Gender Equality Plan (GEP)

About the GEP
The VTI GEP provides an outline of the overall work on gender equality in the VTI. The GEP shows how the VTI meets the European Commission GEP eligibility criterion in research and innovation: the four mandatory process-related requirements: public document, dedicated resources, data collection and monitoring, and training. The VTI's work on gender equality is pursued based on national gender equality targets. Since they comply with the European Commission's five recommended thematic areas, the VTI's GEP also satisfies these recommendations with regard to its content.

The GEP is an official document, published on the website VTI.se and signed by the Director General.

Introduction

The VTI's work on gender equality is based on national gender equality targets and gender mainstreaming, which is the Swedish government's primary strategy for achieving these targets. The general target of Swedish gender equality policy is for women and men to have the same power to shape society and their own lives. Additionally, there are six sub-targets:

1. equal distribution of power and influence
2. economic gender equality
3. gender-equal educational opportunities
4. equal division of unpaid work in the home and care work
5. gender-equal health
6. the end of violence against women by men

A further basis for the VTI's work on gender equality is the sector-specific, transport policy gender equality target that the transport system be equal, that is to say that women's and men's transport needs are regarded as of equal importance.

Gender mainstreaming as a strategy means that the work of promoting gender equality must be integrated into established organisations, policy documents and work processes, which characterises the VTI's work on gender equality.

The VTI's work on gender equality aims to promote gender equality within the institute, the transport sector, and in society based on national targets.

Operation, organisation and resources

The VTI's work on gender equality is led by the DG and management team. In accordance with gender mainstreaming as a method, the work on gender equality is integrated into regular operational systems, policy documents and functions with corresponding staff and resources.

During the autumn of 2020, the VTI adopted multi-year strategic initiatives to promote gender equality internally in the VTI as well as for commissioned services with corresponding annual activity plans. These are included in the 2021 and 2022 operations.

Monitoring

The VTI has developed indicators and collected disaggregated data to survey how well the VTI is contributing to the transport policy gender equality target and other gender equality targets. The purpose of this surveying is to identify areas the VTI specifically needs to prioritise in its future work on gender equality.

There will be annual follow-ups on the work on gender equality in line with current routines and processes for the institute's operational follow-ups. A new and more developed survey will serve as a significant contribution to these follow-ups and will be completed in 2024.

The following section outlines the survey carried out in 2021, as well as the areas identified and prioritised measures for 2022.

Gender and gender equality in the VTI's research activities

Surveying

The VTI's research and development is registered in a project database with each project being divided in percentage terms with regard to relevance to various transport policy targets and where the transport policy gender equality target is included. Generally, projects are divided into multiple targets and it is therefore unusual to see a very high percentage for a specific target in an individual project.

Following a review of the VTI's projects in the project database, at least 20-percent relevance for the gender equality target is judged to represent projects with a focus on gender equality. In April 2021, there were 18 ongoing projects in the VTI which, according to the project database, had a transport policy gender equality relevance of 20 percent or higher, which is listed in Table 1.

Project title	**Budget (SEK thousand)**	**Sponsor**	**Relevance (%)**
Families' everyday mobility in socially vulnerable areas: conditions, negotiations and challenges for sustainable urbanism	1,889	Formas	20
The transport system and mobility of disabled people.	600	The Swedish Transport Administration	20
Reformed road taxation for light vehicles and its distributive effects.	3,000	The Swedish Transport Administration	30
Fair access for rural areas and less built-up areas through mobility as a service and e-commerce (pilot study).	93	The Swedish Transport Administration	20

How does increased accessibility with regard to investments in the transport system affect gender equality in the labour market?	2,628	The Swedish Transport Administration	100
Follow-up on the state of pavements/footpaths in winter	117	The City of Stockholm	25
The development of methods for impact evaluations for Swedish transport planning: a transdisciplinary approach	3,600	Formas	20
Modelling Incentive Schemes for Sustainable Urban Mobility	1,190	K2	20
Tomorrow's green practitioners? Ecopreneurship and social entrepreneurship in a circular economy.	2,271	Formas	20
Open access virtual testing protocols for enhanced road user safety (VIRTUAL)	11,707	EU	50
VIRTUAL WP2 crash test development	3,822	EU	50
Handbook: Gender equality impact assessments in English	120	K2	100
STAPLE - SiTe Automation Practical Learning	655	CEDR	20
Transport Innovation Gender Observatory, TINNGO	3,807	EU	33
Electric mobility in smaller towns and rural areas – a knowledge summary	315	Swedish Energy Agency	20
Mistra programme's Sustainable Accessibility and Mobility Services (SAMS phase 1) WP4. User perspectives and institutional conditions.	5,960	Mistra	25
Mistra programme's Sustainable Accessibility and Mobility Services (SAMS phase 2). WP Citizens	6,059	Mistra	20
Mistra programme's Sustainable Accessibility and Mobility Services (SAMS phase 2). WP Public Actors	5,960	Mistra	30

Table 1. Ongoing projects with transport policy equality relevance.

Table 1 shows that the VTI's research and development with a gender-equality emphasis is pursued primarily within social and behavioural science. This research and development can be divided into two main areas: one where gender along with other factors such as age, overseas background, disability, geographic and socioeconomic conditions are studied; the other where gender and gender equality constitutes the primary study focus. Significant research with a primary focus on gender equality in engineering and natural sciences is primarily carried out in the area of crash safety.

Actions

Increased focus on gender and gender equality in strategic research and development efforts

Multi-year strategic research and development efforts on "Fair and equal accessibility" have provided an increased gender and gender equality focus in the 2021 and 2022 operations plans with their corresponding annual activity plans:

To achieve:

- The VTI shall strengthen the research area for a fair, *gender-equal* and equal transport system linked to the transport policy target of accessibility for all citizens and in the entire country and the *target of the transport system being gender-equal, that is to say that women's and men's transport needs are of equal importance.*
- To strengthen the area, the VTI shall step up its dialogue with potential clients and its participation in international co-operation within the EU and in important arenas such as ITF-OECD. Internal activities aimed at providing a greater impact for *gender*

equality and equality perspectives within different research areas shall be carried out and the capacity for research within the area shall increase by way of recruitment and the utilisation of existing networks."

Skills development

Planning will continue through 2022 in a workshop for research leads and research and development staff to integrate gender equality perspectives into commissioned services. The workshop will include lectures from researchers with experience of integrating gender equality perspectives within social and behavioural sciences as well as in natural and engineering sciences. Lectures will also be held by sponsors concerning demands and requirements in applications to integrate a gender equality perspective into projects. Assistance from the transport authorities is included in the planning.

Operational support

In connection with the workshop, the VTI's research funding support (FFS) will be launched, offering training and knowledge support for integrating gender equality perspectives into projects and in work with applications.

Work to promote gender equality within the VTI

The following section outlines the outcome of the latest survey from 2021, as well as the actions identified which the VTI needs to work on both to further promote gender equality within the institute, and to increase gender equality in society.

Targets, indicators and data

Surveying has been structured based on the overall gender equality target and the six gender equality policy sub-targets. Operations-adjusted indicators, which have been studied with the help of gendered data for the years 2020 and 2021, have been used in Table 3.

Overall targets	**Operations-adjusted indicators**
The target of gender equality policy is for women and men to have the same power to shape society and their own lives.	Horizontal gender equality: • Gender distribution by organisational units • Gender distribution by occupational category
Sub-targets	
1. An equal distribution of power and influence. Women and men should have the same rights and opportunities to be active citizens and shape the conditions for decision-making in all sectors of society.	Vertical gender equality: *Formal* • Managerial positions • Scientific leadership *Informal* • Participation and contributory influence (employee surveys)
2. Economic gender equality. Women and men should have the same opportunities and conditions with regard to paid work that provides life-long financial independence.	• Wages (statutory wage survey)
3. Gender-equal educational opportunities. Women and men, girls and boys should all have the same opportunities and conditions in terms of education, study pathways and personal development.	• Postgraduate studies
4. Equal division of unpaid work in the home and care work Women and men should take the same responsibility for work in the home and have opportunities to provide and receive care on the same terms.	• Parental leave
5. Gender-equal health. Women and men, girls and boys should have the same conditions for enjoying good health and be offered care and treatment on the same terms.	• Sickness rates • Preventative and post-treatment occupational healthcare • Work-related exhaustion and rate of work (employee surveys)
6. The end of violence against women by men. Women and men, boys and girls should have the same rights and opportunities to bodily integrity.	• Discrimination and harassment (employee survey)

Table 3. Gender equality targets and operations-adjusted indicators.

The 40/60 distribution has been used as a criterion for equal gender distribution; i.e. at least 40 percent representation of either sex. If a group is made up of more than 60 percent women, it is female dominated and if it is made up of more than 60 percent men, it is male dominated. This is the definition used for equal gender distribution by Statistics Sweden and in other public

contexts. However, it is important to consider that although a distribution of 33/66 is very close to 40/60, there are double as many people of the opposite sex.

Tables of gender distribution are referred to in parentheses and are found in Appendix 1. Gender distributions that meet the criteria for equal gender distribution have been marked in green. Gender distributions that do not meet the criteria, but which do not fall below a 30/70 distribution have been marked in yellow. Gender distributions falling below 30/70 have been marked in red.

Overall targets

The horizontal gender equality analysis (Tables 4 to 7) shows that the VTI reflects the gendered labour market which holds sway in wider society where women and men largely work in different professions and fields, and where an important partial explanation for this is down to gender-based educational choices earlier in life.

Within research and development (core operations), the VTI shows an equal gender distribution for disputed staff at an aggregated level. If a horizontal analysis is made with divisions in the natural and engineering sciences versus the social and behavioural sciences, an unequal gender distribution is revealed. Men dominate within the natural and engineering sciences with women dominating in the social and behavioural sciences. Non-disputed staff (research engineers, research assistants, doctoral students) show the same pattern and at an aggregated level do no meet the criteria for an equal gender distribution, due primarily to a predominance of people active in the technical sciences (Table 4). Organisationally, there is a mixed picture where certain research and development sections have an equal gender distribution and others do not (Table 5). The general explanation for this picture is what mix of gender-coded occupational categories there are in the respective units.

For joint functions (support activities), the analysis looks even worse since the VTI is a small institute with many functions that only are represented by a single employee. However, for the larger occupational categories it is also possible to see tendencies towards patterns where the VTI is in line with the gendered labour market, with women dominating in communication and support functions in accounting (Table 6). A similar pattern can also be seen at the unit level where, for example, women dominate in HR while men dominate in IT (Table 7).

Actions

- The VTI should, in appropriate management documents (policy, VP etc.), consider introducing a target of an equal gender distribution of 40/60 for distinct types of work/different categories of employees. This also includes postgraduate students (see sub-target 3).
- Recruitment constitutes an important area for action in order to achieve targets for an equal gender distribution. The VTI should adopt more active measures in this area.

Sub-target 1. Equal distribution of power and influence

For all managers put together, the VTI shows an equal gender distribution of 40 percent women (Table 8), which is in line with the national average, but lower compared with the government where the distribution is 50/50. Gender distribution for all managers can be placed in relation to the gender distribution for all staff in the VTI, which is 45/55, with a lesser predominance of men.

Managers in research and development show a particularly equal gender distribution at around 50/50, which can be compared with the nation as a whole where 30 percent are women in this category. The VTI's management group also shows a particularly equal gender distribution.

Scientific leadership (research leads, professors) achieves equal gender distribution, with 60-percent representation of women (Table 9). For leading researchers in the form of lecturers, there is an over-representation of women such that the criterion for gender representation is not met. Taken together, this shows that in a positive manner the VTI runs against the gendered patterns present in academia where more men than women reach the highest positions regarding scientific leadership. Unlike in academia, the VTI achieves an equal gender distribution for professors, which is very uncommon.

In terms of informal power (influence), the VTI's latest employee survey in 2020 shows that men as well as women achieve over the recommended target value for participation and are also on the same level, i.e. no gender differences were shown.

Actions

- As with an equal gender distribution in the different occupational categories, the VTI should, in appropriate management documents (policy, VP etc.), consider introducing a target of an equal gender distribution of 40/60 for different managerial positions and for positions relating to scientific leadership.
- Recruitment, promotion and career development are important areas where action needs to be taken. The VTI should adopt more active

Sub-target 2. Economic gender equality

Information from the 2020 wage review, which included 144 employees, 79 men and 65 women, shows that on average women had a 0.2% higher wage than men in the VTI. However, this indication of a very small pay gap between men and women is unreliable since the entire workforce of around 220 employees is not included in this information for various reasons. The results of the VTI's wage survey (2020) showed that there are no statistically unexplained differences in wages relating to gender without an objective basis for equal and equivalent work.

Actions

- Examine the possibility of data that covers the entire staffing body to analyse the pay gap aggregated at the institutional level.

Sub-target 3. Gender-equal educational opportunities

The VTI's participation in and influence on education is primarily in co-operation with universities and colleges in the form of postgraduate students. A large majority of the VTI's research students pursue their studies in the natural and engineering sciences (Table 4). Within this group, there is a 30-percent representation of women, which is in line with corresponding groups in universities more generally. For the smaller group of research students in the social and behavioural sciences, women make up 57 percent, which means that the criterion for equal gender distribution has been met. For corresponding groups in universities, the distribution is 50/50.

Research students are a strategic group that will eventually need to reach a more equal gender distribution of disputed research and development staff in the natural and engineering sciences in the VTI.

Actions

- The VTI should promote getting more women into research studies in the natural and engineering sciences at the VTI.
- Otherwise, the recommendations are the same as for the general target.

Sub-target 4. Equal division of unpaid work in the home and care work

Gender-equal parenthood is an important factor for achieving a more gender-equal labour market and, in recent years has increasingly been singled out as an important employer issue.

At the VTI, there were 39 women and 33 men who took parental leave in 2020. On average, women took 276 hours of parental leave, and men 203 hours. On average, each man took 42 percent of parental leave, and each women took 62 percent, i.e. equal gender distribution was achieved. The data which the VTI was able to use in this survey did not discern between different types of parental allowance, which makes a comparison with wider society more difficult. Nationally, in terms of parental allowance, men take 30 percent of the time and 39 percent of the temporary parental allowance (VAB). One conclusion is that employees at the VTI experience a more gender-equal parenthood in terms of the division of parental leave, compared to the nation in general, which the VTI sees as very positive.

Actions

- The VTI should consider whether good conditions for combining parenthood and work should be included in the VTI's strategic aim of being an attractive employer and in other relevant policies.
- The VTI should be an active and progressive force in pushing the boundaries of how work with a gender-equal parenthood can be pursued by an employer.

Sub-target 5. Gender-equal health

At the VTI, sick leave in 2020 was around 3 percent for women and 3.5 percent for men when calculated as a share of available working hours. This deviates significantly from the societal pattern where women have more sick leave than men. Regarding contributions from the VTI's corporate healthcare provider in 2020, women accounted for 58 percent of the costs and men for 42 percent.

The VTI's employee survey in 2020 shows gender differences in work-related exhaustion between men and women. Men sit at 30, which is the target value (below the target value is an acceptable level), while women sit at just over 40. Women and men are, however, at the same value regarding their rate of work (how much work needs to be done in relation to the time available), and there were no other issues in the employee survey whereby any form of work-load perspective is able to explain the reason for the high level of work-related exhaustion

among female staff. A hypothetical explanation may be women's higher share of unpaid work in the home and care work. This negatively affects opportunities for recuperation after work. In terms of research and development activities, the VTI works in a sector characterised by "unlimited work" with many official trips and returning home late, many deadlines and research activities (e.g. writing articles) most of which takes place in the evenings and at weekends. This means less time left for recuperation as well as work in the home and care work. This is a complex issue and needs to be investigated further.

Actions

- The VTI should monitor how costs for occupational healthcare are split between the sexes from a gender equality perspective.
- The VTI should take more preventative, active measures regarding the work-life balance.
- The VTI should further investigate the causes of women not meeting the target value for work-related exhaustion.

Sub-target 6. The end of violence against women by men

In the VTI's employee survey in 2020, four people stated that they had been subject to some form of discrimination or harassment in the last year. The number is too low for the VTI to be able to share further information concerning the grounds for discrimination, such as gender, that these people may have provided in the survey.
Generally, for preventative work as well as work on individual cases, it is important that the VTI considers gender-based risk factors that may occur in the workplace. One such known risk factor comes from single-sex work environments, which are present at the VTI. For example, there is a higher risk of women being subject to sexual harassment in male-dominated environments than in gender-balanced environments. Therefore, aiming to create more gender-balanced environments is also a way of preventing workplace bullying and harassment on the basis of gender.

Actions

- In cases where gender is relevant, the VTI should pay attention to gender-based risk factors regarding harassment and workplace bullying.
- Preventatively, the VTI should aim to create gender-balanced work environments (see also recommendations for general targets).

Skills development

In accordance with the 2021 operations plan – and as a step in developing the gender equality perspective in the VTI's management – the VTI has decided that all managers in the institute should attend the Swedish Gender Equality Agency's introductory course in gender mainstreaming for managers in government agencies over the course of the year. However, places on the course have proven to be very limited, with only two representatives from each agency per course which means a total of four people over the course of the year. The VTI has enquired about a training course just for the VTI, but such an individual solution has fallen on deaf ears. Managers have therefore been referred to a one-hour training course on gender mainstreaming also organised by the Gender Equality Agency.

A single co-ordinated and solid training effort for all managers in the VTI is an important strategy to build understanding of and momentum in the VTI's gender equality work with regard to both internal work and commissioned services.

Director General Tomas Svensson has made a decision on this matter. DG Staff Director, as well as Deputy Director General, Åsa Aretun has acted as the rapporteur.

For the VTI

Tomas Svensson
Director General

Appendix 1. Tables of internal gender equality

Table 4. Gender distribution of research and development staff by different occupational categories and work areas, 27 January 2021. N/E stands for the work areas in the natural and engineering sciences. S/B stands for the work areas in the social and behavioural sciences.

Occupational categories - research and development	Number		Proportion (%)	
	Women	Men	Women	Men
Technician	1	7	13%	88%
Engineer		4	0%	100%
Research and development assistant (all)	11	4	73%	27%
Research and development assistant N/E	3	0	100%	0%
Research and development assistant S/B	8	4	67%	33%
Research engineer	3	17	15%	85%
Investigator	1	4	20%	80%
Researcher (all)	16	19	46%	54%
Researcher N/E	5	12	29%	71%
Researcher S/B	11	7	61%	39%
Senior researcher (all)	16	17	48%	52%
Senior researcher N/E	6	13	32%	68%
Senior researcher S/B	10	4	71%	29%
Doctoral students (all)	9	15	38%	63%
Doctoral students N/E	5	12	29%	71%
Doctoral students S/B	4	3	57%	43%

Table 5. Gender distribution of staff in research and development departments with associated sections, 31 December 2020.

Dept. SAMT	Number		Proportion (%)	
	Women	Men	Women	Men
Dept		2	0%	100%
MAP	12	7	63%	37%
MILJÖ	7	6	54%	46%
TAL	10	15	40%	60%
TEK	11	14	44%	56%
Dept. INFRA	Number		Proportion (%)	
	Women	Men	Women	Men

Dept	2	1	67%	33%
DOU	5	6	45%	55%
Crash test tracks	1	3	25%	75%
MÄT VER	2	8	20%	80%
VBA	2	16	11%	89%
Dept. TRAF	Number		Proportion (%)	
	Women	Men	Women	Men
Dept	1	2	33%	67%
FOF	6	7	46%	54%
FSK	2	13	13%	87%
MTS	5	3	63%	38%
TST	6	5	55%	45%

Table 6. Gender distribution of Joint Functions, JF (support activities) staff by different occupational categories, 27 January 2021.

Occupational categories - JF	Number		Proportion (%)	
	Women	Men	Women	Men
Librarian	2	1	67%	33%
Accounting	2		100%	0%
IT specialist		2	0%	100%
Communicator	6		100%	0%
Project co-ordinator	6		100%	0%

Table 7. Gender distribution of staff in Joint Functions, JF (support activities) departments with associated sections, 31 December 2020.

ADM	Number		Proportion (%)	
	Women	Men	Women	Men
Accounting	2	1	67%	33%
HR	4		100%	0%
IT		5	0%	100%
Operational support	8	3	73%	27%
DG staff	Number		Proportion (%)	
	Women	Men	Women	Men
	4	1	80%	20%
KOMBI	Number		Proportion (%)	
	Women	Men	Women	Men
	11	2	85%	15%

Table 8. Gender distribution in managerial positions and the management team for 2020.

Managerial position	Number		Proportion (%)	
	Women	Men	Women	Men
All managers	8	12	40%	60%
All managers, research and development	7	8	47%	53%
All managers, JF	2	3	40%	60%
Unit managers	6	8	43%	57%
Department managers	2	3	40%	60%
Management team	3	4	43%	57%

Table 9. Gender distribution in scientific leadership for 2020.

Scientific leadership	Number		Proportion (%)	
	Women	Men	Women	Men
Lecturer	11	7	61%	39%
Assistant professor	1	1	50%	50%
Professor	3	2	60%	40%
Research lead	6	4	60%	40%