

## Baltic Hub

# Gender balance in STEM – what it is and what could be done?

Eglė Kalašnikovaitė, Ieva Girdvainienė



## Executive summary:

One of the statistical indicators showing the level of participation of males and females in the labour market is a distribution of opportunities and resources between women and men, and/or the representation of women and men. If this distribution or representation is equal, it is considered that a gender balance is present. The transport sector is considered to be one of the most unevenly gender balanced fields. The result is that females have limited access to these particular branches of the labour market and there is also occupational gender segregation.

However, research demonstrates that a diverse workforce can have an impact, in increasing productivity, competitiveness and profitability. It also enables enterprises to get access to a wider market of talents and specialists with different types of skills, which contributes to overall enterprise performance.

## Key messages:

- **PURPOSE:**

To inform everyone interested about the present situation of gender balance and the impact of its absence in the STEM field; to introduce ongoing practical measures in raising awareness about the importance and necessity of gender and diversity balance, as applied in one of Lithuania's tech-oriented education institutions and to assess the gender related context of Baltic countries regarding STEM fields of study.

- **AUDIENCE:**

This policy brief presents the topic for general society as well as for women who are interested in pursuing a career in transport and smart mobility. It aims to raise awareness in the academic environment and to inspire other fields to be more inclined to address the gender balance and the challenges women face in different fields.

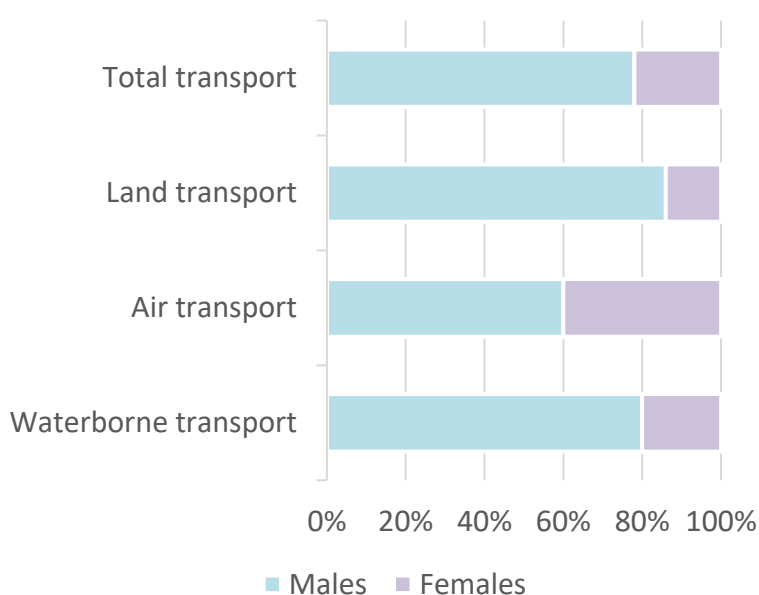
- **FOCUS:**

Transport companies (especially public transport entities, rail, air and sea transport companies), STEM studies, transport and tech-oriented universities which tend to lack gender balance, both among students and employees.

The data shows that although the gender balance and related topics (e.g. gender pay gap) are being addressed for some time now, the much needed change is yet to come. Only over 22 percent of females are working in the transport sector with the highest results in air transport (see the chart below).

In this brief this topic is being addressed within the context of a STEM and transport-oriented education institution – the university – while raising the question of ‘what is the role of technical universities and what could be done?’.

### Share by gender and transport mode

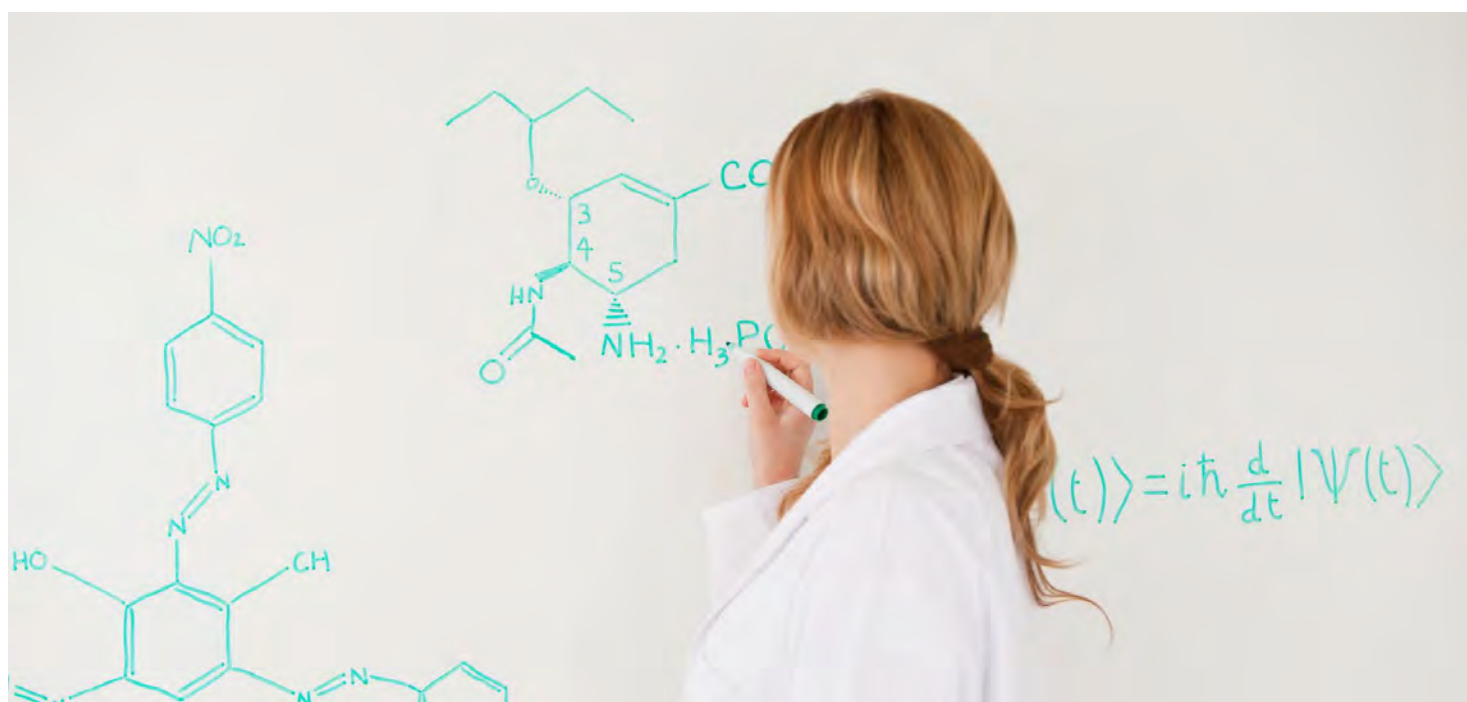


Source: Eurostat, 2017

## Research overview

Significant importance in increasing gender balance in the transport sector lays within the role of the higher education institutions, especially those focused on STEM, transport and tech-oriented institutions. A more diverse study environment in technical universities would bring benefits to their achievements in the context of studies and transport innovation through different diversity-inspired approaches towards the aspects studied as well as motivation to make the study field or the results of the studies more inclusive. It would also have the benefit of a more gender balanced future work environment for the graduates (workplaces are enriched by the aspect of gender and diversity, with awareness of employers about gender-oriented facilities and other workplace aspects).

That is why the Baltic hub decided to contact one of the tech-oriented universities in Lithuania and perform gender and diversity-targeted activities: to inspect the gender balance situation in the university, evaluate the present situation and establish cooperation with the institution aiming to set up a plan and agenda specially for it.



At the beginning of the process, analysis of the statistical data and conversation with the representatives of the administration of the university took place. During the discussion, the general vision towards the topic in the institution was addressed: what is the perspective of the university on the gender balance, what policy of gender and diversity aspect is being applied (if it is), are there any specific actions taken by the administration or the employees, do they see the need to make any (or more) efforts so that the situation would be improved.

The statistical analysis demonstrated that the university is not much different from the general situation – in 2019 females constituted almost 42 percent of all STEM students. It is important to notify that the share of females has significantly risen from 2015 when it was reaching almost 32 percent.

The discussion with the representatives showed that the university does not really have gender and / or diversity-oriented policy and has applied no specific actions related to the topic.

It means that despite this inactivity on the topic of gender balance, a significant increase of females in STEM fields is being spotted.

Despite the fact that the gender balance among the students is changing for the better, it does not mean that no additional measures should be taken. The transport sector is still strongly male-dominated and the present gender exclusion in this field is still relevant.



With an aim to inspire more females to start their career in the STEM and transport fields and to keep the number as stable as possible during the study times and beyond – while pursuing a career in the field as an employee – the Gender and Diversity Action Plan (GaDAP) for the university was formed.

The aim of this plan is to establish a more diverse study environment regarding gender balance, both among the students and the staff. The ambition is to bring achievements in STEM studies and in transport innovation in general as well as create a more gender balanced future work environment for the graduates.





## Conclusions and recommendations

Based on the job done and strategy created, the stakeholder will work on improving their practices towards gender and diversity aspects in the university. The knowledge gained and instructions gathered, together with examples of best practices are set to inspire and motivate staff to pursue a more gender balanced environment. Certain strategies will be followed to make further progress in the field. The strategies will concern inclusive communication (i.e., being cautious of referring gender to specific professions, professional skills, educational paths, subjects in schools, etc.) with students at school and university; improvements of gender balance and diversity both between students and staff; as well as gaining experience on how to gain more social and strategic impact and profits of becoming a more open and supportive institution for gender and diversity. Taking into account the limited budgets of schools, the positive attitude would be suggested by active involvement of the schools themselves into these practices with an ambitious perspective of financing a specialized school-oriented body.

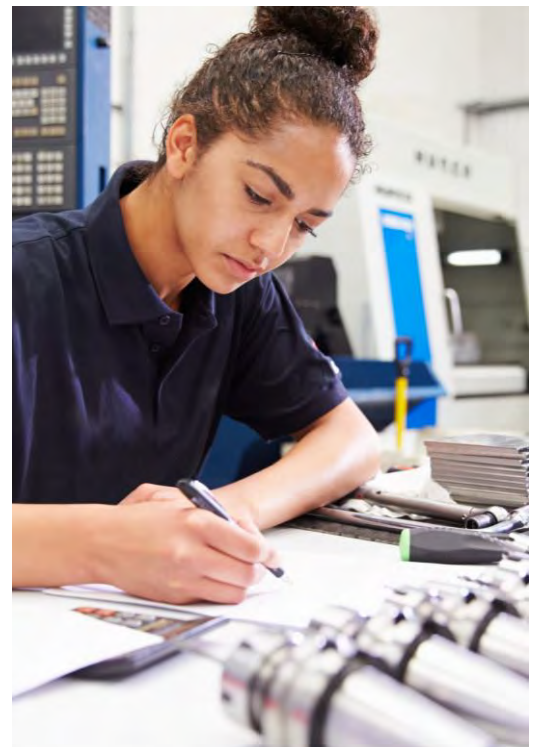
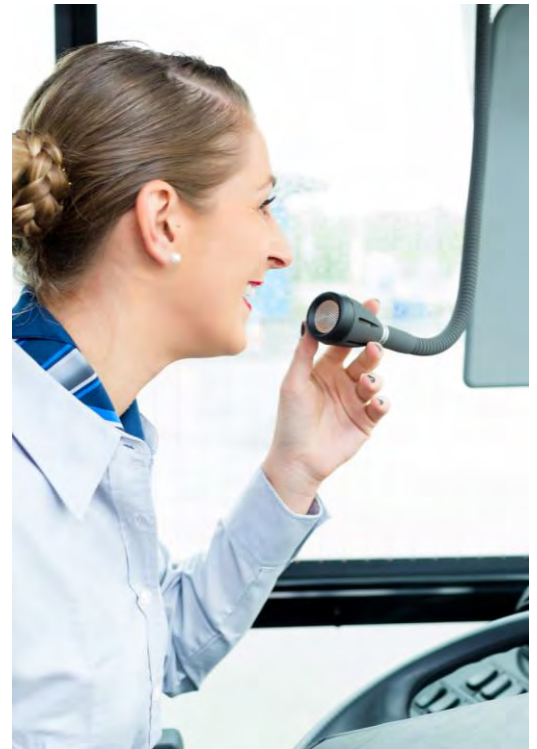
Moreover, during the practices of the Baltic hub, the presence of female role models in the transport field strongly encourages the younger girls not to hesitate and not to rely on gender stereotypes, but follow the path they are sincerely interested in. Hence, the representatives of successful females of STEM and transport fields are strongly encouraged to be present in the eyes of youngsters.

The GaDAP of the Baltic hub is set in accordance with the following gender smart dimensions:

- Attractive: successful attraction of female students to the educational field of STEM.
- Effective: successful retention of female students in STEM by providing an education that meets their expectations. Successful preparation of future human capital for a better gender balance in the transport sector.
- Inclusive: the improvement of STEM studies and transport related education field as a gender and diversity inclusive environment.

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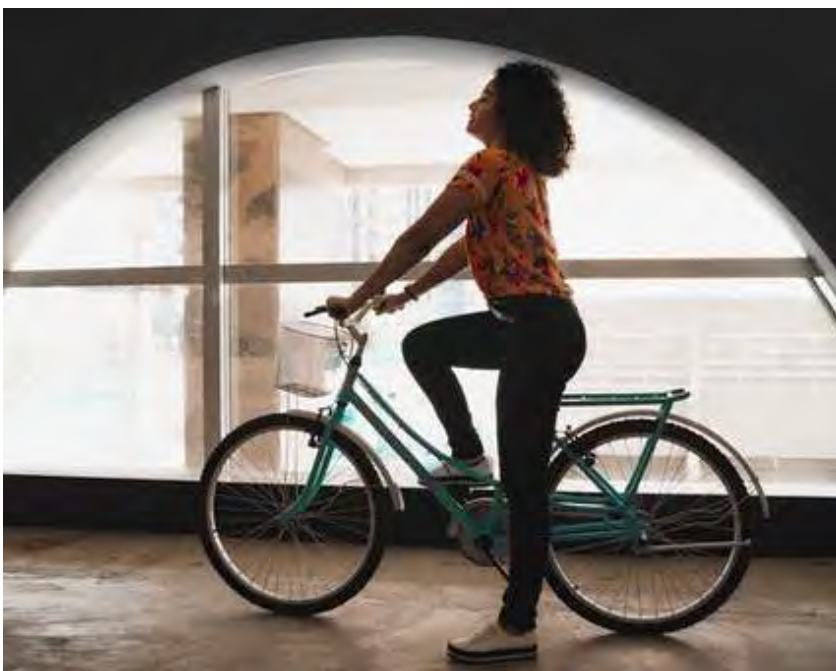
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Scandinavian Hub – Denmark

## PLANNING BICYCLE TRAINING FOR ETHNIC MINORITIES

Michala Hvidt Breengaard



To include gender and diversity in transport policy and planning is central in creating equal opportunities for all people. While cycling is common in Denmark, there are a number of ethnic minorities who have never learned to ride a bicycle. Also, many immigrants from non-western countries come from cultures where cycling is neither widespread nor socially accepted, especially for women.

Bicycle courses are a good way to enhance the mobility of ethnic minority women and this policy brief provides support for those who wish to start up a training course.

### Background

The policy brief is an outcome of a collaboration between the European research project TinnGO and the Danish Red Cross bicycle training for immigrants.

The policy brief is based in research on biking and ethnic minorities.

The aim of the policy brief is to strengthen actions that can improve the mobility of ethnic minorities. It especially targets NGOs as well as policy makers and planners, who are looking for instruments to enhance the integration of ethnic minority women.

For more information see:

<https://www.tinngo.eu/>

<http://transportgenderobservatory.eu/>

[https://koensforskning.soc.ku.dk/projekter/tinngo\\_nordic/](https://koensforskning.soc.ku.dk/projekter/tinngo_nordic/)



"I want to learn how to bike. It gives me freedom from my family. If my husband doesn't have the time, I can bike myself."

Quote from an interview with a participant from a bicycle course, 2020.

### **The benefits of bicycle courses for ethnic minority women**

- Cycling provides ethnic minority women with a more free and independent everyday mobility.
- Cycling can strengthen the social activities of minority women.
- Cycling might help to increase ethnic minority women's opportunities on the Danish labour market.

Yet,

- Cycling may be difficult to learn as an adult and especially if people have no access to a bicycle or an instructor.

### **WHAT'S THE PROBLEM?**

Studies show that transport-related social exclusion is related to gender, ethnicity as well as low income. Culture and norms appear as the most important factors for mobility practices of ethnic minorities (Uteng 2009). Furthermore, there is a connection between increased cycling and less urban segregation among the group of ethnic minority women. To be able to cycle gives ethnic minority women a more free and independent everyday mobility, which is otherwise characterized by the use of public transport or with the help of family members, most often their husbands (Rask, Poulsen & Delica 2017).



“In the past, I dreamed about it, but now it became reality. I am biking. I always bike, every day.”

Quote from an interview with a participant from a bicycle course, 2020.



## PAYING ATTENTION TO THE FOLLOWING FIVE DIMENSIONS CAN HELP WHEN SETTING UP A GENDER AND DIVERSITY INCLUSIVE BICYCLE COURSE

**AFFORDABLE** Participants can be informed about how to buy an affordable bicycle and might also receive help with repairing their bicycles.

**EFFECTIVE** To ensure participation throughout the course, pay attention to certain obstacles for the group, e.g. set up parallel childcare for women with children.

**ATTRACTIVE** Explicitly highlighting the benefits of cycling, e.g. a cheap and healthy form of mobility, might attract people from non-cycling cultures.

**SUSTAINABLE** Cycling is only sustainable to the degree to which it is carried out. Course instructors might ensure that participants maintain their new biking habits by arranging post-course cycling groups.

**INCLUSIVE** For every course, do an assesment of the participants in terms of gender, ethnicity, age, work place, and living area. Did the course include everyone in the target group?

For more information on gender and diversity approaches to transport and mobility, see <https://transportgenderobservatory.eu/>



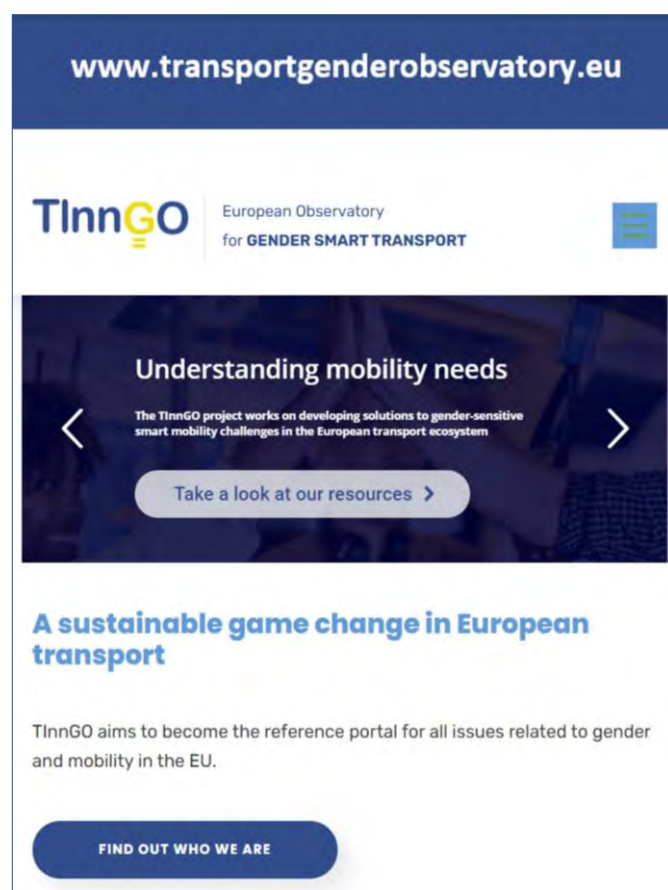
## RECOMMENDATIONS

Try to promote a balanced representation among the participants at the bicycle course, measured by age, ethnicity, type of work, and place of residence. If the participants are all from the same work place or age group, it probably means that the course missed other potential participants.

A way to recruit more participants is to advertise the course in different languages as well as to make sure that course information is put up in different areas of the city.

It might be a good idea to include time for a social activity during the course, such as the possibility to have a cup of coffee and a chat. This can benefit the motivation to attend and complete the entire course.

It is important to encourage participants to maintain their new cycling habits after the end of the course. The help to find an affordable and eventually second-hand bicycle is a good first step.



## CONTACT

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French Hub

## Towards Inclusive Mobility in the Paris Region

Cosima Malandrino, Luc Berman



Exploratory walk organised by the French Hub in the 12<sup>th</sup> arrondissement of Paris in September 2020.

### Executive summary

This policy brief aims at presenting the main issues related to gender and mobility in the Paris region. Similar to many other metropolitan areas around Europe, women in the Paris region tend to rely more on public transport and walking and have different commuting needs and behaviours than men. These differences are a result of gendered societal roles and socio-economic conditions that structure men's and women's daily lives. Safety and security issues, for example, greatly influence mobility practices as women are more likely to be victims of assault and harassment. Fear of assaults or potential traffic accidents generates apprehension for alternative mobility modes such as bicycles, motorcycles and e-kick scooters. This apprehension affects women's behaviours even beyond their transportation choices, forcing them, for example, to change the way they are dressed or the time of the day they go out. Addressing these issues is key to enhancing women's freedom of movement and ensure equal access and comfortable user experiences to all in the Île-de-France region.

### Key messages

- **THE NEED TO INCLUDE GENDER AND DIVERSITY IN SERVICE DESIGN:**

Research on the experiences of mobility users in Paris shows that most services are often not adapted to the needs of the most vulnerable users. Running studies that integrate gender, class differences, disabilities and age factors would allow service providers to better tailor their services to this important part of their clientele, increasing their users pool and ultimately improving the experience of all passengers. For instance, the standardised design of shared vehicles and the increasingly higher digitalisation are often key factors that hinder the access to services by categories such as women, the elderly and people with disabilities.

- **POLICY-MAKERS SHOULD LEAD THE**

**WAY:** Policy-makers at the city and regional level play a key role in catalysing innovation towards more sustainable and inclusive models. Integrating an intersectional approach in their mobility policies would allow local authorities to enforce certain requirements in tenders and service contracts, to protect more vulnerable users. A streamlined collaboration between administrative departments of the City of Paris would allow for better policy-making in this field.

- **COOPERATION AND COMMUNITY ENGAGEMENT:**

Policy and service design greatly depend on engagement of users and citizens. A systematic effort should be provided to engage with users and stakeholders.

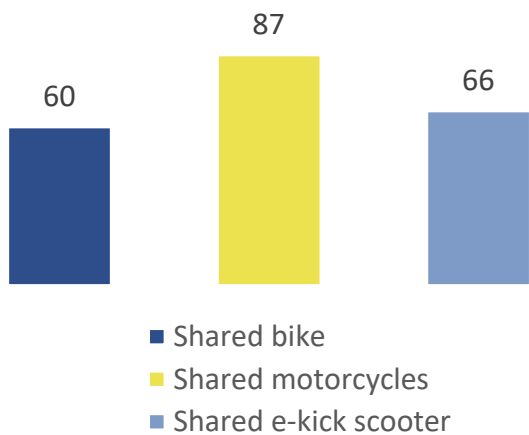
## Gendered Mobility Practices in Paris

Our research highlights the main gender differences, which play a role in mobility choices in the Paris region. Compared to men, women in Île-de-France tend to:

- rely more on public transport and walking;
- travel shorter distances;
- travel for a shorter time;
- dedicate more of their trips to domestic chores;
- work in central areas of the metropolis and in proximity to their home;
- use less shared mobility means, especially e-kick scooters and shared motorcycles.

Despite their need for flexible solutions for shorter, circular trips, they are underrepresented among shared mobility users in Paris. The standard users of shared services are men, young people, students and executives. Many factors contribute to the picture shown by the data in the figure below.

Share of male users, Paris (%)



Perception of insecurity in the public space, risk aversion and gendered mobility practices are frequently mentioned by researchers as some of the causes of this underrepresentation. The graph to the right shows some of the results of the surveys distributed to the participants of our exploratory walks in Paris. Scooters (motorbikes) and kick-scooters appear as very unsafe. Finally, results highlight higher rates of anxiety for public transportation than for other modes and a clear day vs. night contrast when it comes to security.

## Main findings

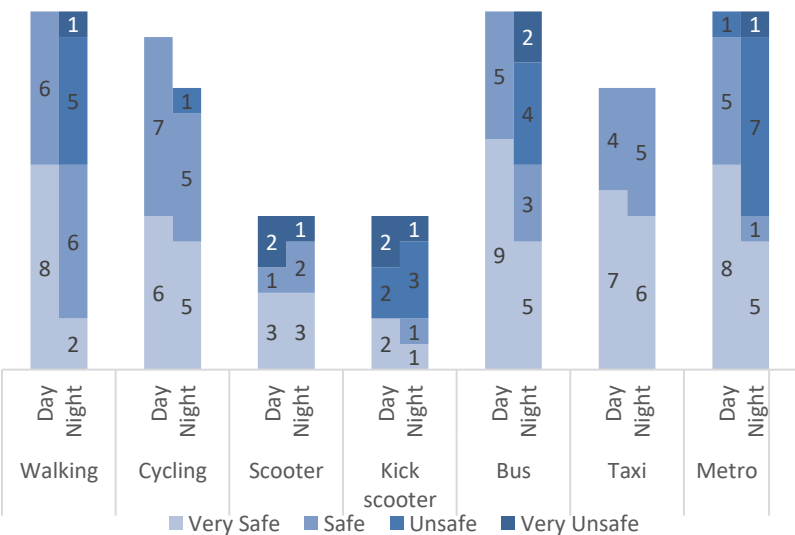
The gendered differences in transport call for an understanding of why **women continue to prefer more traditional transportation modes**.

**1 RESEARCH APPROACH:** the Hub conducted 10 semi-structured expert interviews, 4 exploratory walks in 4 different neighbourhoods in Paris as well as a literature review. The Hub also organized two workshops with local operators.

**2 RESEARCH RESULTS:** We identified a set of barriers that play a central role in limiting the uptake of shared mobility solutions among women: absence of adequate infrastructure; a higher perception of risk; prevalent socio-economic barriers (as these solutions often have higher costs); differences in IT culture; standardised designs (linked to the absence of diversity in design teams); unequal geographic access; incompatibility of solutions with specific needs (for example: taking care of a dependent person / carrying heavy groceries bags).

Exploratory walks further shed light on these trends. Participants frequently mentioned the reliance on digital means, lack of the devices' stability, weight, and the perceived danger of shared modes as barriers.

Perception of insecurity





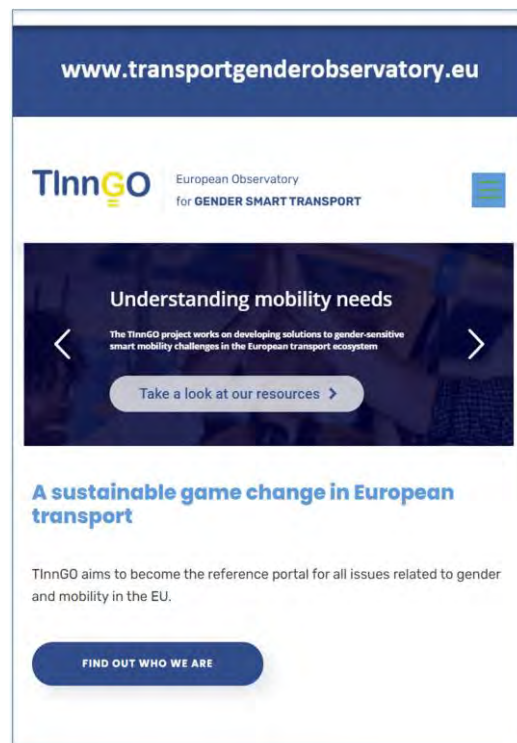
## Conclusions and recommendations

In order to respond to these challenges, we urge operators and public authorities to set up gender and diversity action plans that integrate the gendered, spatial, socio-economic and ability differences into their strategies and operations.

On the one hand, public authorities can have an impact developing public spaces for better accessibility and safety, particularly at night. On the other hand, transport operators should systematise their inclusion of gender, age, socio-economic and physical ability in the design and operation of their services. Working with local associations that are already active on issues like harassment and equality in transportation is especially helpful to support operators in adopting good practices.

To resolve obstacles and improve the accessibility of shared mobility modes, we raise the following recommendations:

Shared bicycles	<p>Wider distribution across the metropolitan area</p> <p>Better maintenance / Lighter bicycles</p> <p>Rear-view mirrors</p> <p>More intuitive docks terminals</p> <p>Better/safer cycling infrastructure</p> <p>Lower reliance on the app</p> <p>Possibility of carrying a child / bigger bags</p>
Shared e-kick scooters	<p>Wider distribution across the metropolitan area</p> <p>More intuitive apps and lower reliance on it</p> <p>Suggest the first ride to be free so that one can test the different services</p>
Shared motorcycles	<p>Wider distribution across the metropolitan area</p> <p>Suggest the first ride to be free so that one can test the different services</p> <p>Offer two helmets</p> <p>Lower reliance on the app</p>
Carsharing	<p>Wider distribution across the metropolitan area</p> <p>More intuitive apps</p> <p>Suggest the first ride to be free so that one can test the different services</p>
Taxis/ridesharing	<p>Heighten the awareness of drivers to gender and diversity issues</p> <p>Greater regulation on drivers' profiles</p> <p>Greater sanctions for drivers who were the subject of complaints</p> <p>Convert fleets to electric and hybrid vehicles</p>



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German Hub

## Gender- and Diversity-sensitive participation culture in the mobility planning process

Cathleen Schöne, Juliane Krause



### Planning with users means planning for users

For a successful gender- and diversity-sensitive mobility planning, it is important to communicate and interact with the various and above all diverse user groups (e.g. children, women, elderly people, people with special needs, people with migration background) in order to gain an insight into their user needs.

In most cases, however, the interaction with users fails due to the lack of communication strategies and the provision of adequate participation opportunities adapted to their needs and therefore leaves many user groups unheard during the mobility planning process.

To counteract this, the work of the German Hub focuses on strengthening and modifying participation culture concepts for example with regard to the collection and evaluation of mobility data, thanks to the introduction of smart criteria and indicators.

### Key messages:

- **PURPOSE:**

To provide guidelines and tools for public transport stakeholders in order to encourage their communication and interaction with (future) users of public transport

- to gain insight into the user needs
  - to gain mobility data
  - to adapt existing mobility services
  - to plan future mobility services
- by
- ensuring a gender- and diversity-oriented design of and approaches via social media appearances
  - using a tool in the format of a survey developed as part of the Hub work
  - evaluating existing mobility surveys and data in terms of their findings potential and gaps with regard to gender and diversity aspects

- **AUDIENCE:**

Public Transport Operators and Mobility Service Providers, Local Decision Makers and Mobility Consultants, that have or will focus on gender and diversity aspects in the scope of Gender Actions Plans of Cities or of legal requirements such as Passenger Transport Act §8 which requires public transport to be barrier-free by January 2022.





## Participation & Mobility Data

In order to create attractive and smart public transport services for users, it is important to involve users (and those who want to or could become users) in the development process. In this way, mobility services can be tailored to user needs, increasing their acceptance, use and sustainability. For this purpose, in-house participation processes can be carried out or data from major mobility surveys can be used. Problems here, however, are that often:

- the participation processes themselves are not gender and diversity sensitive, so that many potential user groups are not able to participate and thus their needs are not captured
- the mobility surveys only cover gender and diversity aspects superficially, but do not link them in more detailed to parameters such as the purpose of the journey, etc., which means that there is still a gap in the evaluation.



## Research approaches

For a diversity- and gender-oriented participation culture in the context of mobility planning, the German Hub pursues the following research approaches in its work.

**1 RESEARCH APPROACH:** Analysis of methods for collecting and evaluating mobility data with regard to gender and diversity aspects in order to identify gaps and potentials in this respect.

In cooperation with representatives of the Hannover Region and the two transport companies ÜSTRA and regiobus, we determine which existing mobility data has been used so far or whether and how additional assessments are designed and carried out and for what purpose.

**2 RESEARCH APPROACH:** Analysis of participation measures in the context of mobility planning with regard to gender and diversity aspects in order to identify gaps and potentials in this respect.

The question was which methods have been neglected so far, which work well and which can still be optimized.



## Research results

**1 RESEARCH RESULT:** Regarding the collection and evaluation of mobility data from a gender and diversity perspective, it has been shown that often nationwide data is used, which makes a more accurate assessment of the situation for individual regions and/or mobility services difficult.

Therefore, some stakeholders in the mobility sector are conducting their own surveys or evaluating existing data from new perspectives (e.g. gender and diversity) in order to obtain the information they need. But sometimes these approaches lack up-to-dateness, flexibility and direct access to the target groups, as they take a long time to prepare, conduct and evaluate.

To counteract these problems, we are developing together with our partners from Region Hannover a tool in the format of a survey linked to the offers of the bus line *sprintH* in the form of so called [Challenges](#) that allows passengers to provide topic related feedback along routes on their stops, vehicles, facilities and connections.

To draw as many data as possible about the gender diversity of passengers and their associated needs in terms of mobility services, the focus and parameters of the queries can be flexibly adapted and updated to different topics and situations (e.g. on the way with kids, etc.).



**2 RESEARCH RESULT:** With the outbreak of the Corona-pandemic, digital participation measures have gained relevance. First and foremost, participation via Social Media.

Therefore, we explored how design gender- and diversity-oriented Social Media appearances has to look like, in order to address the widest possible variety of users and identified three groups of elements in this context:

- User Interface-related gender- and diversity elements
- Content-related gender and diversity elements
- Participation-related gender and diversity elements

Based on these elements we analyzed whether and to what extent transport companies use Social Media to interact with their (potential) passengers, to demonstrate gaps and potential.





## Conclusions and recommendations:

To strengthen gender- and diversity-sensitive participation culture as well as gender- and diversity-sensitive collection and evaluation of mobility data as a key-part of the public transport planning process, means to enable the greatest possible diversity of (potential) users to participate in mobility planning processes and sharing their needs in order to make mobility services more sustainable and smarter for everyone. Participation via technical/digital tools must therefore inevitably also evaluate their suitability in terms of the different affinities for technology and accessibility of the various user groups, so that adjustments can be made and alternatives offered if necessary.

### TlnnGO German Hub in this context

- develops a survey tool and so called [Challenges](#) to get user feedback on concrete questions on gender and diversity issues along routes – implementing and testing in cooperation with stakeholders of the Hannover Region, ÜSTRA and regiobus.
- provides [Design](#) ideas und drafts for alternative tools
- emphasizes the importance and benefits of gender- and diversity-aggregated mobility data.
- promotes criteria for a gender- and diversity-oriented design of social media appearances in order to strengthen their use as a participatory measure that can reach more and more diverse user groups.

### Contact TlnnGO German Hub

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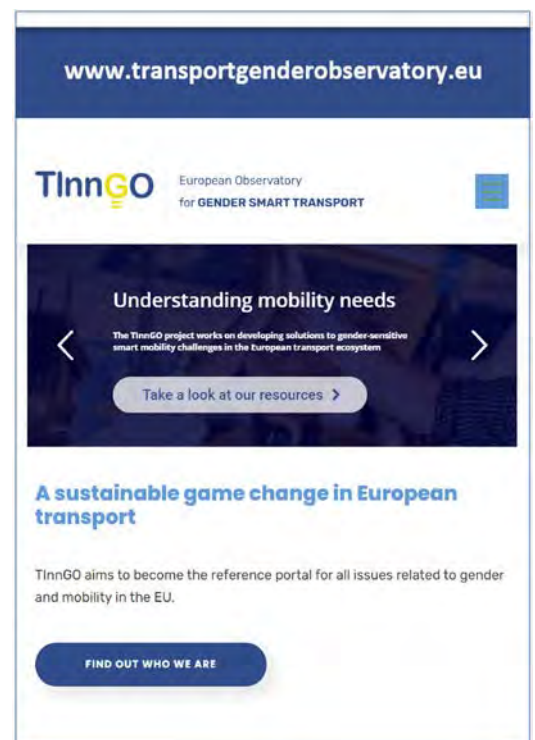
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German Hub

## Gender- und diversitätssensible Beteiligungskultur im Mobilitätsplanungsprozess

Cathleen Schöne, Juliane Krause



### Planung mit Nutzer\*innen bedeutet Planung für Nutzer\*innen

Für eine erfolgreiche geschlechter- und diversitätssensible Mobilitätsplanung ist es wichtig, mit der Vielfalt an Nutzergruppen (z.B. Kinder, Frauen, ältere Menschen, Menschen mit Behinderungen, Menschen mit Migrationshintergrund) zu kommunizieren und zu interagieren, um einen Einblick in ihre Nutzerbedürfnisse zu bekommen. In den meisten Fällen scheitert die Interaktion mit den Nutzergruppen jedoch an fehlenden Kommunikationsstrategien und an der Bereitstellung adäquater, auf ihre Bedürfnisse abgestimmter Beteiligungsmöglichkeiten und lässt somit viele Nutzergruppen im Mobilitätsplanungsprozess außen vor. Um dem entgegenzuwirken, konzentriert sich die Arbeit des German Hub auf die Förderung, Stärkung und Modifizierung von Beteiligungsmaßnahmen, z.B. im Hinblick auf die Erhebung und Auswertung von Mobilitätsdaten durch die Einführung intelligenter Kriterien und Indikatoren.

### Schlüsselthemen:

- **ZIEL:**

Bereitstellung von Guidelines und Tools für die Akteur\*innen des ÖPNV, um ihre Kommunikation und Interaktion mit den (künftigen) Nutzergruppen zu fördern, um

- Einblicke in die Nutzerbedürfnisse zu gewinnen
- Mobilitätsdaten zu gewinnen
- bestehende Mobilitätsservices anzupassen und zukünftige Mobilitätsdienste zu planen

mittels

- einer gender- und diversitätsorientierten Gestaltung von Social Media Auftritten
- dem Einsatz eines im Rahmen der Hub-Arbeit entwickelten Umfrage-Tools
- Erhebungsmöglichkeiten in Bezug auf Gender- und Diversitätsaspekte.

- **ZIELGRUPPE:**

Verkehrsbetriebe, Mobilitätsanbieter, Mobilitätsberater\*innen sowie lokale Entscheidungsträger\*innen, die sich im Rahmen von Gender-Aktionsplänen oder von gesetzlichen Anforderungen wie dem Personenbeförderungsgesetz, wonach der ÖPNV bis Januar 2022 barrierefrei sein muss, auf Gender- und Diversitätsaspekte fokussieren.





## Beteiligung & Mobilitätsdaten

Um attraktive und intelligente öffentliche Verkehrsdienste für die Nutzer\*innen zu schaffen, ist es wichtig, die (potentiellen) Nutzer\*innen in den Entwicklungsprozess einzubeziehen. Auf diese Weise können Mobilitätsdienste auf die Nutzerbedürfnisse zugeschnitten werden, was ihre Akzeptanz, Nutzung und Nachhaltigkeit erhöht. Zu diesem Zweck können eigene Beteiligungsprozesse durchgeführt oder Daten aus großen Mobilitätserhebungen genutzt werden. Problematisch ist dabei allerdings, dass häufig

- die Beteiligungsprozesse selbst nicht geschlechter- und diversitätssensibel sind, so dass viele (potenzielle) Nutzer\*innen nicht teilnehmen können und somit ihre Bedürfnisse nicht erfasst werden
- die Mobilitätserhebungen Gender- und Diversitätsaspekte nur oberflächlich abdecken, da sie nicht detaillierter mit Parametern wie z.B. dem Zweck der Reise etc. verknüpft werden (Lücken in der Auswertung).



## Forschungsansatz

Für eine diversitäts- und gendersensible Beteiligungskultur im Kontext der Mobilitätsplanung verfolgt der German Hub in seiner Arbeit folgende Forschungsansätze:

**1** Analyse von Methoden zur Erhebung und Auswertung von Mobilitätsdaten im Hinblick auf Gender- und Diversitätsaspekte, um etwaige Lücken und Potenziale zu identifizieren. In Zusammenarbeit mit Vertreterinnen der Region Hannover und den beiden Verkehrsunternehmen ÜSTRA und regiobus wird ermittelt, ob, wie und mit welchem Zweck zusätzliche Mobilitätserhebungen konzipiert und durchgeführt werden können.



**2** Analyse von Beteiligungsmaßnahmen im Rahmen der Mobilitätsplanung im Hinblick auf Gender- und Diversitätsaspekte, um etwaige Lücken und Potenziale zu identifizieren.

Die Frage war, welche Methoden bisher vernachlässigt wurden, welche gut funktionieren und welche noch optimiert werden können.



## Ergebnisse

**1** Was die Erhebung und Auswertung von Mobilitätsdaten unter dem Gesichtspunkt von Gender und Diversität betrifft, so hat sich gezeigt, dass häufig landesweite Daten verwendet werden, was eine genauere Bewertung der Situation für einzelne Regionen und/oder Mobilitätsdienste erschwert. Daher führen einige Akteur\*innen im Mobilitätssektor eigene Erhebungen durch oder werten vorhandene Daten unter neuen Gesichtspunkten aus, um die benötigten Informationen zu erhalten. Manchmal mangelt es diesen Ansätzen jedoch an Aktualität, Flexibilität und direktem Zugang zu den Zielgruppen, da sie viel Zeit für die Vorbereitung, Durchführung und Auswertung benötigen. Als Versuch dem entgegenzuwirken, entwickeln und testen wir gemeinsam mit den Vertreterinnen der Region Hannover ein mit dem Angebot der Buslinie *sprintH* verknüpftes Befragungstool und bieten sogenannte [Challenges](#) an, die es den Fahrgästen ermöglichen, themenbezogenes Feedback zu Haltestellen, Fahrzeugen u.v.m. entlang der Strecke zu geben. Um möglichst viele Gender und Diversitätsaspekte und somit Nutzeranforderungen abfragen zu können, können der Fokus und die Parameter der Umfragen/ Challenges flexibel an versch. Themen und Situationen angepasst und aktualisiert werden (z.B. Unterwegs mit Kindern, etc.).

<p><b>Mit Kind und Kegel</b></p> <p>Du denkst „Kinderwagen im Bus? Das ist mir zu eng und zu stressig!“ – Mit <i>sprintH</i> bestimmt nicht. Hier kannst Du auch mit Kind und Kegel entspannt unterwegs sein.</p>  <p><a href="#">Challenge starten</a></p>	<p><b>Mit Sack und Pack</b></p> <p>Du denkst „Mit Einkaufstüten oder Gepäck im Bus? Dafür reicht der Platz nicht aus!“ Im <i>sprintH</i> schon. Hier kannst Du auch mit Sack und Pack entspannt unterwegs sein.</p>  <p><a href="#">Challenge starten</a></p>
<p><b>Die Zeit vergeht wie im Flug</b></p> <p>Mit der richtigen Unterhaltung vergeht die Zeit wie im Flug. Daher gibt es im <i>sprintH</i> kostenloses WLAN und USB-Anschlüsse. Schließ Dich an, log Dich ein und los geht's ...</p>  <p><a href="#">Challenge starten</a></p>	<p><b>Ich sehe was, was Du nicht siehst</b></p> <p><i>sprintH</i> verbindet die Innenstadt mit dem Umland. Entlang der Strecke gibt es also einiges zu sehen. Wie gut kennst Du die Strecken bereits?</p>  <p><a href="#">Challenge starten</a></p>



**2** Mit dem Ausbruch der Corona-Pandemie haben digitale Teilnehmungsmaßnahmen an Bedeutung gewonnen. Allen voran die Beteiligung über Social Media.

Wir haben daher untersucht, wie eine gender- und diversitätsorientierte Gestaltung von Social Media Auftritten aussehen muss, um eine möglichst große Vielfalt an Nutzer\*innen anzusprechen und dabei drei Gruppen von Elementen identifiziert:

- User Interface-bezogene Gender- und Diversitätselemente
- Inhaltsbezogene Gender- und Diversitätselemente
- Teilnehmungsbezogene Gender- und Diversitätselemente

Anhand dieser Elemente haben wir analysiert, ob und in welchem Umfang Verkehrsbetriebe Social Media nutzen, um mit ihren (potenziellen) Fahrgästen zu interagieren. So konnten wir Lücken und Potenziale aufzeigen.





## Schlussfolgerungen & Empfehlungen:

Die Stärkung einer gender- und diversitätssensiblen Beteiligungskultur sowie einer gender- und diversitätssensiblen Erhebung und Auswertung von Mobilitätsdaten als zentraler Bestandteil des Mobilitätsplanungsprozesses bedeutet, die größtmögliche Vielfalt an (potenziellen) Nutzer\*innen in die Lage zu versetzen, sich an Mobilitätsplanungsprozessen zu beteiligen und ihre Bedürfnisse einzubringen, um Mobilitätsangebote für alle nachhaltiger und intelligenter zu gestalten. Bei einer Beteiligung über technische/digitale Tools (wie z.B. das unsere) muss daher zwangsläufig auch deren Eignung im Hinblick auf die unterschiedliche Technikaffinität und Zugangsmöglichkeiten der verschiedenen Nutzergruppen evaluiert werden, um ggf. Anpassungen vornehmen und Alternativen anbieten zu können.

### Der TinnGO German Hub in diesem Kontext

- entwickelt ein Umfragetool samt sog. Challenges, um Nutzerfeedback zu konkreten Fragen zu Gender- und Diversitätsthemen entlang der *sprintH* Linien zu erhalten - Umsetzung und Test in Zusammenarbeit mit Vertreterinnen der Region Hannover, ÜSTRA und regiobus.
- stellt [Design](#)-Ideen und -Entwürfe für alternative Tools bereit
- verdeutlicht die Relevanz und den Nutzen von gender- und diversitätsspezifischen Mobilitätsdaten.
- vermittelt Kriterien für eine gender- und diversitätsorientierte Gestaltung von Social Media Auftritten, um deren Nutzung als Beteiligungsinstrument zu stärken, mit dem mehr Nutzer\*innen erreicht werden können.

### Kontakt TinnGO German Hub

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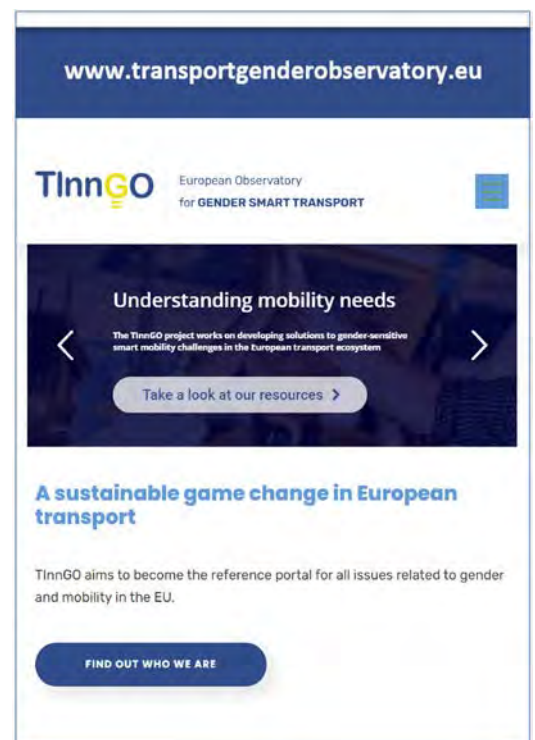
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## Greek Hub

# Public Transportation in Thessaloniki's Metropolitan Area

Iason Tamiakis

Lazaros Tzambazis



## Executive summary

The Greek Hub aims to support gender mainstreaming into areas of policymaking and planning in the local and regional public transport sector. This objective will be achieved through two sub-objectives in relation to 1) Enhancement of safety and security in public transport 2) Enhancement of comfort and/or improvement of customer service for pregnant or foreign women or elderly women in public transport.

With a focus on public transportation and more specifically on Safety and Security as well as Comfort and Customer Service with emphasis on vulnerable groups, the Greek hub conducted a Gender and Diversity Action Plan (GaDAP) along with surveys, focus groups, discussions and stakeholder interviews. These activities have led to the formulation of recommendations and conclusions regarding the Metropolitan area of Thessaloniki.

- **Purpose:** Thessaloniki's Metropolitan area relies solely on public bus transportation for the city's activities. The latter along with limited staff and fleet shortages, result in problematic experiences for the public. In this regard a baseline assessment regarding the level of service and more specifically:

- Comfort and customer service and
- Safety and security

has been conducted and the results have been published and communicated to the local network of actors and stakeholders.

- **Audience:** The current policy briefs are targeted to public transportation actors and stakeholders as well as researchers interested to acquire relevant data.

- **Vulnerable groups:** The groups defined as vulnerable in the case of the Greek hub were: elderly people; pregnant women; people with disabilities as well as teenagers that travel to and from school.

- **Stakeholders:** Numerous actors and stakeholders are operating within the hub's catchment area such as: TheTA; OASTh; four different Joints Bus Receipts Fund (KTEL); 14 Municipalities; the Region of Central Macedonia;; other organisations such as Pedestrian Union, Cyclists Union and more.



## Overview

The Vision of the Greek hub is to improve and enhance safety and security for the predefined social groups throughout the public transportation network, bus stops and stations included, as well as the levels of service and comfort for the users. This vision will be achieved through the objectives:

- a) Enhancement of Safety & Security,
- b) Establishment of Reliability for the public transport system,
- c) Increase of Comfort and the provided Level of Service,
- d) Consistency regarding the timetables and the bus routes,
- e) Monitoring,
- f) Transparency,
- g) Culture cultivation.

Gender Smart Mobility in the context of the Greek hub is characterized by:

- Ease of boarding on and off the buses for vulnerable groups, for example women, especially those in pregnancy or with accompanying children, the elderly and people with disabilities.
- Creation of both a safe environment and a sense of safety and security for passengers from vulnerable groups. Safety and security are two of the most important factors identified, for users in vulnerable groups to choose public transportation over other modes.
- Smooth and unobstructed travel experience, i.e., connectivity among different transportation modes as well as between buses in Thessaloniki's transportation system.

## Research overview

To obtain and analyze information and data in order to provide concrete conclusions and policy guidelines, Lever has completed a set of actions. These actions are:

- 1) Discussions and interviews with local and regional stakeholders as well as an online GaDAP workshop,
- 2) Analysis of the aforementioned data and provision of feedback to local stakeholders,
- 3) Promotion of design ideas to stakeholders and feedback from them,
- 4) Complete formulation of the GaDAP
- 5) Communication and dissemination of the results.

Additionally, Lever conducted a mystery shopping survey to assess Thessaloniki's bus transportation system. Comfort and customer service as well as safety and security were the main components to be evaluated and analysed. Moreover, the needs of the elderly, pregnant and immigrant women were highlighted.

Lever designed the survey and the methodology to be implemented. Indicative bus lines were selected in order to achieve significant coverage of the city's area and mystery shoppers were assigned to specific bus lines. The mystery shoppers behaved as normal passengers while travelling around the city using the city's buses, while additionally identifying and filling their evaluation forms.

Approximately 20 bus lines were selected, and the mystery shoppers travelled throughout the city for four weekdays among three different weeks during peak hour periods both at morning as well as during the evening (08:00-11:00, 15:00-18:00). The evaluation form includes information such as:

- General information (time, date, weather conditions, etc.)
- Information on the bus station/bus stop (cleanliness, vandalism, bus schedule, etc.)
- Information regarding the bus operation (arrival latency, route comfort, bus cleanliness, etc.)

## TlnnGO's Gender Smart Indicators and their connection to the Greek hub's Policy Brief

TlnnGO has developed a set of five Gender Smart Indicators. This is how they link to the Greek hub's policy brief and Thessaloniki's Public Transport:

**Affordable:** Needs to become more affordable for all people to be able to use it.

**Inclusive:** All vulnerable groups need to be included in terms of planning and operation.

**Attractive:** Buses need to improve in terms of cleanliness, time schedule and enhancement of comfort in order to become more attractive.

**Sustainable:** Improvement in identified parameters will lead to increased Public Transport use and thus a more sustainable local and regional environment.

**Effective:** Thessaloniki's public transportation needs to become more effective both currently as well as maintain this in the future.

### Challenges and difficulties

The main challenge that needs to be highlighted is that Gender and Diversity Action Planning is time consuming and requires proper allocation of resources.

The challenges that the Greek hub has encountered while implementing all previously mentioned activities:

- a) Covid-19 related difficulties such as workshop organisation and stakeholder communication and networking. Activities initially planned as physical meetings, etc. were transferred online.
- b) Initial workplan was considered too ambitious and became specialised and specific. GaDAP specified the work on bus stops and shelters.
- c) Actors and stakeholders found it difficult to cooperate in the desired degree, mainly because they had to face new challenges due to the Covid-19 pandemic. Moreover, local challenges such as lack of bus fleet, staff deficit, etc., were increased. This resulted in gender equality issues not being prioritized.
- d) Lack of relevant data collection in order to supplement and support the set objectives through evidence-based decisions.

Through the mystery shopping evaluation form certain parameters were identified and assessed in order to analyse the level of comfort, customer service, safety and security. The results of the survey were further used to highlight the issue of gendered equal accessibility in the city of Thessaloniki and initiate discussions with relevant stakeholders.

Following discussions with local stakeholders, a number of indicators have been identified in the context of the GaDAP for an initial assessment of safety and security issues among vulnerable groups. These indicators are presented below:

**Condition of bus stops and their surroundings:** Percentage of bus stops that include bus shelters / seats; ranking system of lighting conditions at bus stops; of accessibility of each bus stop; stations of bus stops in terms of comfort and customer service such as cleanliness, condition of seats and stops, etc.; obstruction of bus stops mainly due to private vehicles temporary parking.

**Safety and security on trips:** Correlation between over crowdedness and safety & security issues; number of seats for vulnerable users in each bus.

Quantitative indicators are advanced by quality data on mobility patterns and needs of vulnerable groups. A combination of quantitative and qualitative data can result in the development of indicators that show the correlation between these patterns and Safety & Security. Such qualitative data to be used for such an evaluation could be: a) Interviews with vulnerable groups; b) focus groups and discussion with relevant actors and stakeholders; and c) observations at different times of day and night, etc.



Furthermore, the stakeholders involved are eager to implement such measures so further collaboration with the TInnGO project, along with assistance from Lever as head of the Greek Hub, is needed and thus further planned. The initial Action Plan for Gender and Diversity, focused on Thessaloniki's public transport, is the first step to initiate further actions and explore local and regional potential for improvement in the issues we have highlighted.

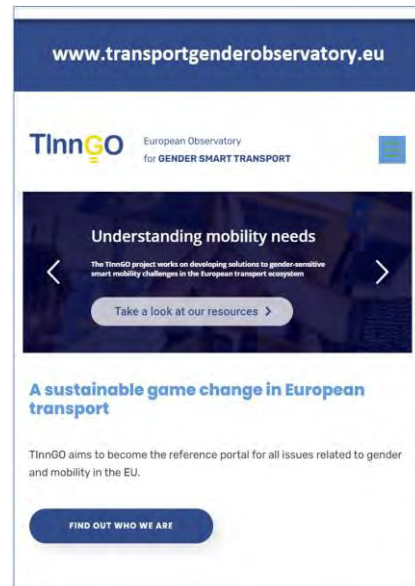
## Conclusions and recommendations:

### Follow-on actions

- A) Steps must be taken involving all stakeholders of planning, implementation, and operation for the public transportation system in Thessaloniki.
- B) The number of involved stakeholders signifies the complexity for processes such as planning and operation. Coordination of 14 municipalities is a major challenge which highlights the need for a unified channel of communication between all involved actors and stakeholders.
- C) Crucial for a proper implementation of actions is the collection of gender and diversity sensitive data. An analysis of these data will provide a baseline assessment as well as a foundation for proper actions towards meeting the transport needs of various vulnerable groups.
- D) Regarding bus stops, the design criteria need to be redefined. This includes the lighting and the streetscape surroundings. Ensure proper cooperation between different stakeholders in order to simplify public space interactions.

### Conclusions

The Metropolitan area of Thessaloniki faces numerous problems and challenges at the operational level regarding public transportation. The gender and diversity dimensions are certainly topics of interest that require provision of solutions through actions and measures.



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## Italian Hub

# Sustainable Urban Mobility Plans: a gender and diversity issue?

Angela Carboni, Miriam Pirra



## Accessibility needs in transport planning

A city's **mobility** is defined by the degree to which it is **accessible**, and its citizens can participate in urban activities, regardless of age, gender, or ability. Mobility barriers place burdens on those already facing difficulties in moving around cities.

Sustainable Urban Mobility Planning (**SUMP**) is a strategic and integrated approach for dealing with the complexity of urban transport. Its core goal is to improve accessibility and quality of life by achieving a shift towards sustainable mobility.

This document aims to illustrate how the SUMP process can be designed to address the accessibility needs of women and vulnerable groups of people. We provide suggestions to guide a gender responsive approach in policy and procedures for strategic urban transport planning.

### PURPOSE:

Increase the attention to gender and diversity in the writing and implementation of **Sustainable Urban Mobility Plans** (SUMPs).

- **Decree No. 397/2017** (and subsequent revisions DM 396/2019) in Italy (based on the European Guidelines for developing and implementing a Sustainable Urban Mobility Plan) establishes the obligation for all Italian cities to adopt SUMPs. The aim is the homogeneous and coordinated application of Guidelines for the drafting of SUMPs throughout the Country.

- Push to start focusing on aspects and users that are commonly not considered during the **mobility planning process**, for instance, women.

- Ensure a more defined knowledge of the **real mobility needs** based on gender to define more sustainable and inclusive mobility plans.

- More attention to **disaggregated data** is needed when proposing new sustainable mobility measures in order to guarantee a more inclusive mobility offer.

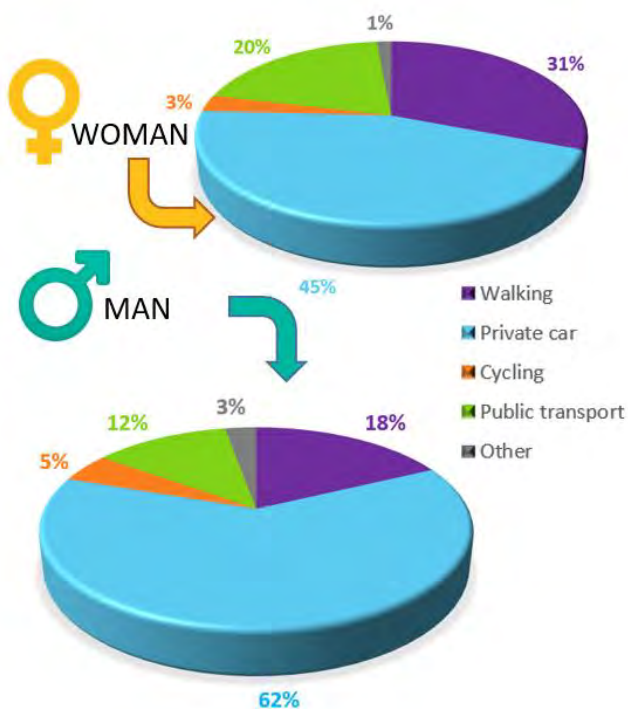
- Move towards '**innovation**' in the vision of mobility planning, considering the current absence of gender and diversity topics.



## Modal choices

The mobility of women and men is different, linked to their daily activities but also to the accessibility and safety of the vehicles chosen for their mobility needs.

The chart shows the gender-differentiated modal choice for the main trip (survey in Turin 2020). Women, for example, are less likely to cycle because they are more sensitive to safety issues. On the other hand, men are more likely to use their own car and less likely to use public transport.



## SUMPs and gender issues

A Sustainable Urban Mobility Plan (SUMP) is a strategic planning tool at the disposal of city authorities to promote a balanced and integrated development of all transport systems in order to stimulate more sustainable modal choices. The implementation of a SUMP requires strong cooperation and consultation between planners, institutions and citizens.

The *European Guidelines for developing and implementing a Sustainable Urban Mobility Plan* state that a sustainable transport system improves accessibility for all, regardless of income and social status and improves economic viability, social equity and environmental quality. And also “a Sustainable Urban Mobility Plan focuses on meeting the mobility needs of people in the functional urban area, both residents and visitors, as well as institutions and companies based there”.

The TInnGO Italian Hub dedicated itself to researching these aspects, i.e. how gender and diversity issues are included in transport planning and SUMPs development at the local and national level.





## 1 RESEARCH APPROACH

The hub's research approach includes the collection of **gender-disaggregated mobility data, surveys** and the analysis of mobility patterns for women and men. Our **review** of the scientific literature on this subject and the collection of **measures and best practices** in Europe and in Italy allowed us to enrich the research.

Regarding SUMP's specifically, an analysis of approved and adopted plans is still ongoing to check how they take gender aspects into account.

## 2 RESEARCH RESULTS

The mobility needs of men and women are different, as shown by many studies in the literature. Furthermore, as a survey carried out in Turin in 2020 on transport choices revealed, the use of transport modes is also dissimilar. Investigating the reasons that lead to these choices (e.g. safety or accessibility of vehicles) is crucial for **inclusive transport planning** that increases accessibility.

In Italy, at the beginning of 2021, there are 189 SUMP's, of which 97 are being drafted, 46 approved, and 46 adopted.



The main research results are:

- Only a low **percentage** of local authorities collected **gender-disaggregated mobility data**, so there was lack of attention to different mobility needs in general, and also in preparation of SUMP's.
- Difficulty in finding **gendered statistics**.
- Absence of **concrete contents** referring to 'women' and/or 'gender' and/or 'diversity' in the SUMP documentation.
- Low **attention** given to **gender and diversity issues**, among the people involved in mobility planning
- A small number of companies *are starting to include* disaggregated data in the work-home mobility plans.



## More attention on gender and diversity issues in transport planning

In conclusion, it is recommended that those involved in mobility planning be more attentive to gender and diversity issues to ensure more inclusive transport by considering how mobility needs change across gender, ethnicities, age, workplaces and locations.

The TinnGO Italian Hub in this context:

- created official **cooperation** with the people who are dealing with the SUMP development in the Turin Metropolitan area and Turin city;
- highlighted as a **specific theme**, the need to give greater attention to gender and more inclusive mobility;
- proposed **concrete actions** with a starter document identifying some key measures of interest for gender-sensitive transport planning.

### Main recommendations:

- the creation of a permanent **Observatory for inclusive and gender-based mobility** with the main objective of raising the awareness of all stakeholders on the topic and on the need for a more gender-sensitive and inclusive planning of mobility and related measures;
- the collection of **gender-disaggregated mobility data** essential to gain understanding of the specific needs of various social groups;
- the drafting of **mobility plans** that are more attentive to gender with the involvement of company and school mobility managers;
- a push towards more inclusive **accessibility** to means of transport through raising awareness among transport service operators of the need to pay greater attention to the needs of particular categories of users of their services;
- the promotion of gender and diversity-aware transport planning.

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[www.transportgenderobservatory.eu](http://www.transportgenderobservatory.eu)

TinnGO

European Observatory  
for GENDER SMART TRANSPORT



### Understanding mobility needs

The TinnGO project works on developing solutions to gender-sensitive smart mobility challenges in the European transport ecosystem

[Take a look at our resources](#)

### A sustainable game change in European transport

TinnGO aims to become the reference portal for all issues related to gender and mobility in the EU.

[FIND OUT WHO WE ARE](#)



## Portuguese Hub – Lisboa

### Community engagement to plan cycle-friendly cities

#### Lisbon TinnGO HUB



#### Key messages:

- **PURPOSE:** This policy brief is based on information from GIRA – Lisbon Bike Sharing. The purpose of this process is to seek contributions from regular bicycle users and non users in ensuring that the product and service offerings, and Action Plan recommendations are made relevant and meaningful to help more women to use the service.
- **AUDIENCE:** Bike sharing operators, policy makers and end-users by gaining insights into how to build measures and contribute to a gender-sensitive transport system.
- **SHARED EXPECTATIONS:** Sustain the social and innovation ecosystem and bring coherency to citizen interactions /contributions

#### Executive summary:

This document is aimed at supporting individual public entities intending to involve the public in mobility planning.

To promote the inclusion of a gender and diversity perspective in the development of mobility policies and measures, EMEL - Empresa Municipal de Mobilidade e Estacionamento de Lisboa produced a proposal for a co-creation process aimed at actively involving people from the cisgender women community, living in Lisbon, in the development of service and operational recommendations for GIRA – Lisbon Bike Sharing, in the short and long term, as well as recommendations to the ecosystem stakeholders, who get involved in structural terms - of the city, infrastructure, mobility policies. These recommendations will be part of the Action Plan for the city of Lisbon to promote the use of the Lisbon bike sharing.

## Introduction

EMEL - Empresa Municipal de Mobilidade e Estacionamento de Lisboa launched a survey on the Lisbon mobility habits. This survey aimed to respond to specific objectives:

- Reasons for using the different modes of transport in Lisbon;
- To understand which are the specific barriers to the use of bicycles and how this mode is integrated in the mobility habits of the city of Lisbon;
- To gather evidence of gender inequality in bicycle access and use.

This survey was essential to help understand the current situation and plan the intervention with a robust action plan. The survey was available online in April 2021, with a total of 695 answers - 571 were considered valid. The questions were related to aspects of demographic characterization, family and work dynamics, access to private transportation, commuting habits, bicycle use, GIRA - Bicicletas de Lisboa service and, finally, safety and security.

The answers obtained allowed us to better understand the mobility habits of the participants. It was possible to identify barriers to the use of transport modes and divergences in their use among cisgender women and men, particularly in the case of bicycles.

One of the evidences of gender inequality in bicycle access and use that resulted from the survey was regarding the use of own bicycle or shared bicycle system by cisgender women.

## Research overview

This approach for the GIRA – Lisbon Bike Sharing aims to involve people from the cisgender women community in the development of service and operational recommendations for GIRA – Lisbon Bike Sharing, in the short and long term.

**1 RESEARCH APPROACH:** To carry out the co-creation process to develop recommendations for the action plan, the following approach was defined:

*Stage 1 - Recruitment of 15 regular female cyclists in Lisbon*

These users will be key to the success of this co-creation process, as they will support EMEL in recruiting another 15 women (known to them) who are not cyclists, and who do not have a GIRA account in their name, to accompany them in an immersive experience of first GIRA use and participate in a collective session of reflection of the experience and ideation of measures for the action plan.





The users to be recruited must be over 18 years of age and meet at least one of the following profiles:

- Regular users with dependents;
  - Regular users university students;
  - Regular users with no dependents (single family)
- Regular use means using the bicycle (personal or from the GIRA system) as a means of transport or intermodally for travel at least 3 times a week, and at least one of these trips must be made other than for leisure purposes.

Each user of these users then invites a non-user to participate in the experiment at stages 2 and 3.

The recruitment approach selected for this stage was chosen in order to provide a safe environment for non-users in their first experience of using the GIRA system, because they felt accompanied by a trusted and more experienced person and also because of the effort that would require these accompanied routes to be made by members of EMEL. The aim of joining a pair of users and non-users in the realization of a route is to motivate experimentation, but also the possibility of providing a dialogue and joint reflection on the presence/absence of barriers in the use of the system by the participants, who do not have identical patterns or perceptions about the use of the bicycle as a means of transport in travel in the city of Lisbon.

#### *Stage 2 - Characterization and survey of barriers to bicycle use for non-users*

This step is only for non-user participants and will be done through a phone call, where a maximum of three questions will be asked and during which they are given the formal briefing to what is expected from their participation and all the necessary indications to participate in this accompanied immersive experience.



#### *Stage 3 - Carrying out GIRA shared bike trials in pairs*

In order for non-user participants to be able to express their barriers to cycling on a regular basis, it is proposed that they carry out a first immersion through the experimentation of the GIRA service. In this way they can confront their initial barriers raised in the previous step (real or perceived) with a real accompanied experience.

A total of 15 pairs will be recruited (thirty people: 15 users and 15 non-users) to run routes of their choice that must take place whenever they have preference and suits both of them for 7 days. These routes must have a minimum distance of 2km (maximum 45 minutes). All participants must ride on GIRA bicycles, and they can choose if it is electric or not. During the route, the user/non-user pairs should always maintain contact and keep close proximity and accompany the route with a reflection (out loud) of the difficulties (or lack of them) felt and the way the experience is lived, in order to share afterwards.

#### *Step 4 - Conducting collective reflection and ideation sessions*

These sessions should bring together several pairs in order to gather, in focus group mode, the various opinions on the lived experience and the barriers (or lack of them) felt among the various participants. After this reflection, facilitated by members of EMEL, the participants will be asked to contribute with ideas for mitigating barriers and promoting the regular use of the bicycle as a means of transport by more women in the city of Lisbon. At the end of the session these barriers, reflections and ideas are gathered and will contribute to the action plan. In total there should be two collective sessions.

#### *Step 5 - Collecting all the information gathered for the action plan*

All these steps should be documented and form part of the co-creation, reflection and ideation process. At the end of the process a report of the work done and the main conclusions and recommendations extracted should be created and included in the action plan.



**2 RESEARCH RESULTS:** By involving and advancing the participation of all stakeholders it will be possible to improve the quality, efficiency and effectiveness of policy design and service delivery.

#### *Smaller groups, teams or “task-forces*

In collaborations and co-creation processes that involve many different actors, facilitating frequent connections and interactions between the participants is important to ensure information exchange, sharing of ideas and to enhance learning. The exploration of new ideas and solutions require a certain autonomy of the actors and/or the group.

*Supporting the development and creation of a shared vision and common goals helps to align interests.*

Managing the interactions between the participants in the collaboration is important, and combining different management strategies is beneficial. Supporting the development and creation of a shared vision and common goals helps to align interests.



## Conclusions and recommendations:

- Policy-makers and Mobility Companies are advised to encourage co-creative processes, in order to foster the quality, efficiency and effectiveness of policy design and service delivery.
- Long-term involvement - consistently involved to create new insights, thus strengthening the relationship with important stakeholders, including under-represented groups in society
- Partnerships with relevant users are crucial to bring together a successful co-creation process. A user that knows the target group, that is experienced in the use of the service, can help bring the collaboration to an inspiring and unanticipated conclusion.
- Involving citizens and stakeholders in planning improves the quality and acceptance of urban mobility measures

Interactions with decision-makers empower citizens to shape mobility measures in line with their needs. This also increases their ownership and acceptance of whatever emerges.

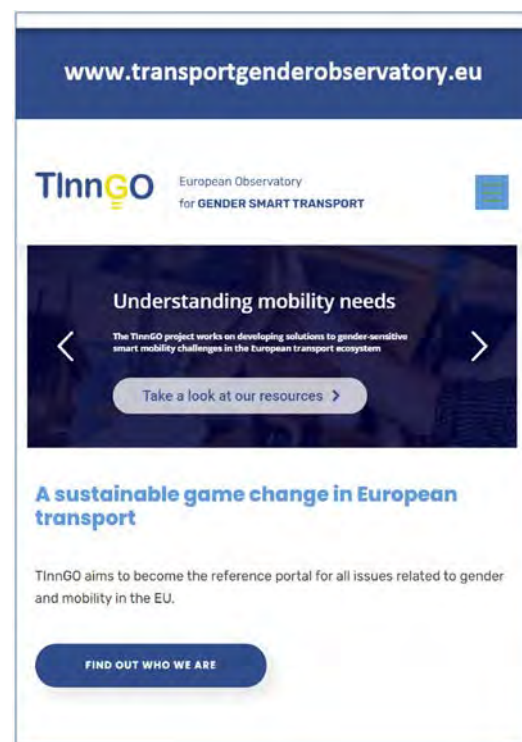
This approach meets the needs of citizens and stakeholders as it is:

- **Attractive** - Involvement of end-users in the definition of action plan measures (co-design)
- **Effective** - Focus on specific user needs – validation of measurers base gender aspects - Co-design method
- **Inclusive** - Measures build in co-creation with users
- **Sustainable** - Promote the use of soft mobility modes, in this case bike, in Lisbon.

## Contact Portuguese Hub

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## Romanian HUB

## Gender equality and women's empowerment in transport: from theory to practice.

Ștefan Roșeanu, Ioana Baba and Florin Paven



2019 Skirt Bike, Alba Iulia. Photo source:  
<https://www.facebook.com/SkirtBikeAlbaIulia/photos>

### Executive summary

Statistics show that Romania is one of the EU countries where gender inequality is still high. While EU countries on average are about 60 years from reaching complete gender equality, the corresponding time frame for Romania is estimated at 100 years. The transition towards gender equality and empowerment of all women and girls in Romania is slow regardless of the regulations by the government to reduce gendered inequalities.

The gender imbalance is visible in the transport sector too. The work in the Romanian Hub was developed to create a major *change* in the traditional way people in Romania and Eastern Europe are used to see women in transport and STEM. Also, women and men have different travel patterns as a result of unbalanced caring duties and household activities in Romania. By including the differences in travel patterns and needs in a process of (re)designing the public local mobility infrastructure, the mobility sector can provide equal access to transport, enable women's empowerment and dismantle gendered stereotypes.

### Gender equality in Alba Iulia

Alba Iulia is the main city of Alba County and the promoter of a series of Smart City actions to provide sustainable growth and more social inclusion. Public transport and micro-mobility are encouraged by the city as part of the Smart City Strategy and the Sustainable Mobility Plan. The transport sector working environment is still marked by the paternalistic protective approach of working environment characteristic to large parts of Romania. The shift to Smart Mobility should provide new jobs and research opportunities, creating a gender and age equitable working environment.

### Gender mainstreaming in Alba Iulia

The purpose of this policy brief is to highlight the existing gender inequalities in transport in Romania and to stimulate gender equality in urban mobility through new, sustainable public policies and gender action plans. The policy brief addresses public entities in Romania, that are willing to close the gender gap in mobility and facilitate women's empowerment.

Alba Iulia Municipality is the coordinator of the Romanian Hub at local level and a public authority. The Municipality enabled gender mainstreaming by signing the European [Charter](#) for Equality of Women and Men in Local Life. As a result, the Municipality committed to elaborate and implement an Equality Action Plan by the end of 2022. Furthermore, the Municipality aims to integrate the gender and intersectional approaches in other relevant strategies (such as the Integrated Urban Development Strategy, Alba Iulia Smart City Strategy etc.), in order to enable Gender Smart Mobility projects at local levels.

Gender mainstreaming aims to provide equal access to transport jobs regardless of gender or age. Also, gender mainstreaming can help to plan public transport solutions, which cater for both women and men.



## The status of gender actions in Alba Iulia

Alba Iulia Municipality is working on a Smart City Strategy, which includes Smart Mobility. Within the promotion of Smart Mobility is a goal to identify solutions that stimulate women's participation in the sector of Smart Mobility. Alba Iulia has set up events (such as the European Mobility Week, Women Rally etc.), workshops and investment projects in which the Municipality encourages local policymakers, top management of transport operators and educational community stakeholders to identify solutions for a more gender equal sector.



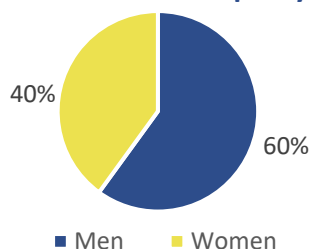
**Alba Iulia Smart City Strategy Verticals**

Photo source: Alba Iulia Municipality own photo collection

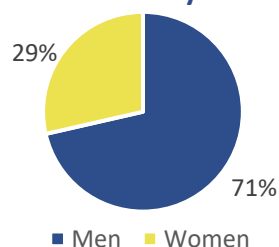
## Gender impact assessment at local level

The values of Alba Iulia Municipality are aligned with the national legislation, outlining democracy, respect for the law and the citizen, integrity, ethics, transparency, commitment for sustainable development, performance, efficiency (value for money), innovation in providing high-quality public services, gender equality and non-discrimination. The gender assessment of the local context starts at the internal level within the Municipality. Thereafter, a macro-environment analysis takes place, including an assessment of the interaction with external stakeholders.

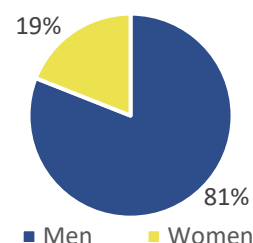
**Top management  
Alba Iulia Municipality**



**Gender distribution  
in Alba Iulia City Council**



**Gender share in STP Alba,  
the private operator  
of the local  
public transport services**



## Approach

During the first phase, an assessment of the existing development strategies of Alba Iulia Municipality was conducted. The second phase of assessing the external environment requires supplementary financial and human resources for more precise outputs, which represents the focus of the project sustainability.

## Results

The assessment found that gender equality and age discrimination are only briefly described or even overlooked within the existing sustainable development strategies in Alba Iulia. However, during the project implementation phase, Alba Iulia Municipality has signed the European Charter for Equality of Women and Men in Local Life in 2020.

## Findings

- Communication barriers accompanied by physical barriers due to the Covid-19 situation;
- Gender imbalances in executive management positions in both public and private entities;
- No Gender Action Plans or similar gender strategies implemented in neither public nor private entities;
- Lack of data related to gender in the local public transport system;
- Low interest in funding gender equality projects by public and private organizations;
- A low percentage of successful women entrepreneurs in transport at the local level.

## The TinnGIDLab

Alba Iulia Municipality has created a network of stakeholders (TinnGIDLab) to work on gender and diversity discrimination in the labor market. The network includes public transport operators and authorities, legal enforcement agencies, labor assistance organizations and academia from the local region. Exchange of information with stakeholders is organized regularly as well as workshops. Results of these interactive actions are used to prepare policy papers. The "1st of December 1918" University of Alba Iulia turned out to be one of the most important gender advocates who supported mentorship sessions among students.

## Findings

- Main employers are open to solutions to avoid gender and age discrimination;
- There is a need for know-how transfer related to gender equality in the educational system (local schools, universities);
- Technology shift may provide the right tools for gender and age equity measures;
- Project implementation and impact rely on budgetary allocation and alignment within local development strategies;
- Raising awareness within the local community by organizing several public events focused on girls' and women's empowerment in Alba Iulia (such as Skirt Bike, Women Rally, European Mobility Week etc.)



2019 European Mobility Week in Alba Iulia: Public campaign on women's empowerment. Photo source: Alba Iulia Municipality own photo collection

## Next steps

- Promote and implement Smart Mobility initiatives to provide equal opportunities in employment, development and research activities;
- Acknowledge the benefits for Gender Smart Mobility by further gender mainstreaming actions (such as the Equality Action Plan as a signatory of the European Charter for Equality of Women and Men in Local Life)
- Cooperate with academic and training organizations in preparing gender and age equitable learning as well as in individual careers;
- Support innovation and new business initiatives to speed up the digitalization of the transport sector as a key to making jobs more inclusive across gender and age;



Workshop session with "1st of December University Alba Iulia", November 2020. Photo source: Alba Iulia Municipality own photo collection



## Recommendations

- Develop and implement a Gender Action Plan or a Gender and Diversity Action Plan;
- Include Gender Mainstreaming in existing and future public policies;
- Identify and activate main relevant stakeholders during all gender mainstreaming processes;
- Identify user needs and collect data on gendered inequalities in transport and smart mobility;
- Include collected data in future planning and design;
- Include the gendered impact of transport in cost-benefit analysis;
- Raise awareness on girls' and women's empowerment through workshops, meetings, events etc.;
- Develop project proposals following a participatory approach on gender equality and diversity;
- Identify potential financial and human resources and implement the project proposals.

## Contact

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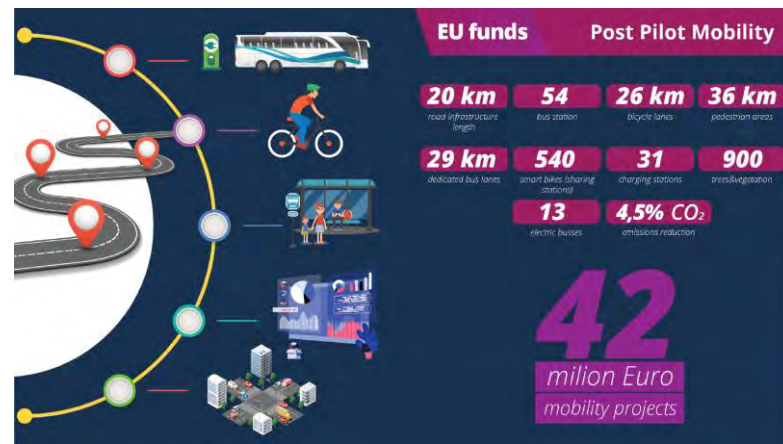
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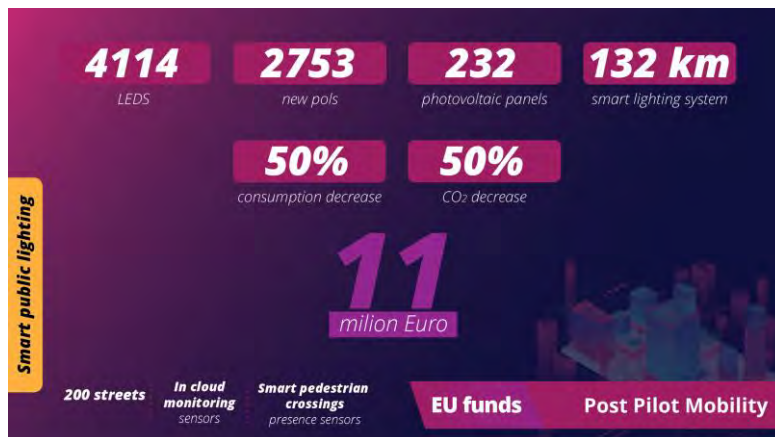
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**Main results targeted through the mobility projects funded through the 2014-2020 Regional Operational Programme, Photo source: Alba Iulia Municipality own photo collection**



**Main results targeted through the smart lighting projects funded through the 2014-2020 Regional Operational Programme, Photo source: Alba Iulia Municipality own photo collection**



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## Scandinavian Hub

# Can Bike-sharing Contribute to Transport Justice?

Malin Henriksson & Robin Nuruzzaman, VTI



## Executive summary:

New mobility solutions have so far primarily been designed to fit the mobility needs of high-income user groups and may have limited impacts on injustices in the transport system. With evidence from a case study of a bike-sharing system implemented by a local authority in Sweden, we present how this bike-sharing system is used presently, and how BSS's can be developed to meet diverse transport needs and improve equality. The analysis is based on interviews and document studies and shows that the system at present mainly attracts users that already have high accessibility. That docking stations were placed in vulnerable residential areas, combined with an affordable price model, suggests that the system has potential to contribute to a more just transport system. Local authorities must take a more proactive approach in BBS design in order to reach long-term objectives in line with sustainability, equality and justice.

## Key messages:

- **PURPOSE:** This policy brief is based on lessons from a local bike-sharing system (BSS) in Linköping, Sweden. The study's aim was to explore users' experiences and analyze how BSSs can contribute to a fairer transport system.

- **TARGET GROUP:** This brief is useful to policy makers and BSS operators for gaining insights into how BSSs can contribute to a socially just, financially viable and environmentally sustainable transport system.

- **TRANSPORT JUSTICE AND BSSs:** Transport justice concerns differences in accessibility between the best-off and worst-off groups in society, stressing the need for fairness in the distribution of the accessibility and affordability of all types of transport services.

A "one size fits all" approach to bicycle design does not reflect the multiplicity of the city and excludes disadvantaged groups like people with disabilities. A bicycle fleet that includes, for example, cargo bikes would improve accessibility for different social groups.

The study the policy brief is based on was conducted by a research team at VTI: Malin Henriksson, Anna Wallsten and Jonas Ihlström.

**Read more about the research team:**  
<https://www.vti.se/en/research/people-in-the-transport-system/mobility-social-inclusion-and-justice>



## Introduction:

Studies find that bike-sharing systems (BSS) often target young, white males that are well-educated and of high income in urban areas. These systems usually do not recognize that men and women have different travel patterns. There is also a lack of options for people that are less physically able, children, and people with larger baggage. BSSs are often located in wealthier areas. They exclude persons without smartphones and credit cards. There is a push for developing BSSs that are fairer and accessible to more diverse groups of people. However, research is still lacking in this area.

Linbike is a BSS that was launched in September 2019 in Linköping, Sweden. It was an initiative taken by the local authority and is the largest BSS in Sweden today. LinBike offers 200 electrical assisted bicycles at almost 20 docking systems located throughout the central parts of Linköping. During the winter, the cycles are equipped with studded tires. Helmets are not available. This service is available for both private and business use. Even though this service is intended for a broad range of users, it is mainly being used for job commuting. The BSS business model is subscription-based or pay per journey. Users must register their personal details in an app to gain access to the BSS.

## • Research Overview

The study of the LinBike bike sharing system aimed to shed light on the experiences of users and how a BSS can contribute to a just transport system. The daily activities of LinBike systems design and usage were studied and analyzed.

Specifically, this inquiry investigated how BSSs can be developed to include and address the needs of different socio-economic groups in urban areas, to reflect a multitude of user needs.

- 1 RESEARCH APPROACH:** The study was designed as a single case study. On-site semi-structured interviews with users of the BSS were combined with interviews with Linbike representatives, and document analysis of Linbike material. The analysis is influenced by theories on transport justices and time-geographical theory.





**2 RESEARCH RESULTS:** Linbike was established by the city of Linköping to help achieve its political objectives, that 40 per cent of its traffic should be comprised of bicycle trips, to strengthen local businesses, and to improve Linköping's image as a forerunner. Inbound commuters and business were identified as target groups which guided the design of the BSS.

The placement of docking stations was based on a travel pattern analysis with the largest stations placed in the center of the city. Areas with larger work places and commuter parking spaces were also chosen, as well two low-income residential areas; however their needs were not considered as it was assumed that they would benefit in a similar way as the primary target groups.

The "one size fits all" model of Linbike excludes certain users. These groups include parents with children and persons with luggage, and children and youths since there is an age limit of 18 years for registration. The most commonly used docking stations are those that lack good connections to public transport. Also, one of the stations in a low-income area is very popular.



Based on the on-site interviews, users mostly included young men that were students or worked in IT or engineering. The main purpose for using the BSS is daily commuting. One of the most active user groups was bicycle couriers that deliver food with the bicycles. Users are mainly positive to Linbike since the bicycles are perceived as comfortable and fast.

To some extent, the service has also been used by groups with traditionally low accessibility at risk of transport poverty. Linbike connects them to the public transport system and increases their accessibility to activities such as work.





## Conclusions

- By initiating a BSS, the local authority took a proactive role in reaching long-term objectives. There is a political ambition to make Linköping a forerunner and to contribute to environmental sustainability, public health and strengthen local businesses. Here, the BSS is seen as one way to support these goals. This shows that connecting BSS to broader political objectives can facilitate its development.
- The “one-model-fits-all” logic excludes certain groups. The main user groups already are highly mobile and experience high accessibility. That the system design included docking stations in two low-income residential areas and had an affordable price model are examples of design considerations that have potential to target diverse usage.

## Recommendations

- The “one-model-fits-all” logic that dominates BSS design today cannot build a solid basis for the transition to a more sustainable and just society: it excludes users beyond the norm.
- A BSS design needs to take the needs and wants of marginalized groups into account in order to contribute to transport justice.
- Stakeholders need to prioritize equality objectives in strategic plans and programs. These objectives must guide the design of sharing services to contribute to transportation justice.
- Local authorities must take a more proactive approach in BSS design in order to reach long-term objectives in line with sustainability, equality and justice.

### Contact

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### Recommended reading

Gelinder, M. 2020. Potential justice-implications in system design of bicycle sharing systems. Master thesis. Radboud university.

Nixon, D. V. & Schwanen, T. (2019). Bike sharing beyond the norm, *Journal of Transport Geography*, 80, pp. 1-4.

Uteng, Espegren, Throndsen, Böcker. "The gendered dimension of multimodality: Exploring the bike-sharing scheme of Oslo." In *Gendering Smart Mobilities*, pp. 162-187. Routledge, 2019.



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## Spanish hub

# INTERNAL JOB PROMOTION PROCESSES WITH A GENDER – PERSPECTIVE

Mireia Calvo, Margherita Colleoni

## Executive summary:

Despite the great effort that Spanish institutions put in fostering equal job opportunities for all the population segments, companies are still struggling in finding their way to turn legislation into reality.

To set up and implement an equality plan is the first step towards the achievement of a gender balance within the company. The assessment of the current company situation and a deep analysis of its processes are key to detect barriers for equal opportunities

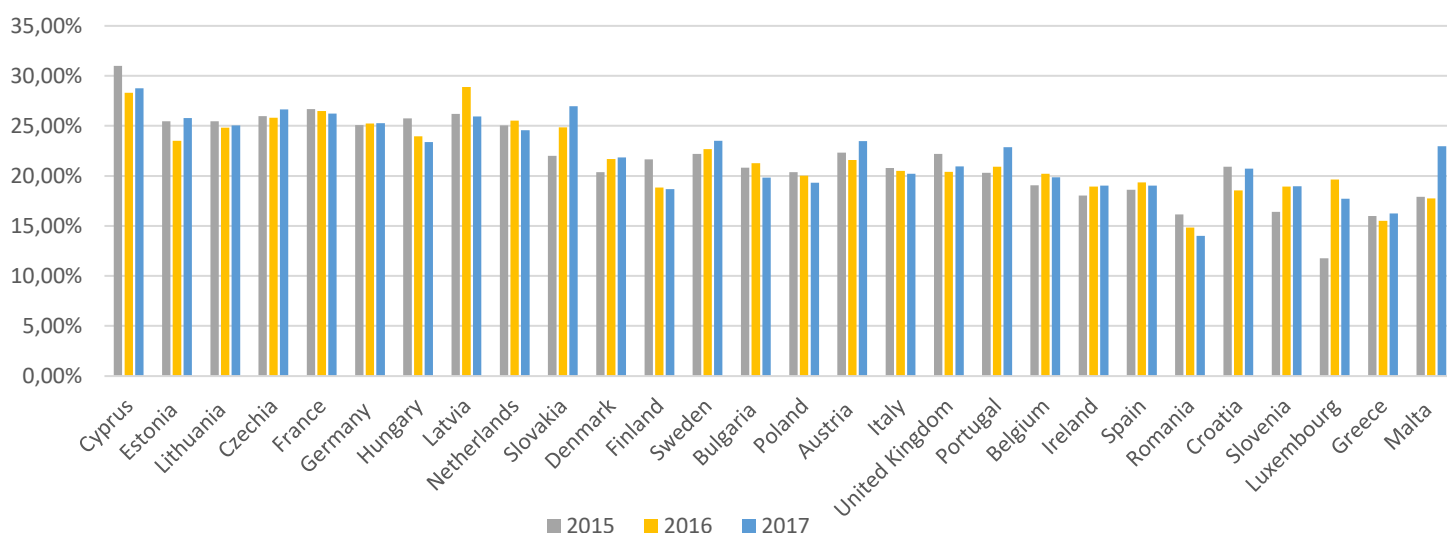
This policy brief gives an example of a study developed in collaboration with a Spanish transport company that has an Equality Plan in place, but where managerial positions were still male-dominated due to certain internal promotion criteria.

This study showed how gender bias in the internal promotion process was detected and modified, thanks to the introduction of gender-smart criteria and indicators.

## Key messages:

- **OVERVIEW:** The transport sector is highly male dominated, that is, only the 23% of European employees are women (Fig.1). At managerial level, the percentage of women is even lower.
- **CHALLENGE:** In many companies the internal promotion programs are gender-biased and indirectly benefit men. The main challenge is to avoid the invisible barriers that makes higher positions male dominated
- **PURPOSE:** To provide recommendations to encourage companies to implement an internal promotion process with a gender perspective.
- **PRECEDENT:** The Spanish Royal Decree-Law 6/2019 of 1 March 2019 states that all companies with more than 50 employees should implement a Gender Action Plan.
- **AUDIENCE:** Transport companies, that have or will implement a Gender Plan following the Spanish Royal Decree-Law 6/2019 of 1 March 2019.

## Women employed in the transport sector

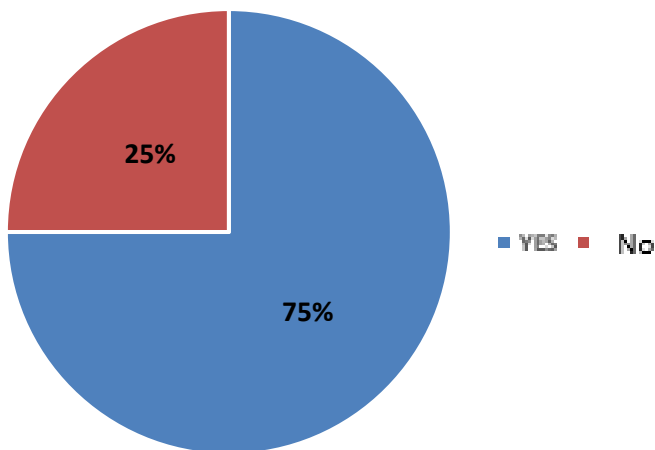




## • Overview of the research

The transport sector is male dominated, and the management positions are not gender balanced. Many companies already have set up an Equality Plan. However, some crucial aspects are not considered, such as the internal promotion process. One of the most common criteria for promotion is the length of service in the company. This is an example of gender bias, since male employees normally have longer service periods due to the company history. As a result, the management positions are male-dominated. In addition, there are invisible barriers that increase the gender bias (glass ceiling).

Do you consider your working environment low diverse in terms of gender?



Source: survey of employees in the Spanish transport company

## • Examination of the findings

Since the promulgation of the Spanish Royal Decree-Law 6/2019 of 1 March 2019, many transport companies have been implementing an Equality Plan. Equality Plans need to ensure equal promotion processes inside the company to avoid gender bias in management positions.

The initial study has been done with a transport service provider that already had an Equality Plan, although this had not removed internal promotion gender biases.

Firstly, the company baseline scenario was assessed, through a survey (see Fig. 2), that assessed employees' perceptions of gender and integration aspects.

Taking into consideration the employees' needs and perceptions is a good practice that benefits the working environment and preserves the talent in the company.

The employees feel valued, since their opinions and needs have been taken care of.



Based on the employees' perceptions and taking into consideration the existing gender bias, the promotion process was accurately analyzed and adapted to include a gender perspective.

The criteria that caused the gender bias was removed or reduced in importance, and new ones were proposed. These new criteria were egalitarian and benefit all the employees in an equal way.

These criteria required the implementation of an action plan to ensure correct implementation. Key Performance Indicators were crucial to assess the set up process and the foster the usability of the new criteria.

All the new promotion processes and criteria were accompanied by deadlines to implement the actions and ensure validation.

The adapted internal promotion process will be kept neutral and based on the activities done by the employees. Each employee will have the same chances to climb the career ladder and join management positions based on their skills.



The Equality Plan is a strong tool that could be even more powerful when supported by a detailed review of all the internal processes in the company. Besides, knowing the employees' perception is useful to detect hidden gender biases and general needs.

The modification of the evaluation criteria for internal promotion will improve the gender balance in managerial positions.

All these actions will contribute in avoiding the gender bias, which will favor integration and diversity inside a company.





## Conclusions and recommendations:

It is important to set up and implement an Equality Plan in the transport companies. It is needed to establish processes to favour the gender balance in management positions.

In order to achieve that, the following steps should be followed:

1. Assessment of the current situation in gender aspects in the company.
  - Analyze the gender balance in the different positions in the company and the contributing factors.
2. Assessment of perceptions within the company:
  - An anonymous survey can help to know the perceptions of the employees in the company.
3. Once the assessment is done, select the measures that can benefit the gender balance and improve the internal promotion processes in the company in a neutral way, without favouring any gender.
4. Development of actions with deadlines and Key Performance Indicators to follow and assess the accomplishment of the process is useful to ensure the implementation and application of the new criteria.

Since many companies in the transport sector are not gender balanced, but rather favour some groups (men), the implementation of neutral criteria equal to all can benefit the promotion of integrated and gender balanced companies in the future. The gap can be closed, and the next generations of employees will work in companies formed by a diverse group of people where the promotion process will be neutral ensuring that the management positions are accessible to all.



## Contact

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## UK Hub

# Working with mobility providers to achieve gender and diversity smart mobility solutions

Ann-Marie Nienaber and Jacquie Bridgman



## Transdisciplinary work collaborations are desirable but challenging

For successful gender and diversity sensitive mobility planning, it is important to work not only in an interdisciplinary but transdisciplinary manner. This means that diverse actors not only from different disciplines but also from different scientific and societal institutions who normally do not work together are mutually concerned about gender and diversity approaches in sustainable mobility planning (e.g. Lang et al., 2012; Ahlstrom et al., 2020). However, working in a connected way can prove challenging, given the broad spectrum of disciplines and institutions in the field, such as planners, policymakers and academics, all trying to address gender and diversity for sustainable urban mobility from differing perspectives.

To counteract this, the work of the UK Hub focuses on strengthening and modifying approaches e.g., the collection and evaluation of mobility data to ensure gender and diversity as an integral part in our future mobility.

## Key Messages

### State of Play

To understand the level of awareness among mobility providers about gender and diversity issues and how this factors into their services.

### Output

This brief provides guidelines for policy makers and transport providers and recommends that gender and diversity is an active part in transport planning through the following objectives

1. to gain an **all-encompassing view** into the needs and requirements of diverse stakeholders
2. that **mobility services** should be inclusive for all users
3. to plan future mobility services by ensuring a transdisciplinary working approach that understands **gender- and diversity as an integral part** of our future mobility planning.
4. to **recommend that mobility surveys and data** in terms of their findings, potentials and gaps are assessed with regards to gender and diversity.
5. to recommend the collection of **data on gender and diversity** using the collection of gender and diversity disaggregated data..

## AUDIENCE

This policy brief informs all stakeholders in the field of public transport by suggesting a new transdisciplinary approach to work which puts gender and diversity at the center of our future sustainable urban mobility planning (SUMP\*), and by providing an organizational framework and best practices to ensure mutual economic and social benefit.

\* 'Guidelines – Developing and implementing a Sustainable Urban Mobility Plan'  
<https://www.eltis.org/mobility-plans/sump-guidelines>



## Transdisciplinary work is needed to address gender and diversity issues in smart mobility



Transport planners and operators are constantly seeking novel solutions to support citizens to navigate journeys in a sustainable, inclusive and affordable way. The Covid 19 pandemic has impacted travel for work and leisure with citizens trying to avoid crowded public transport modes and seeking more personal options such as demand responsive buses, e-Bikes or e-Scooters. This has enabled smaller operators to bid for mobility services in an already tight market. Such operators may already operate in the global arena but be unaware of specific knowledge of gender and diversity issues on a local level. It is this specific issue the UK hub sought to address.

Using co-creation methods and sharing knowledge can support smaller operators to ensure that any solutions offered are as inclusive as possible, thus maximising acceptance and ensuring value for money and sustainability.

## Approach and Results

For transdisciplinary work collaborations that put gender and diversity at the heart of their philosophy in the context of mobility planning, the UK Hub pursued the following research approach.

### A focus on two main elements:

- 1 RESEARCH APPROACH:** Design of an organisational framework through co-creation workshops with the mobility provider Zeelo to allow understanding of **the state of play** for SME mobility providers currently operating in the UK. This will support future sustainable mobility planning for the provider (and therefore planners) and allow the development of innovative solutions thus reaching sustainability goals by building on knowledge exchange and mutual trust between different stakeholders.
- 2 RESEARCH APPROACH:** Design of a tool-kit to collect and evaluate mobility data regarding gender and diversity in order to identify gaps and opportunities. We put this into practise in cooperation with representatives of the transport provider, Zeelo. We determined which existing mobility data Zeelo had used or not so far, whether and how additional assessments are designed and carried out, and for what purpose.

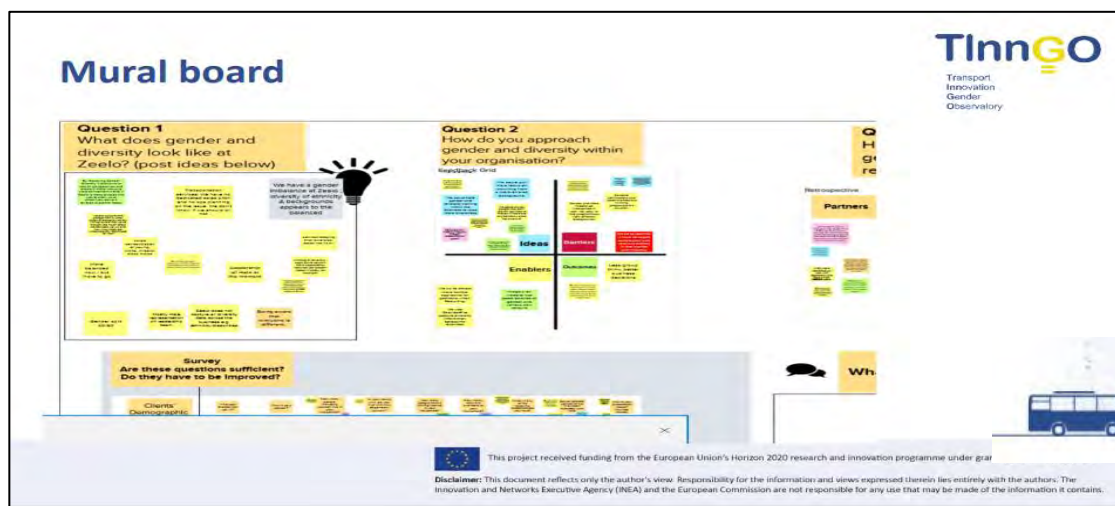


Figure. Example of one co-creation workshop with Zeelo using Mural and Zoom

## RESEARCH RESULTS

### 1 Transport operators know their market but are they missing out?

1. The development of a toolkit for co-creation workshops can support planners to establish that new mobility providers are aware of **localised transport issues**
2. Co-creation workshops can provide a **learning environment** for operators, planners and researchers to share knowledge and explore local issues/legislation requirements.
3. Using such workshops new mobility providers can **maximise their acceptance** and thus sustainability of their operation
4. Successful workshops rely on an **openness for collaboration and co-creation**
5. Desirable incentives for collaborating should be highlighted to operators and planners, as all parties will have different objectives.
6. A further important factor is the flow of information, which needs to be organised and distributed effectively, and on time. Thus, **adequate coordination of different actors, tasks, roles and responsibilities** involved is required for successful collaboration.
7. Outputs from the workshop lead to the subsequent development of a **toolkit** for mobility providers to improve their data collection. This will enable them to understand their ridership and highlight gaps and opportunities
8. Validation of the **data collection toolkit** has been initiated by the operator, Zeelo, further support will be offered by the UK hub to analyse the data and refine the toolkit.

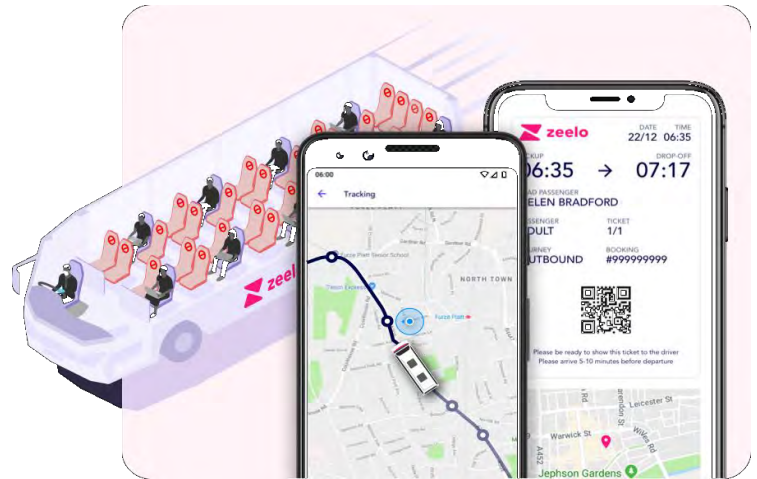


Figure. Zeelo's app for on-demand bus service

### 2

## Collaboration Methodology

Our goal was to develop a methodology that explored SME transport providers' knowledge of gender and diversity issues in the local context and ways in which this knowledge could be improved through co-creation. This has enabled us to develop a toolkit for operators to collect data and improve services to a variety of different groups such as women, children and disabled people.

The methodology is based on four steps to realise success;

1. Informal meetings between transport operators, planners and policy makers in order to **set the framework** (e.g. number of meetings; ethical agreement).
2. A **workshop**, designed to explore knowledge of gender and diversity and support the transport provider in **designing more gender and diversity attractive, effective, sustainable and inclusive services**. During the workshop (in our case this was facilitated online using Zoom and Mural) a survey was co-created that the transport provider can use to identify the needs of women, children and disabled people from their clients (businesses, schools transport operators and riders). Identifying needs will improve the quality of services and ensure an inclusive approach.
3. A **follow up meeting** to evaluate the results of the workshop, allow for reflection and develop proposals for the survey toolkit from all involved in the collaboration.
4. **Validation** of the survey within the transport provider's organisation.
5. **Final development** of the survey toolkit that could be applied for other providers.



## Conclusions and recommendations

The aim of the research was to explore SME mobility providers' understanding of gender and diversity issues in the local (UK) context through a process of co-creation with policy makers, providers and planners in the field. This will not only enable mobility providers to have a richer picture of user needs but should increase acceptance and therefore sustainability of their schemes. This co-creation will also support planners and policy makers to develop mobility solutions that provide affordable, attractive, sustainable, effective and inclusive options for citizens.

- The UK hub recommends that UK local authorities and policy makers question potential providers about gender and diversity as a prerequisite of any bids for contracts.
- We recommend this methodology based on the best practice example we developed with Zeelo to support new mobility providers in understanding local context and regulations and to ensure new schemes offer an affordable, attractive, effective inclusive and sustainable service.

### THE UK Hub developed:

A framework to organize co-creation with transport planners, policy makers and SME transport operators which aims to improve their understanding of gender and diversity issues in the local context. We did this by;

1. Holding co-creation workshops with transport operators and policy makers
2. Generating outputs from the workshop, in this case a survey for the operator, which could lead to greater acceptance of new mobility solutions such as demand responsive buses, e-scooters and e-bikes.

Such co-creation exercises build trust between operators and policy makers with greater understanding of what is required from all parties. They have potential to outline the impact for all partners of such transdisciplinary collaborations such as increased revenue for operators (through maximising ridership) and ensuring the support of policy makers.



*"This methodology helped us a lot to move on with issues on gender and diversity and to offer a more attractive and inclusive service!"*



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