## Gender Equality Strategy in EU Research \&Innovation

The EU has developed over the years a well-established regulatory framework on gender equality, with binding directives, which apply across the labour market including the research sector. The European Commission has defined a Strategic engagement for gender equality ${ }^{1}$ in EU policies for the period 2016-2019. Gender Equality in Research and Innovation is part of this Strategic Engagement. It is also in line with international priorities such as the Beijing Platform of Action ${ }^{2}$, the UN Sustainable Development Goals ${ }^{3}$, and the G7 Guiding Principles for Capacity Building of Women \& Girls ${ }^{4}$, included in the Ise-Shima Declaration

## Why is gender equality in research and innovation important?

Achieving gender equality is not only a matter of social justice but also of economic growth and research performance. Gender equality calls for more transparency and a wider access of women scientists to research, thereby enlarging the pool of talents and the innovation potential. In addition, including sex and gender analysis ${ }^{5}$ in research enhances the quality and the societal relevance of the produced knowledge, technologies and innovations. It contributes to the production of goods and services better suited to potential markets. It contributes to Commissioner Moedas' three goals for EU R\&I policy ${ }^{6}$ and to President Juncker's priorities ${ }^{7}$ for the European Union (EU).

## The gender gaps in research and innovation are reducing slowly

She figures 2015 showed that there are still gaps between women and men in research and innovation. PhD graduates are equally distributed in average between women and men, although there are still differences in fields such as mathematics, statistics, computing and engineering. There are fewer women go in the higher echelons of scientific careers. Women represent third of researchers, $23.5 \%$ of grade A and 20\% of the Heads of institutions in the Higher Education Sector.

## The European Commission strategy for gender equality in research and innovation

Within the European Research Area (ERA) and in Horizon 2020, the Commission pursues three objectives:

- Gender equality in careers, to remove possible bias and discrimination and ensure equal opportunities,

[^0]- Gender balance in decision making bodies,
- Integration of the gender dimension in R\&I content, to ensure that the biological characteristics and the social/cultural features of both women and men are taken into account as relevant.

Gender equality is one of the key priorities in the European Research Area ${ }^{8}$. Member States are invited to create the appropriate legal and policy environment to implement institutional changes at national level. In 2016 Member States designed national action plans with concrete actions to advance gender equality. Research performing and funding organisations are encouraged to implement institutional changes, in particular through gender equality plans (GEP). The European Commission through Horizon 2020 provides funds to research organisations for the implementation of GEPs ${ }^{9}$.

## Gender Equality Plans (GEPs)

Funding agencies and research organisations, including universities, are at the forefront of implementing institutional changes, in particular through Gender Equality Plans. These plans are full-fledged strategies including a gender audit of the organisation's practices, the implementation of measures and targets to address inequalities, and the monitoring of progress.

In FP7 and Horizon 2020 so far, the European Commission supported the implementation of GEPs in 113 research organisations and universities through 17 projects, with a contribution of around 39,1 million euros.

In collaboration with the European Institute for Gender Equality (EIGE), the European Commission designed the GEAR Tool ${ }^{10}$ which guides academia and private and public research organisations in implementing such plans. It builds on existing practices in the Member States and Associated countries and on the EC funded projects.

## Council Conclusions on advancing Gender Equality in the European Research Area

The Council adopted on 1st December 2015 the "Conclusions on advancing Gender Equality in the European Research Area". It called for cultural and institutional changes to address gender imbalances in research institutions and in decision-making bodies. Member States are invited to set up guiding targets for gender balance among full professors and in decision-making bodies, including scientific and administrative boards, recruitment and promotion committees as well as evaluation panels. The Council highlighted the importance of a better integration of the gender dimension in research content. The Council also invited the Commission and the Member States to consider including a gender perspective in dialogues with third countries in STI.

[^1]
## ERA Progress Report 2016

The analysis of National Action Plans showed that the majority of Member States have made progress in setting up or planning more systemic strategies for gender equality in research, including the gender dimension in research programmes. There is an encouraging trend concerning women in Grade A position: the percentage rose from $19.5 \%$ in 2010 to $23.5 \%$ in 2014. The Heads of Institutions in the Higher Education Sector also increased from 15.5 \% to 20.1 \%

Considering the measures described in the National Action Plans, it can be assumed that the ERA policy based on institutional change through gender equality plans continues to act as a catalyst for Member States' action. The three objectives remain however unevenly covered across Member States. The high number of planned measures creates expectations of significant progress in the coming years. The actual improvement will depend on the capacity of the Member States to maintain and reinforce on a longer term the institutional change strategies adopted so far. In this perspective, the mobilisation of Member States for a proper monitoring mechanism is most valued.

## Gender equality in Horizon 2020

Gender equality is a cross-cutting issue in Horizon 2020 with its own article (16) in the Framework Regulation. It is also part of Responsible Research and Innovation (RRI):

- Gender balance in research teams at all levels

Applicants for funding are encouraged to promote gender balance at all levels in their research teams and in management structures. Gender balance in teams is taken into account when ranking proposals with the same evaluation scores. By signing the grant agreement, beneficiaries commit to promote equal opportunities and gender balance at all levels of personnel assigned to the action including at supervisory and managerial level.

- Gender balance in decision making

A target of the under-represented sex is set at $40 \%$ for expert groups and evaluation panels and at $50 \%$ for the advisory groups.

- Integrating the gender dimension in the content of research and innovation The gender dimension in the R\&I content enhances the quality and societal relevance of the R\&I outcomes and creates business opportunities. In H2O20, the gender dimension is explicitly integrated from the outset in many of the specific programmes. Whenever relevant, applicants are requested to describe where relevant, how sex and/or gender analysis is taken into account in the project's content.


## What is the gender dimension in the content of research and innovation?

The gender dimension is a dynamic concept that ensures that researchers question gender norms and stereotypes and address the evolving needs and social roles of women and men. Addressing the gender dimension in research and innovation entails taking into account sex and gender in the whole research process, when developing concepts and theories, formulating research questions, collecting and analysing data and using the analytical tools that are specific to each scientific area.

In its position paper of December 2016 the EC Advisory Group on Gender ${ }^{11}$ provided concrete examples of how to integrate the gender dimension in each part of the Horizon 2020 Work programme 2018-2020 ${ }^{12}$.

## The Helsinki Group on Gender in Research and Innovation

The Helsinki Group (HG) on Gender Equality in Research and Innovation was established by the European Commission in 1999. The HG brings together representatives from Member States and Associated Countries. It advises the Council and the European Commission on policies and initiatives on gender equality in R\&l, for the benefit of scientists, research institutions, universities, businesses and society at large

On $1^{\text {st }}$ July 2017, the HG will move to the Council and become a Standing Working Group of the European Research Area Committee.

[^2]
## Data on women in research and innovation- She Figures 2015

|  | Indicator | Year | EU-28 |
| :---: | :---: | :---: | :---: |
| 뭄 | Number of PhD graduates by sex | 2012 | $\begin{aligned} & W=56652 \\ & M=63061 \end{aligned}$ |
|  | Evolution of the proportion of women PhD graduates | 2004 | 43.4 \% |
|  |  | 2012 | 47 \% |
|  | Proportion of women PhD graduates Engineering, manufacturing and construction | 2012 | 28 \% |
|  | Number of researchers, by sex, headcount | 2011 | $\begin{gathered} W=834865 \\ M=1693829 \end{gathered}$ |
|  | Researchers per thousand labour force, by sex | 2011 | $\begin{aligned} & W=7.6 \\ & M=13 \end{aligned}$ |
|  | Proportion of women researchers | 2006 | 30\% |
|  |  | 2012 | 33\% |
|  | Compound annual growth rate for researchers by sex | 2005-2011 | $\begin{aligned} & W=4.8 \% \\ & M=3.3 \% \end{aligned}$ |
| $\begin{aligned} & \frac{\boxed{N}}{\omega} \\ & \frac{U}{U} \\ & \stackrel{U}{0} \end{aligned}$ | Evolution of the proportion of women in grade A positions | 2010 | 19.5 \% |
|  |  | 2013 | 20.9 \% |
|  |  | 2014 | 23.5\% ${ }^{13}$ |
|  | Women to men ratio of authorships (when acting as corresponding author) in all fields of science | 2011-2013 | 0.5 |
|  | Women to men ratio of inventorships, all International Patent Classification (IPC) sections | 2010-2013 | 0.1 |
|  | Proportion of women heads of institutions in the Higher Education Sector | $\begin{aligned} & 2010 \\ & 2014 \end{aligned}$ | $\begin{aligned} & 15.5 \% \\ & 20.1 \% \end{aligned}$ |
|  | Proportion of women heads of universities or assimilated institutions based on capacity to deliver PhDs | $\begin{aligned} & 2010 \\ & 2014 \end{aligned}$ | $\begin{gathered} 10 \% \\ 14.8 \% \end{gathered}$ |
|  | Proportion of women leaders in national boards | 2014 | 22\% |
|  | Proportion of women members of national boards | 2014 | 28 \% |

[^3]
## GEAR Tool on gender equality plans- Abstracts of good practices

## Overcoming bias in personnel selection procedures (AT)

As part of the internal leadership training programme of the University of Graz, the gender equality office is organising since 2010 an annual bias sensitising workshop. This workshop aims at creating reflexivity about gender and other discrimination-related biases in personnel selection procedures and at creating a general understanding that equality and quality are mutually reinforcing goals. The training takes place over two half-day sessions of five hours each. It is facilitated by external experts, as well as university-internal gender equality experts. In this workshop, participants gain knowledge about diversity issues, societal inequalities, and academic evaluation procedures. They also participate in a simulated personnel selection procedure, as well as discussions on academic curricula vitae, to trigger reflection about their own selection criteria, prejudice and biases.

## Ensuring a gender-balanced representation in the highest decision-making body of Ghent University (BE)

Since Ghent University was founded, the composition of the university's Board of Governors (Raad van Bestuur) has been traditionally male-dominated. This Board is highest decision-making body of the university. In order to ensure a gender-balanced representation in the Board of Governors, in 2014, Ghent University changed its procedures for the election of the members of this Board. The current election procedures request a 40/60 \% gender-balanced representation of its members. Faculties are required to have at least one male and one female candidate for the elections. If the elections do not respect the minimum 40/60 gender balance, the candidate with the least votes from the overrepresented sex (compared to other faculties) will have to be replaced by the faculty's candidate of the other sex with the highest number of votes. As soon as the new procedure was implemented for the first time (2014), it has instantly changed the university's male-dominated board: gender balance was achieved for the first time in the university's history.

## Women represented in all rounds of applications (DK)

Different specific initiatives have recently been implemented at the University of Copenhagen (UCPH) related to processes of announcement of vacant positions, recruitment and assessment of applications. For instance, UCPH is currently requesting at least one applicant of either sex before a vacant post can be filled and, similarly, there has to be at least one person of each sex in all appointment and review committees. UCPH has also begun to reassess the way position vacancies are announced, and they have introduced the use of search committees, which are to look carefully for promising candidates (inter)nationally, prior to the filling of research positions.

## Coordinating and monitoring for effective decentral action (DE)

Goethe University Frankfurt is committed to promote gender equality within its organisation. After realising that the level of commitment to design and implement gender equality measures differed significantly between the decentral units, and recognising the need for centralising information on gender equality initiatives in the faculties, Goethe University Frankfurt established the Gender \& Diversity Controlling in 2010. The establishment
of this structure was foreseen in the university's gender action plan covering the period between 2009 and 2013 (Frauenförderplan 2009-2013).

The Gender \& Diversity Controlling aims at monitoring developments with respect to gender (in)equalities across the university, as well as at providing guidance and support, and monitoring gender equality-related efforts within the 16 faculties (Fachbereiche) of Goethe University Frankfurt. More specifically, the Gender \& Diversity Controlling coordinator is in charge of steering the controlling/monitoring procedures and of managing the compilation of gender \& diversity statistics within the university.

## Enabling women to run for the elections for the University's council (LT)

The EU-funded structural change project INTEGER has taken on a pioneering role at Siauliai University (SU) and in Lithuania as a whole. This project was fundamental to promote institutional transformation in a higher education institution. During the project's implementation, the Council elections were planned to take place. Considering the striking underrepresentation of women in the university's Council, the SU Council Election Tactics and Strategy Plan were developed within INTEGER in order to encourage a gender-balanced representation of the Council. Several activities were undertaken in order to empower female candidates to run in the university's Council elections, such as: communication with the highest management staff at SU through formal meetings; consultation with the university lawyer about the possible ways of making women's representation in the Council's election; participation in the preparation of the election regulations; search for women candidates from SU representatives according to criteria such as loyalty to the university and commitment to implement gender equality at the university. As a result of these initiatives, the number of women to the Council significantly increased from 0 \% in 2011 to 36.3 \% in 2014.

## Monitoring progress towards gender equality in the university of Beira interior (PT)

University of Beira Interior (UBI) was the first university in Portugal to set up a gender equality plan as early as 2011. The pioneer work of UBI in this field is well-known in the country. A thorough initial assessment (20102011) of the gender equality state-of-play of the university preceded the development of the gender equality plan. UBI's plan established as a measure the elaboration of sex-disaggregated statistics about teaching and nonteaching staff, and students. Since 2012, Gender Equality Reports have been prepared on an annual basis to monitor the progress towards gender equality in the university. These reports are publicly accessible and build on the initial assessment carried out early in the process of setting up UBI's gender equality plan. The analysis provided in the reports considers the gender balance in terms of disciplines taught and on decision-making and leadership positions, the gender pay gap, the use of measures to reconcile professional and personal life (like flexible working hours), a gender analysis of the utilisation of leaves, and information about the number of students disaggregated by sex and faculty.

## Integrating a gender perspective in research and teaching: an award promoted by the University of Santiago de Compostela (ES)

Since 2010, a gender perspective award is being organised on an annual basis by the University of Santiago de Compostela (USC). The award aims to recognise and make visible existing research projects and teaching practices that stand out for integrating a gender dimension. Six prizes are awarded annually: three for teaching achievements (excluding gender-specific courses) and three for research projects in any field (which integrate a gender dimension in hypothesis formulation, research design, methodology, research processes or the dissemination and publication of results). The award is fostering synergies with other initiatives undertaken by the university such as gender training and conferences. The award is remarkably bringing more visibility to gender issues in research and teaching. Furthermore, synergies were activated with other parallel initiatives (such as conferences and trainings) on which awardees have the possibility to share their research findings or how they managed to introduce a gender perspective in their teaching activity (including obstacles and resistances faced and how these were overcome).

## Attracting more women to academic leadership positions (SE)

In 2004, Lund University launched a gender-integrated leadership programme (AKKA). Within this programme, leadership is understood as something that can be learnt and developed, and that focuses on the individual's competences, and not on personal characteristics. The AKKA programme aims at raising gender knowledge and awareness, and providing methods and tools for structural change in order to achieve sustainable gender equality. From 2004 to 2014, five AKKA programmes have been offered for 150 senior scholars in Lund University (Sweden) (of which 37 were men). The programme runs over a year with monthly meetings. Throughout the years, AKKA has increased the number of women in leading positions, contributed to an enhanced visibility of women as potential leaders, increased willingness of both women and men to assume leadership positions, raised gender awareness among female and male academic leaders, promoted networking and collaboration within the university, raised the knowledge about the university's politics and activities, developed tools to deal with resistance to gender issues and for change management, contributed to highlight discrimination, and developed concrete change projects.

## Supporting work-life balance for parents returning to work (UK)

In Queens University Belfast (QUB), all Schools have adopted the University return to work policies, and fund these from a combination of Schools' resources and central University resources. The policies cover the maternity period and the immediate return to work period. These policies aim to ensure that mothers-to-be can take their maternity leave without worrying about how their leave impacts on others. Moreover, these policies ensure that mothers have time to readjust to work on their return and focus on research activities without teaching pressures. These policies also extend to female and male staff taking adoption leave.

Further information and resources on gender<br>Science with and for Society<br>http://ec.europa.eu/research/swafs/index.cfm?pg=home<br>Council Conclusions on Advancing Gender Equality<br>http://data.consilium.europa.eu/doc/document/ST-14846-2015-INIT/en/pdf<br>GEAR Tool- Gender Equality in Academia and research organisations tool<br>http://eige.europa.eu/gender-mainstreaming/tools-methods/GEAR<br>ERA Progress Report 2106<br>http://ec.europa.eu/research/era/eraprogress en.htm<br>Horizon 2020 Participant Portal<br>http://ec.europa.eu/research/participants/portal/desktop/en/home.html<br>How Gendered Innovations Analysis Contributes to Research<br>http://ec.europa.eu/research/science-society/document library/pdf 06/gendered innovations.pdf<br>Gendered Innovations website<br>http://ec.europa.eu/research/swafs/gendered-innovations/index en.cfm?pg=home<br>She Figures report 2015<br>https://ec.europa.eu/research/swafs/pdf/pub gender equality/she figures 2015-final.pdf


[^0]:    ${ }^{1}$ http://ec.europa.eu/justice/gender-equality/files/documents/160111_strategic_engagement_en.pdf 2 http://www.un.org/womenwatch/daw/beijing/platform/
    3 http://www.un.org/sustainabledevelopment/gender-equality/
    4 http://www.mofa.go.jp/files/000160274.pdf
    5 taking into account both men and women biological characteristics and social / cultural features
    6 https://ec.europa.eu/research/openvision/index.cfm
    7 https://ec.europa.eu/priorities/index en

[^1]:    ${ }^{8}$ The ERA Roadmap 2015-2020, as adopted by the "Competitiveness" Council on 29 May 2015, calls on the Member States and the Commission to start the implementation of the top action priorities.
    ${ }^{9}$ http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016 2017/main/h2020-wp1617-swfs en.pdf
    ${ }^{10}$ http://eige.europa.eu/gender-mainstreaming/tools-methods/GEAR

[^2]:    ${ }^{11}$ http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail\&groupID=3034\&NewSearch=1\&NewS earch=1
    ${ }^{12}$ http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc\&id=28824\&no=1

[^3]:    ${ }^{13}$ ERA Progress Report 2106

