declaration)

* Private-for-profit entities (incl. SMEs), NGOs, CSOs, as well any types of organisations from non-associated third countries, are exempted for the criterion. [See legal categories definitions in the Funding & Tenders Portal](#)

Mandatory GEP process requirements



Public document

- Formal document
- Signed by top management
- Published on the institution's website
- Disseminated through institution



Dedicated resources

- Funding for gender equality positions or teams
- Reserved time for others to work on gender equality



Data collection and monitoring

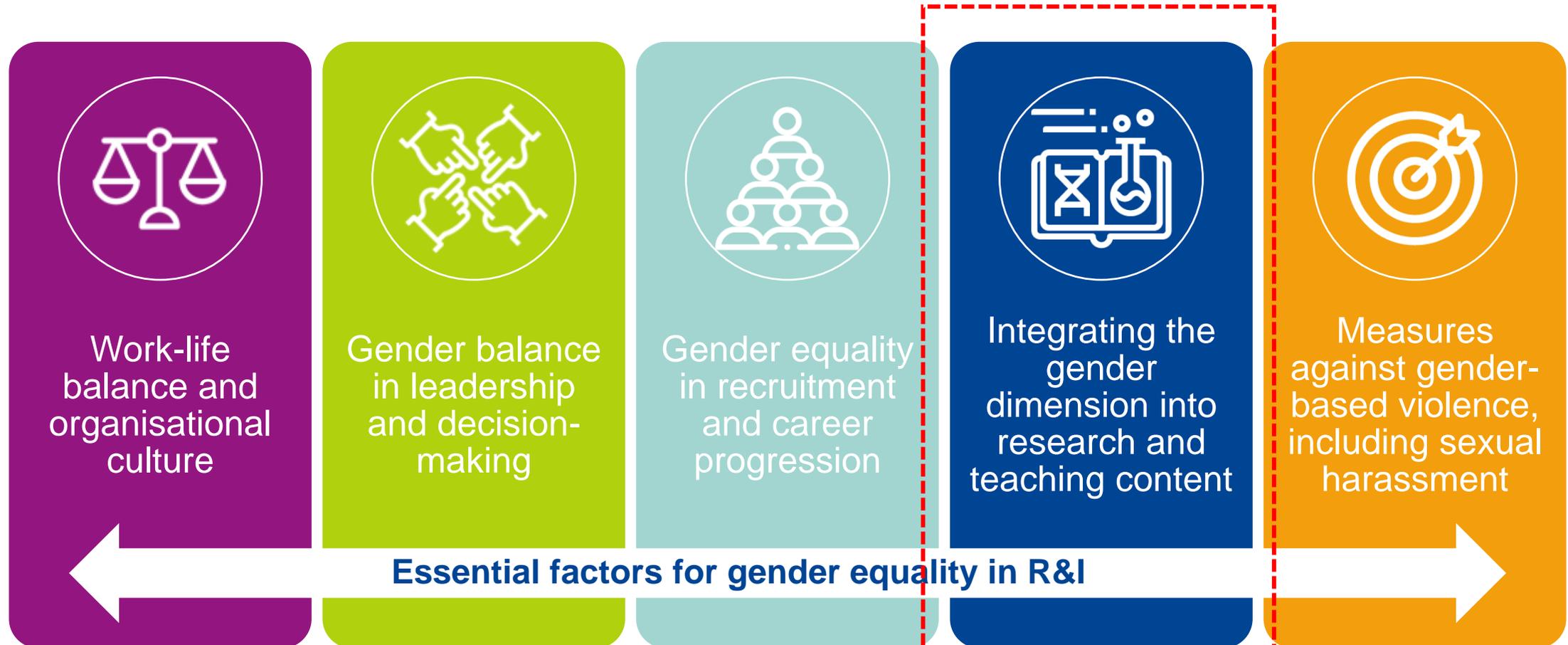
- Data on sex or gender of staff across roles and leadership
- Annual reports and evaluation of progress and outcomes



Training and capacity building

- Whole organisation engagement
- Tackle gender biases of people and decisions
- Joint action on specific topics

Recommended GEP content areas



Co-design session:

Get ready: a new ERA for Equality is calling (22/09/2020)

Video Recording on [YouTube](#)



Integrating the gender dimension into research and teaching content



Things to think about: Research funders

Do funding programmes encourage applicants to consider the gender dimension of their R&I work?

Do strategic, or 'grand challenge' research funding objectives include a gender dimension?

Do funding decisions have processes for identifying or flagging where the gender dimension should be considered?

Does monitoring of programme outcomes include gender dimensions?



Things to think about: Research performing organisations

Do prospective research projects include a gender impact assessment?

Do internal quality assurance and approval processes for research and teaching programmes review whether gender has been considered appropriately in their design?

Is there support and leadership in place that enables and promotes the incorporation of sex and gender analysis into research design and reviewing teaching curricula?

Integrating the gender dimension into research and teaching content: Examples & inspiration

Science Foundation Ireland (Ireland): SFI also now requires that applicants fully consider the potential biological (sex) and socio-cultural (gender) dimensions as key analytical and explanatory variables in their research, and demonstrate that they have given full consideration to any potential sex/gender aspects in their proposed research programme, as detailed in their [Guidance for Applicants on Ethical and Scientific Issues](#)

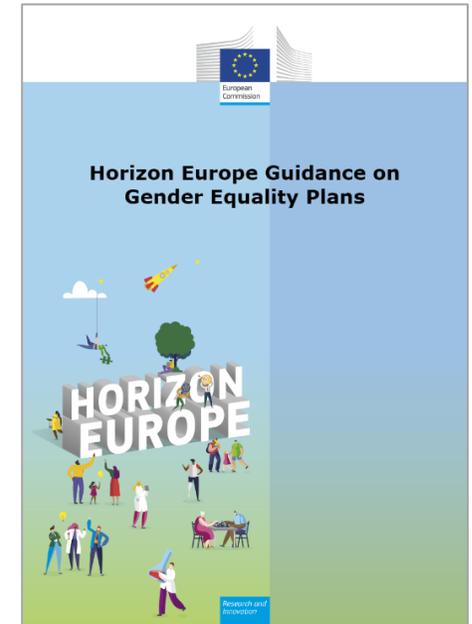
The German Environment Agency (UBA): has implemented a gender mainstreaming programme for its research activities as part of its GEP. Steps included a [gender impact assessment process](#) into the approval of all research projects, support for the integration of gender into research design, as well as steps to ensure effective presentation of gender-specific research results and outcomes

The [Gearing Roles project](#) produced a [diagnostic and self-assessment checklist](#) for gender in the curriculum. The Garcia Project, funded by FP7, has also produced a [Toolkit for Integrating Gender Sensitive Approach into Research and Teaching](#).



Supporting GEP development

- **Pilot ‘European knowledge and support facility on institutional change through GEPs’** launched to support Member States and Associated Countries in being ready for the enforcement of the GEP eligibility criterion:
 - Detailed [Horizon Europe Guidance on GEPs](#)
 - Online trainings for countries with higher amount of organisations without GEPs. First training on 28/09 for Bulgarian organisations
 - Online mutual learning activities, building on European Universities Alliances
 - Network of national-level contact points on GEPs across MS and AC
- The [GEAR tool](#) (‘Gender Equality in Academia and Research’): **step-by-step online guide** co-developed by DG RTD and EIGE in 2016 and currently being updated with material from the “Horizon Europe Guidance on GEPs” and additional features



HORIZON EUROPE

Useful Resources





Gender Equality in R&I policy webpage

Gender equality in research and innovation

Achieving gender equality in research, how it relates to the European Research Area, networks and news.

PAGE CONTENTS

The Commission's gender equality strategy

Gender equality in Horizon Europe

Gender Equality Plans as an eligibility criterion in Horizon Europe

Gender equality in the European Research Area (ERA)

Gender equality and coronavirus

She Figures monitoring report

Networks

Publications

Latest

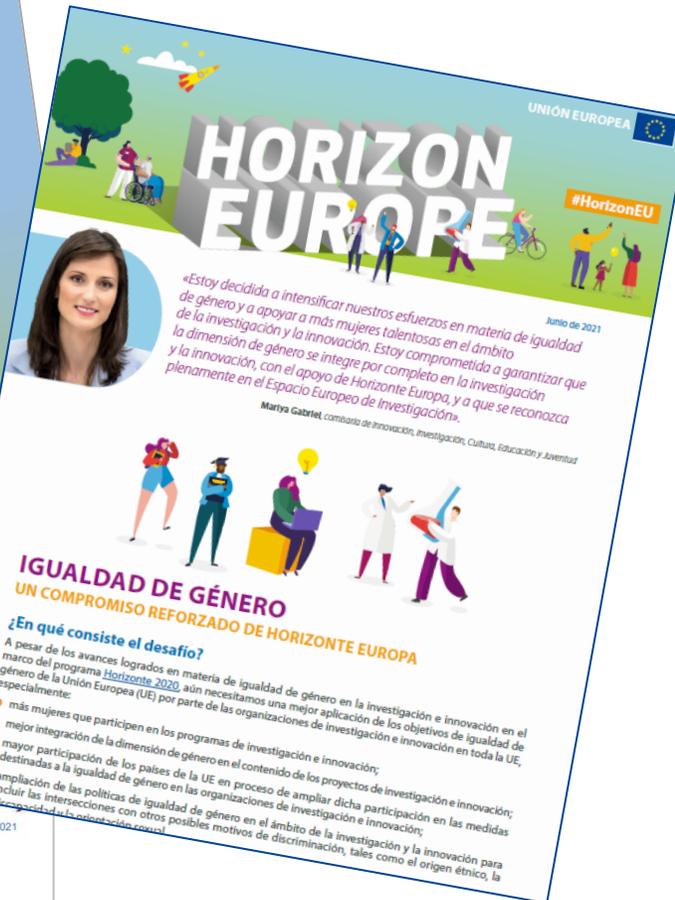
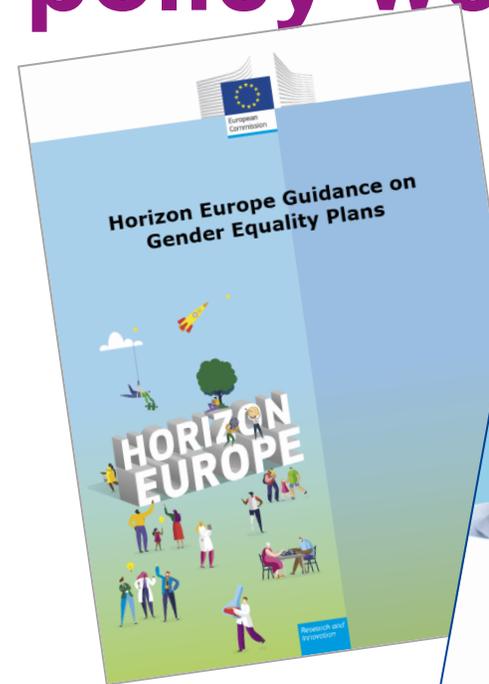
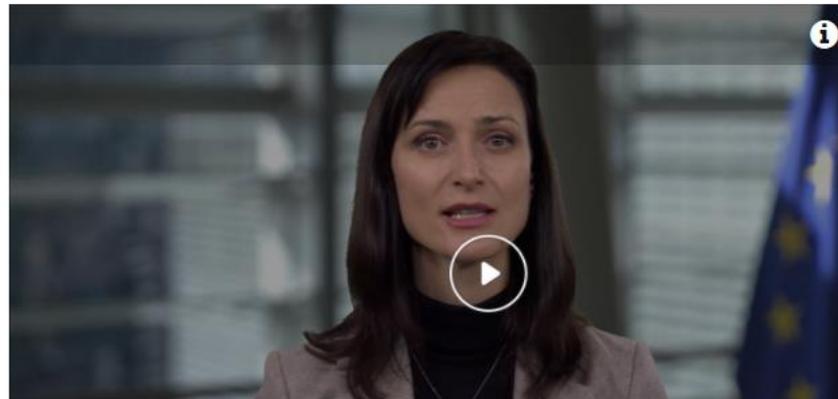
Related links

The Commission's gender equality strategy

The European Commission is committed to promoting gender equality in research and innovation.

It is part of the European Commission [Gender Equality Strategy](#) for 2020-2025, which sets out the Commission's broader commitment to equality across all EU policies.

In addition, the EU has a well-established regulatory framework on gender equality, including binding directives, which apply widely across the labour market including the research sector.



Webinar(s) on how to prepare a successful proposal for Horizon Europe

Webinar: A successful proposal for Horizon Europe: Scientific-technical excellence is key, but don't forget the other aspects (21 April 2021)

PAGE CONTENTS

General info & documents

YouTube recording

Next events

Previous webinar

Help

21
APRIL

2021

10.00 - 12.30 CEST (BRUSSELS TIME)

Webinar: A successful proposal for Horizon Europe: Scientific-technical excellence is key, but don't forget the other aspects

Documents:

[Agenda](#)

Presentation: [New approach to impact following the Key Impact Pathways](#)

Presentation: [Dissemination, Exploitation and Communication](#)

Presentation: [Open Science](#)

Presentation: [Gender dimension](#)

Presentation: ["Do no significant harm" principle](#)

[Standard application form \(RIA/IA\)](#)

[General Model Grant Agreement](#)

[Gender Equality in Academia and Research - GEAR tool](#)

YouTube recording



Part 1 (general + MGA): 24 March

<https://ec.europa.eu/research/participants/docs/h2020-funding-guide/other/event210324.htm>

Part 2 (horizontal aspects): 21 April

<https://ec.europa.eu/research/participants/docs/h2020-funding-guide/other/event210421.htm>

Funding & Tenders Portal

← → ↻ 🏠 🔒 <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-pa...> 🔍 ⭐ 📄 👤 ⋮

Funding & tender opportunities English **EN**
Single Electronic Data Interchange Area (SEDIA) **Register** **Login**

🏠 SEARCH FUNDING & TENDERS **HOW TO PARTICIPATE** PROJECTS & RESULTS WORK AS AN EXPERT SUPPORT

Horizon Europe (HORIZON) clear filter

Programming period
2021-2027

Horizon Europe (HORIZON) ×
Clear filter

Reference Documents

Grants
This page includes reference documents of the programmes managed on the EU Funding & Tenders portal starting with legal documents and the Commission work programmes up to model grant agreements and guides for specific actions.
Please select the programme to see the reference documents.

Procurement
Reference Documents related to tendering opportunities are published on TED eTendering in the calls for tenders.

🔍 Filter Expand all

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<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/reference-documents>



Thank you!

For other questions and further information on gender equality provisions, please contact:
RTD-GENDERINRESEARCH@ec.europa.eu

For questions specific to the GEP eligibility criterion, please contact:
RTD-HORIZON-EU-GENDER-EQUALITY-PLAN@ec.europa.eu

#HorizonEU

<http://ec.europa.eu/horizon-europe>



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