Gender Mainstreaming in the Transport, Health and Environment Pan-European Programme

Introduction

Issues and challenges regarding gender and transport have been discussed and researched for decades. Despite this, there has only been gradual progress regarding safety, ease of access, participation in decision-making processes, and several other issues regarding gender and transport. Additionally, the transport and mobility sector is a male-dominated field and there is a lack of women undertaking education in science, technology, engineering and mathematics (STEM) disciplines, which provide an entry point to careers in the sector, as well as other subjects that commonly lead to careers in the sector. As such, the sector lacks a diversity of perspectives, knowledge and thinking, which has contributed to the challenges faced today.

As gender mainstreaming is increasingly becoming an imperative focus within the United Nations system, taking greater action on these matters in the Transport, Health and Environment Pan-European Programme (THE PEP) is fundamental. Moreover, there have been few discussions which combine the transport, health and environmental aspects of gender mainstreaming in transport and mobility, which is a key gap that THE PEP could seek to fill.
Background

In April 2020, a task force was formed under THE PEP to discuss, analyse and identify challenges and outcomes of the coronavirus disease (COVID-19) pandemic for transport, health and environment, which led to the publication of “Recommendations for Green and Healthy Sustainable Transport – Building Forward Better”,2 adopted at the Fifth High-Level Meeting on Transport, Health and Environment. The specific recommendations form one of the Annexes to the Vienna Declaration.3 Theme and recommendation 7 of this publication focused on social disparities in the transport system and rebuilding in a fairer and more inclusive way.4 Whilst looking at disadvantaged and vulnerable groups as a whole, largely building on SDG target 11.2,5 women as a group were also considered, which initiated a conversation on taking greater action in integrating a gender perspective in transport policies within THE PEP.

Building on this, a series of side events were held in the run up to the Fifth High-Level Meeting on Transport, Health and Environment, one of which focused on gender in transport, health and environmental policies. Expert panellists discussed some of the issues and challenges that women face as users of transport services and as employees in the transport and mobility industry. A key outcome from the side event were discussions and suggestions for how (a) the current situation regarding gender in the transport and mobility sector could be improved and (b) also how THE PEP could move forward in better incorporating a gender perspective in its work.

Now, with a new mandate given in the Vienna Declaration, emphasizing the “social inclusivity of access to mobility and transport”, repeating the need for social equity and reducing inequalities,6 and containing a programme area on the social inclusivity of access to mobility and transport in THE PEP Workplan for the period 2021-2025, the present document is intended to continue the conversation and contribute to turning discussions into concrete actions within the framework of THE PEP.

“Research shows that women are vital to transitioning to a low-carbon economy and a more sustainable, integrated mobility sector. Better connectivity for women is essential to solving many of the challenges we face today. Better participation of women in the mobility sector is key to reducing negative externalities and unlocking much of this potential”7
Gender Mainstreaming

Whilst sex refers to the biological differences between people, gender is, among other things, a social construct, whereby roles, attributes and behaviours are influenced by societal expectations which change over time. Gender can influence the generation of trips in several ways, from recreation to entertainment, social contact, political involvement, practices of personal and health care and employment. However, male thinking and perspectives dominate society and are so ingrained that policies, programmes, and infrastructure, among other things, are considered as gender neutral even though they cater to men. As a result, when transport and mobility policies and plans are considered without gender, with the assumption that such actions will benefit both men and women, these in fact still cater to men.

A deep transformation is necessary to change these entrenched perspectives, not only through the policy-regulatory environment but also through the socio-cultural environment. Gender mainstreaming is key to achieving such changes, as the ultimate goal of gender mainstreaming is to achieve gender equality by “assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels”. In the transport and mobility sector, such an approach is key to achieving not only gender equality, but also to achieving the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs).

In this document, the two focus points will be: users of transport and working in the transport and mobility sector. Whilst there is a focus on women, primarily since the data that does exist only disaggregates data at the level of men and women, challenges also exist for people who identify outside of the gender binary and do not identify as either female or male. As such, both women and sexual and gender minorities face severe challenges as users of transport and for those employed in the transport and mobility sector.

Sustainable Development Goals

- **Sound transport and mobility is key to poverty reduction, given that it provides access to education and employment opportunities.**
- **Promoting active mobility, reducing road traffic accidents, and reducing the number of deaths and illnesses by air pollution all contribute to achieving SDG 3.**
- **SDG 5 is the most applicable Goal to gender mainstreaming in transport, health and environment policies.**
- **Transport and mobility infrastructure greatly influence and affect the mobility of women. Indeed, infrastructure must not only be sustainable and resilient, but also support human well-being and equitable access for all.**
- **Globally, the gender pay gap is still wide, especially in a male-dominated field like the transport and mobility sector. Moreover, there are unconscious and sometimes deliberate biases regarding age, disability, race and ethnicity, among others.**
- **SDG 11 is also especially applicable for gender mainstreaming, in particular with its focus on paying special attention to providing safe, affordable and accessible transport systems for women, among others.**
- **Women have often been described as “agents of change” since they typically already use more sustainable modes of transport. If transport and mobility planning is carried out with a gender perspective, this can also contribute to mitigating and adapting to climate change.**
In order to address the challenges faced by women as users of transport, it must first be understood how women travel. Broadly speaking, due to the differences of roles and learned behaviours, most responsibilities and tasks regarding caregiving, domestic work, eldercare, shopping, education and health services, entail women travelling with children, the elderly, people with disabilities, or goods. This is frequently the case even where both partners in a heterosexual relationship are working, with women undertaking the greater burden of these household and caregiving duties on top of their occupations.12

Women are more likely to undertake shorter, more complex patterns of movement and “trip chain”, which involves using multiple modes of transport and multi-stop journeys to balance these responsibilities. These types of trip-making have multiple variances beyond simply getting from A to B and are more frequent than work-related trips.13

Women are also more likely to walk and use public transport because these modes are more convenient for shorter trips.14 However, these modes of transport can be problematic from an infrastructural perspective and for considerations of security, affordability, accessibility and time availability, among others.15 Moreover, the car has become the “dominant mode of travel”, which has meant that urban planning, sprawl and suburban development cater to male patterns of movement. Indeed, social and cultural depictions of masculinity often reference cars and, for some men, there is a connection between manhood and owning a car.16 Furthermore, transport planning has historically catered to men’s
commuting patterns, failing to recognise or take into consideration the needs of women. As a result, where assumptions about gender reflect on the urban environment and transport infrastructure, this built environment further cements gender inequality and “reinforce(s) gender relations and travel patterns”. Women bear the burden of bad transport planning, design and infrastructure that is unsuited to their needs and does not facilitate their patterns of movement. Such limitations have huge repercussions on women’s lives, including their ability to access education and employment, and meet their daily needs.

Health aspects

Safety concerns are a major issue for women and sexual and gender minorities, which is especially true in the case of sexual harassment. Women and sexual and gender minorities carry an extensive decision-making toll prior to, during and after making a journey. This includes decisions not to go out alone, to travel before it gets dark, to travel in well-lit areas, to avoid public transport at certain times of the day and choose specific routes. From small towns to large cities, in developed and developing nations, sexual violence, ranging from unwelcome sexual remarks, looks, gestures and touching, attempted rape, rape, and murder, occur when walking or cycling, on public transport and in spaces around transport infrastructure. This severely limits their freedom and means to travel securely. The International Labour Organization has estimated that safety concerns of transport are the biggest obstacle to women’s participation in the labour market in developing countries, “reducing their participation probability by 16.5 percentage points”. Moreover, those identifying as LGBTQ+, the elderly and disabled people are more frequently targeted for discrimination.

COVID-19 has also had a damaging effect on women’s and sexual and gender minorities’ use of transport. The pandemic has led to a significant reduction in the use and timetabling of public transport. This reduction in services affected women as more frequent users than men, though also added to safety and security concerns given the increase in waiting times with less bystander support. As such, sexual violence has continued throughout the pandemic and, in some cases, there has been a heightened risk of violence against women. As well as this, women, alongside migrants or racial and ethnic minorities, are disproportionately represented in essential work settings or in the informal economy. Since they could not work from home during the pandemic, many of these individuals used public transport to get to their place of work, thus increasing their risk of contracting COVID-19.

Whilst women walk more often than men, this is often not out of choice but due to a lack of access to other options. However, where poor walking infrastructure exists, women may choose not to walk which severely restricts their movement and, when they do not have a choice, they are more vulnerable to a lack of personal security and road safety. Moreover, many women have the added burden of walking with heavy loads which also affects health and well-being.

* Lesbian, gay, bisexual, transgender, queer and others.
In areas with high levels of air pollution, walking may also lead to a greater exposure to emissions and pollution which leads to several health issues. This may affect poor and marginalized women who live in low income and high deprivation neighbourhoods more severely since, in some parts of the world, these areas are more exposed to higher levels of air pollution.28

In bike-friendly countries and cities, the demographic characteristics of cyclists generally reflects the overall population, with men and women cycling as part of their daily life. However, in countries that are more car-oriented, most cyclists are young to middle-aged men and the number of women cyclists declines at a much faster rate than men from childhood to adolescence and from middle age to older age. Moreover, in these countries there are relatively higher rates of cyclist fatalities and serious injuries.29

**Environmental aspects**

In many countries, traditional urban development is centred around carbon-intensive, single-use zoning, sprawl and car-centric planning. Not only does this limit the movement for those who have limited access to this mode of transport, but it also contributes to high emissions.30 Indeed, land transportation is one of the sectors that contributes the most to global warming from fossil fuel combustion, primarily through emissions of CO₂, and the sector is also a large emitter of ozone (O₃) and particulate matter (PM₂.₅).31 Moreover, the emissions of gaseous and particulate pollutants from transport modifies the composition of the atmosphere, degrading air quality and contributing further to climate change.32

This is a vicious cycle since the increasing frequency and intensity of climate-related disasters and extreme weather events severely disrupts transport systems which disrupts the lives of people. Given the role of transportation in contributing to global warming, the business-as-usual scenario and traditional norms must be addressed in order to mitigate and adapt to climate change.33

Integrating a gender perspective in urban planning and mobility is a key way in which sustainable transport can be reached.

“This is fundamentally a social justice, labour and human rights issue. In order to create a public transport system that is safe, accessible and equitable, we need to ensure that women’s voices – workers and passengers – are present during the planning, policy-making, research, development and operation of our systems.”34

Conversely, the environmental benefits from transport policies may be unfairly distributed if not carried out through a gender lens. For instance, the broader use and distribution of electric cars, and subsidies for electric cars, may benefit men more than women since men are more likely to own cars and there is an imbalance in purchasing power given the high upfront cost of electric cars.35

**Economic aspects**

Since women undertake multiple trips more often, if there is not an integrated system for ticketing to allow users to use multiple modes of transport in a certain time period, this leads to an unequal expense for journeys on public transport. Moreover, during off peak hours there are less options, and it often takes more time to travel, or it is more expensive to travel, which may lead to decisions not to undertake certain
employment or educational opportunities, thus limiting the way in which women can fully participate in society.

Women may settle for lower paid work if it is closer to home to balance their unequal gender-based allocation of domestic work. This further engenders an imbalance in pay between men and women. Furthermore, the double burden of these work activities leads some women to experiencing “time poverty”, resulting in less time for rest and discretionary time. Time poverty can be reduced through gender-sensitive transport infrastructure, whilst more accessible transportation also improves access to opportunities.36

Good Practice Examples

✓ In Los Angeles, measures undertaken to increase the presence of transit and local police, cameras and train transit operators to de-escalate confrontations led to a 39 per cent decrease in total crime and a 60 per cent decrease in operator assaults in the METRO bus system between 2017 and 2018.37

✓ The Netherlands’ cycling friendly infrastructure dictates that it should be safe, direct, cohesive, attractive and comfortable. This is based on CROW’s Design Manual for Bicycle Traffic, which is now influential not only in the Netherlands but also globally too.38 However, infrastructure alone does not have much effect on the number of cyclists. Indeed, the Netherlands’ flexible labour policies, traffic safety lessons at school alongside its cycling infrastructure leads to more security and confidence, which is a key concern for women cyclists.39

✓ A study conducted in Norway demonstrated that e-bikes were very attractive to women and, in their study, this group showed the greatest increase among e-bike trips per day.40 E-bikes can also be a helpful, healthy, more environmentally friendly mode of transport for women who have more sedentary lifestyles. This is due to the fact that physical exertion on e-bikes is lower, but longer distances can be travelled in a shorter timeframe and the level of enjoyment can be higher on e-bikes.41 E-bikes can also be useful even in challenging environments, such as cities, villages and rural areas with steep hills.42 Nonetheless, e-bikes are a more expensive alternative to normal pushbikes, so this option is currently only available to those who can afford their high price tag. In Geneva, Switzerland, subsidies for testing e-bikes are offered for long-term rentals up to 250 Swiss francs (approximately $265), for a maximum of 50 per cent of the price.43
At the global level, the transport sector, alongside the construction, storage and communication sectors, usually have the highest concentration of male workers. Conversely, education, health, social work, wholesale and the retail trade are the sectors with the highest proportion of women workers. In 2017, women only made up 17 per cent of the total global transportation workforce; and in the European Union this reached only 22 per cent.

Several factors contribute to this low and unequal representation of women workers in the transport and mobility sector. Starting from a young age, gender stereotypes are strong and persistent which can influence the skills that girls gain, their education and their interests. Indeed, “anyone who has noticed the prevalence of cars and trucks on boy’s clothing will recognise [these stereotypes].” Women and girls are underrepresented in STEM backgrounds, which is problematic since many essential transport jobs are linked with STEM.

This may be due to “stereotypes, social norms and cultural practices, welfare policies, family backgrounds and the absence of women role models, and limited access to networks, information, funding or institutional support.”

This limited participation in STEM subjects results in women entering the workforce lacking the required qualifications for many jobs in the transport and mobility sector. However, this has been referred to as a “chicken-and-egg” problem because there is a preference for male recruits due to the fact that transport roles are not usually designed with women in mind, and so are also not very attractive for women. As such, a strong promotion of careers in transport at school and changing the perceptions of this field as distinctly “male” are key.

For the minority of women that do enter the transport workforce, there are several negative consequences of gender stereotypes that stops women from climbing the career ladder, pushes them out of the sector, or stops women from
applying to certain roles in the first place. These include: gender discrimination and stereotyping; company or working culture; work-life balance; health and safety; sexual harassment; job perception; wage gaps; a lack of training and career development; a lack of representation in unions; a-typical contractual relations; and a lack of corporate gender policies.51 Furthermore, a survey conducted in 2017 by the European Transport Workers’ Federation revealed that 63 per cent of female respondents had been exposed to violent behaviour, 49 per cent from customers, 22 per cent from colleagues and 17 per cent from managers/supervisors and, for those who reported their incidents, only 20 per cent believed that their complaint had negative consequences for the offender or made the workplace safer.52

Given that women may struggle to both start or progress their careers in this field, the cycle continues since there is a lack of female role models at all levels of responsibility and so young female professionals may be unaware of the options available to them. 53 Indeed, there is a lack of female representation in decision making at all levels for all modes of transport.54 As of 2021, out of the 56 member States of the United Nations Economic Commission for Europe (UNECE), only 10 transport ministers are women. This is problematic from many perspectives.

"Gender diversity in the workplace does not only benefit women. Mounting evidence shows that it is a benefit to societies, economies, the environment and enterprises themselves”55

Better female representation in the transport and mobility sector can create innovative and creative solutions in the face of emerging challenges which need a variety of perspectives to address.56 Moreover, the planning and design of transport systems and services will better cater to women users when women are in the workforce. Not only will this lead to making transport more accessible to all users, but it will also increase the sustainability of transport and mobility.57 Indeed, it is often said that women are “agents of change”, which is especially true for a sustainable transformation in the transport sector.58

Women must be included in just transitions to sustainable societies, where future transport systems will have increased vehicle electrification, automation and technology and shared mobility. Automation is a particular concern for women, given that most women in the transport workforce are in administrative and customer service roles which are vulnerable to automation. Whilst there are several opportunities for new and better forms of work in the future, training and education must be accessible and attractive to women to benefit from these opportunities.59
Women are not a homogenous group and there cannot be a one-size-fits-all approach to gender mainstreaming. Indeed, compounding identities, and being a part of a disadvantaged group, may lead to greater vulnerability to poor transport and transport infrastructure. For example, women outnumber men among people over 65 years old and the likelihood of being disabled and or experiencing multiple chronic health conditions increases with age, including loneliness and social isolation. Moreover, disabled women, ethnic minorities and people at risk of deprivation (those with a low income, the unemployed and people living in poverty) are more vulnerable to poor transport infrastructure and poor mobility options. As such, gender mainstreaming requires an intersectional approach, whereby discrimination grounds such as gender, age, ethnicity and disability, are analysed in an interwoven and mutually affecting way. Moreover, a one-size-fits-all approach will not be suitable when accounting for the differences concerning gender and transport in each UNECE member State.

A lack of disaggregated data continues to be a barrier to understanding women’s transport experiences, the gendered impacts of transport, as well as the ability to set baselines and goals for both workers and passengers. More studies and investment in research are necessary to explore ways in which to address findings and implement nuanced gender perspectives in transport and mobility policies and programmes.

The digitalization of society can bring about many positive changes, including new digital solutions, business models, services and jobs. However, digitalization also brings with it several challenges, including concerns of cybersecurity, increased automation of supervision in public spaces and unregulated service providers.

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* Intersectionality was first coined by Kimberlé Crenshaw as a black feminist critique of the exclusion of black women from feminist theory. The Oxford English Dictionary defines intersectionality as, “The interconnected nature of social categorizations such as race, class, and gender, regarded as creating overlapping and interdependent systems of discrimination or disadvantage; a theoretical approach based on such a premise.”
Taking into consideration the above information, it must be explored how THE PEP can integrate gender mainstreaming into its work and encourage a gender sensitive approach to transport planning, policies and programmes by member States. Moreover, it should be identified which area, specific issue or issues regarding gender, transport, health and environment, THE PEP will seek to address. This document has identified many actors and organizations working on issues related to gender and transport, yet it is clear that action and firm commitments are lacking at the implementation level. An initial step could be to organise a regional brainstorming to gather ideas from around the pan-European region to understand what areas are in need of action.

THE PEP could explore:

**Raising awareness**

Raising awareness of these issues is important to contribute to changing deeply ingrained attitudes in society and in the workplace, since this transformation towards gender equality will not only require changes to the policy-regulatory environment, but also the socio-cultural environment. THE PEP Clearing House could be a useful tool for this, as more articles, reports and other documents could be added on gender, transport, health and environment. Webinars and workshops could also be organized to raise awareness and train participants on these matters. THE PEP also has a number of THE PEP Partnerships, including Partnerships on cycling, eco-driving and jobs in green and healthy transport. These Partnerships could be used to raise awareness, and gender should be mainstreamed throughout these activities.

THE PEP can also provide a hub for information and best practice sharing. THE PEP organizes Relay Race workshops which are designed to share knowledge and pass the “baton” from city to city disseminate good practices across the pan-European region. Indeed, with the broad membership of THE PEP, countries can seek to learn from each other’s practices to see how they have integrated gender perspectives into their policies.
Future actions

In the future there could eventually be the development of an implementation plan, for THE PEP to recommend actions and support member States with various policies. Potentially, another THE PEP Partnership could be set up developed alongside those already existing. THE PEP Strategy is under preparation and discussions on gender mainstreaming in THE PEP could also feed into this work.

Given that data is a continuing issue, more research into gender mainstreaming in transport, health and environmental policies could be supported by THE PEP.
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Endnotes

1 Gisbert Stoet and David C. Geary, 'The Gender-Equality Paradox in Science, Technology, Engineering, and Mathematics Education' (2018) 29 Psychological Science 581, 581. Strangely, the study found that the STEM graduation gap increases with increasing levels of gender equality.


3 THE PEP, Vienna Declaration, Fifth High Level Meeting on Transport, Health and Environment (Online, Geneva, 17 May 2021), ECE/AC.21/2021/3–EUCHP2018924/4.3.3, Annex II.

4 Arianna Americo and others (n 2) 43.

5 SDG target 11.2 states: "By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons”.

6 Vienna Declaration (n 3) [1(d)], [3(a)], [3(c)].


9 Sustainable Mobility for All, Global Roadmap of Action - Toward Sustainable Mobility: Gender (SuM4All 2019) 9.

10 Ibid.


13 Robin Law (n 8) 577.

14 Sustainable Mobility for All (n 9) 3.


16 Robin Law (n 8) 582.


18 Eleanor Blomstrom, Aimee Gauthier, and Christina Jang (n 17) 11.


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