Guidelines to design customised GEPs

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Executive Summary

The 'Guidelines to Design a Customised Gender Equality Plan (GEP)' – (D3.3.) provide concrete guidance for the second stage of the TARGET project for the seven Gender Equality Innovating Institutions (GEIIs) participating in the project: three research performing organisations (including two universities - University of Belgrade, Serbia; UH2C, Morocco - and a public research performing organisation - ELIAMEP, Greece), three research funding organisations (ARACIS, Romania; FRRB, Italy; RPF, Cyprus) and a network of universities in the Mediterranean basin (RMEI). Based on the TARGET gender equality audit tool (GEAT) this general guidance document tries to help TARGET implementing institutions identify initial priorities of the GEP on the basis of the audits undertaken. Specifically it walks the GEIIs through how to use the results (of the audit) to design the GEP in a reflexive and participative way –thereby further embedding the GEP process within the institution. Although the focus is on the GEP, these guidelines are meant to be also useful for designing a consistent Gender Equality Strategy (GES) in the case of the network of universities.

Abbreviations

CoP: Community of Practice

EIGE: European Institute for Gender Equality

ERA: European Research Area

GEA: Gender Equality Audit

GEAR: Gender Equality in Academia and Research

GEAT: Gender Equality Audit Tool

GEII: Gender Equality Innovating Institute

GEP: Gender Equality Plan

GES: Gender Equality Strategy

H2020:   Horizon 2020 the European Commission's 8th Research Framework Programme.

LERU: League of European Research Universities

RFO: Research Funding Organisations

RPO: Research Performing Organisations

STEM: Science, Technology, Engineering and Mathematics

WLB: Work life balance

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1   Introduction

These TARGET 'Guidelines to Design a Customised Gender Equality Plan (GEP)' – (D3.3.) provide concrete guidance for the second stage of the TARGET project for our Gender Equality Innovating Institutions (GEIIs). These seven implementing partners include three research performing organisations including two universities (University of Belgrade, Serbia; UH2C, Morocco) and a small research performing organisation (ELIAMEP, Greece), three research funding agencies (ARACIS, Romania; FRRB, Italy, RPF, Cyprus) and the Mediterranean Engineering School's network (RMEI). Based on the gender equality audit tool (GEAT) this general guidance document tries to help TARGET implementing institutions identify initial priorities of the GEP/ GES on the basis of the audits undertaken. Specifically it walks the GEIIs through how to use the results (of the audit) to design the GEP in a reflexive and participative way –thereby further embedding the GEP process within the institution.

These guidelines attempt to provide practical advice to consolidate gender mainstreaming processes that have already started with the audit, i.e. focusing on top-management commitment, defining roles and responsibilities of members of the community of practice, identifying existing inequalities as well as embedding data collection processes within the institution.

The TARGET guidelines also provide various examples of concrete actions and measures that have been tried and tested in European institutions and beyond in order to facilitate the design of tailor-made actions (that respond to the audit findings) throughout the three TARGET areas: removing gender-related institutional barriers to careers; decision-making and integrating the gender dimension in education and research content in our implementing institutions. In each of these three areas the problem is described, recommendations are developed and a range of concrete actions that have been tried and tested are presented. Transversal measures, such as leadership accountability, participatory processes, and data collection are also described.

Throughout this document we follow the GARCIA project definition of a gender equality plan:

> *"A Gender Action Plan is a planning document that promotes gender equality within an organisation. It aims to fulfil sets of actions and to achieve structural changes on the basis of each specific situation and context. It is important for a Gender Action Plan to be self-tailored to the specific organisational context." (Bozzon, Murgia & Poggio, 2016:4)*

We have tried to identify a range of 'good practices' that cover the three substantive areas, removing gender-related institutional barriers to careers, decision-making and integrating the gender dimension in education and research content, from different institutions from all over Europe and beyond. By presenting various 'good practices' we aim to provide the implementing

institutions with enough information about the range of possible actions. This it is hoped will enable our implementing institutions to build on, further develop and tailor the types of interventions that might be useful in combating those gender inequalities identified in the audit.

We build on the EIGE working definition of good practice as one that meets at least two of the following criteria: leads to an actual change; has an impact on the policy environment; demonstrates an innovative or replicable approach; or demonstrates sustainability (EIGE, 2013:11). We also recognise the GENDERACTION final definition of good practice measures or policies as something to aim for:

Good practice measures/ policies

- are based on an empirical baseline assessment
- explicitly aim to contribute to at least one of the three main gender equality objectives
- formulate concrete targets and target groups
- are based on a theory of change/ programme theory (a formulated set of assumptions why and how the policy should reach its targets and target groups),
- involve relevant stakeholders in the development of the policy/ measure
- are provided with sufficient and sustainable funding
- produce results which are sustainable and significant (in terms of coverage, resources, timeframes, etc.)
- develop a dissemination/ communication strategy (what has been done, what has been achieved, what worked, what didn't work), and
- are monitored or evaluated on a regular basis with regard to their implementation status and impact.

Other identified elements that constitute a good practice measure/ policy

- self-reflexive approach taken by the implementing institution
- an external evaluation
- sanctions to ensure the implementation of agreed measures and policies
- provisions to safeguard good practice measures against institutional or political change (Wroblewski, 2018: 31).

Good practices in Europe have been identified by EIGE, by European Commission funded GEP implementation projects through the seventh framework programme (FP7) and Horizon 2020, i.e EGERA, INTEGER, Plotina, GARCIA, GENERA, Genis Lab, GENDER-NET e.t.c. In line with the PLOTINA project, TARGET actions will be informed by previous projects in relation to: 1) removing barriers to recruitment and career progression of female researchers (Gender time, GARCIA, EGERA, STAGES, GENOVATE, FESTA and TRIGGER) 2) Addressing gender imbalances in

decision-making (FESTA, GenderTime) 3) Gender Dimension in education and research content (Gendered Innovations, EGERA, TRIGGER and GARCIA).

Moving forward

The initial draft guidelines were circulated in March 2018. The second TARGET Capacity Building Workshop (Planning) that was held in the University of Belgrade, Serbia on the 15th and 16th of March, 2018 provided a forum to discuss the guidelines, taking into account the results of the audit, institutional priorities as well as the tailoring of possible actions to be included in the GEP. On the basis of this work the initial draft was further elaborated to suggest more tailored measures / actions for each specific institution. Finally, the guidelines have been revised taking into account the discussion held at the third TARGET Capacity Building Workshop (Fondazione Regionale per la Ricerca Biomedica (FRRB), Italy, 25th and 26th of June, 2018), particularly for ensuring consistency across the set of TARGET tools: the GEAT, the guidelines and the monitoring tool.

2 From GEA to GEP: Consolidating processes & institutionalisation

2.1 Top-management commitment

Leadership and top-management commitment are essential for a successful gender equality plan. The TARGET GEAT explains why this is so necessary:

Commitment at the upper and highest level of hierarchy (Board of Directors, Managers, Heads of Research Units) is key for legitimising the time and effort that will have to be invested by the organisation's staff to implement the GEA, for authorising information flows, for addressing problems that may arise during the implementation of the GEA (e.g. internal resistance), as well as for supporting the sustained and iterative institutional learning and reflexive process that is at the core of the TARGET methodology. Put in a nutshell, strong and explicit commitment of the top and upper level management is crucial for the GEA implementation in three regards:

- increasing the perceived legitimacy of the GEA at the institutional level
- communication and visibility
- approval of procedures and activities supporting structural change towards gender equality in the organisation (GEAT, 2017:7).

The GEAT also provides practical suggestions for consolidating and strengthening commitment at the upper and highest organisational levels of the GEII (see GEAT, 2017:7). Whilst these arguments were developed with the audit stage of the project in mind – we think that these practical suggestions are important to remember throughout the whole GEP process particularly as top-leaders will come and go throughout the four year project. In the following box we highlight these four very practical suggestions and adapt them to the design stage of the GEP:

Practical suggestions for the Audit	Practical suggestions for the Design Phase
Present arguments that link priorities of the organisation in the areas of human resources, communication and EU-wide recognition to gender equality related issues and show how these priorities could be supported by the introduction of gender equality policies.	Actions could include: Training that links the priorities of the organisation to gender equality policies specifically for top and upper level management
Present arguments that link the R&I goals and priorities of the organisation to research that provides evidence for the positive correlation between the level of gender equality and the level of scientific excellence of research institutions.	Actions could include: Training that provides evidence for the positive correlation between the level of gender equality and the level of scientific excellence of the research institution specifically for top and upper level management.
Foster the active participation of members of top and upper-level management in institutional activities such as workshops, dissemination and communication activities. Ask representatives of top-level management to open, and if possible to attend parts of institutional TARGET workshops. This gives visibility to key personnel in top-tiers of management in institutional GEA relate activities, thus adding to the perceived legitimacy of the gender audit activities.	It is important to make sure that top and upper level management are actively involved with and committed to the institutional change actions developed on the basis of the results of the audit. Invite and make sure that top and upper level management attend the next institutional workshop where the design of the GEP will be discussed on the basis of the audit. This is crucial to ensure that those processes, practices and procedures identified as gender biased can be effectively gender proofed, including institutional data collection processes.
Make sure that the top and upper level management commits to playing a central role in the GEA communication strategy. For instance, it should be the GEIIs senior managers who announce the GEA, the goals of initiating a process of structural change towards more gender equality, and the expected institutional opportunities and benefits.	Make sure that the top and upper level management commits to playing a central role in the GEP communication strategy. It should be the GEIIs senior manager who announces the results of the audit, the start of the GEP design process, as well as communicating its adoption and the progress made.

Sekula & Pustulka, (2016: 29) from the GENERA project carried out a literature review to identify how different actions can improve **leadership accountability**. They suggest the following:

- "incorporate training on diversity and gender bias into mandatory leadership workshops for staff / faculty with personnel management responsibilities (Committee on Maximizing the Potential of Women in Academic Science and Engineering 2006; see also Science Europe, 2017).

- identify and overcome "passive responsibility" of the departmental leaders (McClellend, Holland, 2015; Wharton 2015).

- improve managers' ability to give their staff ongoing guidance and support in career management and development (Lee, Faulker, Alemany, 2010).

- sensitize managers to the problem of penalising candidates in promotion rounds for taking periods of parental leave or for working reduced hours in order to care for family members (Lee, Faulkner, Alemany, 2010)." (Sekula & Pustulka, 2016:29).

These actions are also key to improve human resource management processes as well as promoting more gender balanced decision making.

Involving top-management into the GEP process is also an important step towards effectively **embedding gender equality within the institution**. EIGE highlights three conditions that help to facilitate the process of making gender equality a long term objective:

1. incorporating a gender equality perspective and aims into the institutions steering documents including long-standing development strategy (Swedish Secretariat for Gender Research, 2016)

2. allocate gender equality work to a specific multi-annual budget" (EIGE, 2016b:3).

3. "create and implement regular accountability, monitoring and evaluation structures, and/ or tools into a Gender Equality Plan to flag when sustainability begins to lag and to indicate actions needed prior to crisis points being reached." (EIGE, 2016b:3).

All three conditions can only be fulfilled with top-management level support and commitment for the gender equality plan process.

2.2   CoP & define roles and responsibilities

Developing and consolidating the institutional community of practice is crucial for the successful design, implementation and monitoring of the GEP. According to the GEAT:

Communities of practice are formed by people who engage in a process of collective learning and acting in a shared domain (cf. Wenger 1998, 2000), in our case in the field of implementing gender equality policies at GEII level. Communities of practice define competence by combining three elements (Wenger 2000:229): First, members are bound together by their collectively developed understanding of what gender equality is about and they hold each other accountable to this sense of joint enterprise. To be competent means to understand the enterprise (here: the enterprise of promoting gender equality within the GEII) well enough to be able to contribute to it. Second, members build their community through mutual engagement. It also means to be able to engage with the community and be trusted as a partner in these interactions. Third, communities of practice share a repertoire of communal resources – language, routines, sensibilities, artefacts, tools, stories, styles, etc. To be competent also means to have access to this repertoire and be able to use it appropriately. (GEAT; 2017:8)

In the audit phase two main benefits of creating a community of practice were identified: firstly, an increased institutional willingness and capacity for identifying, reflecting on and addressing gender bias and gender equality issues in a sustained way and secondly making sure that the GEP implementation process does not depend solely on the change agent and his/her assistant.

In the design phase, this work is built on. Regarding the **sustainability** of the plan, results from the STAGES project demonstrated how the quest for sustainability starts at the very beginning of the GEP process – through institutional arrangements that are set up for implementation, which are continually assessed so viable solutions are found to secure their continuity (Cacace et al, 2015:xi) (Seklua & Pustulka, 2016:14). TARGET's emphasis on the community of practice is built on this premise. Cacace et al (2015; xi) highlights how different actions may have different degrees of sustainability, some may be sustainable from the start yet others will need to be redesigned, modified or integrated with others to ensure their sustainability. An approach that factors in sustainability from the beginning of the GEP must contemplate a transition phase - "where the teams still continue to cooperate in the delivery of the action by gradually reducing their efforts as new institutional actors take over" (Cacace et al, 2015:ix).

EIGE through their GEAR tool also recommends working in this way and highlights how this approach of **distributed responsibilities** (and not too much dependence on one or two actors) can prevent changes of leadership, budget cutbacks or apathy thwarting progress made towards gender equality through plans. As a first step the GEAR Tool states it is necessary to: "embed commitment to both gender equality and the work related to the gender equality plan into

multiple organisational structures. This means that support, buy in and commitment for the plan will need to be sought from multiple stakeholders and not only allocated to a specific school or department" (EIGE, 2016b:3). This has implications for the distribution of the roles and responsibilities within the community of practice at the design stage.

The setting up of each institutional community of practice can be seen as a first step towards creating a **permanently based gender equality body** within the institution. Research states how "a well-equipped and well-located gender equality body (e.g. a dedicated unit, working group, team or office) has been identified as a success factor to promote gender equality through institutional change and higher educational settings." (Sekula & Pustulka, 2016:18). The 2012 European Commission structural change report highlighted how these bodies and particularly the heads of these bodies should be aligned to top governance bodies and should hold a title that reflects proximity to power. This is a way to gain legitimacy within the institution but the report also stresses how these bodies should have access to adequate and permanent resources – including staff and gender experts and a budget so activities can be carried out (European Commission, 2012, 27).

The design of the plan must also take into consideration the roles and responsibilities of those participating in the community of practice. For example, plans adopted in Finland assign responsibilities for implementation specifically highlighting human resources and communications personnel, the rector, deans, faculties, department, units, professors and supervisors. Whilst some plans also suggest that implementation relies on the whole research and academic community, it is wise to allocate specific roles and responsibilities- so these can be monitored and those responsible for actions –held accountable. Monitoring implementation and follow-up however tends to be the responsibility of the gender equality officer (EIGE, 2016c:30). In Denmark the following institutional actors tend to be responsible for the following areas: gender equality boards for the overall plan, then those managers responsible for employment (i.e. deans, heads of department and directors of research centres) and the human resource management department (EIGE, 2016c:30).

2.3   Change agents

In the TARGET project change agents play a fundamental part in the GEP process. Each implementing institution has a self-nominated TARGET 'change agent' who represents the interface between the GEII and the supporting partner and is responsible for the process of implementing a GEP within her/his institution. The main tasks of GEII change agents are 1) to embed the GEP in existing institutional strategies, decision-making structures and working groups; 2) in parallel, on the basis of initial institutional experience of GEP, to contribute to the

establishment of dedicated structures with adequate staff / funding to develop a sustainable gender equality policy.

Callestig (2014) in her thesis on 'Making Equality Work: Ambiguities, conflicts and change agents in the implementation of equality policies in the public sector' notes how change agents must ensure that the general prerequisites for change are put in place:

- Adequate resources
- Support from management
- Time
- Capability to relate to contextual factors i.e. the area of implementation (Schofield, 2004). (Callestig, 2014:140).

Callestig's (2014:140) findings show that a major feature of the work to implement gender mainstreaming by the change agents are the strategies they they develop which she terms 'tempered radicalism' and 'small wins' strategies'. Tempered radicals are described by Callistig (2014) as:

> *"employees who acknowledge unfair or unjust practices or conditions in their organisations and who want to change them but who are at the same time loyal and support the overall objectives of the organisation. Tempered radicals use small wins strategies, i.e. they seek out opportunities to make changes in a small fashion, building alliances and securing support as they go along, and they work to create change from the inside."* (Callestig, 2014:140).

Small wins strategy has been identified as an effective way to achieve gender equality objectives (Charlesworth & Baird, 2007). Small steps towards organisational change can be effective as it lowers resistance to change. Meyerson and Fletcher (2001) suggest that the small wins strategy is "a powerful way of chipping away the barriers that hold women back without sparking the kind of sound and fury that scares people into resistance" (p. 126) (cited in Callestig, 2014:141).

It is also suggested that each GEII hires a gender equality assistant whose role it is to support the change agent. In some GEIIs however the tasks of the gender equality assistant will be distributed amongst the CoP members. For example, in two of the GEIIs the CoP includes staticians and these members have become partly responsible for data collection and analysis.

2.4 Identify where inequalities exist: From audit to GEP objectives and actions

One of the main aims of the GEA undertaken in each implementing institution was to pinpoint those institutional practices and processes that are gender biased – so actions and measures can be designed and implemented to overcome these.

Whilst the TARGET project in line with the ERA priorities stresses three main areas for improvement: removing gender-related institutional barriers to careers, decision-making and the integration of the gender dimension in education and research content - each implementing institution will focus on **tailoring a mix of actions** to combat those main areas where inequalities have been identified and there is an institutional will to overcome these. In some institutions just one of the three dimensions may be chosen, in some institutions two of these areas may be chosen and in some institutions all three areas may be tackled but with differing degrees of emphasis on the three dimensions.

The development of the main GEP objectives should be evidenced based building on the work carried out in the audits. An explicit connection should be made between the audit results and the main objectives identified in the GEP. The following table provides an example of main audit results and links it to possible subsequent objectives in each of our three domains:

Domain	Audit Results	Main Objective
Removing gender-related institutional barriers to careers	No system in place for monitoring trends in career paths of women and men in academia	To build up the institutional capacity to identify relevant data & establish procedures and systems to improve data collection
Decision-making	Women are under-represented in decision-making bodies	Raise awareness of the significance of gender balance in decision-making bodies
Gender Dimension in Research Content	Lack of research projects that explicitly include a gender dimension	To build and support the capacity of researchers to integrate a gender dimension into their research projects

2.4.1. Defining objectives

The first step involves developing explicit objectives. The objectives should be tailored to the institution and therefore be based on the audit results. They should also reflect the expected and desired 'impact' that the GEP will have in each concrete area. Science Europe (2017:29) suggests that **explicit objectives** for gender equality- can be linked to national objectives or can

be more ambitious. They should however be not only explicit but they should be "**measurable, and monitored**".

The definition of objectives however does not go far enough when considering effective implementation – Science Europe recommends that "**mandatory actions** should be undertaken to meet the objectives" if the objective fails to be met (Science Europe, 2017:29). This should also be considered at the design stage of a GEP.

2.4.2 Defining measures and actions

The second step involves developing a set of actions linked to the defined objectives to resolve the identified inequalities. The identification of the following is key: policies/ actions/ measures that need to be developed; timeframe specified; who is responsible for each action; how will each measure be implemented (and monitored) and the required resources.

2.4.3 Prioritising measures and actions

Prioritising the above identified actions/ measures can be useful when thinking about allocating resources to different actions that aim to reach the specific objectives. Three main axes can be identified: **implementation** (easy, medium or difficult), **level of impact** (low, medium, high), and **time-span** (short, medium, long term). One possible tool for ordering objectives according to the first two dimensions is the following table:

	Low impact	Medium impact	High impact
Easy to implement			
Medium to implement			
Difficult to implement			

Once measures and actions have been mapped along the impact/ implementation matrix – they can then be ordered according to time-span. For example, those measures and actions identified as 'easy to implement' with a 'high impact' in the short term should be considered to be implemented at the start of the GEP process. This means that the community of practice and broader institutional stakeholders will begin to see concrete, visible results early on in the process. This may be key in taking the whole process forward.

2.4.4 Successful implementation: a reflexive approach

Whilst defining objectives and designing subsequent actions and measures are key parts of the GEP design process – it cannot be taken for granted that well thought out measures and actions

will automatically be successfully implemented and create the desired impact. There are many examples of well-thought out and designed policies which ultimately do not lead to the intended change. For example, Wroblewksi (2015) discusses how despite the development of guidelines to increase transparency and reduce gender bias in appointment procedures for full professors at Austrian Universities – gender practices remain entrenched. Stability of practice has been attributed to a lack of reflection and reflexivity (ibid). Institutional reflexivity according to Moldaschl (2005) is the "ability of an organisation to cope with organisational change" (ibid). He states that there are three fundamental components of institutional reflexivity:

- Self-monitoring
- Consideration of incremental consequences
- Knowledge

One effect is that "a self-reflexive component is…established because the organisation and its sub-units reflects on recent developments and the reasons for any goal achievement and/ or failure on a regular basis". (Wroblewski, 2015:13).

2.5 Embedding data collection processes

The TARGET project takes a self-reflexive approach to institutional monitoring – and aims to build up the institutional capacity to identify the relevant data as well as establish and adapt existing procedures, processes and information systems to **improve data collection** and **address data gaps**. The audit phase has not only provided a first collection of data but has also enabled the identification of relevant data gaps for an effective monitoring of gender equality policies. This means that improving data collection, and namely in those areas where action is prioritised is a key issue in the design of the GEP.

Gender equality data collection should be ongoing, indicators should be calculated annually whilst the findings should be discussed internally in order to create/ sustain a gender equality discourse in the organisation and should be also made public. Data collection that is carried out on a yearly basis means that changes can be observed – and improvements registered in specific areas – which means that gender equality actions can be adapted accordingly. Science Europe also suggests including success stories on actions taken to improve gender equality in progress reports (Science Europe, 2017:29).

Sekula & Pustulka, (2016:19) state that the **monitoring** of policies on gender equality on research should:

- "include a variety of tools (European Commission, 2012a)
- measure and benchmark progress against other institutions (European Commission, 2012a)

- focus not only on the successes of specific policy measures, but also on shortfalls and unintended effects (McGregro; Bazi, 2007; Lee, Faulkner & Alemany 2010); European Commission, 2012a, Lipinsky 2014; Wharton 2015)."

To sum up, GEP should pay attention to data collection in two different senses:

- Actions to improve existing procedures, processes and information systems to address the data gaps that have been identified as relevant (e.g. the lack of complete sex-disaggregated data about the staff of the institutions or the grant award holders; success rates for recruitment, promotion or grant application processes). It might be the case that some of these data are lacking or have been collected specifically for the purposes of the gender audit.

- Identify the indicators that should be used for monitoring the actions included in the GEP.

3   GEP Design: Concrete measures and actions

In the following section we attempt to provide a brief overview of different measures that can be developed in the three different dimensions that the TARGET project attempts to tackle. The GENERA project has developed a useful typology of the different measures that can be implemented in RPOs and RFOs classified by field of action and sub-field of action (Oetke et al, 2016). We build on this typology as a basic framework for ordering possible actions/measures into our three main areas, including a fourth strand of general or transversal measures. The following table provides an overview of this framework.

TARGET Dimension	Field of Action	Sub-field of action
Removing gender-related institutional barriers to careers	Gender-inclusive organisational culture	Gender awareness and bias Non-discrimination
	Presence	Recruitment Retention and attrition Advancement
	Flexibility, time and work life	Work-life balance Care & family life
Decision-making	Addressing gender bias in decision-making	
Gender dimension	Gender dimension in education	
	Gender dimension in research content	
Transversal measures	Top management commitment - Leadership accountability	
	Community of practice - Gender equality structure	
	Data collection - monitoring	

3.2 Removing gender-related institutional barriers to careers

3.1.1 Gender-inclusive organisational culture

A priority area for intervention in managing change is raising awareness of gender issues, tackling denial and resistance to change, and promoting self-reflection among top-management and different actors (e.g. RPO managers with responsibility for human resources and career advancement; RFO managers with responsibility for establishing funding criteria; selection, promotion and evaluation committees) to recognise and eliminate sources of gender bias. Gender stereotypes and biases are pervasive, they are deeply embedded in our unconscious and affect how we interact with others. Unconscious, or implicit, gender bias means that women are more negatively assessed than men for the same job or achievement, because they are far less likely to be associated with the stereotypical men characteristics perceived as necessary for success (Science Europe, 2017: 12-13). Action in this field should be combined with non-discriminatory policies fostering an inclusive culture and work environment - addressing gender as well as other grounds of discrimination.

Did you know?

A meta-analysis that examined gender stereotypes in science in 66 countries demonstrated how in many places science is associated more with men than with women (Miller et al, 2015). Whilst it was found that the number of women researchers present in a country can be correlated to *explicit* bias, this cannot be said of *implicit* bias and gender stereotypes about science. They found that even in countries with more women researchers, science still tends to be implicitly associated with men more than with women (Science Europe, 2017:12). It is important to stress that all individuals are susceptible to implicit gender bias and it affects even those with an egalitarian belief system (Dovidio & Gaertner, 1994). Boys, girls, men and women exhibit the same implicit gender biases; it should not be only attributed to men (Science Europe, 2017:13).

Sub-fields of action

Building on Oetke et al, 2016, we can identify two sub-fields of action:

- **Gender awareness and gender bias***:* Implicit gender biases significantly affect research institutions - from day to day interactions to implicit norms and decision-making practices. Addressing gender biases and making people aware of their effects is essential in working towards gender equality.

- **Non discrimination**: Non-discrimination policies should address specific gender issues (as introducing sexual harassment policies) as well as more general diversity issues. A

work culture free from discrimination needs to be fostered and supported if gender equality is to be achieved.

Measures

The following table details some of the measures/ actions that might be undertaken to create a gender inclusive organisational culture. It presents the measures identified by the GENERA project alongside other measures implemented in other projects or institutions[1]. As a general remark, it is important to highlight that training (gender-awareness / diversity and implicit bias) needs be targeted to different actors - e.g. leadership, decision making-bodies, middle-management, evaluation panels.

Gender awareness and bias	Non-discrimination
Implicit bias training	Zero-Tolerance Sexual Harassment Policies
Gender-awareness training	Equal treatment of part-time work and promotion of work-life balance
Diversity training (FWZ)	
Appeal body – HR representatives, Gender Equality Officer	Fair and transparent workload balance across all areas (teaching, research, administration)
Gender-sensitive communication (EGERA)	Equal access to resources (e.g. finding, lab space, equipment)
Incorporate implicit bias statements	Policies of overall non-discrimination

Examples

Countering Gender Stereotype: Science Foundation Ireland, Ireland. "In 2014 Science Foundation Ireland commissioned a study into the career choices of young people in Ireland. The study revealed that information about a particular course or career will not even be sought by young people if they have no affinity with the associated stereotypes. Parents were found to have an important role in influencing a child's opinion on whether they 'fit in'. This reinforces the importance of breaking perceived stereotypes amongst this group. Informed by this finding, the SFI Gender Strategy 2016-2020 will implement specific measures to increase the participation and interests of girls in Science, Technology, Engineering and Mathematics (STEM)- related activities, thereby increasing their confidence in the relevance for girls studying STEM subjects." Science Europe (2017;12).

Observations in evaluation panels, Swedish Research Council (VR), Sweden. Observations in evaluation panels: "Since 2008, the Swedish Research Council has been conducting biannual gender equality observations in selected evaluation panels. Two out of three reports are available in English and contain conclusions and recommendations from the gender equality observations... The objective of gender equality observations in evaluation panels is to examine and unveil any differences in the evaluation process for funding applications with regard to gender, since they are often subtle and difficult to

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[1] The source of other measures is included in the table.

identify. The purpose of the observations is not to reveal how particular panels or individual panel members behave and relate to gender issues, but rather to discern significant patterns. To date, the observations have led to the production of a series of recommendations on how the evaluation process can be developed and improved in order to attain a higher level of gender equality. Furthermore, the reports from the gender equality observations are used in the training for review panels, by decision-making bodies, and by research council staff." (Science Europe, 2017:17).

Gender Blinding for assessments in early-stage career research programmes, Irish Research Council, Ireland. "The Council introduced gender-proof criteria for assessment purposes to ensure that there is no implicit gender bias, disadvantage or deterrent in the language or criteria. The Council has also introduced gender blind assessment procedures: its assessors review applications that are anonymous and free from pronouns or other words that would identify the applicant's gender. Data on the relative proportion of female STEM awardees before and after the implementation of this policy demonstrate the impact of gender-blinding…While women made up only 35% of STEM Postdoctoral awards in 2013, this number rose to 44% in 2014 and 45% in 2015. Also notable is the fact that in 2013, female STEM researchers submitted 43% of postdoctoral applications and won only 35% of the awards. Following the implementation of gender-blinding, these figures were almost reversed: women applying for 2014 STEM postdoctoral fellowships submitted 32% of applications and won 44%." Irish Research Council (2016:3)

Diversity training in the context of research funding, FWF, Austrian Science Fund, Austria. "Since 2009, the Austrian Science Fund has provided internal training to co-workers and board members concerning gender mainstreaming. In 2015, a further step was taken to improve important aspects of procedures. A training session on diversity in the context of research funding was conceived, allowing board members and FWF staff (such as heads of departments, scientific project officers, and administrational project officers) to learn more about the theoretical background. Participants' feedback clearly confirmed an increased awareness of the topic after the workshop." (Science Europe, 2017:16).

Advice by International Gender Experts, Swiss National Science Fund (SNSF), Switzerland. "The Swiss National Science Fund has an international advisory board for gender equality. The members are internationally known gender experts and distinguished researchers. The committee meets twice a year at SNSF and makes sure that gender equality issues are addressed in the organisation on a regular basis. Committee members have given presentations on biases and stereotypes and their impact on the evaluation process to the SNSF Research Council members in 2015 and 2016." (Science Europe, 2017:16)."

Unconscious bias training, Science Foundation Ireland (SFI), Ireland. "One of the objectives of the Science Foundation Ireland Gender Strategy 2016-2020 is to ensure that the agency review process remains unbiased, as demonstrated by the annual disaggregated analysis of the success rates of all funding programmes. // To that aim, in 2016 all SFI staff, including the Executive Committee and the Board of Management, received sector-specific, data-driven unconscious bias training by an external provider. Feedback and learnings from the session have been fed into process improvements within the

organisation, such as expanded briefing to peer reviewers and a reconsideration of the information provided to review panels." (Science Europe, 2017:19).

3.1.2 Presence

Addressing the chronic under-representation of women as researchers and scientific staff which is magnified the higher up the career ladder is one of the greatest challenges to achieving a more gender inclusive science. A priority for intervention here are measures that make existing career thresholds and procedures more transparent and gender aware: this entails counteracting (unconscious) gender bias and challenging the rigid scientific career trajectory based on an out-dated male norm of full availability and early achievement. The aim is fostering a work environment where all researchers can achieve their potential. This requires a critical assessment of RPOs' recruitment practices, analysing women's attrition causes and developing strategies for retention and advancement. RFOs's funding criteria and grant management practices have also to be critically assessed in order to promote retention and advancement. Positive action measures such as targeted recruitment or targets for grant awards have also proven to be effective. Oetke et al (2016: 4) highlight how when designing measures in all these fields it is imperative to define these carefully to not victimize female scientists or reinforce gender stereotypes.

Did you know?

Statistics show how men succeed more than women to be part of the permanent staff and rise in the scientific ranks. One of the sharpest declines in the percentages of women in the traditional academic research career track occurs between the graduate and tenure track or permanent position career points (Science Europe, 2017:40). A study about the recruitment and selection criteria for early career academics showed a relevant gap between formal and actual criteria - and this gap is gender-biased (Herschberg et al, 2015). The study focused on the entrance to positions for postdocs, researchers and assistant professors; both permanent, tenure-track and non-permanent positions. At this stage, recruitment and selection processes act as a "bottleneck" in career progression for scientists where only a small minority among a pool of candidates are retained. This intense competition may bring along extra risk of producing inequalities. The study revealed how implicit gender biases shape the understanding of scientific excellence and hinders the access of women to permanent staff. The deconstructing of excellence forms part of acknowledging that science is gendered, i.e. science has been long dominated by men and therefore gendered power relations have shaped and continue to shape the definition of and assessment of excellence (Rees, 2011).

Sub-fields of action

Building on Oetke et al (2016) we can identify three sub-fields of action:

- **Recruitment:** Current recruitment practices and procedures need to be redesigned to foster the maximum transparency and gender sensitivity. This process starts with how job advertisements are written (language used) and encompasses gender awareness and training – specifically in implicit bias for recruitment panels.

- **Retention & attrition:** The attrition of women in scientific careers needs to be mapped and analysed in order to explore the reasons for the decrease of women across the scientific career and develop appropriate retention strategies.

- **Advancement:** Advancement and promotion measures need to be implemented to ensure that the higher echelons of scientific organisations are more gender balanced.

Measures

The following table details some of the measures/ actions that might be undertaken to promote a more equal presence of women at all stages of the scientific career. It presents a selection of measures identified within the GENERA project, alongside other relevant measures implemented by other projects or institutions[2] .

Recruitment	Retention & Attrition	Advancement
Transparency of selection processes	Training of HR Managers	Balanced women's representation in promotion pools
Gender sensitive formulation of advertisements for open positions; publications of adverts in wide-spectrum of outlets	Mobility rules and policies of outside hiring	Balanced women's representation in application pools for grant award (Science Foundation Ireland)
Promotion of non-discriminatory hiring / admission practices (e.g. anonymised applications)	Ensure research staff are aware of career/ professional development options	Promotion policies and practices (e.g. possibility of stopping the tenure clock at universities due to parental leaves or family leaves).
Gender-balanced / gender-trained hiring committees	Policies to reduce pay gap	Targets for grant award holders (Science Foundation Ireland)
Targeted recruitment (Artic University of Norway)	Policies to increase job security	Gender as a criterion for ranking applications
Cooperation between GE officers, HR personnel and managers with hiring responsibilities	Analysis of attrition at all levels of career and its causes	Gender balanced evaluation panels for grant award (Science Foundation Ireland)
Equal treatment of part-time work		Flexible grant management practices, e.g in parental and family leaves (Science Europe)
Dual career schemes		Mentoring[3]

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[2] The source of other measures is included in the table.
[3] We have included mentoring as a possible measure for advancement.

Examples

Review Procedures and practices in CNRS, France. CNRS organised awareness raising activities and training on gender equality issues and stereotypes for decision-makers regarding researchers' evaluation, recruitment and promotion at CNRS (chairs of peer review evaluation panels, scientific directors, human resources representatives). In this process they utilized social science experts who presented their latest findings on gender issues. They also invited external observers (senior gender researchers during interviews of candidates to reflect and identify gender bias in treatment of candidates. CNRS added specific section in the application form for family related career breaks and this information was considered in the evaluation process. It was also recommended to evaluation panels to put forward two names (a woman and a man for an internal institutional award instead of only one) to ensure better gender balance in the selection procedure" (INTEGER)." (PLOTINA, 2017: 56).

Targeted Recruitment, Artic University of Norway (UiT), Norway. "With the aim of finding potential candidates for specific positions, the UiT has established special search committees. Before any permanent academic position is announced, a search committee must be established. The committee identifies qualified women and encourages them to apply. If there are no female applicants, a report on the recruitment pool within the specific academic field and on the search committee's work is required. A successful application process is defined by a minimum of 40% female applicants" (Gender-net) (PLOTINA, 2017: 56/7).

Appointment Committees, Radbound University, The Netherlands. "In Radboud University, protocols for appointments of full professors specify that at least although preferably two women should be members of the appointment committees. Furthermore, HR advisors have been trained to develop gender-neutral advertising of vacancies. HR advisors are responsible to ensure compliance with the recommendations and the protocols. To improve these processes, the university is collecting data from appointment reports, monitoring the composition of recruitment and selection committees and appointment outcomes. (EGERA)." (PLOTINA, 2017:57).

Target for women award holders and positive action, Science Foundation Ireland (SFI), Ireland. "One of the objectives of the SFI Gender Strategy 2016–2020 is to achieve a target of 30% women award holders by 2020, against a benchmark of 21% in 2015. Several measures are envisaged in the strategy; however, in 2015 the Starting investigator research Grant (SirG) award programme incorporated a gender initiative, ensuring that half of eligible applicants are women. This gender initiative led to an increase in the number of women applicants from 27% in 2013 to 47% in 2015. As a result of the usual peer-review process, of the 20 proposals awarded in 2015, 55% of awardees were women, compared to only 27% in 2013. Additionally, SFI continues to allow extended eligibility timeframes for applicants who undertook career breaks, and also annually publishes gender-disaggregated data on funded award holders and research team members which inform redressing actions." (Science Europe, 2017:30).

3.1.3 Flexibility, time and work life

Academia is well known for long-working hours combined with high pressures and work-life imbalances which can have a counterproductive effect on performance and worker satisfaction (Kinman and Jones, 2008). Furthermore, explicit and implicit academia regulations usually require high levels of competence and research productivity in the early years of the academic career which coincides with the time of starting families or raising young children - a fact that hits women researchers particularly hard (O'Laughling, Bischoff 2005). RPOs policies designed to address the needs of staff with caring responsibilities and work-life balance can help to increase both productivity and satisfaction. In fact, RPOs in Europe have the highest tendency to implement work-life balance measures, including provisions to enable the adoption of a flexible career trajectory (e.g. enabling career interruptions, returning schemes after career breaks) (EC, 2015:121). RFOs may also play an influential role in supporting the reconciliation of work and family life - grant management practices are increasingly including measures to mitigate conflicts between career and family demands (Science Europe, 2016). As highlighted by Oetke et al (2016) policies and measures designed in this area must challenge the traditional view of women as fulfilling a caring role and must help to foster co-responsibility for care. Measures in this area must therefore be formulated to be gender inclusive.

Did you know?

Management policies related to research grants as enforced by national and international research funding agencies, can have a direct and indirect effect on facilitating the flexibility and support required at critical career times for women researchers, such as, but not limited to, times associated with birth and caregiving. A specific survey was circulated among the organisations belonging to Science Europe to analyse current practices. In spite of significant cross-country variation in welfare provisions, the results for 17 national RFOs and 3 RPOs in 15 European revealed some common trends:

- All new mothers employed by RPOs receive 100% of their salary while on maternity leave (in some cases, depending on certain eligibility criteria).
- Most organisations allow their award holders to apply for no-cost extensions which allow extra time to complete the proposed research without extra funding. The possibility of undertaking research projects on a part time basis is available from most surveyed organisations. A significant number of the surveyed organisations have specific additional grant management initiatives to retain women within research careers.
- With a few exceptions, these policies are applicable to all funded research team members, including graduate students.
- With the exception of a few countries – notably Norway and Sweden, where both parents have the right to share the parental leave after the birth of a child – statutory paternity leave in the countries of the surveyed organisations generally has a limited duration. In most surveyed organisations, no policies have been implemented to provide additional supplementary grants to fathers who might want to take a period of family leave (Science Europe, 2017).

Sub-fields of action

Building on Oetke et al (2016) we can identify two sub-fields of action:

- **Work-life balance:** Work-life balance refers to the amount of time spent at work in comparison to that spent out of work. Policies and measures developed in this area can benefit both employers and employees – leading to a reduction in stress and increases in performance.

- **Care & Family life:** Care and family life refers specifically to reconciling work and family life- and is particularly concerned with those with caring responsibilities be them parents (i.e. looking after children), or other dependents (be them elderly parents, partners etc.). Conflicts between care and family life in academia hits carers particularly hard. Women tend to be statistically more likely to take a caring role – it is imperative that measures developed in this area challenge this and provide support for all carers (both men and women with caring responsibilities).

Measures

The following table details some of the measures/ actions that might be undertaken to promote a more equal presence of women at all stages of the scientific career. It presents a selection of measures identified within the GENERA project, alongside other relevant measures implemented by other projects or institutions[4] .

Work-Life Balance	Care & Family Life
Reasonable working hours, limited overtime and holiday and vacation policies	Child-care availability and funding tailored to researchers' needs
Avoidance of environments that foster the creation of "Old-boys clubs" (e.g. meetings held late in the evening)	Parental leaves: "father quota"
Measures addressing the pressure created by the myth of dedication being equal to time to spend	Carer/ parent-friendly workplaces (e.g. breastfeeding rooms, 'with –child offices', breaks)
Availability and equal treatment of part-time positions	Availability of childcare during work-related events (e.g. conferences, workshops)
Flexitime/ flexible schedules	Support of the 'dual-earner'/ 'dual carer' family model
Telework	Non-discrimination of parents
Team and cooperation	Parental leave cover/ replacement; alternative assignments available for expectant mothers
Compensation policies that promote WLB, bonuses, leaves and compensation schemes that reward WLB, acknowledgement of GE and WLB at employee performance reviews	Support of other caring activities (e.g. spouse, relatives)
	Providing interim technical or administrative support during a leave of absence related to caregiving responsibilities (Sekula & Pustulka, 2016:28).
	Family friendly grant management practices (for example,

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[4] The source of other measures is included in the table.

	direct measures to support to maternity and paternity leave; support for paternity leave for dual career couples; support to switch from a full-time grant to a part-time grant or extending the grant at no cost (Science Europe 2017). Allow grant money for dependent care expenses necessary to engage in off-site or after-hours related activities or to attend work-related conferences or meetings (Sekula & Pustulka, 2016:28).

Examples

Full paid maternity leave. Science foundation Ireland (SFI) and Research Councils UK (RCUK), UK. "In the UK and Ireland, the state does not pay the full salary of employees on statutory maternity leave. However, most RPOs and universities have a policy to provide 100% of their salary to their employees on maternity leave, including researchers whose salary is funded through research grants, which can leave the RPOs and universities financially exposed in these circumstances. In order to remove any perceived barrier towards the hiring of women researchers, research councils UK and the Science Foundation Ireland provide additional funding to RPOs and universities to supplement the statutory maternity pay to 100% of the employee's salary when team members funded through research grants take a period of maternity or adoptive leave." (Science Europe, 2017: 43).

Care & family life friendly measures, Research Foundation Flanders (FWO) "At research Foundation Flanders, PhDs and postdoctoral fellowships can be suspended during pregnancy/maternity or parental leave, in which case a no cost extension is automatically granted. additionally, beneficiaries of a pre or postdoctoral fellowship at FWO, who may be required to perform a certain amount of additional tasks by their host institution – such as teaching, clinical tasks or administrative duties – are relieved from these obligations during periods of maternity/paternity leave." (Science Europe, 2017:45).

Flexible Working: Department of Mechanical, Materials and Manufacturing Engineering, University of Nottingham, UK. "Offer a range of flexible working and part-time working arrangements such as extended lunch breaks to enable care of elderly relatives, variable hours to enable staff to complete school pick-up and a gradual change in hours to facilitate the return to full-time working for parents of young children." (Athena SWAN Best Practice/ WLB).

Extension of fixed term contracts: University of Reading, UK. "Extend contracts for fixed term research staff to cover maternity leave and enable the individual to return and complete the outstanding months on the original contract." (Athena SWAN Best Practice/ WLB).

Reduction of Teaching Commitments, University College London, UK. "Provide for one term of sabbatical leave without teaching commitments for research-active academics returning from maternity, adoption, extended carer's or long-term sickness leave. This leave will enable staff to re-establish their research

activity more quickly." (Athena SWAN Best Practice/ WLB).

Review Promotion Systems: Lancaster University, UK. "Review the promotion systems to prevent any discriminatory barriers to progression. Invite candidates to declare any significant periods of 'time out' that may be relevant to their career history, for example, caring for children or other relatives, maternity leave or long-term sickness." (Athena SWAN Best Practice/ WLB).

3.3 Decision-making

Balancing the gender composition of all relevant decision-making bodies is strategic to effectively counteract unconscious gender bias, improve the quality of committee work through diversity and symbolically change institutional culture. This can be achieved by different means - such as the use of quotas or other 'softer' strategies to bring about gender balance.

As highlighted by Oetke et al (2016) addressing gender bias in decision-making not only refers to equal presence of women and men in all relevant boards and committees, but also the ability of their members to address their own biases and make informed decisions. This implies developing gender awareness measures to ensure that all bodies are gender-sensitive and aware.

Did you know?

Research has demonstrated how diversity in participation and involvement in decision-making processes facilitates the choice of higher quality solutions in complex tasks and organisational environments (Veronesi et al, 2016:7). The overall quality of decisions has been linked to the degree of openness and transparency of decision-making processes in order to broaden views on a topic as well as incorporate multiple perspectives (Morrison and Milliken, 2000) (Veronesi et al, 2016:7). Women however only make up 28% of scientific and administrative board members in the EU-28 and only 22% of board leaders (EC, 2016:6). The systematic exclusion of female researchers from decision-making processes not only negatively affects the quality of decision-making but has damaging effects on "research opportunities, scientific productivity and ultimately the, promotion and career advancement of female researchers (Zuckerman, 1991)." (Veronesi et al, 2016:7). The GEAR Tool highlights how gender balance in leadership and decision-making positions is a key concern at the EU level: "The [Council Conclusions on Advancing gender equality in the European Research Area](#) (adopted in December 2015) invited relevant authorities to set up guiding targets, for example quantitative objectives, for better gender balance in decision-making bodies including leading scientific and administrative boards, recruitment and promotion committees as well as evaluation panels. Research funding and performing organisations are encouraged to reach these targets by 2020." GEAR Tool

Measures

The following table details some of the measures/ actions that might be undertaken to address gender bias in decision making. It includes measures identified or implemented in diverse projects and institutions.

Decision-making
Introducing gender balance (40/60%) or gender quotas (e.g. in boards, bodies, committees) (GENERA)
Develop election rules to foster a balanced gender composition (University of Ghent)
Empowering female candidates to foster a balanced gender composition (Siauliau University)
Ensuring that all bodies are gender-sensitive and aware - Implementing gender awareness and bias measures (GENERA)

Examples

Empowering female candidates, Siauliai University (SU), Lithuania. "Considering the striking underrepresentation of women in the university's council, the Council Election Tactics and Strategy Plan were developed within the EU-funded structural change project 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" (EIGE[5])

Developing election rules for ensuring a balanced representation, Ghent University, Belgium. "The new election procedure for the Board of Ghent University (Belgium) requires faculties to have at least one male and one female candidate for the elections. If the elections have an unbalanced gender outcome (not respecting the minimum 40/60 gender balance) the candidate with the least votes from the overrepresented sex (compared to other faculties) has to give way to the faculty's candidate of the other sex with the highest number of votes. Although it triggered some resistances, the new procedures paved the way for substantial changes: as a result of the 2014 election, the Board has now a 50/50 composition. There was no further need to implement positive measures to elect a female representative and the reformed election attracted the most voters ever in the history of the University" (EIGE, 2016:12)

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[5] http://eige.europa.eu/gender-mainstreaming/tools-methods/gear/legislative-policy-backgrounds/lithuania)

3.4 Gender dimension in education and research content

In recent years, gender equality debates have paid increasing attention to overcome gender bias in science knowledge making, mainstreaming sex and gender analysis into basic and applied research (Schiebinger 2008). At stake is better quality of research process and outcomes: Incorporating gender and sex in the research process, in science knowledge making, and in the science value system is considered a key challenge to improve quality and excellence of scientific endeavours. As highlighted by LERU (2015:17), the European Commission Directorate-General for Research and Innovation has emphasised the need for sex and gender analysis in its funded projects for years. These policies have been reformulated and strengthened in the current funding framework H2020. In the proposal template applicants are asked to describe, when relevant, 'how sex and gender analysis is taken into account in the project's content'." Whilst relevant RFOs are adopting similar approaches, namely in the field of health and life sciences, some RPOs are implementing measures to integrate the gender dimension in higher education curricula and researchers training.

Did you know?

The Gendered Innovation Alliance at the Karolinska Institute (KI) in Sweden intends to develop a platform for training, knowledge and experience exchange for mainstreaming concepts of sex, gender and diversity as biological and social variables in biomedical research and education to maximize individualized/personalized patient care and endorse the development of gendered innovations. The initiative is linked to the Doctoral Programme of Development and Regeneration. Activities include organising training sessions, workshops and scientific meetings, including innovation hubs and sharing best practices. "Since sex, gender and diversity interconnects all areas of medical preclinical and clinical research, KI Gendered Innovation Alliance is uniquely set to collaborate broadly across disciplines in strategic partnerships together with industry, health care providers and patient organizations". (https://ki.se/en/staff/gendered-innovation-alliance)

Sub-fields of action

Following Oetke et al (2016) we can identify two sub-fields of action:

- **Integrating the gender dimension in education** refers to fostering gender knowledge in all areas. It includes measures to mainstream gender issues in higher education curricula to enhance awareness and sensitivity as well as initiatives to foster specific gender programmes for researcher training, e.g. by creating collaborative alliance between different actors to establish new content and teaching/learning methods.

- **Integrating the gender dimension in research content** involves the inclusion of methods drawn from gender studies in all stages of research process. It includes RFOs developing specific funding criteria to mainstream sex and gender analysis in R&I

content and programmes (e.g. as in H2020), providing guidance and supporting specific gender-related research. RPOs policies may focus on particular research strengths and priorities to foster gender-sensitive research.

Did you know?

A review of gender equality policies in European Research Area (ERA) countries shows that several countries have introduced gender criteria in research funding or supported the consideration of gender in research content through specific programmes. Yet although policies are in place, there is hardly any evidence on the effects of the integration of the gender dimension into research content. How is gender operationalised? How are research questions formulated when gender is considered? Do the formulated research questions indicate a change in gendered norms? How is gender expertise integrated into research teams? How do different settings for integrating gender expertise influence the organisation or focus of the research? The Austrian Ministry for Transport, Innovation and Technology commissioned an analysis of the inclusion of gender criteria within the research projects funded by the programme FEMtech. The analysis (Wroblewski, 2016) was based on research proposals, self-description of projects (e.g. webpages) and qualitative interviews with project leaders and gender experts involved in the projects. The empirical findings were contrasted with an ideal scenario of the integration of the gender dimension in research projects. The comparison depicted that most research designs do not support the ideal scenario. There are several reasons for deviation – e.g. because gender concepts used are not explicated, because gender expertise is restricted to specific partners or because of a lack of reflection of results or research process. On the other hand, good practice cases came up in the analysis. They are characterised by a strong position of the gender expert in the project as well as a clear definition of her/his tasks in the project. Based on these cases recommendations for the further development of the programme were formulated. They focus on the one hand on strengthening the gender dimension in research content and on the other hand on strengthening a reflection of the research process.

Angela Wroblewski "Gender in research content: Experiences from an Austrian Programme". Paper presented at the 9th European Gender Summit, Brussels, 8th and 9th November 2016

Measures

The following table details some of the measures/ actions that might be undertaken to address gender bias in decision making. It includes measures identified or implemented in diverse projects and institutions.

Gender dimension in education	Gender dimension in research content
Mainstreaming gender awareness in all curricula (LERU) Including methods of sex and gender analysis and related knowledge in all curricula (GENERA; LERU) Developing new knowledge and training methods for students and researchers in fields where sex and gender analysis is of special relevant (e.g. Karolinska Institute in health and biomedical research) Collecting and publicising research that has successfully integrated sex and/or gender perspectives (LERU)	Asking research applications to address 'how sex and gender analysis is taken into account in the project's content'"(Horizon 2020; Science Foundation Ireland) Raising gender awareness and competence for applicants, reviewers or evaluation panels, providing specific guidance and training (LERU, Science Foundation Ireland) Supporting gender-related fields of research (Horizon 2020) Providing tools for researchers to understand and apply gender in research content methods in their research fields, for instance through training, workshops, seminars or showcasing good examples (GENERA, LERU) Creating incentives for researchers to consider methods of sex and gender analysis in applications, in particular in multidisciplinarity collaboration (LERU) Including training in sex and gender analysis an eligible costs in applications (Science Foundation Ireland)

Examples

Gender Perspective in Research and Teaching Award, University of Compostela, Spain. This initiative "organised at the University of Santiago de Compostela illustrates the positive impact of peer judged stimulants which provide incentives for virtuous competition: the award has generated significant impact in the university's community, with over 260 applicants presenting nearly 100 total eligible achievements since 2010, and it is fostering synergies with other initiatives undertaken by the university such as gender training and conferences and an increase in the visibility of gender issues in research and teaching." (EIGE, 2016: 12)

Gender lectureship, Linköping University, Sweden. "As concerns awareness raising and competence development, at Linköping University (Sweden), a gender lectureship actively contributes to the gender mainstreaming within the content and/or form of study programmes and into the development of pedagogical models for work based on equality and gender. A gender lecturer is a researcher, well established within the faculty, who helps integrating gender issues within educational programmes on a part-time basis. The approach is that mainstreaming gender is possible in every area, although through different strategies: if a gender perspective cannot be brought in in terms of content, it can be addressed how the discipline is being taught. As such, the gender lectureship challenges gender bias and unequal power distribution, through mainstreaming gender knowledge. The lectureship is permanent and established in the University's plan." (EIGE, 2016, :12)

Sex and gender analysis in health research, Canadian Institutes of Health Research (CIHR), Canada. CIHR is a signatory on the Government of Canada's Health Portfolio Sex- and Gender-Based Analysis Policy, as well as the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans. Both policies underscore the importance of integrating sex and gender into health research when appropriate. CIHR's Sex and Gender-Based Analysis in Research Action Plan ensures that health research in Canada leads to sound science and reliable evidence that effectively addresses biological (sex) and sociocultural (gender and other identity factors) differences between diverse groups of people. As such, and as indicated in the Grants and Awards Guide, CIHR expects that all research applicants will integrate gender and sex into their research designs when appropriate. In addition, CIHR has developed extensive guidance and training content for applicants and reviewers. For example, The following tools are available to help researchers: Distinguish between and define sex and gender in health research; Identify sex and gender differences in the mechanism, disease or treatment under study; Identify methods for integrating sex and gender variables in health research contexts; and Assess a research protocol or publication based on the integration or omission of sex and/or gender[6]

3.5 Transversal measures

Transversal measures will also need to be defined, developed and explicitly stated in the GEP. In keeping with the reflexive and participatory nature of the TARGET project those processes that begin with the GEA, i.e. top-management commitment, the participation of the community of practice and the embedding of data collection processes will all need to be explicitly defined in the GEP and incorporated as measures or actions. These transversal measures or actions can be seen to be the fundamental building blocks of the GEP process. If these measures are not well defined – it is unlikely that measures/ actions developed in the other three areas will be successful.

Top-management commitment - leadership accountability

As already stated in section two of these guidelines measures to foster top-management commitment and leadership accountability could include: training that links the priorities of the organisation to gender equality policies, and provides evidence of the positive correlation between gender equality and scientific excellence. Top-management should also be involved in the communications strategy as this will give added weight to the GEP process.

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[6] http://www.cihr-irsc.gc.ca/e/50833.html

Community of practice - gender equality structure

As regarding the community of practice – explicitly defining how a permanently based gender equality body within the institution will be established is key. Assigning members of the community of practice responsibilities for actions and measures also forms a key part of the GEP design.

Data collection - monitoring

Data collection processes that started with the gender equality audit need to be embedded within the institution. The audit enabled the identification of relevant data gaps and the GEP should address how to improve existing information systems. The GEP should also identify specific indicators for monitoring the key actions and measures to be developed in the plan.

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5   Annex

5.1 TARGET GEP Template

•Short and concise document (approx. 5 pages)
•Signed by the governing body / TARGET coordinator

1. **Background**
   General statement about fostering gender equality in the institution; reference to the 1st gender equality plan to start a long-term gender equality strategy
   (Make reference to framing legislation/ recommendations)
2. **Main objectives**
   (list all main objectives)
3. **Removing gender-related institutional barriers to careers**
   Short description of why must your institution act in this area? (One paragraph-make reference to conclusions of audit)

OBJECTIVE	ACTION	RESPONSIBILITY	TARGET	TIMEFRAME

4. **Decision Making**
   Short description of why must your institution act in this area? (One paragraph-make reference to conclusions of audit)

OBJECTIVE	ACTION	RESPONSIBILITY	TARGET	TIMEFRAME

5. **Gender Dimension in Research Content**
   Short description of why must your institution act in this area? (One paragraph-make reference to conclusions of audit)

OBJECTIVE	ACTION	RESPONSIBILITY	TARGET	TIMEFRAME

6. **Transversal Measures** (Top-management commitment, Community of Practice and Data Collection)
   Short description of why must your institution act in this area? (One paragraph-make reference to conclusions of audit)

OBJECTIVE	ACTION	RESPONSIBILITY	TARGET	TIMEFRAME

7. **Monitoring indicators**
   Statement about developing tailored process and outcome indicators in the next phase of the GEP

5.2 TARGET Examples

The GEP should include explicit objectives as well as targets allowing regular monitoring. Some examples are:

OBJECTIVE	ACTION	RESPONSIBILITY	TARGET	TIMEFRAME
TO FOSTER EQUALITY IN RECRUITMENT PRACTICES	Include in all recruitment communications and marketing materials a statement about gender equality	Equality task force and committee Human Resource Services	A statement about gender equality is prepared and included in all recruitment communications and marketing materials	January 2019 ongoing to December 2021
	Monitoring of sex-disaggregated data in recruitment: total applicants, applicants selected, and committees making the selection	Equality task force and committee Human Resource Services	Sex disaggregated indicators are available and jointly monitored by the Equality task force and committee and the Human Resources Services	Annually
TO FOSTER GENDER BALANCE IN DECISION MAKING COMMITTEES AND BOARDS	Implement a policy to foster gender balance in decision making committees and boards	Rectorate Equality task force and committee	A policy to foster gender balance in decision making committees and boards is agreed and implemented	January 2020 ongoing to December 2021
TO PROMOTE THE INTEGRATION OF THE GENDER DIMENSION IN RESEARCH AND INNOVATION	Request applicants to demonstrate they have given full consideration to any potential gender aspects in their proposed research programme.	Body/ Key stakeholders responsible for research calls	All calls require applications to give full consideration to any potential gender aspects in their proposal and provide specific guidance on how to deal with this requirement	2019 -2021 (should coincide with timeframe needed to develop guidelines, publish and evaluate call)
	Provide guidance to to reviewers about the integration of the gender dimension in research and innovation	Body/ Key stakeholders responsible for research calls	Materials to provide guidance to reviewers are prepared and training sessions to reviewers are implemented	2019 -2021 (should coincide with timeframe needed to develop guidelines, publish and evaluate call)

5.3 Examples of GEPs

RFOs

Science Foundation Ireland: Gender Strategy 2016-2020:
1. Background
2. Scope and Structure
3. Strand 1: Gender in Education and Public Engagement
4. Strand 2: Gender in Balance in Research Teams
5. Strand 3: Integrating Gender in Research and Innovation

http://www.sfi.ie/resources/SFI-Gender-Strategy-2016-2020.pdf

RPOs

RMIT (Australia)
http://mams.rmit.edu.au/8e7c1ca5cfycz.pdf (no explicit objectives)

University of Aalto (Finland)
http://www.aalto.fi/en/midcom-serveattachmentguid-1e5fbbfff326160fbbf11e5aa00f1bfd8cc90f690f6/the_aalto_university_equality_plan_2016-2019.pdf (very extensive - links objectives to actions, responsibilities and timeframe)

5.4 Examples of gender equality mission statement of networks

RMEI the network will elaborate a gender equality mission statement. See the box below for an example of the LERU commitment to gender equality taken from the report Women, Research and Universities: Excellence without gender bias.

LERU's 21 members have committed to promoting gender diversity among academic staff with strong leadership ability conforming to institutional, national and other regulatory frameworks in partnership with other LERU universities. They have committed to developing or continuing to implement gender equality strategies; to sharing them and jointly monitoring their development and implementation as well as engaging with EU policy-makers, funders and other actors to promote gender equality in universities.

LERU universities commit themselves to undertake action, we examine what LERU and other universities can do to produce structural change and we share the experience of what LERU universities are doing to attract and support women in research careers.

Specifically, the LERU universities have decided to undertake a commitment:

- to promote gender diversity among their academic staff with strong leadership, in conformity with institutional, national and other regulatory frameworks and in partnership with the LERU universities.
- to develop or continue to implement Gender Equality Strategies and/or Action Plans, to share them and to jointly monitor their development and implementation.
- to engage with EU policy makers, funders and other actors to promote the cause of gender equality at universities.

Having analysed the specific challenges that women face in the course of their academic careers, we identify four priority areas in which universities can usefully undertake gender actions.

A first priority for action is in the area of leadership, vision and strategy. We argue that:

1. A strong commitment from the university's leadership should underpin all gender-related actions.
2. This commitment should be operationalised by a Gender Strategy (or Action Plan), which is often set within the wider realm of equality and diversity policy.
3. Universities should set up dedicated processes and structures to coordinate the Strategy or Plan and manage gender activities.
4. A commitment to gender should be backed up with the necessary funding. Funding considerations should aim at structural change, enable longer-term planning and consider attractiveness for researchers at all career stages.

A second action area covers the types of measures universities can take to achieve structural change:

5. Universities need to select the right mix of measures in accordance with their institutional and regulatory situations and target these at certain career phases as needed.
6. Measures can be adopted as (usually) gender-specific career development measures and (usually) gender-neutral work-life balance measures.
7. Measures should be aimed at achieving structural change.

A third imperative is for universities to consider how to implement and ensure effective uptake of measures taking into consideration that:

8. Successful implementation requires transparency, accountability and monitoring of gender equality at universities.

A final action area aims to address the lack of a gen- der dimension in research. We recommend that:

9. Universities should actively promote and support a gender dimension in research, taking into account the specificities of particular research fields.

Universities need to be able to decide which mix of policy decisions, measures and processes best fulfills their needs in view of the institutions' overall strategies and national or other gender and diversity agendas. Since these vary widely across Europe, it is impossible to have identical goals or measures across all universities, even within such a similar group as LERU universities. One- size-fits-all solutions are in most cases inappropriate and unlikely to be successful. The appendix of this paper contains a wealth of examples of and references to LERU universities' policies and initiatives, which we share as a source of good practice and inspiration for universities and other interested parties.

Source: LERU (2012) Women, research and universities: excellence without gender bias