

TAKING STRUCTURAL CHANGE INTO THE FUTURE

This GENDERACTION Policy Brief presents policy recommendations on structural change for gender equality in Research Funding and Performing Organisations. Developed by GENDERACTION in cooperation with representatives of EU-funded structural change projects, its goal is to summarise compulsory elements of the structural change approach and present recommendations for taking structural change forward in the next framework programme period.

Main messages

- The Commission and Member States are strongly encouraged to maintain and further **reinforce the structural change approach as a policy framework** for promoting sustainable gender equality actions in the research ecosystem. This should be done by increasing and/or introducing **dedicated budget lines**, introducing **temporary special measures as defined by the UN¹** as well as **new forms of disruptive measures**.
- The **uneven implementation** across the EU Member States must be addressed, together with **continued shortcomings** in implementation, including the lack of robust, context specific data and indicators to measure progress in the European Research Area (ERA).
- Structural change must take an **intersectional approach** to gender equality to address race and ethnicity, gender identity and sexual orientation, class and economic inequality, and disability. Without attending to other axes of inequality, structural change projects run

the risk that the needs of e.g. non-white and LGBTQ+ individuals will remain un-addressed.

- Structural change must be applied in the **Business Enterprise Sector (BES)²**. The BES is a crucial R&I employer but shows a continued and severe gender gap among R&I staff. Significant amounts of public funding are spent by the BES. Thus, BES should be included in the structural change effort with a view to

1 | The Committee on the Elimination of Discrimination against Women defines temporary special measures as “positive action, preferential treatment or quota systems to advance women’s integration into education, the economy, politics and employment”.

2 | The term Business Enterprise Sector is used in line with Organisation for Economic Cooperation and Development (OECD), *Frascati Manual 2002: The measurement of scientific and technological activities - Proposed Standard Practice for Surveys on Research and Experimental Development*. OECD, Paris, 2002.

creating fair and non-discriminatory working conditions and addressing the research and innovation needs of all.

Introduction

The European Union has been a privileged space to develop rules and standards for gender equality in Research and Innovation (R&I). Structural change³ is today a dominant approach to fostering gender equality in Research Performing and Funding Organisations (RPOs and RFOs) in the EU. Structural change is a win-win approach, which, ideally, firstly contributes to eliminating persistent gender barriers such as gender bias, sexist and hostile environments and sexual harassment, lack of institutional work-life balance measures, etc. Secondly, as structural change fosters gender diversity and the integration of the gender dimension into R&I content, it also has a positive impact on the excellence, robustness, interdisciplinarity, responsibility and creativity of R&I outcomes. Thirdly, since gender balance in management and board positions is

3 | In this policy brief, the term “structural change” is used instead of the term “cultural and institutional change” or “institutional change”. The term structural change more fittingly describes the complexity of the change process in organisations, which must occur at four inter-related levels: symbolic (cultural), institutional, inter-personal and individual, in order to achieve sustainable impact. Institutional and cultural aspects are only two of the four constitutive parts of the structural change approach. The term structural change is used by EIGE (see <https://eige.europa.eu/gender-mainstreaming/toolkits/gear/why-change-must-be-structural>), by the Commission Expert Group (European Commission 2012) that delivered initial recommendations as well as Member States (e.g. Lithuanian Presidency conference organised with EU funding in November 2013 with the title Structural Change Promoting Gender Equality in Research Organisations).

related to increasing financial benefits, the organisation’s competitive edge, job satisfaction and staff productivity, organisational attractiveness and social responsibility, it also leads to environmental initiatives and eco-innovations (EFFORTI 2017).

Policy framework

In 2010, the Council of the EU (10246/10) highlighted the concept of structural change, aiming at eliminating gender barriers in scientific recognition and career progression. In its 2012 Communication, the European Commission (COM(2012) 392 final) committed to fostering gender equality and the integration of a gender dimension in Horizon 2020 and specifically invited Member States to “engage in partnerships with funding agencies, research organisations and universities to foster cultural and institutional change on gender – charters, performance agreements, awards”. In 2015, the European Parliament (2014/2251(INI)) highlighted the need to fund structural change policies as well as to provide incentives and link funding to gender standards. The Council Conclusions of 1 December 2015 on Advancing gender equality in the European Research Area (14846/15) acknowledged these previous messages and reinforced them further.

Despite the robust policy framework, there is an imbalance in the EU in the uptake of the structural change approach. EU-15 countries as well as higher innovation countries have tended to make structural change a key element of their national policy framework for gender equality in R&I more often than EU-13 countries and lower innovation countries (SWG GRI 2018). Even in countries where structural change is part of the policy framework, there are shortcomings related to its implementation as well as monitoring and evaluation. Furthermore, the structural change approach has so far focused on gender equality with-

out attending explicitly to other axes of inequality; structural change has also been promoted chiefly in the public research and higher education sector and among public RFOs but not in the BES.

Structural change: definition and compulsory elements

- Structural change is far more than just the adoption of a gender equality plan in an institution. It addresses change at four inter-related levels: the symbolic (cultural), the institutional, the inter-personal and the individual. Regular monitoring and evaluation of the actions is necessary so as to understand which actions work and what their impact is.
- Achieving structural change requires a complex and comprehensive set of actions addressing the three main ERA gender equality objectives simultaneously: (1) Removing barriers to the recruitment, retention and career progression of women researchers, (2) Addressing gender imbalances in decision making processes and (3) Integrating the gender dimension in research and innovation content. Reducing gender equality policies to only one of the objectives (e.g. increasing the share of women in STEM) risks that the gender-unequal culture will continue in academia because structural barriers are not tackled and might even be reinforced.
- Gender is socially constructed which means that gender relations are constantly (re)constructed in professional settings, among other social domains, based on gender stereotypes and perceptions that are often unconscious. The prevalence of gender bias and stereotypes in research and higher education is all the more problematic as the academic culture largely builds on the value of meritocracy. However, meritocracy cannot exist in biased systems.

- Gender must always be addressed as intersectional, through an analytical framework that examines interlocking and intersecting systems of power between gender and other social categories and identities, such as ethnicity, migration, gender identity, sexual orientation, socio-economic status and disability.
- Structural change is a complex systemic challenge which will only be successful if top-down and bottom-up approaches meet and complement each other.

Recommendations

Gender mainstreaming of policies

To achieve sustainable change towards gender equality, a gender mainstreaming approach to policy-making is needed, including the retention of gender equality as a policy objective for the ERA. All R&I policies at European as well as national level must consider their potential gender specific impacts. Furthermore, gender has to be considered in all steps of policy implementation including budgeting⁴ and monitoring and evaluation, not only in topics explicitly mentioning gender.

Disruptive measures

Decades of gender equality efforts in the European R&I field have produced some advancement and valuable changes in RPOs and RFOs, but the speed of change is too slow. In order to achieve substantive change in coming years, ambitious temporary special and disruptive measures need to be applied both by the European Com-

4 | Importantly, DG RTD has not been doing gender budgeting, failing to implement the 2017 recommendations of the European Parliament (IPOL_STU(2019)621801).

mission and the Member States through coordinated objectives.

- Temporary special measures such as quotas to increase women's participation in managerial and decision-making positions as well as in fields where they are underrepresented have proven to be effective and need to also take into consideration multiple forms of discrimination.
- Novel disruptive measures such as reverse mentoring or leadership initiatives for women professors should be introduced, together with sanctions for the failure to comply and implement. These measures should be evaluated and lessons learned should feed into structural change initiatives.
- In Horizon Europe, the Commission should include a section on gender (similar to ethics in Horizon 2020) in funding applications covering both human resources and management and the gender in R&I content.
- In the evaluation of Horizon Europe projects, gender balance should be used as a first ranking factor (before SME participation) for ex-aequo proposals. To avoid mere name-dropping, implementation of the gender-related team composition should be checked during the mid-term review.

Budget and incentives

Linking structural change and funding is a strong, if not the strongest, incentive. Provision of financial resources stimulates the uptake of structural change among RFOs and RPOs; financial incentives can also stimulate friendly competition, collaboration and emulation among RPOs and RFOs, as the Athena Swan attests. The importance of the national (and even regional) level must not be underestimated, and the recommended measures should therefore be implemented both by the Commission

in Horizon Europe and national funding programmes at Member State level, and synergies between them should be created, particularly through the use of the Structural and Cohesion Funds.

Specifically:

- The Commission should continue a dedicated funding line in Strengthening the ERA part of Horizon Europe, with budget allocation significantly increased compared to Horizon 2020.
- The Commission should aim to bridge the gap between countries that are more and less advanced in gender equality (according to ERA Progress Report 2018 only 16.5% of RPOs in EU-13 countries have introduced a gender equality plan, compared to 67.1% in EU-15 countries). This should be done by earmarking dedicated funding for gender-specific structural change projects within the "Sharing excellence" part of Horizon Europe (e.g. via Twinning/Teaming schemes). Also, the Commission should make the Widening funding contingent upon the funded projects including as an obligation structural actions toward gender equality that would be sustained after the implementation of the project.
- In Pillar III of Horizon Europe, the Commission should require applicants to ensure that project management and/or business strategies include gender equality related activities and address the gender dimension of innovation, including SMEs and scale-ups.
- Member States are strongly encouraged to make use of the Structural Funds 2021-2027 to implement structural change projects at national level. This should be done by defining policy objectives, allocating dedicated funding for structural change projects implemented by national RPOs and RFOs and introducing appropriate indicators. For example, the Czech Operational Program Research, Development and Education 2014-2020

contained Priority line 2 Development of higher education institutions and human resources for research and innovation, which *inter alia* provided "support for balance professional advancement of women and men researchers in line with the cultural and institutional change approach for achieving gender equality...".

- An award scheme like Athena SWAN should be introduced in the entire EU to incentivise RPOs and RFOs to implement, monitor and evaluate structural intersectional gender equality actions, including the differentiated stages (bronze, silver, gold) to allow for a modular approach involving institutions with no actions in place at the moment.
- In funding programmes, RFOs are invited to introduce budget top-up for applicants that address gender equality at a structural change level. Alternatively, a portion of overheads should be ring-fenced for structural gender equality actions.
- RFOs are further invited to introduce specific funding programmes for women in innovation and technology fields. An example of good practice is the Laura Bassi 4.0 programme introduced by the Austria Research Promotion Agency (FFG) which provides R&I funding to women for digitalization related projects.
- Grants focused on fostering excellence should provide a bonus to applicant/hosting institutions with structural change initiatives in place or specifically awarded for their commitment and progress made on gender equality.

Monitoring and evaluation

Comparable data is the baseline for an objective assessment of the current situation and for identifying potential gaps and differences among countries, thus giving them visibility. Currently, there are only few indicators addressing structural change available at European, national or RPO level. Com-

mon standards and internationally comparable statistics must be introduced and further improved. Data serves to demonstrate developments / ongoing changes ("no measurement, no improvement"). Hence, both qualitative and quantitative data is needed, including field- and context-specific data. The She Figures, for instance, are often a starting point and reasoning factor for national authorities to advance gender equality. However, monitoring and information about structural change adoption is currently very limited and unreliable.

- The Commission should learn from the insufficiencies of the current ERA monitoring system for ERA Priority 4 (see GENDERACTION 2018 and especially GENDERACTION 2019) to revise the monitoring system in order to better capture advances in gender equality. The current headline indicator is not appropriate, sends the wrong message and stalls gender equality activities in inactive countries.
- For the future of the ERA, the Commission should set up an expert group to develop recommendations on how to assess the implementation of structural change. This should be done prior to the next edition of She Figures 2021 so that the contract can already reflect this.
- Member States should take up the results of this expert group to revise their monitoring at national level in relation to the structural change and ERA Priority 4 objectives.
- The Commission and Member States should continue to promote the development of gender-disaggregated and intersectional data. This may include exchanges of good practice and mutual learning exercises.
- RFOs, including the European Commission, should increase the time span for monitoring and evaluation of funded structural change projects' impact in order to assess their long-term impacts.

Sectors covered

Given the tremendous importance of the BES in research and innovation, fostering structural change within the BES would have a considerable multiplier effect. Start-ups and SMEs, in particular, do not have a structural change approach to gender, and the venture capital-industry is not gender-sensitive, with minimal volumes of venture capital invested in women-owned start-ups. The only existing tool at the EU level in this area – the EU prize for women innovators – is not a structural measure. Including all sectors will also broaden the understanding of innovation, extending it towards social innovation.

- The Commission and the Member States are encouraged to fund structural change projects specifically for start-ups and innovative SMEs. Such funding should be “low threshold” in order to stimulate uptake among SMEs.
- A bonus should be introduced in funding programmes aimed specifically at BES, to advance gender equality through implementing structural change processes.
- For Horizon Europe, Article 33 in the current model grant agreement for Horizon 2020 projects is an important legal base and must be kept in a comparable form. SMEs, start-ups etc. must not be exempt from this article.
- The EU prize for women innovators should be extended to also include social innovation.
- The Commission should contract a study on the benefits of structural change on start-ups and innovative SMEs.

Capacity building

The structural change process is a comprehensive process that requires the involvement of various types of stakeholders and specific forms of stakeholder mobilisation and communication. Successful implemen-

tation is contingent upon the availability of capacities and capabilities (knowledge, skills and attitudes). Hence, incentives should continue be provided for exchange, mutual learning and capacity building.

- The Commission and the Member States should further stimulate exchanges on good practice and mutual learning among relevant stakeholders, especially from the BES due to the lack of such initiative in the sector to date.
- Structural change projects should continue to provide funding for mutual learning and training activities, with a view to building capacities at the institutional level of implementing organisations and to share examples of working practices across European institutions and across sectors.

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References

Butler, Judith (1990) *Gender Trouble. Feminism and the Subversion of Identity*. New York et al: Routledge.

Communication from the Commission: A Reinforced European Research Area Partnership for Excellence and Growth (July 2012) [https://ec.europa.eu/research/science-society/document_library/pdf_06/

era-communication-partnership-excellence-growth_en.pdf].

Council Conclusions on advancing gender equality in the ERA (01-12-2015) [http://data.consilium.europa.eu/doc/document/ST-14846-2015-INIT/en/pdf].

Council Conclusions on Various issues related to the development of the ERA (28-05-2010) [https://register.consilium.europa.eu/doc/srv?l=EN&f=ST%2010246%202010%20INIT].

European Commission (2017) *Interim Evaluation: Gender equality as a crosscutting issue in Horizon 2020*, Brussels [https://ec.europa.eu/research/swafs/pdf/pub_gender_equality/interim_evaluation_gender_long_final.pdf].

European Commission (2012) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A Reinforced European Research Area Partnership for Excellence and Growth*. COM(2012) 392 final [https://ec.europa.eu/digital-single-market/en/news/reinforced-european-research-area-partnership-excellence-and-growth].

EFFORTI *The Manifold Benefits of Gender Equality and (Responsible) Research & Innovation* [https://www.efforti.eu/sites/default/files/2019-05/EFFORTI_Overview_Performance_Effects_GenderDiversity.pdf].

EFFORTI (2017) *A Conceptual Evaluation Framework for Promoting Gender Equality in Research and Innovation Toolbox I - A synthesis report* [https://www.efforti.eu/sites/default/files/2018-03/EFFORTI%20D3.3%20FINAL%20report%2027032018.pdf].

ERAC Opinion on the ERA Roadmap 2015-2020 (April 2015) [http://data.consilium.europa.eu/doc/document/ST-1208-2015-INIT/en/pdf].

European Economic and Social Committee (EESC) Own-initiative Opinion on Women in science

(2015/C 012/02). 15-10-2014 [http://www.eesc.europa.eu/?i=portal.en.soc-opinions.30505].

European Parliament Resolution on women's careers in science and universities, and glass ceilings encountered (9-9-15) [http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2015-0311+0+DOC+XML+V0//EN].

GEAR tool [https://eige.europa.eu/gender-mainstreaming/toolkits/gear/step-step-guide].

GENDERACTION (2018) *Deliverable 3.1 Report on national roadmaps and mechanisms in ERA Priority 4* Available at [http://genderaction.eu/wp-content/uploads/2018/12/741466_GENDERACTION_D05_NAPS_submitted.pdf].

GENDERACTION 2019 *Deliverable 3.1 Monitoring of ERA Priority 4 implementation*.

Hancock, Ange Marie (2007) *Intersectionality as a Normative and Empirical Paradigm*. Gender and Politics, 3(2): 248-254.

Linková, M. (rapporteur), Toader, A., Drew, E., Grech, J., Cassingena Harper, J. Ratzon, N., Grünenfelder, J. (2018) *Report on the implementation of Council Conclusions of 1 December 2015 on Advancing Gender Equality in the European Research Area*. Brussels: European Research and Innovation Committee – Standing Working Group on Gender in Research and Evaluation. [http://data.consilium.europa.eu/doc/document/ST-1213-2018-INIT/en/pdf].

STAGES (2015) *Guidelines for Structural Transformation to Achieve Gender Equality in Science* [https://eige.europa.eu/sites/default/files/guidelines_stages_1.pdf].

Standing Working Group on Gender in Research and Innovation (2018) *Report on the implementation of Council Conclusions of 1 December 2015 on Advancing Gender Equality in the European Research Area* [http://data.consilium.europa.eu/doc/document/ST-1213-2018-INIT/en/pdf].

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