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GENDER EQUALITY IN ENGINEERING THROUGH COMMUNICATION AND COMMITMENT (GEECCO)

WORK PACKAGE 7: Implementing Gender Equality in RFOs BEST PRACTICE EXAMPLES OF GENDER MAINSTREAMING IN RESEARCH FUNDING ORGANIZATIONS

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GEECCO – Gender Equality in Engineering through Communication and Commitment. In a Nutshell

Scientific and technological innovations are increasingly important in our knowledge-based economies. Today STEM (Science, Technology, Engineering, and Mathematics) is literally everywhere; it shapes our everyday experiences. With technologies we choose e.g. structures that influence over a very long time how people are going to work, communicate, travel, consume, and so forth. It is thus both a question of competitiveness and justice, to achieve gender equity within science and technology institutions, including policy and decision-making bodies. GEECCO with its project lifetime from May 2017 to April 2021 aimed to establish tailor-made Gender Equality Plans (GEPs) in 4 European RPOs and to implement the gender dimension in 2 RFOs (funding schemes, programmes and review processes). All participating RPOs were located in the STEM (Science, Technology, Engineering, and Mathematics) field, where gender equality is still a serious problem and whose innovations are increasingly important in the knowledge-based economies.

GEECCO pursued the following objectives in order to enhance systemic institutional change towards gender equality in the STEM-field:

- (i) Setting up change framework and a tailor-made GEP for each participating RPO;
- (ii) Implementing gender criteria in the activities of RFOs;
- (iii) Setting up a self-reflective learning environment in and between all RPOs und RFOs to participate from existing experiences and match them with their specific needs and circumstances.
- (iv) Evaluate GEP implementation within the participating RPOs and RFOs with a quantitative evaluation using monitoring indicators and a qualitative monitoring to enhance and fine-tune implemented actions over the course of the project.

<http://www.geecco-project.eu/>

<https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate>

Further resources developed by the GEECCO-project consortium

All public deliverables, resources and additional material can be downloaded on this website:

<https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate>

Public deliverables (in order of the related work packages)

- Postorino, Maria Nadia; Marino, Concettina; Suraci, Federica; Enzenhofer, Bettina; Lusa, Amaia; Costa, Carme Martínez; Pulawska-Obiedowska, Sabina (2018): Gender Analysis of Decision-Making Processes and Bodies. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
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- Dvořáčková, Jana; Navrátilová, Jolana; Nagl, Elisabeth; Lasinger, Donia (2020): Guideline for Jury Members, Reviewers and Research Funding Organizations' Employees. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
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- Kraus, Marcel; Dvořáčková, Jana; Lasinger, Donia (2021): List of Principles of Communication of Gender Criteria. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Mergaert, Lut; Allori, Agostina; Rutzer, Brigitte; Enzenhofer, Bettina; Lusa García, Amaia; Marino, Concettina; Zakowska, Lidia; Bryniarska, Zofia (2020): Tailor-made Gender Equality Plans (GEP version 3.0). GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
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- Jorge, Irene (2021): Implementation of Dissemination Activities. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Jorge, Irene (2021): Engagement Activities. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Lipinsky, Anke; Schredl, Claudia: Final Evaluation Report. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).

Additional resources and literature reviews

- Knoll, Bente; Renkin, Agnes; Mergaert, Lut (2020): Additional resources (living document). GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Burtscher, Sabrina (2019): Literature Review: Gender Research in Human Computer Interaction. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Pillinger, Anna (2019): Literature Review: Gender and Robotics. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Mort, Harrie (2019): A Review of Energy and Gender Research in the Global North. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Lehmann, Tobias (2020): Literature Review: Gender and Mobility. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).

Explanatory videos (available on Youtube)

- Ratzer, Brigitte; Enzenhofer, Bettina (2019): Humans & Computers. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <https://www.youtube.com/watch?v=vrWx91RdmGo>, checked on 4/30/2021.
- Ratzer, Brigitte; Enzenhofer, Bettina (2019): Robots in our society. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <https://www.youtube.com/watch?v=bfXr29VAuwU>, checked on 4/30/2021.
- Ratzer, Brigitte; Enzenhofer, Bettina (2020): Energy for all. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <https://www.youtube.com/watch?v=tIwrgsNVfW8>, checked on 4/30/2021.
- Ratzer, Brigitte; Enzenhofer, Bettina (2021): Mobility for all. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <https://www.youtube.com/watch?v=oMifoI5-14M>, checked on 4/30/2021.

- Ratzner, Brigitte; Enzenhofer, Bettina (2021): Inclusive design – why intersectionality matters. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <https://www.youtube.com/watch?v=U4eRb1NM21A>, checked on 4/30/2021.

Evaluation and monitoring tutorials

Anke Lipinski and Claudia Schredl, both from GESIS, developed five online evaluation and monitoring tutorials.

1. GEECCO Data Monitoring Tool
2. GEECCO Infographic: Gender Equality Approaches and Their Impact on GEP Implementation
3. GEECCO Infographic: SMART Gender Equality Objectives
4. GEECCO Explainer Video: Gender Equality Plans in Technical Universities and the Use of Logic Models
5. GEECCO Log Journal

These tutorials can be downloaded on this website:

<https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate>



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About this document

This document is a report including best practice examples regarding gender mainstreaming (GM) activities among participating RFOs (research funding organisations). It is based on the analysis of the questionnaires that were filled in the course of the project GEECCO as well as further desk research and information resulting thereof. The analysis was conducted under Task 7.1. “Knowledge exchange among participating RFOs on their common practice”, which was led by the task leader WWTF. This task is the first task of work package (WP) 7 named “Implementing gender equality in RFOs”.¹

Within task 7.1, a questionnaire was developed and filled in by two participating RFOs in the GEECCO consortium (TACR and WWTF) and was sent out to the RFOs that are members of the Observer Group in the project GEECCO, as well as further RFOs in Europe and also some other countries. Also, some interviews with selected RFOs were conducted to get a deeper understanding of practices and procedures. A summary of the results, as well as some best practice examples, are pointed out in this document.

This report serves as a basis for the future work of RFOs when implementing gender equality measures – especially in gender mainstreaming the funding processes. Ultimately, it serves the goal of knowledge exchange among RFOs on common practices concerning gender mainstreaming.

About the project GEECCO

GEECCO aims to establish tailor-made Gender Equality Plans (GEPs) in four European RPOs (research performing organisations) and to implement the gender dimension in two RFOs (funding schemes, programs and review processes). All participating RPOs are located in the STEM (Science, Technology, Engineering, and Mathematics) field, where gender equality is still a serious problem and whose innovations are increasingly important in the knowledge-based economies. It is thus a question of excellence, competitiveness and justice to achieve gender equity within STEM-institutions, including policy and decision-making bodies. Concerning the gender dimension in research programs, RFOs are one important key to substantial changes and thus a crucial part of the aspired transformation. GEECCO will pursue the following objectives to enhance systemic institutional change towards gender equality in the STEM-field:

- (i) Setting up change framework and a tailor-made GEP for each participating RPO;
- (ii) Implementing gender criteria in the activities of RFOs;
- (iii) Setting up a self-reflective learning environment in and between all RPOs and RFOs to participate from existing experiences and match them with their specific needs and circumstances. Facilitators will build up appropriate communication structures and processes within the RPOs and RFOs. They will enable the RPOs and RFOs to help themselves in the longer term dealing with internal resistances against gender equality.
- (iv) Evaluate GEP implementation within the participating RPOs and RFOs with a quantitative evaluation using monitoring indicators and qualitative monitoring to enhance and fine-tune implemented actions throughout the project.

GEECCO will develop the “GEECCO Experience: Dos and Don’ts while Degenderizing the STEM Field”, a guideline for RPOs and RFOs in the STEM field how to promote gender equality in the STEM field and intends to participate in standardization processes at EU level to measure “gender balance performance” of RPOs and RFOs.

¹ The deliverable D7.1. is a separate document that includes the protocols of the exchange workshops as described in the project proposal.

Introduction

WP 7 ensures the knowledge exchange and transfer between the participating RPOs and RFOs. This includes (1) the exchange of knowledge and best practice between the participating RFOs, RPOs and other experts outside the consortium, (2) the introduction of gender equality into the content of research programs and projects, (3) the development of guidelines for gender dimension in the evaluation process of research programs and projects as well as (4) the adaptation of a program or a call in each RFO reflecting a gender dimension in the research and innovation content and the support conditions for beneficiaries.

The first task 7.1. is focused on the first aspect described above, the knowledge exchange among participating RFOs on their common practice. The goal was to set up an exchange process to collect existing experience, knowledge and inputs from consortium members by the participating RFOs. Furthermore, and with the help of the RFO-observer group, best practice from other RFOs were mapped. The information serves as input for further tasks within WP7.

Methodology

The main collection of existing practices in RFOs was done via a structured questionnaire that was developed for this purpose and which covered five main areas (the questionnaire can be found in the Annex 1):

1. Characteristics of RFOs: general description of the participating RFOs, e.g. size, geographical scale, legal status, ratio male/female employees,...
2. Internal sphere: e.g. strategies, budget, goals,... that tackle GM
3. Funding activities: general and specific funding programs in the field of GM, support conditions,...
4. Evaluation process: e.g. evaluation instruments, criteria,...
5. Interconnectedness with RPOs: e.g. exchange between RFOs and RPOs, communication structures,...

First of all, the questionnaire was used for mapping the practices of the RFOs in the consortium, i.e. TACR and WWTF. Then the RFO Observer Group was asked to give their input to the questionnaire which was also followed and deepened by an exchange workshop with the RFO Observer Group on April 23, 2018, during the project group meeting in Krakow.

In parallel to that, the questionnaire was sent out to 31 European and international RFOs from which 19 responded (respond rate of 61%). Other H2020 projects that also focus on gender equality like GENDER-NET Plus were approached and invited to participate. Selected interviews (6), as well as written feedback loops (3) with some questionnaire participants, followed to get more detailed insights. The collection of data was augmented by internet research.

Characteristics of participating RFOs

The next chapter gives an overview of the RFOs that participated in the questionnaire and gave valuable insights into their procedures and practices. They are listed in Table 1 in alphabetical order and are quite diverse in their characteristics and span a wide pool of types, sizes and countries, as demonstrated below.

	Name of RFO	Abbrev. ²	Country	Gender-related projects	Website
	Academy of Finland	AKA	Finland		http://www.aka.fi/en
	Austria Wirtschafts-Service GmbH	aws	Austria		https://www.aws.at/
	Austrian Academy of Sciences	OeAW	Austria		https://www.oeaw.ac.at/
	Austrian Climate and Energy Fund	KliEn	Austria		https://www.klimafonds.gv.at/
	Austrian Research Promotion Agency	FFG	Austria	GEECCO RFO Observer Group	https://www.ffg.at/
	Austrian Science Fund	FWF	Austria	GEECCO RFO Observer Group GENDER-NET Plus	https://www.fwf.ac.at/
	Einstein Foundation Berlin	Einstein	Germany		https://www.einsteininfoundation.de/
	Estonian Research Council	ETAG	Estonia	GENDER-NET Plus	https://www.etag.ee/en/
	Israeli Ministry of Science	MOST	Israel	GENDER-NET Plus	https://www.gov.il/en/Departments/ministry_of_science_and_technology
	Natural Sciences and Engineering Research Council	NSERC	Canada	GENDER-NET Plus	http://www.nserc-crsng.gc.ca/index_eng.asp
	Netherlands Organisations for Scientific Research	NWO	Netherlands		https://www.nwo.nl/
	Research & Innovation Foundation	RIF	Cyprus	GENDER-NET Plus	https://www.research.org.cy
	Swedish Research Council	SRC	Sweden	GENDER-NET Plus	https://www.vr.se/english.html
	Swiss National Science Foundation	SNSF	Switzerland		http://www.SNSF.ch/en/

² Not all abbreviations used here are officially recognized but were used for better readability of the text.



Technology Agency of Czech Republic	TACR	Czech Republic	GEECCO consortium member GENDER-NET Plus	https://www.tacr.cz/index.php/en/
Vienna Business Agency	VBA	Austria	GEECCO RFO Observer Group	https://viennabusinessagency.at/
Vienna Science Fund	WWTF	Austria	GEECCO consortium member	https://www.wwtf.at/index.php?lang=EN
Vinnova	Vinnova	Sweden		https://www.vinnova.se/en/
Volkswagen Foundation	VWF	Germany	GEECCO RFO Observer Group	https://www.volkswagenstiftung.de/en

Table 1: Overview of participating RFOs

A majority of the participating RFOs are located in Austria but also RFOs from other European countries like Sweden, Germany or Switzerland participated in the questionnaire (Figure 1). Furthermore, Israel and Canada added an international perspective.

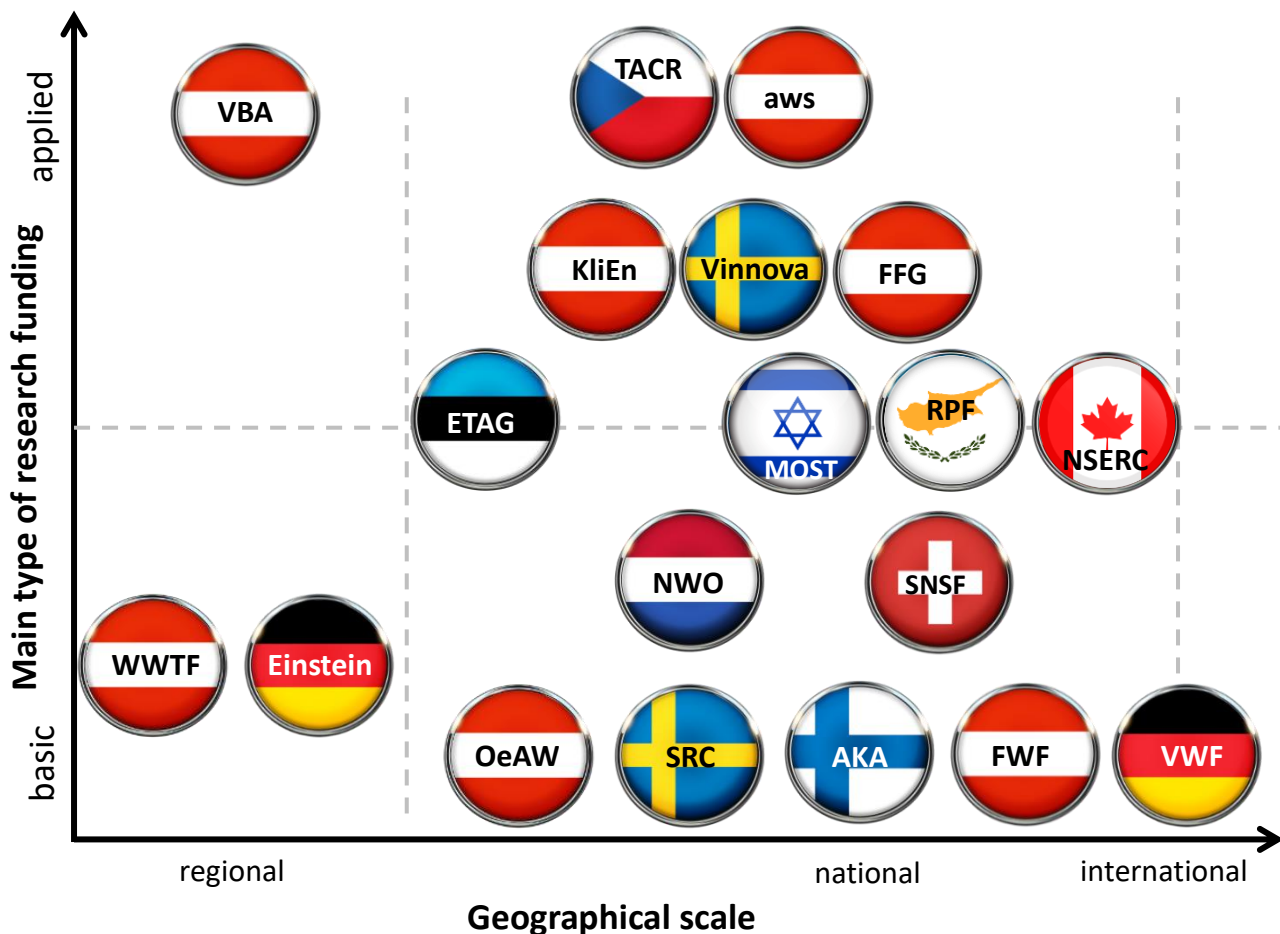


Fig. 1: Overview of RFOs: country

When comparing the geographical scale on which the RFOs operate (regional vs. national), it is obvious that most of the institutions operate on a national level (Figure 1). Only the Einstein Foundation, Vienna Business Agency and WWTF fund on a regional level only (only Berlin/ Vienna). The only RFO which reported to also operate on an international scale is the Volkswagen Foundation.

Looking at the type of research funding (on the continuum from basic to applied), there is also a good spread of institutions represented in the questionnaire: The Swedish Research Council and the Academy of Finland being at the more basic side, TACR and AWS being at the very applied side with a lot of combinations in between (also compare Figure 1).

Comparing the size of the participating RFOs, there is a broad variety. The size, in this case, is an approximation of the number of FTEs or employed persons (headcount) per RFO. The number was stated in the questionnaire or collected from internet research (Table 2). The Netherlands Organisation for Scientific Research and the Austrian Academy of Sciences have to be considered as different types of institutions compared to the other participating RFOs, as they act both as research funding bodies but also as umbrella organizations for research institutes. The smallest funding organisations are the German Einstein Foundation and the Austrian WWTF with 9 FTEs and 7,1 FTE respectively.



Name of RFO	Size (FTE unless stated otherwise)
Netherlands Organisations for Scientific Research	~2.500 (~1.400 scientific institutes)
Austrian Academy of Sciences	~1.700 ³
Natural Sciences and Engineering Research Council	~450
Austrian Research Promotion Agency	296
Austria Wirtschafts- Service GmbH	245
Swiss National Science Foundation	230
Swedish Research Council	~216 (headcount)
Vinnova	200 (headcount)
Academy of Finland	140
Vienna Business Agency	136 (156 headcount)
Austrian Science Fund	104
Technology Agency of Czech Republic	~100
Volkswagen Foundation	~100 (headcount)
Estonian Research Council	56,7 (61 head count)
Research & Innovation Foundation	54
Austrian Climate and Energy Fund	16
Einstein Foundation Berlin	9
Vienna Science Fund	7,1
Israeli Ministry of Science	No numbers provided

Table 2: Size of participating RFOs

³ Source: <https://www.oeaw.ac.at/die-oeaw/ueber-uns/die-oeaw-stellt-sich-vor/>

Most of the organisations are public (compare Figure 2). Only four organisations, the Volkswagen Foundation, WWTF, SNSF and the Research & Innovation Foundation (Cyprus) are private. The Einstein Foundation, the Estonian Research Council as well as the Netherlands Organisation for Scientific Research stated to be on the boundary between public and private.

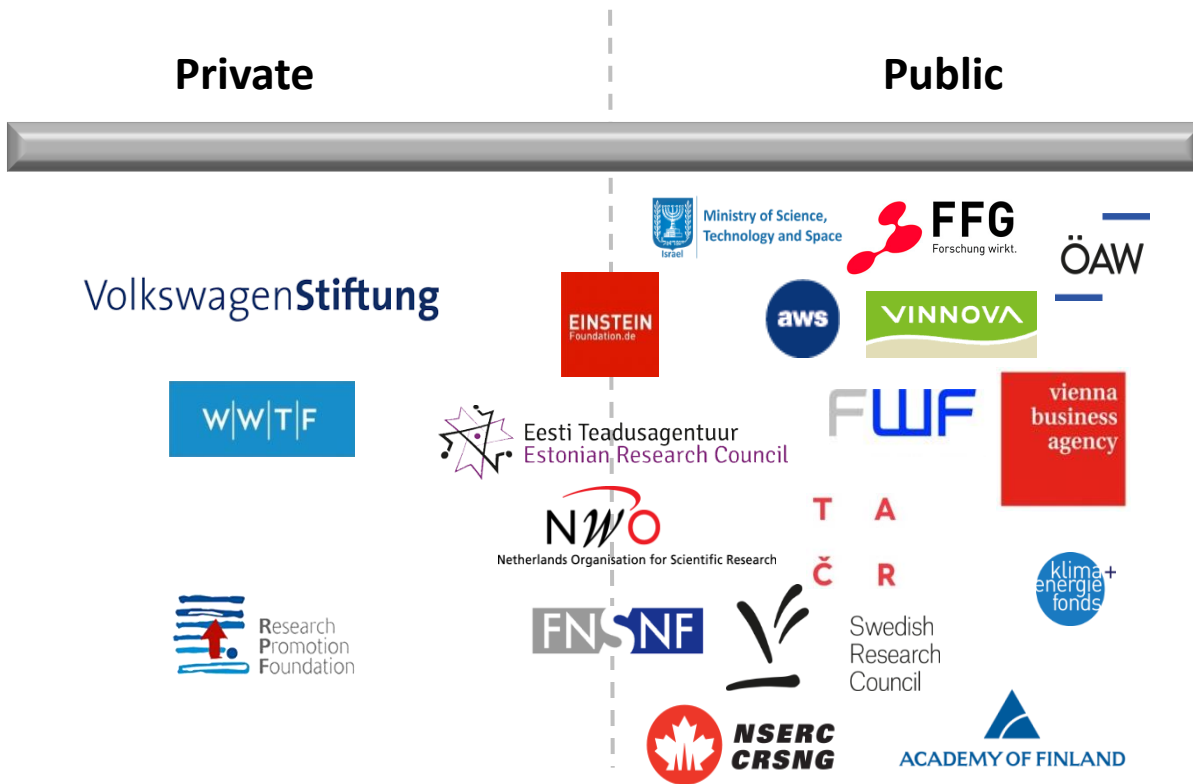









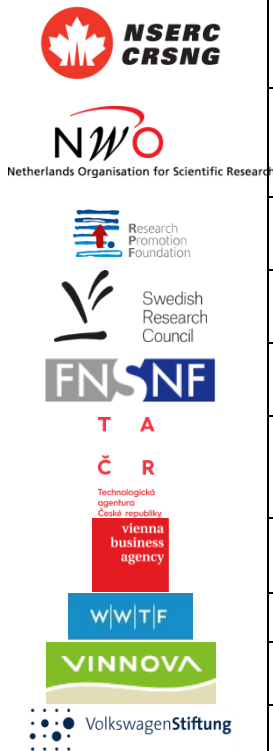


Fig. 2: Legal status of organizations

We also asked the institutions to name the main scientific fields in which they are operating respectively do their funding. Most of the institutions cover a wide range of fields, several are mainly focused in the STEM area (FFG, WWTF, NSERC and KLIEN) (Table 3 and Figure 3).

	Name of RFO	Scientific fields
	Academy of Finland	All fields of science
	Austria Wirtschafts- Service GmbH	-
	Austrian Academy of Sciences	All fields of science
	Austrian Climate and Energy Fund	Climate change, energy, renewables
	Austrian Research Promotion Agency	Mainly, not only, STEM fields
	Austrian Science Fund	All scientific fields
	Einstein Foundation Berlin	All scientific fields
	Estonian Research Council	All scientific fields
	Israeli Ministry of Science	All scientific fields including natural sciences, exact sciences, medicine, social sciences, humanities, space, ...



Natural Sciences and Engineering Research Council	Natural sciences and engineering
Netherlands Organisations for Scientific Research	Applied and technical services, science, social sciences and humanities, WOTRO Science for Global Development, NWO Institutes Organisation
Research & Innovation Foundation	Natural sciences, engineering and technology, medical sciences, agricultural sciences, social sciences, humanities
Swedish Research Council	Humanities, social sciences, life sciences, natural sciences, technology, engineering
Swiss National Science Foundation	All disciplines
Technology Agency of Czech Republic	Applied research (not strictly limited by scientific fields)
Vienna Business Agency	Not applicable (general business funding)
Vienna Science Fund	Mainly STEM fields, life sciences
Vinnova	STEM, social sciences
Volkswagen Foundation	All areas

Table 3: Main scientific fields supported by the participating RFOs

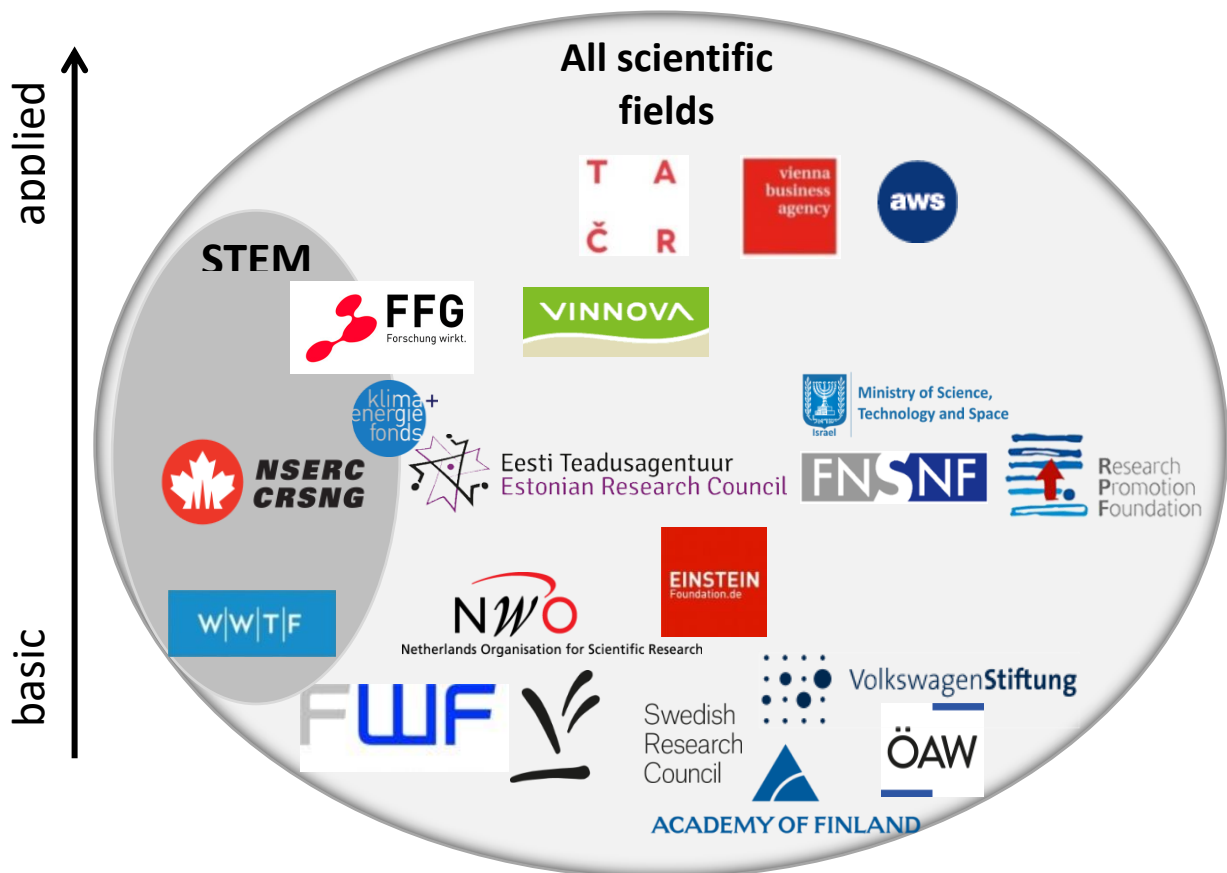


Fig. 3: Main scientific fields supported by the participating RFOs, own figure

The following sections show which GM-relevant measures, strategies and processes are in place in RFOs and are underlined by some (best practice) examples.

Internal sphere

This section covers topics that lie in the internal structure of the organizations as objectives, goals, strategies, budgets and responsibilities. We analyzed the responses from the questionnaires and point out examples where these structures address gender mainstreaming. The envisioned goal is to find an answer if GM is openly communicated as top priority in the RFOs interviewed.

Strategic internal factors

The strategic internal factors cover objectives/mission/vision, the strategy and respective quantitative or qualitative goals that take GM into account. There is a broad span between the RFOs and the inclusion of GM into these factors – some of them have included GM into it, others not.

Looking at publicly available documents we checked if objectives, mission and/or vision of the institutions are addressing GM. This also has to take into account if the organisation is public or private, as the former sometimes are obliged to already established rules and guidelines from the government (e.g. aws, VINNOVA, KLIEN, FFG, FWF, SRC,...). In some organisations, GM is explicitly named in strategy documents (be it part of a larger strategy or documents dedicated explicitly to GM) e.g.

- NWO: strategy document since 2010⁴ including a statement to adapt funding instruments, procedures and approaches to guarantee diversity: “NWO will make efforts to attract more researchers with a migrant background and women via incentive measures in the financial possibilities as well as in the appointment policy of its institutes. NWO also considers the issue of diversity in the design and realisation of projects and programs.” (NWO strategy 2019-2022, p. 48)
- Academy of Finland: Equality Plan⁵ approved by the Board being gender equality an essential part of responsible research since 1990
- SNSF: SNSF Mission Statement of Equality between Women and Men⁶ since 2001
- NSERC: Framework on Equity, Diversity and Inclusion since 2015⁷
- OeAW: Women’s Promotion Plan⁸, OeAW Development Plan⁹
- Swedish Research Council: Gender Equality Strategy since 2003¹⁰

NSERC: Framework on Equity, Diversity and Inclusion (EDI)

On NSERC’s website, there is a brief status of each action that is named in the framework as well as the status of every action. In 2018, NSERC has implemented increased self-identification data collection¹¹ from all funding applicants based on gender, indigenous identity, member of a visible minority group in Canada, person with a disability. This data collection will be expanded to include members of peer review committees. Other examples of the framework are given below:

Issue	Actions	Status
We need to go beyond current norms for assessing NSE research excellence by recognizing the broader range of relevant competencies and	Update and improve evaluation criteria to recognize equity, diversity and inclusion; and sex- and gender-based analysis plus (SGBA+) as	2017: Wording added to multiple programs regarding the value of equity and diversity in research teams and among trainees.

⁴ <https://www.nwo.nl/en/documents/nwo/strategy/nwo-strategy-2019-2022>

⁵ <http://aka.fi/en/funding/responsible-research/equality/>

⁶ http://www.snf.ch/SiteCollectionDocuments/wom_leitbild_gleichstellung_e.pdf

⁷ http://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/index_eng.asp

⁸ https://www.oeaw.ac.at/fileadmin/NEWS/2018/PDF/OeAW_Frauenfoerderplan_engl18_online.pdf

⁹ https://www.oeaw.ac.at/fileadmin/NEWS/2017/PDF/EP_2018-2020_en.pdf

¹⁰ https://www.vr.se/download/18.781fb755163605b8cd29c9ea/1529480566477/Strategy_Gender_Equality_SRC_2014.pdf

¹¹ A harmonized self-identification data collection process allows the granting agencies to monitor the equity performance of its programs and design new measures that achieve greater equity, diversity and inclusion in the research enterprise.

See Also: http://www.science.gc.ca/eic/site/063.nsf/eng/h_97615.html

contributions to research.	components of research excellence.	2018-19: Grants and Scholarships evaluation criteria recognize integration of sex, gender & diversity considerations in research, as appropriate; diversity in research teams; and EDI in science promotion, outreach, mentorship and leadership as factors that contribute to research excellence.
Adopt EDI best practices in selection/peer review, governance and advisory committee composition.	Increase diversity and gender equity on committees and panels.	2016: Selection committee guidelines revised; recommend 20% women starting in 2016; 30% women by 2020.
		2018: Expand EDI guidelines beyond gender equity criteria and apply to all committees.

SNSF: Mission Statement of Equality between Women and Men

The SNSF Mission Statement of Equality between Women and Men is structured in three parts and is three pages long. The first part shows the main principles of the SNSF, followed by equality standards and measures in research funding and its administration. The principles are:

- The SNSF is committed to equality between women and men. It actively undertakes measures to distribute opportunities equitably and to support the equal and balanced participation of women and men in all functions, on all boards and across all programs.
- The SNSF defines equality as a responsibility to gender mainstreaming anchored in all activities of its research council and administrative offices.
- The implementation of equality is amongst the central tasks of its leadership, meaning that responsibility for equality lies with the presidency of the National Research Council and the Directors.
- The SNSF sets itself goals in the area of equality and monitors progress by regularly collecting relevant data.
- The composition of boards is to be decided in a way that takes equality concerns effectively into account.
- The use of gender-sensitive communication strategies in the SNSF is a matter of course.
- To achieve equality in practice, the SNSF applies targeted measures to eliminate existing gender-based disadvantages.

Academy of Finland: *Equality plan*¹²

The Academy of Finland Equality Plan is applied to those working on Academy funding, to Academy Professors and Academy Research Fellows, and to the staff at the Academy's Administration Office. When making decisions regarding research posts and research funding, efforts must be taken to establish an open, transparent expert review procedure in which the qualifications of applicants of either sex are evaluated equally and fairly. The Academy's Equality Plan also takes into consideration other equality issues than gender equality. No person may be discriminated against based on age, ethnic or national origin, nationality, language, religion, belief, opinion, health, disability, sexual orientation or other personal characteristics. Harassment is also regarded as a form of discrimination. Compliance with the Equality Act is monitored by the Ombudsman for Equality and the Equality Board. Notwithstanding any regulations on the secrecy of a matter or a document, the Equality Ombudsman and the Equality Board are entitled to receive from the authorities, free of charge, all information necessary for monitoring compliance with the Act. The Equality Ombudsman has the right to carry out an inspection at a workplace if there are grounds to believe that the employer has acted contrary to the Equality Act. The Ombudsman is entitled to assistance from other authorities in carrying out an inspection.

Gender aspects of organizational structures

GM is differently included in the RFOs' internal structures: some of them have dedicated structures and responsibilities in place, others not. Some examples follow with the objective to give a brief overview of organisations that have responsible persons/groups/... for GM in the organisation. These are not complete and show quite a diverse range of options (ranging from a dedicated officer to working groups, experts or units that also include the GM function next to their other duties, see Table 4):

- VINNOVA: two experts on gender research and GM as well as a steering group with program managers from different strategic areas are in place (see below)
- FWF: head of staff unit for gender issues
- NWO: project leader and two coordinators for diversity
- aws: since 2014 aws has an appointed diversity officer who functions as contact person for employees that feel discriminated and an equality board which consists of the workers' council, the HR manager and the diversity officer
- KLIEN: working group on non-discrimination in the by-laws¹³
- Academy of Finland: equality working group chaired by the vice-president
- FFG: internal gender anchor group that focus on gender with regard to funding activities (see chapter "Legal framework and voluntary collaborations")
- OeAW: working group on non-discrimination, Jour fixe "Gender & Diversity" i.e. regular meetings of the president, directors, head of legal department and chair of the working group on non-discrimination
- SNSF: Gender Equality office "Gender Equality in Research Funding" since 2001 with two people that focuses mainly on funding and not on internal GM issues; Gender equality commission (see below)
- NSERC: policy division for inter-agency affairs that focuses on Equity, Diversity and Inclusion (EDI) policy and implementation; EDI champion at the upper management level and an EDI senior policy advisor; agency-wide EDI working group. The Champion promotes the integration of EDI analysis across the institution. Their role is to speak to how and why EDI is relevant to natural sciences and engineering research, and how embedding EDI analysis in research and adopting EDI practices in relation to research teams increases research excellence.
- Swedish Research Council: internal organization for GM with staff being responsible for coordinating GM work

¹² <http://www.aka.fi/en/funding/responsible-research/equality/>

¹³ https://www.oeaw.ac.at/fileadmin/NEWS/2017/PDF/by_laws_final_english.pdf

RFO	No dedicated responsibility	Dedicated expert person(s)	Responsible (working) group(s)	Organizational structure
Einstein Foundation Berlin	x			
Estonian Research Council	x			
Israeli Ministry of Science	x			
Research & Innovation Foundation	n.a.			
TACR	x			
WWTF	x			
Volkswagen Foundation	x			
VINNOVA		x	x	
FWF		x		
Vienna Business Agency		x		
KLIEN			x	
Academy of Finland			x	
aws		x		
NWO		x		
FFG			x	
SNSF			x	x
OeAW			x	
NSERC		x	x	x
Swedish Research Council				x

Table 4: Organizational responsibility structures in the participating RFOs

Vinnova: Support function

The support function is available at a set time every week. Program managers who want to launch a program or a call can book a time with the support function to go through ideas and check if different aspects are sufficiently considered (among others gender aspects). The support function consists of people with specific competencies, e.g. lawyers, employees from the departments of communication, internationalization, statistics and monitoring, evaluation and also the responsible persons for gender mainstreaming. All these aspects need to be considered when a new program or call is launched, i.e. it is compulsory to consult the support function. Within the support function, there is also a discussion on how the new program or call can be gender mainstreamed.

The main purpose is to make sure that all the program managers have considered these specific areas. Apart from the support function, the gender mainstreaming unit is always open to support the program managers ad hoc.

SNSF: Gender equality commission

The gender equality commission of SNSF was established in 2014 and meets twice a year. Before that (2001-2014), it was an internal body consisting of employees and members of the research council, which is also responsible for the evaluation of applications. In the course of a process to professionalize the commission, international experts were nominated. The commission has an advisory role for the SNSF office and the research council, i.e. it does not have decision-making competence. However, the cooperation is not solely based on situations when the SNSF asks for advice, but the commission can also approach SNSF actively in case they see a need for action. Examples for topics tackled based on the initiative of the commission are how to deal with sexual harassment in research or how to implement procedures and indicators for gender monitoring. The funding scheme PRIMA was also developed in collaboration with the commission (see chapter “Special funding programs for GM”).

In 2018, the commission stated as an interim impression that it is generally very valuable and a lot has been achieved, but that there still is unused potential¹⁴. Specifically, they preferred to be involved more and more systematically and especially also get in exchange with the top-level of SNSF. Since then, one member of the commission is invited to participate in the monthly meeting of the praesidium. This option was welcomed by the commission and actively embraced by the members. Apart from this, extraordinary meetings take place occasionally, like a workshop to discuss the strategic program for the next years, in which gender equality is one of several pillars. Nevertheless, some critical aspects also became apparent, such as resource constraints (both time and money) and therefore a lack of flexibility in order to react in a timely manner to specific situations.

Budget and support measures for GM

Another interesting detail is the question if there is a share of the budget dedicated to GM measures. There has to be made a distinction between the budget for internal measures (e.g. for employees of the RFO) and measures to increase the proportion of women in the funding activities (for the funded researchers). Both aspects will be considered.

RFOs expressing that they do have a dedicated budget for internal use represent the minority. Some of them, however, have the possibility for mentoring or training activities, as well as flexible working hours/models, seminars, maternity/paternity leave, information events and care leave or gender-neutral language (e.g. KLIEN’s Gender Manual¹⁵). Three examples with a more comprising set of measures can be found below:

NSERC

NSERC has obligatory courses for employees at certain staff levels:

- Online GBA+¹⁶ (Gender-Based Analysis Plus) training module
- Bias Awareness in the Staffing Selection Process
- Distribution of EDI (Equity, Diversity and Inclusivity) in STEM information and articles via email
- Courses offered in relation to reconciliation, such as: “Reconciliation Begins with Me”
- Women in leadership trainings

VBA

- Part-time leadership (currently 16% at management level and 31% at team leader level)
- Obligatory gender & diversity training (general course for all employees)
- Equal pay analysis (since 2012)
- Transparent recruiting processes

¹⁴ <http://www.snf.ch/en/researchinFocus/newsroom/Pages/news-180710-gender-equality-commission-still-a-lot-to-do.aspx>

¹⁵ <https://www.klimafonds.gv.at/wp-content/uploads/sites/6/KlimafondsGender-1.pdf>

¹⁶ http://www.nserc-crsng.ca/NSERC-CRSNG/Reports-Rapports/DP/2018-2019/supplementary/t4_eng.asp

FFG

- Gender training, partly mandatory:
In the beginnings (2009), the gender trainings were mandatory for new employees. In order to also reach teams with less fluctuation, the goal was to reach 70% trained team members per team. Now there is a new training concept in place, which includes a basic module (why gender is important for FFG) for all new employees and a follow-up module which is only mandatory for some persons (such as program managers, etc.) and voluntary for other employees. These follow-up modules have more specialized content like gender-sensitive language and imagery, gender criteria, events, communication). Some follow-up modules are also specifically tailored at employees who have been working for FFG for a longer period of time (and have thus not received basic gender training).
- Several voluntary offers for further trainings
- Staff recruitment: Focus on balanced teams and balanced management
- Possibility to work part-time and Part-time management positions
Part-time management is also possible in practice, most of the persons on part-time positions are in the middle management. It is also possible to have this type of contract for a longer period of time.
- Equal pay Analysis
There is a project to establish equal pay analysis in place at the moment.

Looking at the second aspect which will also be dealt with in chapter “Special funding programs” for GM (if there is budget for funding) there are only some examples. The SNSF grants 14 m CHF to PRIMA¹⁷, a funding scheme for women only, 3 m CHF for Flexibility Grants¹⁸ that give the possibility for flexibility measures for parents and 50 k CHF for the Mentoring Programme Réseau Romand. The Israeli Ministry of Science has a share of the budget dedicated to special scholarships for woman in fields where there is underrepresentation of women and a yearly conference on women in science. FFG also has funds for special calls Talente¹⁹ and w-fORTE Laura Bassi Centres of Expertise. FWF gives 5,8% of the research budget for the career development program for women.

Governance structure

The RFOs were also asked if their organization does address gender mainstreaming in the internal governance structure, i.e. if a policy for shares of women in boards etc. is in place. The majority of RFOs does not have such measures in place. In many of those cases, the respective RFOs do not have the power to assign members of the steering boards themselves, but they are nominated either by public bodies or by member institutions.

In some cases, however, quotas for shares of female participants in governing bodies are established:

- Academy of Finland: The gender balance should be at least 40-60% of each gender in all groups and governance structures.
- KLIEN: The participation of females in all boards is a general principle. The board of directors must have a minimum share of 35% female participants.
- Israel Ministry of Science: Gender equality is a “must” in public scientific boards. If this is not the case, the body responsible must provide an explanation.
- Swedish Research Council: A minimum of 40% of each gender must be represented in governing boards.
- SNSF: A quota of 40% minimum participation of females is in place for the Foundation Council. A preferential rule is in place for the Research Council, i.e. if there is a vacancy in the Research Council, a female candidate will be preferred to a male candidate in case of equal quality.
- Vinnova: Steering groups and boards should be gender-balanced. Apart from that, a communication policy is in place, that Vinnova does not finance or participate in conferences, workshops etc. if keynote speakers, panels etc. are not gender-balanced.

¹⁷ <http://www.snf.ch/en/funding/careers/prima/Pages/default.aspx>

¹⁸ <http://www.snf.ch/en/funding/supplementary-measures/flexibility-grant/Pages/default.aspx>

¹⁹ <https://www.ffg.at/programm/migriert-talente-der-foerderschwerpunkt-des-bmvit>

Legal framework and voluntary collaborations

In the following, a few examples of external networks or policies affecting funding organizations will be presented. Abiding to national laws concerning non-discrimination, equal treatment etc. will not be listed separately as obligatory examples, as this applies to all the participating organizations, even if slight differences might apply in different countries.

One obligatory regulation affecting two participating RFOs with regard to gender mainstreaming are presented below:

Swedish Research Council and Vinnova: *The Swedish Gender Equality Policy*²⁰

The idea behind gender mainstreaming emerged in the 1980s in the area of international development work. Gender mainstreaming was adopted by Sweden in 1994 as the official strategy to implement the national gender equality policy, and by the UN women's conference in Beijing in 1995 as a strategy for the member states. Since 2007, Sweden has launched special initiatives to promote gender mainstreaming in municipalities, county councils and regions (2007–2013), government agencies (2013–) as well as higher education institutions (2016–). An interim report of the evaluation of this was published in 2018.²¹ Gender mainstreaming work is also being carried out within the Swedish Government Offices. In 2018, the Swedish Gender Equality Agency was established. Since 1996, a Minister for Gender Equality has been in place continuously, and occasionally, i.e. in some, but not all Governments before that already since 1973.

The overarching goal of the gender equality policy is that women and men are to have the same power to shape society and their own lives. To this end, six sub-goals have been specified:

- 1.) Gender equal division of power and influence. Women and men are to have the same rights and opportunities to be active citizens and to shape the conditions for decision-making.
- 2.) Economic gender equality. Women and men must have the same opportunities and conditions as regards paid work, which give economic independence throughout life.
- 3.) Gender equal education. Women and men, girls and boys must have the same opportunities and conditions with regard to education, study options and personal development.
- 4.) Gender equal distribution of unpaid housework and provision of care. Women and men must have the same responsibility for housework and have the opportunity to give and receive care on equal terms.
- 5.) Gender equal health. Women and men, girls and boys must have the same conditions for a good health and be offered care on equal terms.
- 6.) Men's violence against women must stop. Women and men, girls and boys, must have the same right and access to physical integrity.

Besides the example given above for obligatory frameworks, we want to present a few voluntary measures, which can be seen as the best practice examples in this regard in the participating institutions. Even though these measures are not only directed towards the internal procedures of these RFOs but also towards the context of the respective RFOs, they are listed in this chapter, as a clear allocation to specific parts of the funding cycle cannot be made.

²⁰ <https://www.jamstallhdetsmyndigheten.se/en/about-gender-equality/swedens-gender-equality-policy>

²¹ <http://www.statskontoret.se/in-english/publications/2018---summaries-of-publications/evaluation-of-the-governments-development-programme-for-gender-mainstreaming-in-agencies.-interim-report-201817>

FFG: Voluntary measures

Gender-Anchor-Group

The management of FFG set up a gender anchor group with employees from all areas, which is located in the strategy department. It consists of eight operative members. The gender anchor persons provide a bridge for the development, dissemination and reflection of gender mainstreaming in FFG. The group acts as a consultancy and development network for all questions concerning the implementation of gender mainstreaming in FFG and to consider open questions in this regard. There are also sub-groups within the gender anchor group focussing on specific issues (e.g. the update of gender trainings). If there is a specific need, the group may also convene regularly, as when the general gender criteria were designed.

FEMtech Network Meetings

With the initiative FEMtech²², the Federal Ministry for Transport, Innovation and Technology (BMVIT) supports women in research and technology and promotes equal opportunities in industrial and non-university-research, at universities of applied sciences and focus areas of research and technology. By increasing the share of women and by improving their professional position in these fields, FEMtech strives to render a contribution towards the increased realization of female innovative potential and more equal opportunities for women and men in society.

FEMtech supports activities designed to raise awareness and enhance the visibility of women in research and technology. Activities include FEMtech's database of female experts, FEMtech's female expert of the month, FEMtech's networking meeting, FEMtech knowledge (current data on women in research and technology) and FEMtech funding (internships for female students and pupils, research projects, support for gender mainstreaming activities in enterprises).

FEMtech's networking meeting are organized twice a year. These take place in Vienna and other places in Austria. The participants are informed about news on the funding schemes and show current FEMtech topics. There is also the opportunity for an informal exchange and support counselling by the FFG, who is administrating the FEMtech funding activities. Child care is offered at every network meeting.

Estonian Research Council: AcademiaNet²³

The Estonian Research Council is a member of AcademiaNet and has organized the nominating of Estonian female researchers to be represented at the portal.

AcademiaNet is a database of profiles of excellent female researchers from all disciplines. The portal was established in 2010 with the profiles of primarily German-speaking women academics. Since 2012, the portal has been gradually internationalised in order to continuously expand the pool of outstanding women academics in Germany and beyond and to make it more readily accessible. The profiles of renowned European women academics have been added since 2012. In order to ensure that the database is also accessible to non-German speaking academics and users and that European scientific communities will be able to familiarise themselves with it, the web site is also available in English. The portal has been established as a European database for those searching for suitable female candidates for influential academic and scientific positions.

It is not possible to apply directly to be added to the database. The partners of the network (among others The Robert Bosch Stiftung, Nature, DFG, CNRS, ERC, FWF, Max-Planck-Gesellschaft, Wellcome Trust, The Royal Society) appointed high-ranking persons to the steering committee, which then agreed on a set of standards for all of the partners to use when nominating candidates for AcademiaNet. These partners vouch for the outstanding qualifications of the women academics and scientists in AcademiaNet. The selection criteria unite the outstanding scientific qualifications, academic credentials and independent leadership activities of the nominated academics, as well as further supporting criteria.

²² <https://www.femtech.at/>

²³ <http://www.academia-net.org/project/>

FWF & FFG: *genderAG*

The *genderAG* working group is a multi-organisation group set up by the research agencies housed in the Haus der Forschung building (FWF, FFG, Joanneum Research and Austrian Cooperative Research). The goal of the working group is to increase the visibility of each organisation's gender mainstreaming activities in order to promote the topic of equal opportunities for women and men in the research world. In 2017, WWTF and VBA joined the *genderAG*.

In addition to the actions and measures taken within the organisations involved in the working group, the group plans to conduct its work, exchange knowledge and implement new initiatives across the organisations in the coming years. The *genderAG* working group is also meant to provide active stimuli for the implementation of equal opportunities in its member organisations.

These efforts focus on the following objectives:

- Promotion of gender issues in the member organisations: gender training seminars to be integrated into each organisation's training and education program
- Communication of the group's activities to the general public
- Promotion of national and international gender discourse in the organisations

Einstein: *The German Research Foundations' research-related standards of gender equality*²⁴

To effectively and sustainably promote the goal of gender equality in research, optimally leverage the full potential of female researchers in the research system and achieve universal gender equality within this system, the member organisations of the general assembly of the DFG continue to uphold the "Research-Oriented Standards on Gender Equality" and take suitable measures to implement these standards and make them viable for the long term. Each institution voluntarily commits itself to this objective and to ensuring an appropriate ratio of women and men at all academic career levels. Compliance with the "Research-Oriented Standards on Gender Equality" remains a decision-making criterion in the approval of DFG-funded coordinated programs, in which universities and equivalent institutions with the right to confer doctorates are applicants.

The structural and personnel-related gender equality standards correspond to the following criteria: consistency, transparency, competitiveness and forward-looking orientation, and competence.

In 2018 a new Qualitative Reporting System was launched. In the future, the member organisations intend to submit concise qualitative reports on changing key topics and discuss examples of successful and less successful equal opportunity measures on a mutually supportive, non-competitive basis.

The key topics of the two reports in the first reporting round (submission deadline 31 January 2019) included:

- 1.) Reducing the workload of female researchers to allow them to engage in committee work
- 2.) Recruitment procedures to attract more women to academia

Apart from that, the Athena Swan Charter was mentioned by some RFOs as an interesting measure. Also, one participant of the questionnaire, NSERC, and its two partner granting agencies, the Canadian Institutes of Health Research and the Social Sciences and Humanities Research Council, launched "Dimensions: Equity, Diversity and Inclusion Canada"²⁵, designed to foster cultural change and increase EDI within the Canadian post-secondary research ecosystem".

²⁴ http://www.dfg.de/download/pdf/foerderung/grundlagen_dfg_foerderung/chancengleichheit/forschungsorientierte_gleichstellungsstandards_2017_en.pdf

²⁵ http://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Dimensions_Dimensions_eng.asp

Athena SWAN charter

Athena SWAN (Scientific Women’s Academic Network) is a charter established and managed by the UK Equality Challenge Unit (= ECU; now part of Advanced HE)²⁶ in 2005 that recognizes and celebrates good practices in higher education and research institutions towards the advancement of gender equality: representation, progression and success for all. ECU’s equality charters enable organizations to apply for an award recognizing their commitment to, and progress on, equality and diversity.

The Athena SWAN charter was established in 2005 and the first awards were conferred in 2006. The initial charter set out to encourage and recognize commitment to advancing the careers of women in science, technology, engineering, mathematics, and medicine (STEMM) institutions of higher education and research.

In 2011, the UK Chief Medical Officer made it a requirement for academic departments applying for funding from the English National Institution of Health Research to hold the Athena SWAN silver award. In the same year, ECU undertook an internal evaluation of the Athena SWAN Charter, which found clear evidence of the impact that it had at the institutional level and for individuals.

In May 2015 the charter was expanded to include non-STEM departments including arts, humanities, social sciences, business, and law. Additionally, it expanded to cover additional communities including professional and support staff, technical staff, as well as trans staff and students. The first awards to non-STEM university departments were announced in April 2016. The new charter recognizes work undertaken to address gender equality more broadly, and not just barriers to progression that affect women.

Members who sign up to the charter are expected to apply for an Athena SWAN award, at Bronze, Silver or Gold level. Each award is valid for four years under the post-2015 rules (three years where pre-2015 rules apply). They commit to adopting ten principles, which focus on promoting and supporting gender equality for women. In particular, the charter aims to address what is known as the “leaky pipeline” of women progressing to senior roles in science by removing obstacles to their advancement, ensuring equal pay and mainstreaming support, through action at all levels across the department or organization.

Qualitative and quantitative goals and goal achievement

The diversity in practice is also visible for quantitative and/or qualitative goals with regard to GM. Some examples are given below.

OeAW: Women’s Promotion Plan²⁷

OeAW details in the Women’s Promotion Plan specific actions as well as quantitative and qualitative goals in regard to GM. The numbers for goal achievement were given in the questionnaire:

- Increasing the proportion of research associates at all career levels at which they are underrepresented, in particular, the post-doc level at science and technology divisions’ research units and in leadership roles
- Increasing the proportion of women on OeAW panels (including committees and commissions awarding fellowships and prizes) to 30%
 - Goal achievement: depending on panel between 25% and 50% in 2017
- Increasing awareness of gender-based discrimination within the OeAW
- Increasing the proportion of female speakers and members of panel discussions at OeAW events from 30% to 40%
 - 33% in 2016, 45% in 2017

²⁶ <https://www.ecu.ac.uk/equality-charters/athena-swan/>

²⁷ https://www.oeaw.ac.at/fileadmin/NEWS/2019/PDF/OeAW_Women_s_Promotion_Plan_2018-2020_online_engl.pdf

Vienna Business Agency

The Vienna Business Agency has several quantitative goals in place:

- Training of all employees in GM-topics
- 50% female quota at management level
- No jury and no panel without female experts/speakers

One qualitative approach for goals is given by VINNOVA, another one by the Volkswagen Foundation.

VINNOVA

VINNOVA has the goal to reach a balanced gender distribution in evaluation and steering groups and ensure equal power and influence among women and men in the various parts of the core processes in all programs and calls. Furthermore, a gender perspective in the contents of research and innovation must be considered if steering group and program managers, jointly with support function for GM, consider appropriate.

These goals were formulated in three pillars:

- Who (gets funded? Strive for gender balance in funded projects)
- What (do we fund? Is a sex/gender perspective integrated where appropriate?)
- How (do projects that apply for funding integrate gender aspects and how do evaluation groups consider this?)

Volkswagen Foundation

The Volkswagen Foundation has a qualitative goal, which is “a general consensus on GM issues”. There is a policy in place which should ensure that the proportion of female applicants remains comparable through all application phases. This is also discussed in the jury meetings.

The share of female reviewers (written-peer reviews and jurors at meetings) is 30%. There is the aim to increase this share but there is also the awareness that this has to be handled with caution, as many women are frequently asked to do a lot of committee work.

One more example for a set of specific goals is the Strategy for Gender Equality by the Swedish Research Council. The document includes five main objectives (see box below) and respective descriptions for each of these on the processes to achieve these objectives.

Swedish Research Council: *Strategy for Gender Equality*

The Swedish Research Council should:

- 1.) achieve and maintain an equal gender distribution in its evaluation panels,
- 2.) ensure that the percentages of female and male applicants for grants from the Swedish Research Council correspond to the percentages of women and men among the potential research grant applicants,
- 3.) ensure that women and men have the same success rates and receive the same average grant amount, taking into account the nature of the research and the type of grant,
- 4.) include a gender equality perspective in each analysis and evaluation, where possible,
- 5.) integrate a gender equality perspective in the council’s external communication.

A similar set of goals (for the years 2017-2018) is included in the document *Criteria for funding decisions*²⁸ by the Academy of Finland:

²⁸ http://www.aka.fi/globalassets/10rahoitus/liiteet/trp_09112017_en.pdf

Academy of Finland: GM objectives

- All Academy decision-making bodies will monitor gender equality when granting funding for research. A particular monitoring target is the effects of the Academy's newest funding instruments or amended instruments on equality and non-discrimination.
- Particular attention will be paid to the transparency of the funding process and the funding for research posts as well as to the balanced review of both genders, for example as regards career breaks due to parental leaves.
- The funding periods are usually prolonged because of family leaves.
- The Academy increases the proportion of women among reviewers with a view to working towards a balanced gender composition in review panels.

NWO is one example where quantified targets were also available for the internal sphere of the organization, in addition to a few objectives regarding the funding process. However, NWO pointed out that new targets would be necessary due to a reorganization process. Those could not be found on the homepage at the time of writing (January 2019).

NWO: Target figures²⁹

The following target figures and realisation apply to NWO as an employer (made up of the NWO units in The Hague and STW, and the institutes ASTRON, NSCR and SRON).

- Top (salary scale 15 and higher): 28% - December 2014: 19% - January 2011: 16%
- Subtop (salary scale 13/14): 36% - December 2014: 26% - January 2011: 23%
- Middle management (salary scale 11/12): 40% - December 2014: 40% - January 2011: 33%

Not quantified but qualitative targets – or better directives – for both the internal sphere as well as the funding procedure are also formulated in the SNSF Mission Statement on Equality between Women and Men (see ⁶).

When it comes to the question of goal achievement, there was very little information on this question in the participants' replies or it was focussed on narrow aspects such as gender equality on boards. The most structured and specific concept seems to be the NSERC's Framework on Equity, Diversity and Inclusion, which includes selected "Issues" that should be tackled with respective "Actions" and also the current "Status" of the action. OeAW and NWO also provided some punctual information for the degree of goal achievement (see respective boxes above). This is also interlinked with the following part on data and monitoring structures that was added and includes information from the internet search and the interviews.

Data and monitoring structures

Some organisations have evaluation processes in place to monitor the status quo and the development (e.g. equal opportunity monitoring since 2015 of the FWF, equal-pay analysis of the Vienna Business Agency).

FFG: Impact orientation and monitoring

A regulation which affects FFG are the gender goals from the "impact orientation and – monitoring" by the Austrian federal government including gender budgeting and gender monitoring. The impact orientation is a highly complex system of objectives set for all federal public institutions in Austria. Those objectives represent what the Austrian Federal Government aims for in the medium to long term in society. The goals (1) are very specific, and each goal has assigned measures (2) how it shall be achieved and assigned key performance indicators (3) to measure the degree of achievement (4) as well as a narrative overall assessment of the impact goal (5).

It is a self-commitment of the ministries (BMVIT and BMDW). It is structured according to budgetary subdivisions. The ones relevant for FFG are the subdivisions 33 "Economy (Research)" and 34 "Transport, Innovation and Technology (Research)". In each of the subdivisions, there can be up to five goals, of which one has to be focussed on gender mainstreaming. Impact target 33.3 is the

²⁹ <https://www.nwo.nl/en/policies/diversity/gender+diversity>

better use of the potential of professionals. The connected measure is “Raising awareness of RTI and women in RTI, learning of best practice models on the compatibility of work and family life “. The respective indicator is the “increase in the proportion of women in leading positions in FFG programs [%]”.

FFG (and other institutions) report to the ministries, which collect the data and judge the degree of goal achievement. Since the measure is primarily a self-commitment, the most important consequence in case of non-fulfilment is transparency and thus pointing out the need for action.

One example will be introduced below:

(1) Impact target 34.3 Equality in the FTI sector:

<https://www.wirkungsmonitoring.gv.at/2017-BMVIT-UG-34-W0003.html>

(2) The connected Measure is “Increase the absolute and relative share of female employees in the field of RTI”

(3) The respective indicators are: Proportion of female Employees in R&D and Development of female employees in research and experimental development (R & D) in the corporate sector

(4) For the indicators, the respective data, as well as the degree of goal achievement, is also shown on the website (if it is available, what is not always the case).

Year: 2017

Target achievement rate: not achieved

Actual state: 14.8 [%]

Target state: 20

Upper threshold: 24

Lower threshold: 14

(5) Narrative overall assessment of the impact goal

In addition to a general increase in the number of high-quality jobs, the main aim is to significantly increase the current below-average proportion of women in these jobs. While further successes have been achieved in the absolute number of female R&D employees in the corporate sector, no increase in the proportion of women in scientific and higher-skilled non-scientific staff in the corporate sector has yet been achieved. Changes - in awareness-raising as well as structurally - take place only slowly, the reachability of the goals under the assumption of increases must, therefore, be regarded as very ambitious. A stronger continuation of the previous measures and a consistent promotion policy seem all the more necessary. As an example, the further development of gender monitoring can be mentioned both in the FFG and in the BMVIT. Additional measures (to raise awareness) are currently under revision.

Apart from the impact orientation and - monitoring, a better gender monitoring is currently under revision at FFG, e.g. to be able to see patterns of costs incurred in projects and costs accounted at the end of a project with regard to gender, in order to be able to analyse the relationship between resource inputs and funding.

Other indicators, also more general ones and going beyond gender mainstreaming, are analysed. In total, there are about 300 indicators in place in FFG, for goals which have been set with regard to the funding programs. The highest amount of gender-related indicators is in place in the gender focussed programs. One of these goals is to raise the share of female experts in evaluation boards, which has improved constantly over the last years. One measure was to increase the number of female experts available in the FFG expert database (from which the evaluators are selected).

AWS: Economic impact model

Diversity is one of several factors (such as innovation, growth and employment, environmental relevance) in the economic impact model in all funding programs, which are assessed by using an economic impact model. Diversity is measured by the following two questions:

- Is there any positive social impact based on the project or the enterprise policy?
- Is there any support in the enterprise for interventions of gender equality?

In general, it could be shown that a great variety of practices in organizations exist. This has also to do with the sample and selection of organizations and general criteria like the size of the organization, the legal status etc.

Funding activities

This section covers funding activities of the RFOs that participated in the questionnaire. A special focus was taken to activities that take gender mainstreaming into account.

Most of the RFOs claim to fund gender research – even if there is no dedicated program for funding gender research, there is at least an opportunity to fund projects focusing on gender in a general program. Only a few RFOs state not to fund gender research. This distinction has to be taken into consideration, as it might only result from differences in the way the question was interpreted, i.e. to fund gender research at all or in special programs.

General funding programs addressing GM

Almost all RFOs named general or thematic funding programs that also address GM, e.g. that also allow for GM funding but are not exclusively dedicated to it. It includes programs where gender is addressed as an overarching goal (i.e. that there should be gender balance in the persons that are funded ultimately; e.g. *Einstein Award for Doctoral Programmes*, ÖAW's *go!digital Next Generation*) and programs focused on equality and on how equality can be improved (e.g. *Social Innovation* by Vinnova, *Equality in Society* by the Academy of Finland).

The following list just gives some examples:

- Einstein Foundation Berlin: *Einstein Award for Doctoral Programmes*³⁰, *Einstein Junior Fellow*³¹
- KLIEN: *Smart Cities Demonstrations*, *Co-Creation Spaces*, *ACRP*
- Academy of Finland: *Strategic Research Funding*³², especially the program *Equality in Society*³³
- Volkswagen Foundation: In *symposia* and *summer schools*, the foundation expects a significant representation of women both as speakers and participants. Otherwise, applications are not accepted.
- ÖAW: *DOC program*³⁴ and *go!digital Next Generation*³⁵
- Vinnova: *Social innovation*, *innovative start-ups*, *challenge driven innovation*, *food tech and fashion tech*
- TACR: *ZETA*³⁶, *ETA*³⁷
- SNSF: *NCCR*³⁸, *SPIRIT*³⁹
- FWF: Within all funding programs the FWF asks the applicants to consider the gender dimension when developing the research program within the project outline (as an example *stand-alone projects*⁴⁰)

A few examples will be presented in greater detail below:

Academy of Finland: *Equality in Society*

Since 2018 there is a section for the research and interaction plan in the program *Strategic Research Funding*, in which the consortium's responsibilities and competence in regards to scientific and societal impact are described. In this section also justifications for possible gender imbalance and means to promote gender equality must be presented. Therefore, gender balance and women's career in academia are criteria for this program scheme.

In the specific strategic research program *Equality in Society* (2015-2021) the focus lies on equality and on how equality can be promoted. The program provides funding to research that seeks solutions to support the sustainable and equal renewal of basic public services and benefit schemes. The research consortia are expected to address the following questions:

- What are the mechanisms of inequality in Finland today?

³⁰ <https://www.einsteinfoundation.de/en/programmes/einstein-award-for-doctoral-programmes/>

³¹ <https://www.einsteinfoundation.de/programme/einstein-junior-fellow/>

³² <http://www.aka.fi/en/strategic-research-funding/src-in-brief>

³³ <http://www.aka.fi/en/strategic-research-funding/programmes-and-projects/equality-in-society/>

³⁴ <https://stipendien.oeaw.ac.at/en/stipendien/doc/doc-programme-statutes/>

³⁵ <https://www.oeaw.ac.at/en/fellowship-funding/funding-programmes/godigital/godigital-next-generation/>

³⁶ <https://www.tacr.cz/index.php/en/programmes/zeta-programme.html>

³⁷ <https://www.tacr.cz/index.php/en/programmes/eta-programme.html>

³⁸ <http://www.snf.ch/en/funding/programmes/national-centres-of-competence-in-research-nccr/Pages/default.aspx>

³⁹ <http://www.snf.ch/en/funding/programmes/spirit/Pages/default.aspx>

⁴⁰ https://www.fwf.ac.at/fileadmin/files/Dokumente/Antragstellung/Einzelprojekte/p_application-guidelines.pdf

- How can equality be promoted in connection with the renewal of basic public services and benefit schemes?
- In what ways can the public sector best support innovative experimentation, learning by experimentation and institutional change so as to maintain a well-managed transition and successfully renew basic public services and benefit schemes?

In addition, the consortia are expected to suggest ways in which it can best be ensured that individuals, groups and institutions possess the capabilities and resources that facilitate equal adaptation to the renewal of basic public services and benefit schemes.

ÖAW: DOC program and go!digital Next Generation

The *DOC* program is intended as a gender mainstreaming measure while maintaining academic quality criteria. If childcare duties for at least one child under the age of 7 (e.g. as a single parent) can be proven, the fellowship can be taken up as a part-time fellowship and the fellowship's duration can be lengthened by up to half the time granted. A subsidy of up to 1,900 Euros per annum is available for childcare. Efforts are made to keep the proportion of women constant in both the applications and in the awarding of fellowships.

The program *go!digital Next Generation* is intended to improve the framework conditions for data-based and data-driven research in the social sciences and humanities. Submissions should be handed in from a group of at least two scientists and the share of female scientists in the group shall be at least 50 %. In the case of an uneven number more female scientists must be represented.

TACR: ZETA and ETA

The *ZETA* program supports the involvement of young researchers (up to the age of 35) with the implementation of applied research projects. One of its aims is to promote equal opportunities for men and women in development of their research paths. GM is included in the evaluation process in three aspects – extra points are awarded to the proposals: a) led by women or projects with gender-balanced teams; b) correctly assessing the relevance of the gender dimension for the content of the proposed research and (if it is relevant) correctly integrating it in the project and its methodology; c) with an advanced HR policy (promoting equal opportunities) of the institution of the main applicant. Furthermore, GM is included in one gender-sensitive support condition consisting of the age limit of 35 years: the age limit may be increased by the time spent on relevant professional breaks (maternity leave, care for a close person, long-term disease, etc.).

The *ETA program* is supporting research, experimental development and innovation of applied social sciences and humanities. The program supports projects that focus on one or more of the following aspects utilizing the benefits of multidisciplinary approaches, linking technical and non-technical research and extracting potential outputs of basic research for application. The duration of the program is expected to be 6 years from 2018 to 2023. One of the 31 thematic research areas is (9) equal opportunities for men and women and principles of non-discrimination.

SNSF: National Centres of Competence in Research (NCCRs)

NCCRs are aimed at established researchers in Switzerland who wish to pursue a long-term research project on a theme of strategic importance. The *NCCR* management teams are based at a higher education institution or at another renowned research institution. *NCCRs* are backed by one or more home institution(s). One aim of the program is to improve the career prospects of women in research. Every *NCCR* needs to provide an equal opportunity strategy, which is assessed by external reviewers. The funding period is 12 years; evaluations are done every four years. The gender equal opportunity strategy of an *NCCR* is then evaluated by gender equality experts and these include recommendations in their report (even though the gender equality strategy is not the main focus of the evaluation, but also other aspects such as a communication strategy or a plan for the support of junior scientists are evaluated). In the event that the implementation of the gender equality strategy is seriously flawed, consequences such as the retention of part of the funding amount are possible.

The gender equality strategy has to be discipline-specific, i.e. an analysis of the status-quo in the respective field has to be included. This comprises the analysis of current problems regarding gender equality in the respective field and a set of measures and ideas of how to address these. As

there is a broad range of scientific fields, the suggested and implemented measures do vary a lot, which can be a valuable resource for other institutions. The Centers have the autonomy for experimenting with measures; one example would be quotas for doctoral students.

Special funding programs for GM

The participants were also asked if there are funding programs that specifically address GM (e.g. programs that are exclusively for women) in their organizations. Here the answers were quite diverse, ranging from a clear “no” to single examples of calls up to a whole program. These calls and programs were directed at different career stages: from female students to young post-docs up to professorships. Some of them directly try to foster the career via tenure track or professorship positions, e.g. the career development program for female scientists of the Austrian Science Fund. It is divided into 1) the *Hertha-Firnberg Program* for post-docs, which aims to support women at the start of their scientific careers, 2) the *Elise Richter Program* for senior post-docs, 3) the *Elise Richter Program* for arts-based research (*Elise Richter PEEK*), which aims at providing the necessary qualifications to apply for professorial positions within Austria or abroad. It addresses highly qualified female scientists of any scientific discipline, who have completed their university studies. Other examples are the *FemPower Calls* of the Vienna Business Agency (see below for more examples). Other programs try to support and improve the working environment or work-life balance for the funded applicants (like the mentioned *Flexibility grants* or the *Women’s Bonus*); some RFOs put prizes out for tender. The following list is not exhaustive:

- Academy of Finland: *Minna Canth Academy Professorship* (women's studies and gender research)
- Austrian Academy of Sciences: *L’Oréal Austria Fellowship* program⁴¹
- Austrian Research Promotion Agency: *Talente* (FEMtech), *w-fORTE Laura Bassi Centres of Expertise*⁴²
- Austrian Science Fund: *Hertha-Firnberg* program⁴³
- Israeli Ministry of Science: *Scholarships* for female PhD and post-doc students in STEM as well as scholarships for MA students in engineering⁴⁴
- Natural Sciences and Engineering Research Council: *Chairs for Women in Science and Engineering Program*⁴⁵, *L’Oréal Canada For Women in Science Supplement*, *The Alice Wilson Award*
- NWO: *WISE* program⁴⁶
- Swiss National Science Foundation: *Gender equality grant*⁴⁷, *PRIMA* (see below) and *Flexibility Grants*
- Vienna Business Agency: *Women’s Bonus* (formerly *FemPower Bonus*) and *FemPower Calls*
- WWTF: *Supplementing measure for gender mainstreaming activities*
- Vinnova: *Gender and Diversity for Innovation program*, different Calls in this program, such as *Norm-critical innovation: innovations for increased equality*⁴⁸

⁴¹ *L’ORÉAL Austria* is a fellowship program of the Austrian Commission for UNESCO in cooperation with the Austrian Academy of Sciences (ÖAW). The fellowships are awarded in context of the worldwide cooperation “For Women in Science” and since 2007 they have been financially supported by the BMWF (since 3 March 2014 BMWFW). The idea behind the program is to increase the number of women in PhD and postdoc positions in the fields of medicine, natural and life sciences, and mathematics.

The fellowships for Austrian female scientists in basic research are each € 20.000 and are given for eight to twelve months (pre-doc) or six to eight months (postdoc). <https://bmbwf.gv.at/english/home/science-higher-education/gender-and-diversity/programmes-and-initiatives/loreal-austria-fellowships-for-young-female-scientists-in-basic-research/>

⁴² The scope of the impetus program *Laura Bassi Centres of Expertise w-fORTE* was funding research centers for applied basic research at the interface between science and economy that are managed by top-level female scientists. The program was evaluated on an ongoing basis with the objective to detect essential factors for framing a modern research culture that appeals to both women and men alike. Ended in 2018; <http://www.w-fforte.at/at/laura-bassi-centres/laura-bassi-centres/laura-bassi-centres-of-expertise.html>

⁴³ <https://www.fwf.ac.at/en/research-funding/fwf-programmes/firnberg-programme/>

⁴⁴ https://mfa.gov.il/MFA/AboutIsrael/Spotlight/Pages/Advancement_women_science_2011.aspx

⁴⁵ http://www.nserc-crsng.gc.ca/Professors-Professeurs/CFS-PCP/CWSE-CFSG_eng.asp

⁴⁶ <https://www.nwo.nl/en/research-and-results/programmes/women+in+science+excel>

⁴⁷ <http://www.snf.ch/en/funding/supplementary-measures/gender-equality-grant/Pages/default.aspx#How%20To>

⁴⁸ <https://www.vinnova.se/en/e/normkritisk-innovation/innovation-projects/>

Examples for calls that give direct career opportunities are given below:

NWO: Women In Science Excel (WISE)⁴⁹

The *Women In Science Excel (WISE)* program offers young female researchers (PhD obtained at least three years ago) to develop or expand their own research group at an NWO institute since 2015. NWO offers 20 tenure-track positions at NWO research institutes (specific institutes cooperate in each round and are presented on the NWO homepage for each round) in five recruitment rounds. The funding includes a start-up package that is subdivided into three levels, depending on the candidate's qualifications: 1) a standard tenure-track position for a fixed period of five years, 2) an accelerated tenure-track position for an experienced candidate for a fixed period shorter than five years or 3) a permanent position for a senior candidate (funding for max. three years). Candidates have to submit a research proposal and state the NWO institute they would like to work at. This application is assessed by the institute of choice in the first round followed by an assessment of the WISE selection committee that invites the two first rated candidates of each institute. The dedicated goal of the program is to ensure a more balanced male-female ratio in top-level positions at NWO's institutes and is a direct result of the strategy "Talent to the Top Charter" (NWO signed this Charter in 2010) with the objective to concentrate on gender diversity during recruitment and selection, staff planning and talent management.

NSERC: Chairs for Women in Science and Engineering Program (CWSE)

The *Chairs for Women in Science and Engineering Program (CWSE)* was launched in 1996. Its goal is to increase the participation of women in science and engineering, and to provide role models for women active in, and considering, careers in these fields. The main goal is to develop, implement and communicate strategies to raise the level of participation of women in science and engineering as students and as professionals. This includes to:

- encourage female students in elementary and secondary schools to consider careers in science and engineering;
- increase the enrolment of women in undergraduate and graduate programs in science and engineering in all Canadian universities and colleges;
- increase the profile and retention rate of women in science and engineering positions;
- eliminate barriers for women who wish to pursue careers in science and engineering;
- promote the integration of female students and professionals both within and outside academia.

The program is regionally based, with one Chair for each of the Atlantic, Quebec, Ontario, Prairie, and British Columbia/Yukon regions. Chairs are tenable at any NSERC-eligible Canadian university within a designated region. They are approved for a five-year term, renewable for an additional term of three to five years. Chairholders are expected to contribute up to 50 percent of their time to the activities of the Chair and the remaining time to their professor/researcher activities at the university. NSERC matches cash contributions as well as in-kind contributions from the host university and supporting organizations including cash for a graduate student, postdoctoral fellow or research engineer that helps the chairholders maintain their research activity at a high level during their tenure as a *CWSE*. Supporting organizations may include private- or public-sector organizations, universities (other than the host institution), communities or individuals. However, one private-sector organization contributing in cash must be included. This interactions with the Chair's supporting organization(s) help expand the visibility and reach of the Chair and increases awareness of issues surrounding women in science and engineering to sectors beyond academia.

To foster the exchange between the Chairs in the different regions, in September 2006, the five regional Chairs were formally linked through the creation of a National Network Grant, funded by NSERC (currently \$80,000 per year). It provides mechanisms to facilitate interactions among the five Chairs and undertakes a range of collaborative research, communication and networking activities such as contributions to national and regional conferences.

⁴⁹ <https://www.nwo.nl/en/research-and-results/programmes/women+in+science+excel>

Academy of Finland: Minna Canth Academy Professorship

Academy Professors are in an employment relationship with the organisations by which the research posts are hosted. Research posts as Academy Professor are intended for fixed-term, full-time research work where the professors carry out their own research plan, supervise their own research team and provide guidance to junior researchers. Their duties also include supervision of thesis and dissertation writers in their own field and teaching related to their research. One of these professorships – the Minna Canth Academy Professorship - is dedicated to women’s studies and gender research and is open for applications every five years.

FFG: Female Talents

There are three funding options at FFG under the header Female Talents - *FEMtech*:

- 1.) *FEMtech Career* – Equal Opportunities in Applied Research
- 2.) *FEMtech Internships for Female Students* – Entry into a Research Career
- 3.) *FEMtech Research Projects* – Gender-Relevant Projects

FEMtech Career aims to increase the number of female scientists employed in industrial research and to improve their career opportunities. Companies and research institutions receive funding to implement measures which attract women to careers in applied research, lead to equal opportunities for women and men (affirmative action plans, flexible working hours, etc.), increase the proportion of female scientists and engineers in the company or research institute or support female scientists and engineers in their professional careers (coaching, mentoring, further education and training, etc.).

FEMtech Internships for Female Students supports and mentors female students to take up scientific and engineering positions in industry in order to meet the future demand for researchers and R&D experts. The internship lasts one to six months.

FEMtech Research Projects initiates and supports projects in research, technology and innovation that deal with the different needs and requirements of men and women. By considering the relevance of gender within the project, innovations are supported and new market potential is generated. Scientists should be more aware of gender issues when developing and carrying out research projects, to improve the quality and capability of solutions, products and technologies to meet the needs of all customers.

Examples that give additional bonuses or improve the working environment and support conditions for funded (female) applicants are given below:

SNSF: PRIMA, Flexibility Grants and Gender Equality Grants

PRIMA grants are aimed at excellent female researchers who show a high potential for obtaining a professorship. PRIMA grantees conduct an independent research project for five years with their own team at a Swiss research institution. The grants cover the grantee's salary and project costs. The goal is that the grantees can take the next step up the academic career ladder and reach a professorship position. If a PRIMA grantee is appointed as a professor in Switzerland during the funding period, the remaining amount of the PRIMA grant will be transferred to the new place of work as research funds.

Flexibility grants are aimed at postdocs and doctoral students who have to look after children at an important stage in their career and are therefore in need of more flexibility. The *Flexibility Grant* offers researchers two options to balance their professional and private lives: on the one hand, it can provide funding to help cover the external child care costs charged to the researcher. On the other hand, it can be used to help finance the salary of a support person, allowing the grantee to reduce his/her work quota. The two measures can also be combined.

The *gender equality grant* is aimed at young female researchers at the doctoral or postdoctoral level funded by the SNSF (work-time percentage of at least 60% funded by the SNSF). It offers them

additional individualised and flexible support for their career development. An eligible person receives CHF 1.000 per 12 months' approved project run time. The grant may be used to finance career support measures but does not cover family support measures.

Vienna Business Agency: Women's Bonus

With this bonus, a company will receive between 2.000 and 10.000 Euros additional funding as part of the different funding programs (e.g. the research and innovation) if a professionally qualified woman leads the R&D project. Its purpose is to act as a career booster for women (as they can claim to have led that project). The bonus is granted at the beginning of a project but only paid out at the end of a project after it has been examined with a plausibility check if a woman actually had the role of the project leader.

The money paid out for the bonus goes to the respective company, who achieved the bonus, and it has no strings attached, i.e. it does not have to be used for the respective project or a gender mainstreaming purpose; a proof of costs is not necessary. There is no fixed amount of money dedicated for the women's bonus beforehand in the budget of VBA.

Considering gender in designing new programs

The questionnaire included a question on the mechanisms to develop and decide on new funding programs, and if GM would play a role in this process. For the majority of participating institutions this was not the case: For public institutions, the main components of the procedure seem to be loops with the respective principal authority like ministries or boards.

Still, in some cases gender considerations are included when new programs are designed; some are interlinked with measures stated above (law etc.) and repeat themselves:

- FFG: GM is considered in program design, in some cases, it is even a specific focus of the program (e.g. *Laura Bassi*, see also footnote ⁴²). The implementation of gender criteria in the selection processes of funding proposals is standard.
- Einstein Foundation Berlin: GM does play a role in all discussions concerning the specific design of the programs – program goals and procedures are examined as to whether they contain a gender bias. When designing the Einstein Award for Doctoral Programmes³⁰, promotion of female researchers and the leaky pipeline question played a role in deciding on award criteria.
- SNSF: Political mechanisms are the most relevant base for developing and deciding on new funding programs. Usually, new research programs have a set of predefined questions and/or subjects and/or problems to solve. Gender Equality has been addressed as a main topic in two programs so far.
- TACR: Each program must be adopted by the Governmental Council for Research on Development and Innovation, and as such it must be accompanied by a Gender and Sex Impact Analysis (as any document to be approved by the government). However, this analysis is perceived as very formal issue, so it does not fulfil its role to promote GM sufficiently.
- VBA: The decision-making process on new funding programs is a mix of economic trends, regional needs and political input as well as feedback from clients. Gender Mainstreaming does play a role as FemPower Calls for research projects are opened on a regular basis and the majority of the programs provide extra bonuses for projects led by women.
- Vinnova: A support function is in place, where all program managers must present their programs and calls to be launched. In the support function, gender mainstreaming is always raised and discussed with the program managers.

Implementation of gender aspects in general funding programs

The question concerning the implementation of gender aspects in the research content of projects in general funding programs showed that in a number of organizations this is a requirement which is already in place (10 out of 19). Looking at the status in the participating institutions, a few patterns could be noticed in our sample: In

general, it seems that RFOs focusing on applied research put more emphasis on the implementation of gender aspects also in general funding programs than basic research funding RFOs. Among nine RFOs stating that this is not relevant for them (yet), there was only one RFO which is a purely applied RFO and two RFOs which are funding both applied and basic research. If a closer look is taken at the organizations, mainly basic research RFOs, which stated to not have specific requirements in this regard, the picture shows to have more shades: Some RFOs state to be currently implementing gender aspects as a requirement, but are not entirely there yet, such as NSERC:

NSERC: *Equity, Diversity and Inclusion in general funding programs*

NSERC is in the process of addressing EDI considerations in relation to all program descriptions and application instructions, as well as in relation to the understanding of researcher and research excellence. NSERC is increasing its capacity to recognize the benefits of forming diverse research teams, including diversity among trainees, and to recognize the increased rigor, relevance and impact of research that embeds sex, gender and diversity considerations and analysis.

Challenges include the time needed to develop internal EDI analysis capacities across the organization and communicating the why and how to stakeholders. Programs are increasingly including EDI considerations as elements of research teams and as indicative of research excellence.

Following the answers given in the questionnaire, others do consider these factors but more in an informal manner (*“Not in a formalized way. It is up to the evaluation committee to judge if something – for example gender – is missing and should be there for quality reasons”*) or not as a criterion which is asked from the applicants, but can still be an evaluation criterion (*“There are no specific requirements for the design of projects, however, reviewers are asked to consider aspects of gender equality in their assessment and there have been rejections of projects on the grounds of lacking adequate consideration of gender aspects.”*).

The following examples summarize experiences with the implementation of gender aspects in the research content.

Vinnova has made the experience that implementing gender aspects in the research content has been a learning process for the applicants as well as for the organization itself over the years. Especially in the beginnings, it could be noticed that some applicants just tried to fulfil gender criteria on a very superficial level. It was also experienced that the evaluators noticed this more and more and got very irritated when applicants just tried to fulfil the criteria with empty phrases. The training of evaluators has led to a situation that they are now harsher in the evaluation when they notice that the answers are not elaborated enough.

When Vinnova started to send decision letters to applicants in the case of a negative evaluation of the gender aspects, they realized that this is a serious criterion just like other quality relevant criteria. Even though it cannot be ruled out that these cases still exist, posing the question to include gender aspects and introducing the requirement to answer these questions has led to an increase of awareness and a general acceptance and sincerity of how applicants deal with it.

Similar experiences were made at FFG. Implementation of gender criteria for project selection started in the division “general programs” and was rolled out to all funding schemes where relevant. The acceptance of the gender criteria (externally and internally) was a process that took some time. In the meanwhile, it is well accepted. The main argument is that it is important for the scientific quality of proposals as well as an improved market potential.

Gender-sensitive grant conditions

The participants were also asked to give information about gender-sensitive grant agreement conditions that were established in the RFO (such as rules for maternity leave during the runtime of the project, acknowledgement of work-life balance expenditure as eligible cost, positive consideration of the applicants’ institution holding a GEP, etc.). Almost all RFOs stated that parental leave during the project was one gender-sensitive grant condition in place (and even those RFOs which did not explicitly state it are obliged to abide by the respective national laws).

The “Practical Guide to Improving Gender Equality in Research Organisations”⁵⁰ by Science Europe lists these Grant Management Practices of the participating organizations. They were subdivided into four categories:

- supplementary maternity grants
- supplementary paternity grants
- no-cost extensions
- option for part-time work

The analysis in the guide is in accordance with the observations made within this analysis. In this respect, no-cost extensions and options for part-time work seem to be well-established. However, supplementary maternity or paternity grants seem to be less common yet.

Another measure which does not seem to be that common yet is the acknowledgement of work-life balance costs:

- OeAW provides up to 12 months cost contributions for child care
- FWF pays for kindergarten in the career development programs for women if the project leader has a full-time employment contract: She can receive a child allowance of € 9,600 per child per year until the third birthday of the child. Female grant-salaried principal investigators (financed for at least 50% through the grant) can apply for 2000 Euros/year to support their own career development.
- *Flexibility grants* by the SNSF (see above)

Looking at our questionnaire, one other example was given by NSERC: it has a special section in the grant application, the “Special Circumstances Section” to explain any gaps in their research productivity due to personal reasons.

The Volkswagen Foundation provides a document in which they inform about their objectives of a better work-life balance for researchers with children and the related main conditions. An extract of this document can be found below:

Volkswagen Foundation: *Family-Related Benefits*⁵¹

1.) Eligibility:

Funding is available for male or female researchers raising one or more children. As a second prerequisite, the supplementary funds are restricted to funding initiatives and calls specifically targeted at young researchers submitting applications for the funding of their own positions, in particular postdoctoral positions, and W1 professorships in Germany.

2.) Adaptation of the project duration, replacements

During maternity and/or parental leave the current legal provisions shall apply. The end of the project will be shifted accordingly. After prior consultation with the Foundation, part-time employment combined with a proportional project prolongation is possible. If during parental leave and with the prior consent of the Foundation it is considered indispensable for achieving the project targets, an appropriate replacement (e.g. research assistant) may be hired. Any additional costs thereby incurred may be claimed in a substantiated post-application, always assuming a cost-neutral budget reallocation is not possible.

3.) Child care costs

An allowance for child care may be paid from the grant for children no older than twelve. The amount depends on the number of children and is set as follows: For a single child EUR 400 per month. For each additional child the allowance is increased by EUR 100 per month. (...)

4.) Research stays abroad

Within the context of funding initiatives involving longish research stays in another country (minimum six months) the Volkswagen Foundation may assume the costs of flights for grantees as well as return flights for children and the grantee’s partner. Alternatively, in the event that the grantee travels alone, it is possible to apply for one return trip home during the

⁵⁰ See Table A, p. 48 in https://www.scienceurope.org/wp-content/uploads/2017/01/SE_Gender_Practical-Guide.pdf

⁵¹ https://www.volkswagenstiftung.de/sites/default/files/downloads/MB_family_related_benefits.pdf

period of stay. (...)

5.) Application procedure

In order that the HR costs are correctly budgeted for, the childcare allowance must be applied for at the same time as the written project proposal is submitted. In case a child is born or adopted into the family while the project is running, a reallocation of funds in order to cover partial child care expenses shall be deemed approved. If required, a subsequent application may be posted towards the end of the project. (...)

Evaluation process

In this section, the participating RFOs were asked to describe evaluation instruments, methods, evaluation criteria and selection processes.

Panel composition, evaluation instruments/ methods and selection process

Juries and peer reviewers are selected based on their performance and expertise. It has to be noted that which persons apply for this position, who is encouraged to apply or who is nominated is a gateway for a possible bias. Some try to increase the share of women but there are generally no fixed quotas (as finding qualified jurors and reviewers who are also willing to take over this role is especially difficult in some fields). Exceptions are the Swedish Research Council and Vinnova that have a quota for jury members of 40/60 in place (a minimum of 40% of each gender), the BMVIT aims at a minimum of 10% female experts on FFG panels and NSERC has various guidelines ready depending on the research funding opportunity (e.g. minimum of 30% women on a selection committee).

Peer review and internal or external expert juries (remote or on-site) and sometimes hearings are the instruments that are most commonly used (in project and person funding). Some alternative evaluation and selection procedures were mentioned by RFOs in the questionnaires:

SNSF: Implementation of the *DORA Declaration*⁵²

The San Francisco Declaration on Research Assessment (DORA) intends to halt the practice of correlating the journal impact factor to the merits of a specific scientist's contributions. The SNSF signed the DORA declaration; however, the implementation is still pending. Documents and forms have been developed, which are according to the DORA declaration, and are in place. In order to achieve the full implementation of the DORA declaration, supporting measures like training in this regard will be developed and conducted. Also according to this statement, this practice creates biases and inaccuracies when appraising scientific research. It also states that the impact factor is not to be used as a substitute "measure of the quality of individual research articles, or in hiring, promotion, or funding decisions". The declaration originated from the December 2012 meeting of the American Society for Cell Biology. The quote below originates from the declaration:

"We recognize that many funding agencies, institutions, publishers, and researchers are already encouraging improved practices in research assessment. Such steps are beginning to increase the momentum toward more sophisticated and meaningful approaches to research evaluation that can now be built upon and adopted by all of the key constituencies involved."

The suggestion for RFOs is to consider the value and impact of all research outputs (including datasets and software) in addition to research publications and to consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice for the purpose of research assessment.

Volkswagen Foundation: *Randomization*⁵³

The small grant scheme *Experiment!* in the fields of natural and life sciences includes a randomization element. The anonymous grant applications (three pages long, neither applicant nor institution are known, no citations) are pre-assessment by program directors. The shortlist is then discussed by the jury who identifies about 15-20 applications to be funded. A similar number of proposals are selected by lot from the shortlist⁵⁴.

The Volkswagen Foundation first experimented with a lottery procedure for the "*Experiment!*"

⁵² <https://sfdora.org/>

⁵³ <https://www.volkswagenstiftung.de/en/news-press/funding-stories/give-chance-a-chance-%E2%80%93-a-lottery-decides-which-daring-research-ideas-receive-funding>

⁵⁴ http://www.wissenschaftsmanagement-online.de/system/files/downloads-wimoarticle/1710_WIMO_Risikobereite%20F%C3%B6rderung_Bischler_Soetbeer.pdf

selection procedure in autumn 2017. Out of the 594 applications received, 119 were shortlisted. They corresponded formally and conceptually to the given criteria and were presented to the eight-member jury for discussion – whose expert knowledge remains indispensable for the quality assurance in the final selection. At the meeting, the jury was able to agree on the direct approval of 17 applications, with one expert drawing his "wild card" – a kind of joker – and voted against the other jurors. In addition, the jury members excluded 34 applications that, despite the pre-selection, did not meet the required criteria. All remaining 85 applications went into the lottery drum. A total of 17 applications were drawn from the drum, analogous to the 17 previously selected by the jury. Among them were five duplications of outline proposals that had already been selected by the panel of experts – resulting in the bottom line of 29 approvals. The draw was decided completely impartially and free from unconscious bias, both in terms of research fields as well as factors such as age or gender. And since the number of possible allocations had been doubled in advance by the Foundation, the applications favored by the jury are being approved in the same measure as in previous years.⁵⁵

The motivation to include randomization into the peer review process was 1) to enhance the diversity of funded projects as not the entire disciplines can be covered by an interdisciplinary jury and 2) to avoid implicit bias towards women which may still be present despite the anonymous application procedure.⁵⁶

The Health Research Council of New Zealand also has some experience with lottery processes: in *Explorer grants*, all proposals that have been judged compatible with the scheme's intent are equally likely to receive funding. These proposals will be randomly ordered, with funding offered to the first ordered proposals up to the limit of the available budget. The funding recommendations will be presented to the HRC Council for approval.⁵⁷

The SRC stated that *"the goal is to fund equal, that is, if there are 50 percent woman applying for funds, 50 percent of the funding should go to women. The statistics are presented to the board, and if the goal isn't fulfilled, the failing scientific council has to present why and what kind of measures they will take to fulfill the goal in future calls for funding (that is, next years)."* As a consequence of such a process, it was decided by the board to conduct the Gender Equality Observations⁵⁸. The observations have in many ways affected the way panel meetings are managed at SRC.

Evaluation criteria⁵⁹

Scientific excellence/quality and innovation were the primary evaluation criteria that most RFOs have in place, followed by the quality of the team or the researcher. Less frequently mentioned was the impact or the feasibility of the project. Gender was hardly ever listed as a criterion with high impact during the evaluation. Exceptions are the FemPower Calls of the Vienna Business Agency, where several gender-sensitive criteria apply formally, the criteria used by Vinnova, different sub-criteria addressing gender in FFG (see above) and two gender relevant criteria in TACR Zéta program (gender equality in the team composition and quality of HR policy of the institution of the main applicant) (see below).

Especially quality-focused criteria often do not take gender aspects into account. The Swedish Research Council states: *"The quality of the proposed research is the most important criterion in project funding and person funding*

⁵⁵ <https://www.volkswagenstiftung.de/en/news-press/funding-stories/give-chance-a-chance-%E2%80%93-a-lottery-decides-which-daring-research-ideas-receive-funding>

⁵⁶ For further information see: <https://elifesciences.org/articles/32015>; <http://philsci-archive.pitt.edu/14238/>; <https://www.nature.com/articles/d41586-018-02743-2>; <https://www.rj.se/Forskningsnyheter/2018/bortom-peer-review/>; <https://www.natureindex.com/news-blog/luck-of-the-draw>; <http://www.efc.be/newsevents/spotlight/>

⁵⁷ <https://gateway.hrc.govt.nz/funding/researcher-initiated-proposals/2019-explorer-grants>

⁵⁸ <https://www.vr.se/download/18.f1bedda162d16aa53a2440f/1529480560435/A-Gender-Neutral-Process-Panels-2016-VR-2017.pdf>

⁵⁹ A separate task of the GEECCO Project is dedicated to the overview and assessment of gender criteria for funding programs. Therefore, the information included in this chapter has to be seen as base for the more detailed deliverable to follow.

programs for all scientific councils... Since most professors in Sweden are men, this specific criterion may hit female researchers. There may, of course, be a risk for conflict between the goal of equal funding between the two sexes and the criteria 'the quality of the researcher'. In some scientific fields, panels tend to stress the merits of the applicant while in others the focus lies on the quality of the proposed scientific project. While addressing the quality of the researcher or the team, gender aspects are often addressed indirectly (career breaks etc. are taken into account).

FFG: Gender criteria in funding programs

The following three general gender criteria should ensure equal opportunities:

- Gender aspect in the project content
- Gender balance in the project team
- Gender aspects with regard to commercialization

One example is the program COIN, for which it is indicated below how the gender criteria are specified.

COIN - Cooperation & Innovation

COIN aims to stimulate and increase the research and innovation activities of companies, especially SMEs. One of the goals is to trigger innovations that are new to the market or to companies (COIN "networks"). Another aim of COIN is to improve and strengthen the RTI structures of research institutions and Universities of Applied Sciences, also taking into account the core function towards companies (COIN "Aufbau" = capacity building).

The following gender relevant criteria are in place:

- In the section "Quality of the project" one sub-criterion is "Consideration of gender-specific topics":
 - o To what extent have gender-specific issues been considered in the planning?
 - o Quality of analysis of gender-specific issues
 - o Consideration in the methodological approach of the project

If individuals (groups) are the subject of research, or the research results concern humans, it needs a corresponding research design. Projects that do not require gender relevance with sufficient justification are rated here with the full number of points.

- In the section "Suitability of the applicant/project participant" one sub-criterion is "Composition of the project team in terms of gender mainstreaming":
 - o Does the organization of the project team contribute to increasing the gender balance?
 - o Does the project aim at improving the gender balance with regard to the customary gender ratio within its industry?

Vienna Business Agency: FemPower Calls

FemPower calls are dedicated at companies that hand in projects that fulfil at least one of the following criteria:

- Qualified female project lead and/or
- Projects with a major share of qualified female project members and/or
- Projects focusing on aspects of gender mainstreaming

In case more than one criterion is fulfilled, a preferential rule (in case of equal quality is in place).

In all other funding schemes, there is a general question on gender (and other societal aspects such as ecological aspects, social entrepreneurship).

NSERC: Chairs for Women in Science and Engineering Program (CWSE)

The application for the program *Chairs for Women in Science and Engineering Program (CWSE)* includes a section on the university's strategy towards women in science and engineering (including a communication and networking plan), in which the university should outline:

- the general nature and level of current activities related to women in science and engineering within the university and the region;
- the vision and anticipated evolution of these activities including plans for expansion,

enhancements and other changes;

- strategies to enhance the prestige, status and profile of the Chair for women in science and engineering within the university and the region;
- the positioning of the proposed Chair, and its role and importance with respect to the university's strategy to promote women in science and engineering;
- specific contributions to date by the university and/or the candidate in support of women in science and engineering.

The applicant has to develop an action plan that balances the activities between science promotion, research into factors and institutional mechanisms that influence the participation rates of women in science and engineering, as well as public advocacy and role-modelling.

Applications will be reviewed by a CWSE Selection Committee. Membership will be drawn from Canadian universities and colleges, foreign institutions, and industry and/or government laboratories.

The evaluation of the proposals will be done by the CWSE Selection Committee following a set of criteria that have equal value:

- the research achievements and stature of the candidate;
- the experience and/or the potential of the candidate to make a contribution to Chair-related issues;
- the merit and projected impact of the proposed strategies;
- the communication and networking plan to ensure maximum impact at both the regional and national level;
- the support of the host institution(s), including the integration of the Chair with existing Chair-related initiatives in the region;
- the cash and in-kind contributions secured from the supporting organization(s).

After the first 5 years, there is the possibility for a renewal application. The decision to renew a Chair for a second term will be based on the fourth year progress report, a proposed action plan for the second term, supporting documentation from the supporting organization(s) as well as a statement of impact from the host university. Renewal applications are evaluated by members of the CWSE Selection Committee and NSERC staff following criteria on the analogy of the original criteria but focused on the past chair-related period.

Vinnova: "Who, What, How"

Evaluation criteria used by Vinnova in the evaluation process should include gender aspects that reflect the "Who, What, How" focus areas. A minimum is that all applicants report on the gender balance in the project team when applying. Gender aspects should be part of the overall assessment of the application.

Gender sensitivity in the process depends on what the gender issue is for the program or call. In some of the programs, there is an equal distribution of female and male applicants but the project that they apply funding for has not considered the relevance of applying a sex/gender perspective in their project. If that is the case, the "What" focus area is most important. In other programs, the gender equality problem is the lack of women applying for funding (ICT for example) there the priority is to reach women in communication strategies, focus on areas that are female-dominated. There has been a lot of discussion on how to evaluate the gender criteria, e.g. the aspect "Who": Should the indicator be how the funding is distributed within the team and on what position the women and men are in the team?

The same can be asked for the aspect "What": To what is Vinnova giving out funding? Is it giving out funding (=tax-payers money) to R&I projects that contribute to gender equality? The aspect "How" has an external and an internal perspective: how does Vinnova and the jury evaluate the applications. The internal perspective includes the question if the pool of evaluators is gender-balanced, did they receive training on how to evaluate these criteria? The external perspective is focused on the question how the applicants are going to integrate the other gender aspects *Who* and *What*.

TACR: ZÉTA

Promoting gender equality is one of the explicit aims of the program ZÉTA. There are two gender-relevant criteria assessed by the Program board: 1) the proportion of men and women in the team (and gender of the person leading it) and 2) HR policy of the institution of the main applicant – the aspects related to gender equality and their level of advancement.

1) The proportion of men and women in the team is assessed according to the following matrix:

GENDER-MATRIX – tool for evaluation of gender equality in the research team in the ZETA program				
	Pillar 1	Pillar 2	Pillar 3	
Research team	Gender-various (under 35%)	Gender-balance (35% and more)	Female leadership	RECOMMENDED EXTRA POINTS
Project 1	YES	YES	YES	10
Project 2	YES	YES	no	7
Project 3	YES	no	YES	7
Project 4	YES	no	no	3
Project 5	no	no	YES	3
Project 6	no	no	no	0
Concerns:	F/M	F/M	F	

However, the evaluators are instructed not to proceed mechanically and to consider the distribution and type of activities and responsibilities in the team as well.

2) The quality of HR policy and management (of the main applicant institution) is included among the evaluation criteria. It is an optional criterion (the applicants can get extra points, but do not have to address this). Currently, **it is possible to get 10 points** (out of 391 at maximum) **if the main applicant (institution) fulfils at least 1 of the following conditions:**

1. it holds HR Excellence in Research Award
2. it holds the award "Company of the year: Equal Opportunities" (awarded by the NGO Gender Studies and relevant mainly to business companies, who are also eligible applicants of the program ZÉTA)
3. it implements Gender Equality Plan
4. it employs at least 2 of the following measures (which must be properly documented):
 - aspiration to receive the HR Excellence in Research Award⁶⁰ (endorsement of the 40 principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers and submission of the endorsement letter to the European Commission)
 - Gender Equality Plan in the phase of mapping and planning
 - operating of a childcare provision, children's group etc.
 - collection and evaluation of gender statistics
 - institution employs a person responsible for gender equality
 - institution has the ombudsman for employees
 - transparent rules of promotion/career growth (such as transparent distribution of institutional posts, transparent management of successive fixed-term contracts, equal treatment of persons with institutional posts and persons employed on projects etc.)

⁶⁰The HR Excellence in Research Award (HR Award) is an award that has been launched by the European Commission to support research institutions and funding organizations in aligning their human resource policies and practices with the principles set out in 1) the European Charter for Researchers and 2) Code of Conduct for Recruitment of Researchers. The principles of the Charter and Code specify the roles, responsibilities and entitlements of researchers as well as of employers of researchers. Non-discrimination and gender equality represent one part of these principles. The overarching aim is to develop an attractive, open and sustainable European labour market for researchers, giving individual researchers the same rights and obligations wherever they may work throughout the European Union. Currently, there are 469 institutions that have received the HR Excellence in Research Award. More information about this award (and also the list of its holders) can be found here: <https://euraxess.ec.europa.eu/jobs/hrs4r>

- taking into account the research breaks when assessing or extending contracts
- active support of young researchers (e.g. mentoring programs)
- other measure that can be considered as a sign of advanced level of human resource management (and are contributing to equal opportunities of men and women)

The criterion is evaluated by external experts in the area of human resources and gender equality.

FWF: Gender Criterion

Since 1.1.2019 FWF has included a gender criterion in all funding schemes:

All potential sex-specific and gender-related aspects in the planned project and its implementation must be described in a separate section. This aspect should be addressed briefly in the text even if the applicant believes the project does not raise any sex-specific and gender-related issues.

The specific formulation in the application documents is:

“Positioning and reflecting on the research approaches in the planned project in terms of sex-specific and gender-related issues, for instance: Is the research approach likely to produce sex-specific and gender-related findings? If so, what findings? How and where are these integrated into the research approach?” (For information on checking the relevance of sex-specific and gender-related issues to a project, see <https://www.fwf.ac.at/en/about-the-fwf/gender-issues/fix-the-knowledge/fix-the-knowledge-detail/>)

Gender-sensitive elements of the evaluation process and awareness-raising

In this section, gender-sensitive elements and awareness-raising measures in the selection process are stated (some examples, the list is not intended to be exhaustive):

- Training modules: NSERC requires reviewers to complete various training modules related to bias in peer review/equity as well as online learning module for applications; introduction workshops for new research councils (including information on bias) and sometimes (but not systematically) presentations on the topic; in Vinnova, evaluation groups, colleagues and applicants receive gender training before the evaluation process (see below).
- (Oral) briefings: WWFT briefs jury members at the beginning of a session about its aim to raise the share of female grantees; FWF starts the panel session with an introductory briefing about their goals, aims and gender mainstreaming strategy; in the Vienna Business Agency jury briefings address all gender-sensitive criteria; FFG also has jury briefings (online or in-person briefings)
- Instructions/guidelines for evaluators:
 - TACR: for ZÉTA evaluators (also see above);
 - WWTF: short written briefing of jury members and reviewers to take the academic age and career breaks into account. Apart from that, a preferential rule is in place in WWTF: If the jury has to decide between two proposals of equal quality, the proposal with the female PI is given preference.
 - FWF: at the first page of the evaluation letters there is an introductory remark that informs about the aims of the FWF concerning gender equality and fair objective processes;
 - FFG: the jury receives a briefing document in advance which points to the importance of the gender aspects. Apart from that, a set of slides also includes information on the motivation behind including the gender criteria and information on how to judge the proposals regarding these gender criteria. Usually, the experts are selected based on their professional quality and gender experts are not included explicitly (this does not apply to the gender-specific programs).
 - RIF: the evaluators are asked to answer to the question: “Do you believe that the Proposal under evaluation is gender-balanced, both in terms of its research content, as well as the key research personnel to be involved in its implementation?”. However, no score is associated to this question. It is only taken into account when proposals receive the same score (3rd ranking criterion) and only one can be funded.
- External reviewer for gender research projects: At the SRC, gender research projects can be funded and are processed (i.e. peer-reviewed and judged by a scientific council) in the main scientific fields. If these

experts find that they do not have enough expertise in gender research, they may ask for an external reviewer.

- Feedback loops: In ÖAW, unequal gender ratios resulting from evaluation processes need to be explained.

NSERC: Online Trainings for Selection Committees & Evaluation Groups

At NSERC selection committees (scholarships and fellowships) and evaluation groups (grants) are in place. Approximately a third of the membership changes each year because members are recruited for three-year terms. Selection committees are given the following instructions in the Selection Committee Guide: “Members are asked to complete the following training module: Bias in Peer Review, produced by CIHR⁶¹. Members are also encouraged to complete one of the Sex and Gender training modules produced by CIHR.”⁶² Evaluation groups do not yet have this requirement in their Peer Review Guide; however, they do recommend EDI training in their orientation sessions for members at the start of each competition process. The experience is that this is not an obstacle for getting reviewers onboard. It is not typically part of the recruitment process; rather, the requirement to complete the training modules is explained to members after they have already joined the committee. Member surveys have indicated an increased level of participation in terms of completing the required module over the last few years since the measure was implemented. The training is not time-consuming; the required module can be completed in approximately 20 minutes.

Vinnova: Evaluation groups

Vinnova has a pool of evaluators for all its calls and programs. Evaluators are selected from that pool or if specific competence is needed persons can be added to it, e.g. for gender-specific calls. There is a core of evaluators who have been in working for Vinnova over the last years but also new jurors are added regularly. These evaluators receive gender training in the form of a workshop or information session (Program managers (PMs) decide about the format). The PMs can perform the training themselves. In this case, the PMs are trained by the gender unit to train the evaluators. A manual on how to perform gender-equal evaluation is available and distributed to all jurors.

The evaluators are trained to understand the focus areas Who, What and How (see above p. 22) and how they are evaluated. How the gender aspects are weighted differs between programs that are in place, in some, there is a bonus (higher evaluation). Usually, it is not a knock-out criterion. Competence centres which run for a long time have the specific requirement that gender equality is constituted (i.e. it is a condition for funding).

After a call, there is an internal reflection on what worked and what did not work. Examples from the past showed that male applicants are more frequent, male applicants apply for a higher amount of money because they come from a larger SME. As a consequence the applications were not comparable, so the evaluation was separated into smaller and larger SMEs.

After every call, basic statistics are created where for example it is checked if there were more or less women applying and funded. This routine should always be seen together with the question “What could we do better next time?” One experience that has been made in this regard is that including more requirements in the call text (e.g. regarding internationalization) seems to reduce the share of female applicants.

⁶¹ <http://www.cihr-irsc.gc.ca/lms/e/bias/>










⁶² <http://www.cihr-irsc-igh-isfh.ca/>

Interdependence with RPOs

One pillar to foster GM at RFOs and RPOs is the active collaboration between them. This was also expressed at one of the consortium meetings by a member of the Advisory Board of the GEECCO project. The recommendation to RFOs and RPOs was to set up structures which facilitate collaboration with RFOs and to liaise with one another. As one important aspect of the GEECCO project is the interconnectedness between RPOs and RFOs, the participating RFOs were asked to comment on their practices in this area. Surprisingly, this section was filled in sparsely.

Formal representation of RPOs in RFOs

Most of the RFOs have formal representatives in their governance structures as advisory boards, scientific boards or councils, see the overview in Table 5:

	Name of RFO	Formal representation of RPOs in...
	Academy of Finland	no
	Austria Wirtschafts-Service GmbH	n.a.
	Austrian Academy of Sciences	<ul style="list-style-type: none"> • Members of the presiding committee/chairs of juries
	Austrian Climate and Energy Fund	No, but are member of program-related boards, juries and panels as well as in expert groups (e.g. for the development of technology roadmaps)
	Austrian Research Promotion Agency	<ul style="list-style-type: none"> • Governing board
	Austrian Science Fund	<ul style="list-style-type: none"> • Board members • Members of delegates
	Einstein Foundation Berlin	<ul style="list-style-type: none"> • Berlin Board⁶³ (RPO representatives make up the board) • Foundation Council⁶⁴ (one RPO representative is full member) • Advisory Board (four from up to 13 members of the board are the Berlin university's heads of the respective boards of trustees)
	Estonian Research Council	<ul style="list-style-type: none"> • Council • Evaluation Committee⁶⁵
	Israeli Ministry of Science	<ul style="list-style-type: none"> • Ministry Council for the Advancement of Women • Evaluators for research calls

⁶³ The Berlin Board assesses those applications that the Research Board has evaluated positively with regard to their local/regional effects.

⁶⁴ The Foundation Council is acting as a board of supervisors.

⁶⁵ Decides over research grants



Natural Sciences and Engineering Research Council	• Council ⁶⁶
Netherlands Organisations for Scientific Research	n.a.
Research & Innovation Foundation	• Board (at least one member is affiliated with an RPO)
Swedish Research Council	• Board
Swiss National Science Foundation	• Research Council (comes from RPOs, but do not represent them) ⁶⁷
Technology Agency of Czech Republic	• Scientific board ⁶⁸
Vienna Business Agency	n.a.
Vienna Science Fund	• Advisory board • Board of directors
Vinnova	• Agency steering board
Volkswagen Foundation	• Board of Trustees (out of 14 members, 60% are scientists)

Table 5: Formal representation of RPOs in the participating RFOs

Active policy dialogue versus informal communication

When it comes to the questions if the RFOs have an active policy dialogue between their organization and RPOs with regard to GM, the situation is that clear policy dialogues with regard to GM are the exception. Moreover, those RFOs which did state that an active policy dialogue is in place with RPOs are relatively advanced also with their structures regarding GM (e.g. strategies, goals, responsibilities, etc.). Some of the RFOs enter into a dialogue with RPOs on GM on occasion or organize events or focus groups for an exchange between RFOs and RPOs. Some examples are given below:

- Events
 - business meet-up's (also for female founders), call kick-off's with business testimonials, consultations, regular focus groups for informal feedback: in Vienna Business Agency, there are information events (women's networks) in order to increase the share of female applicants. Therefore, VBA is also trying to collaborate more and more with knowledge transfer centers. The idea is to foster exchange between these centers and VBA in order to reach a higher number of interested applicants. The focus groups are in place in order to collect feedback in the form of everyday experiences. Selected companies are invited to discuss what works well and where there is potential for improvement

⁶⁶ NSERC's Council is composed of the President and up to 18 other members appointed from the private and public sectors. The roles and responsibilities of the Council are set out in the NSERC Act and By-laws. The Council collectively represents the academic research and private sector R&D communities in natural sciences and engineering, as well as other stakeholder groups in the Canadian innovation system. The Council's main responsibilities are to set the strategy and high level policies for NSERC, and to review and evaluate performance.

⁶⁷ Federalist structure of Switzerland makes it complicated. RPOs are normally not national but cantonal organizations and very autonomous.

⁶⁸ is the policy-making authority

- talks about NSERC's EDI initiatives during university visits, engagement visits, and society meetings (NSERC)
- capacity building activities (training, info days, webinars) (Research & Innovation Foundation)
- annual platform for women in research and entrepreneurship (TACR)
- networking (FFG)
- Visits: university visits, engagement visits (NSERC)
- Trainings (Vinnova)

Some examples are elaborated below:

Vinnova: Training sessions for RPOs

Vinnova offers training sessions for RPOs (researchers and representatives). "What the applicants need to know is how to integrate gender aspects into our research and projects." The applicants are informed about the Who, What and How scheme described above (p. 22) and how it is evaluated. Apart from that, some positive examples of projects that have handled the aspects in proper ways are shown. The situation in Sweden, that all Governmental agencies have a governmental assignment to foster gender mainstreaming leads to the fact that it is also somewhat generic; all actors in the whole public sector have the same goals. In 2017 all universities and RPOs have received these assignments that they have to gender mainstream their organizations. In order to work towards the same direction, the RPOs need to understand which aims and measures are in place at Vinnova, so the RPOs ideally can learn from the experiences made by other actors, who have been dealing with gender mainstreaming for several years. The framing that all organizations have the same goals also implies that the macro goals have to be broken down to the organizations and develop action plans accordingly. That all these actors have this requirement in common, can be seen as a positive sign in form of a common ground to start from, which makes it easier to communicate and implement necessary changes, even if it is very specific for each organization.

FWF: Consultation process initiated by BMBWF - Department of Gender Mainstreaming and Diversity Management

In 2014, a consultation process was set up by the former ministry, analogous to the conference Gender in Higher Education which was held in Vienna in that year. Research agencies and universities were invited to the ministry twice per year. A national committee was established. This routine was continued for some time also after the conference but came to a standstill in recent years.

Einstein Foundation: Active policy dialogue and informal communication

Questions of gender equality are discussed in all governing bodies and on occasion by members of the eligible RPOs with members of the executive board as an active policy dialogue. While the goal of promoting women in research, especially in those fields where they are still heavily underrepresented, is widely agreed upon, concrete measures are usually contested by at least one of the parties involved in the discussion.

In terms of informal communication, the head office and the contact persons at the eligible RPOs discuss the topic regularly and fathom different approaches in order to increase the percentage of female applicants. The director of research affairs regularly takes part in a workshop of the program (ProFiL) established by the Berlin universities to promote female researchers on their way to becoming professors.

However, informal communication seems to be the more frequent mode of exchange on GM between RFOs and RPOs. This is not surprising; the importance of GM is not always undoubted and therefore informal communication is often the only remaining means of bringing it up in an exchange between institutions. Also, informal communication can be done easily without the need for a set framework like networks or boards which a) need to be coordinated in some way and b) often also are charged with other issues so that GM comes out on the short end.

Incentives

Hardly any RFO provides incentives to foster the GM activities between RFOs and RPOs in the narrower sense (i.e. monetary incentives). If incentive is defined more broadly, also initiatives like the **Athena SWAN charter**

or the HR Excellence in Research Award⁶⁰ could be considered here. One example with an already implemented monetary incentive action was stated by WWTF, see example below:

WWTF: Supplementing measure for gender mainstreaming activities

WWTF established an extra incentive for the person funding scheme Vienna Research Group Leaders for Young Investigators (VRG) in 2014. In case that a female researcher is awarded a VRG grant, the institution of the successful applicant will receive up to additional 50.000 € which they have to use for a gender mainstreaming support measure of the institution itself (not the VRG project). In this way, WWTF sets an additional incentive for the institution to apply with a female young researcher. The application for this grant is a “tandem” between the Viennese institution and the candidate (i.e. the Vienna institution advertises the position and searches for candidates).

Conclusion

This report on best practice examples of RFOs with regard to gender mainstreaming covers four areas of high interest and relevance in research funding: the internal organizational sphere, the design and implementation of funding programs, the selection process and the interconnectedness with RPOs, i.e. the most relevant stakeholders for RFOs.

It consists of a comprising collection of examples of great diversity. It has to be kept in mind that the environment and preconditions of all RFOs that participated in this analysis vary a lot. The influencing factors are innumerable: besides characteristics covered in this report such as legal status (private/public), size (in terms of staff as well as budget), type of research funded (basic/applied) and scientific fields, many more aspects, often on a much more general level, have an influence on how RFOs deal with gender mainstreaming and how far they have come in this process. Such aspects are the current political situations in which the RFOs are embedded and closely connected to that the duration since when gender mainstreaming is a topic which is worked on in the organization, and not least the engagement for gender mainstreaming of key persons in the staff or close environment of an RFO. Therefore, the individual examples listed differ respectively. Some will be more useful for different RFOs than for others, but the diversity and range of examples should provide fruitful insights for all interested readers.

Besides the collection of existing examples on how RFOs can gender mainstream their funding procedures, some general observations could be made as a result of this analysis:

- 1.) Gender mainstreaming in RFOs focussing on applied research and in RFOs focussing on basic research faces different challenges. While in the first case it might be easier to relate to gender mainstreaming in the content (as the research is applied and humans are likely to be involved) the challenge there is that companies are often involved, and the awareness of GM is generally lower there. In RFOs focussing on basic research, the opposite is the case: the awareness of GM in academia is usually present, but it can be more challenging to see the relevance of gender mainstreaming in the research content.
- 2.) The political background seems to be crucial precondition for a comprising inclusion of gender mainstreaming in the funding cycle. This seems to be the case for the Northern countries such as Sweden (with the examples Vinnova, SRC). On the one hand, the direct influence of the governance plays a role, such as in the situation in Sweden, where all Governmental agencies have a governmental assignment to foster gender mainstreaming. On the other hand, there are also more general aspects that contribute to the acceptance of the topic in society. Again the Swedish case is a good example here, where gender mainstreaming has been on the agenda of governments since the mid 1990ies and has also been institutionalized with and within governmental offices, policies and ministries.
If gender mainstreaming is a topic which is considered as relevant from the highest political level “downwards”, the premises are good that it can be implemented properly in all institutions and at all levels.
- 3.) That this positively influences the development and the progress of gender mainstreaming in RFOs, is only logical. Besides the “support”- aspect of the political background, there is also the “time”- aspect: gender mainstreaming takes time. This observation is also not a very surprising one, but it has to be kept in mind when assessing the status of gender mainstreaming in different RFOs. The more time that has passed since the beginning of gender mainstreaming office, the further the progress (in terms of institutionalization as well as implemented actions and measures).
- 4.) Directly linked to that is the observation that implementing gender mainstreaming measures is a matter of learning by doing, or even trial and error. As there are so many facets to this matter, it can be noted that many – well-conceived – measures are implemented even if they are not uncontested. It can be stated that is an important act to start engaging in gender mainstreaming for an RFO, even if “the perfect” actions is not (yet) found. This also clearly has to do with the high variety of RFOs and that there is no one-fits-all solution which can be easily transferred between different institutions.
- 5.) Gender mainstreaming is a permanent process of trying and adapting ideas and instruments. Apart from the above-mentioned experimentation with different measures, it is also the requirements and challenges that change. Gender mainstreaming today comprises many more aspects than it did 20 years ago, and the same development will be true in the future. RFOs which are beginning to engage in GM have to be conscious about this fact.

Annex 1 – Questionnaire

Survey - EU project “GEECCO – Gender Equality in Engineering through Communication and Commitment”

Please find the informed consent information sheet and informed consent form on separate pages

The EU Horizon 2020 project aims to establish tailor-made gender quality plans in four European Research Performing Organizations (RPOs: universities, non-university research institutions) and implement gender dimensions in research programs in two European Research Funding Organizations (RFOs) in the STEM field (Science, Technology, Engineering and Mathematics), WWTF (Vienna Science and Technology Fund) and TACR (Technology Agency of the Czech Republic). One work package is dedicated to foster the knowledge exchange among RFOs on their common practice in regard to gender mainstreaming (GM) and gender quality. Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels. It is a way to make women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and societal spheres so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal is to achieve gender equality (Source: <http://eige.europa.eu/gender-mainstreaming/concepts-and-definitions>).

For this purpose, the following short qualitative questionnaire was developed.

We would be very thankful if you share your experience with gender equality actions with us to foster learning from each other. In reverse, we will share with you the main findings of our survey.

To allow for an accurate interpretation of your input, please describe in detail.

Thank you very much for your participation! This is a really important help for us!

Contact WWTF: Elisabeth Nagl (elisabeth.nagl@wwtf.at, T: 01-402 3143 19)

Name of RFO:	
Contact person (name, contact details)	
Short task description of contact person (For how long have you been responsible for gender mainstreaming activities in your organization? responsibilities, management level, ...)	

General characteristics of RFO	
Legal status	
Geographical scale	
Main scientific fields	
Type of research funding (basic research, applied research, innovation, mix..)	
Size (FTE)	
Male/female ratio of employees	
Male/female ratio at management level	
Male/ female ratio of applicants and grantees on average (If available)	
Male/ female ratio of applicants and grantees in different STEM fields (If available)	

1.) Gender mainstreaming (GM) in the INTERNAL sphere		
1.1)	Is GM a topic that is addressed in the objectives/vision/mission of your organization? If yes, how? Please provide links to documents/ statements.	
1.2)	Is a strategy on GM activities in place in your RFO? Since when? Please describe the most relevant developments during the past five years and the success of implementing the strategy.	-
1.3)	Is a share of the budget of your RFO dedicated to GM measures? (Please provide examples)	
1.4)	Do you have specific organizational responsibilities for GM in your structures? Please describe them. (e.g. specific organizational unit, dedicated person,...)	
1.5)	How is GM addressed in your governance structures? Do you have a policy for shares of women in your governance structure? (e.g. governance bodies, boards,...)	
1.6)	Please state up to 5 GM support measures/measures for career development for employees in your organization: (e.g. staff recruitment, PR, capacity building).	1.
1.7)	What legal prerequisites/ national platforms/ policies do affect your organization with regard to GM? Which ones are obligatory, which ones voluntary?	
1.8)	Which qualitative or quantitative goals are set in your RFO with regard to GM? Please describe the degree of goal achievement.	

2.) FUNDING ACTIVITIES concerning Gender mainstreaming (GM)		
2.1)	What are the main organizational mechanisms to develop & decide on new funding programs? Does GM play a role? In which ways? (Provide max. two examples)	
2.2)	Please name up to 5 general/ thematic funding programs of your organization that also address GM. (please also provide links)	1.
2.3)	What kind of funding programs do you have that specifically address GM? (e.g. programs exclusively for women, ...)	
2.4)	Do you fund gender research?	
2.5)	Does your organization set value upon the implementation of gender aspects in the content of the proposed projects also in general funding programs? (e.g. user groups, patient cohorts, ...)	
2.6)	Which gender-sensitive grant agreement conditions or requirements aiming to promote gender equality are in use? (rules for maternity leave in the projects evaluation and projects solution, acknowledge the work-life balance expenditure as an eligible cost, positive consideration of the applicants holding GEP, gender quotas or targets etc.)	

3.) Gender Mainstreaming (GM) in the SELECTION PROCESS		
3.1)	What kind of evaluation instruments/ methods do you use in your two most relevant funding programs? If applicable, please describe one person funding and one project funding program. <small>(jury, peer review,...)</small>	
3.2)	What are the most important evaluation criteria in the funding schemes stated above?	
3.3)	Which elements of the evaluation process (incl. criteria) are specifically gender-sensitive? How do you address this in your selection process?	
3.4)	How do you select your jury members/ evaluators? Which rules do you apply? Is a quota in place? <small>Please provide actual numbers.</small>	
3.5)	Do you apply specific measures/ processes/ mechanisms to raise awareness of gender mainstreaming in your evaluation processes? <small>(e.g. training for evaluators, rules for evaluators regarding decision making at equal points, etc.)</small>	
3.6)	How are career-breaks/ academic age/ non-traditional career paths etc. taken into account in your evaluation processes?	

4.) INTERCONNECTEDNESS with RPOs with regard to gender mainstreaming		
4.1)	Do RPO representatives have roles as stakeholders in your organizational structure? If yes, please describe. If not, why? <small>(e.g. in boards)</small>	
4.2)	Is there an active policy dialogue between your organization and RPOs with regard to GM? If yes, please describe what works well and where there is room for improvement? If not, why?	
4.3)	Is there any kind of informal communication between your RFO and RPOs with regard to GM? Please describe.	
4.4)	Are there incentives by your RFO for increasing GM activities of the RPOs?	

Further information	
Further useful links/material Please add informative links here and do not hesitate to send us additional material	
Further comments Please state here additional useful information and comments	