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**REPORT TO THE UNITED NATIONS ECONOMIC COMMISSION
FOR EUROPE EXECUTIVE COMMITTEE ON THE IMPLEMENTATION OF THE
PRIORITIES OF THE UNECE REFORM FOR STRENGTHENING SOME
ACTIVITIES OF THE COMMITTEE**

The Inland Transport Committee and gender issues in transport

Note by the secretariat ^{1/}

The Committee may wish to note that the United Nations Economic Commission for Europe (UNECE) Executive Committee had asked all sectoral committees to set up a mechanism to ensure that gender is effectively mainstreamed into relevant areas of the Programme of Work. It further asked all Sectoral Committees to include gender mainstreaming in the annual report to the Executive Committee. At its meeting in June 2008, the Bureau asked the secretariat to prepare a paper on transport and gender for consideration at its next meeting, and at its meeting in November 2008, the Bureau considered the attached document and recommended to the Committee to endorse it.

INTRODUCTION

1. Transport can make a big difference in increasing women's productivity and promoting gender equality. In addition to its major contribution to economic growth, transport plays a crucial role in socially sustainable development by broadening access to health and education services, employment, improving the exchange of information, and promoting social cohesion.

^{1/} This document should be considered in conjunction with documents ECE/TRANS/2009/6 and ECE/TRANS/2009/8.

Yet, according to the World Bank, little attention appears to have been paid to women's needs in transport development projects worldwide.

2. Making transport policy more responsive to the needs of women requires developing a structured approach to understanding their needs, identifying instruments to address those needs, analysing the costs and benefits of those instruments, and establishing an appropriate policy framework. It also requires that women are represented at each step of the planning and design process of transport investments. Government agencies and NGOs, community-based organisations, and women's groups that can be used in planning and implementation should be identified and consulted.

3. Transport is a traditionally male-dominated sector, both from the employment point of view and for the values which are embedded. At same time, it is widely recognised that gender sensitive issues are many and highly relevant. There are, however, certain important differences in approaches to gender sensitive issues in developing and developed countries.

4. In the former, women are frequently seriously constrained in their access to transport and this often translates in limited access to labour markets, increases production costs and reduces the amount of goods which can be taken to market. Poor access to transport also affects girls' school attendance more than boys', women's use of health and other public services and maternal mortality. Evidence shows that in developing countries lack of access to transport services falls more heavily on women since they tend to spend long hours hauling water and fuel and walking to and from farm plots. Head-loading is a major health hazard to women and they may suffer higher accident rates walking on crowded roads with heavy burdens. In some areas where the water is scarce only half as many girls as boys attend school due to the time-consuming collection of water.

5. Transport is hardly mentioned in the Millennium Development Goals (MDGs) either as a cause of or as a potential solution to poverty. However, transport infrastructure and services have a strong influence on empowerment of vulnerable groups such as women, by reducing time spent on domestic tasks, timely and affordable delivery of basic services such as health, education and water and sanitation. Thus, access to transport services and mobility for women could be considered as critical factors for achieving the MDGs by 2015.

6. These considerations, supported by numerous field research, case studies and analysis, has led development organisations, international development banks and the aid community in general to conceptualize new approaches to gender in transport with particular emphasis on links between transport and its contribution to increasing women's productivity and promoting social equity. Based on empirical evidence this conceptualization starts from recognition of women's transport needs, identification of potential policy analysis and evaluation of the benefits of gender-oriented efforts as well as of their costs.

7. In developed countries, it has also been recognized that there are sufficiently significant differences between women's transport demands and experiences, as opposed to those of men – differences in access to private transport, in patterns of commuting and employment, in child-care and elder-care responsibilities, in basic attitudes to private and public transport – to justify treating women separately. Within the group "women" there are highly important distinctions which depend, for example, upon income, age, household, employment status,

ethnicity, location, class and education. The particular balance among these will vary from country to country and area to area, and it seems essential for policy makers and transport operators to gather information locally in line with best gender balancing practice in order to understand the characteristics of women. In addition to understanding travel issues, transportation, access and community design, additional specific considerations about injury prevention and ergonomics have come into picture in the last several years.

8. Internationally, gender has begun to feature as a recognized issue in transport policy and planning while transport has begun to feature on the agenda of gender policy. "Gender and transport" is therefore placed on somewhat new professional ground. At present it is fair to argue that there are no systematic gender inclusion procedures for transport either in terms of training of professionals, the participation of users or the design and planning of systems, services and equipment. As a result, it is easy to overlook gender: no protocols are in place and no sanctions are applied to those who fail to consider the transport needs of over half of the world's population. Table 1 presents some of the more common misconceptions held by transport sector professionals, with the associated realities tabled.^{2/}

Table 1 – Misconceptions by the transport sector

Theory	Reality
Gender is not a transport issue; it is a health, education, energy, water/ sanitation issue.	All access to these services are by road, either in terms of the provider or the client.
Gender is a cultural and social issue which is not in the realm of transport to resolve	This attitude reinforces and accommodates social restrictions imposed. The same prevailed in the developed countries in the early 20th century – with barriers broken down only through persistent intervention.
Building of roads, de facto, improves position of women and offers tremendous opportunities previously denied.	Unless baseline data is taken and comparisons before and after made, this cannot be taken for granted. Cases have been identified where road improvements have greatly added to women's burdens (i.e. increased agricultural responsibilities without concomitant compensation, flight of men from the area creating hardships, etc.)
With regards to ports, rail and aviation there are no gender issues.	Training and employment of females is all but totally disregarded in these sectors although the competence exists.
Introducing gender into project preparation, etc. is administratively cumbersome - another band - wagon issue of the Bank	No more arduous than any other requirements for project preparation. The same had been said of environmental issues. Managers have solved this problem by contracting out where expertise is limited.
Transport projects are assessed using economic cost-benefit analyses; there are no quantifiable benefits which can be identified with respect to gender.	Work has been done concerning the quantification of time savings with respect to women and improved transport efficiencies, but other techniques need to be developed and alternative methods of identifying unquantifiable benefits determined.

^{2/} Gender and Transport, A Strategy for Africa, Elizabeth Rankin, August 1999, Draft (mimeo).

9. The operational experiences and analysis of the situation in Africa and other developing regions have fuelled much of the interest in gender and transport. There is growing support from the multilateral and bilateral donor agencies to streamline gender aspects in projects. However, there is less of an acceptance that gender and various aspects of transport, which include regional/national road systems, railways, ports and even aviation, should be gender sensitive. Institutional strengthening, private sector involvement, technical assistance and training in transport also need to consider gender as areas which so far have not been systematically taken into account.

10. When the objective is to take into account gender transport issues and concerns, there are ways in which these concerns could be more appropriately incorporated in the articulation of transport issues. Table 2 gives some indication of possible gender interventions in specific transport issues.

Table 2 – Incorporating gender concerns in transport issues

Transport issue	Gender intervention
Increased institutional capacity	Conscious inclusion of women in training and employment programs to improve understanding of gender issues and concerns, to allow them to be articulated more appropriately in policies and projects in all transport sectors.
Improved management and operations	Specific targeting of women for management and senior operations positions will balance inequality creating a more inclusive environment for all transport-related activities.
Financial management	Conscious inclusion of women in training and employment programs would benefit not only institutions involved but also create a more balanced work environment.
Decentralization of responsibilities & financing	Greater female participation in decision-making bodies will allow for decisions to be based on the need of both genders.
Appropriate regulatory environment	Explicit sensitivity to gender in all policies, regulations and legislative endeavors will create a more gender sensitive environment.
Establishing a legal status for all roads	Inclusion of women in legal decisions will be a stepping stone to empowerment in other legal issues.
Increased private sector participation	Target incentives for female-owned & operated activities to encourage inclusion of women.
Introduction of new but appropriate technologies	Intermediate technologies, as well as advanced technologies to ensure appropriate means of mobility for women of all incomes.
Attention to safety	Focus on decreasing women's fatalities and injuries as a direct step in eliminating present inequalities in dealing with this problem.
Environmental sensitivity	Explicit inclusion of women in programs as issues related to environmental degradation often impact directly on both their livelihood and capacity to carry out household chores.
Participation in globalization of economies	Attention to entire transport chain, especially as pertains to gender inclusion, in recognition of women's vital role in economic growth.
Improved appraisal techniques	Development of quantifiable gender benefits and economically effective indicators for gender interventions.

11. In addition, because of the wide scope of such a strategy, this framework presents an opportunity to examine the transport sector from the perspective of all of its subsectors, including road, rail, ports/maritime, aviation, urban transport as well as rural transport.

I. KEY GENDER ISSUES IN TRANSPORT

12. According to the United Nations Development Programme (UNDP) Human Development Report, seventy per cent of the 1.2 billion people living in poverty worldwide are women. Transport-related issues such as access to jobs, markets and social/educational facilities play an important, but under-appreciated role in perpetuating women's disadvantaged position in society. While there have been an increasing number of efforts to incorporate gender perspectives especially into the health, education and agricultural sectors, much fewer attempts have been made in the transport sector. This seems particularly unfortunate since transport plays such a vital role in most women's daily routines.

13. There is a considerable amount of information concerning women and their role and importance in the transport chain. In a global context this includes: (a) women as users of transport; (b) women as marketers of agricultural and other products; and (c) women as workers in the transport sector. Generally speaking transport projects and programme planning are concerned with operational efficiency, institutional strengthening, increased traffic volumes, private sector participation, adequate services delivery, financial management, safety programmes, employment and income generating opportunities, training, and intersectoral linkages. However, the realization is less forthcoming that these activities should take into consideration the needs of women as well as men.

14. Major differences in the basic mobility needs of women and men are grounded in the gender-based division of labour within the family and community. Men's stereotypical role in almost all societies is the one of the income-earning breadwinner, who leaves the house for work in the morning and comes back in the evening. Women, however, usually perform triple roles as income earners, home-makers, and community managers. As a rule, they take shorter, more frequent and more dispersed trips during the day. Women also frequently carry shopping bulky loads and are accompanied by children or elderly relatives. Existing transport systems are not adequately geared towards the needs of women. Rather, most systems are biased towards the travel needs of men. In order to alleviate women's disproportionate transport burden in society, a variety of factors need to be addressed. Among the most important are access to modes of transport, the siting and routing of facilities and infrastructures, and the timing/frequency of services.

15. Access to motorized transport is determined not only by economic means but also by cultural roles. All over the world, car ownership is associated with success, power and social status. Even in car-owning households, it is often only the men who get to drive. A study from Nairobi, Kenya revealed that while 24 per cent of male heads of households used a car, only 9 per cent of women heads did and a similar study made in Belo Horizonte, Brazil, showed 23 per cent of trips to work made by men were made by car, but only 6 per cent of the women's. Statistics illustrate that women and men do not access services and facilities to the same extent or in the same way. In Northern Ireland for example, 79 per cent of men have a full driving licence compared to 61 per cent of women. This difference is most significant in urban areas, and means women are more reliant on public transport than men, so are likely to access it more.

In addition 78 per cent of men are in the labour force compared to 65 per cent of women, so women are more likely than men to be travelling to non-work facilities, such as shops, schools, health centres, and childcare facilities. Putting a gender equality perspective in mainstream transport policies thus means considering public transport provision not just to work, but also to these other facilities to which women are more likely than men to travel, and taking these issues into account as policy is developed and implemented.

16. Women are also more dependent on public transport than men, especially when they are lower-income. Frequently, the off-peak and peripheral public transit routes on which many women depend for their travel to shopping or social facilities have much less priority than the commuter corridors going straight to the city centre. Women's complex household and caretaking responsibilities usually force them to make multiple stops. This also often makes it much more costly for women to get around, since they may have to pay numerous single fare tickets during such a chained trip. Women are also disproportionately affected by the privatization of public transit, because bus companies operating under competitive market conditions are not very interested in serving the less lucrative routes and connections on which women depend, so this is where operators are most likely to reduce service, or cut it altogether. If service does remain, it is often at increased fare levels.

17. Personal safety and the avoidance of harassment are also major concerns for women public transit users. Women are especially vulnerable to violent attacks or sexual abuse when transporting heavy goods and accompanying children and this can be a major deterrent for women to use public means of transport. Finally, there are cultural constraints which often prevent women from properly accessing public transport. In some predominately Muslim cities, it is socially difficult for women to share crowded buses with mainly male riders because of the religious reasons, or social seclusion of women.

18. Overall, women's access to vehicles and services is often more constrained by socio-cultural conventions than by physical barriers. This is particularly true for bicycles, which represent a particularly attractive transport alternative for shorter and medium length trips with multiple stops. Unfortunately, it is culturally unacceptable for women in many societies to ride bicycles.

19. There is a growing understanding that gender analysis needs to be incorporated into all transport planning, so that gender impacts are studied and considered before project implementation. Gender analysis challenges the traditional analysis which looks at households as black boxes and assumes that household behaviour reflects the preferences of all its individuals, regardless of the power structures and gender relations within these household units. In this sense, gender analysis is part of a general re-orientation of transport planning away from a focus on facilitating the movement of motorized vehicles to a people-centred perspective that starts with an analysis of the basic household mobility needs.

20. As the world slowly changes, there are more women in senior positions in the transport industries, changing attitudes and perspectives and challenging old ways of working; there is more research that has identified gender issues; and a clearer focus on understanding people's needs as a starting point for developing and delivering transport services is slowly emerging.

21. There is a growing opinion that the way transport is designed, built, and operated results in transport systems, facilities and operations that women are frightened to use; vehicles designed with seats and seat belts that are not appropriate for a woman's body mass; transport planning decisions that do not reflect the different work-life balance that many women have, for example, managing child care with running a home, keeping a full-time job, and caring for aging parents; and fare structures and job requirements that work against those who need to work flexibly or on a part-time basis.

22. Transport is an important area for gender equality for a number of reasons. Gender aspects which need to be considered in the context of transport can broadly be grouped in several clusters.

A. Mobility

23. Women and men travel by different means, at different times, to different patterns of locations over different distances, for different purposes and journeys take on different significances. These differences in travel are not addressed systematically by current transport policies, and they may have direct impact on women's time-poverty, health consequences, and uneven accessibilities to such things as employment, training and healthcare as well as on journeys repressed/suppressed due to personal security concern and poor accessibility. In majority of developed countries, men are much more likely than women to travel as car drivers, while women are more likely to travel as car passengers, or on foot. Women are slightly more likely than men to travel by public transport, especially to work, with their greater use of buses outweighing men's slightly greater use of trains. Women and men also travel for different purposes. Men are more likely to do so for commuting and business reasons, whereas women are more likely to do so for shopping or taking children to school.

24. There are number of questions which could be further considered at both national and international level. What are the linkages between mobility and quality of life especially for women? What is the impact of trip chaining on modal choice and alternative modes? What are the mobility issues for older women in urban and rural areas? What are the interrelationships among mobility, poverty (access to jobs and social services), ethnicity, and religion?

25. Addressing gender dimensions within the framework of mobility is particularly important with regard to economic policy: the 'caring economy' needs to be integrated into economic analysis and policy-making as a core component, not an add-on. There is a growing idea that women's unpaid caring activities form a crucial basis of what is currently regarded as 'economic activities proper'. Women have different (part-time, less paid) and fewer employment options. This is largely due to the sexual division of labour at the household level which affects their economic position and thus their access to transport.

B. Safety and health

26. Linkages between transportation and health and in particular their gender component, touch upon a number of questions: What is the relationship between vehicle design (crashworthiness) and injury patterns for women? How do pedestrian safety issues differ for women? What is known about ergonomic issues related to women's use of vehicles as a function of their work, especially truck and bus drivers? What variables should be included in models for

examining women's crash and injury risk (transportation mode and purpose, types of crashes, types of vehicles driven, etc.)?

27. The data from the United States show that the number and rate of driver fatalities are increasing for women but decreasing for men. The number of licensed drivers has been increasing at a faster rate for women than men, so that there are now as many women licensed as men. Mileage is increasing faster for women, but men still drive more. As many as 370 traumatic foetal deaths may occur annually in the United States, of which about 82 per cent are related to motor vehicles. Women are more likely than men to be injured in crashes of the same severity; however, men's crashes are more likely to be fatal. Men have higher driver fatal crash rates per driver and per distance travelled in both the United States and Australia.

28. There are considerable gender differences in personal safety. An important consideration in this context is to what extent does concern for personal safety guide a woman's decisions regarding transportation options? Women are more vulnerable to attack and harassment than men and their greater concern with personal safety have important implications for transport policy. The perception that we live in a climate of increasing crimes against the person, to which women are especially vulnerable, is the most salient factor impacting on women's travel behaviour. Many women simply avoid travelling after dark. This concern about personal safety has important implications for a number of issues, including the design of transport interchanges, waiting areas and staffing. The removal of conductors for example, results in reduced personal safety for passengers, especially women. This has important implications for the quality and level of staffing on vehicles and at bus and rail stations.

C. Vehicle safety issues

29. Vehicles construction and safety may have different ramifications for women's and men's safety and health. Frontal airbags reduce driver deaths by 12 per cent for women but only 6 per cent for men. Head protection side airbags reduce the risk of fatality among female and male drivers by 33 per cent versus 44 per cent. Torso-only airbags reduce the risk of fatality by 21 per cent for men but do not significantly reduce women's risk.

D. Modal choice and design of communities

30. Implications of urbanization, community design and modal choice may have important implications for access to transport services, travel patterns and ways women use public transport services. Access to transit, ability to walk and use bicycles, and personal security are legitimate issues of concern and several questions reward further attention of transport policy-makers and planners. How and to what extent does community design affect women's access to transit and other modes of transportation, such as walking and biking? What effect does access have on women's health and quality of life? How do the personal security concerns of women differ from those of men when it comes to using transit? What kinds of technologies are being used to increase transit safety and to what degree do these technologies address the safety concerns of women?

19. To further study these issues the necessary variables would include density, land use mix, network characteristics, aesthetic qualities, regional structure, trip frequency, destination choice, mode choice, and total vehicle kilometres travelled. Qualitative studies focused on women that

examine family, health, and safety concerns could enhance the ability to clearly define the issues and seek appropriate solutions in design and policy.

E. Policy and planning

31. Introduction of gender considerations may have implications for a range of transport policy areas. For example, one could consider to what extent are women involved in the transportation decision-making process, or does involvement by women in transportation decision making result in different outcomes? Another set of considerations may include discussions about the implications of women's trip behaviour for planning practice, implications of women's transportation issues for policy or the international experiences in planning and policy development based on gender. Further, economic and transport policy-makers could discuss were the supporting roles that transportation policies can play in meeting other societal goals important to women. The experience of women's engagement or participation in the planning and policy-making processes could also be discussed, in particular barriers to and opportunities for women's participation.

F. Data

32. Access to data is one of the largest challenges. The data issues involve quantity, quality, definition and interpretation, and collection methods. Often it is difficult, if not impossible, to distinguish clear gender differences by examining a particular data set either because of the way the data are collected or because of how they are arrayed and managed in the database. Even in cases where significant gender-disaggregated data on mobility at a national level exist, they often do not provide disaggregated data on time of day of travel or the full-nature of multi-purpose complex journey patterns undertaken by women. Time use data may be of significant benefit in highlighting the complexity of mobility patterns and the interaction between people in scheduling mobility and the interaction between mobility and other household activities. Time-use data is only available at a national level in few cases and still have exploratory purpose in influencing transport policy.

G. Gender equality and transport policy

33. Transport remains a very significant area of public expenditure and public sector provides significant revenue for its operation and, hence, has leverage over the nature of gender equality in the sector. There are certain tools recommended to engender national budgets: (i) gender-desegregated policy evaluations of public expenditure to evaluate the policies that underlie budget appropriations in terms of their likely impact on men and women; (ii) gender-desegregated beneficiary assessments to assess the views of women and men as potential beneficiaries of public expenditure on how far current forms of service delivery meet their needs; (iii) gender aware budget statements to indicate the expected implications for gender inequality of the expenditure estimates in total and by ministries; (iv) gender-aware medium-term economic policy scenarios to produce a policy framework which recognizes that women and men participate in economic activity in different ways, contribute in different ways to macroeconomic outcomes, and experience different costs and benefits from macroeconomic policies.

H. Gender awareness training and capacity-building

34. If policy-makers and planners in the transportation ministries are to work towards gender equality, they need gender awareness training. They are not likely to change attitudes unless they become aware of the transport-related problems women face. The need for understanding and acceptance of gender issues and the commitment to help resolve those issues are crucial. Only then will the appropriate implementation arrangements be made and adequate resources committed. Gender awareness training for all staff, male and female, at all levels of the organisation, need to be provided. It should also include some field work doing a survey of women's (latent) transport needs, including route planning, and services off peak hours and on less travelled routes. The training could be planned with women's NGOs and networks, and the relevant ministries.

II. FUTURE CHALLENGES

35. In spite of progress made in introducing gender considerations in transport sector issues in a number of countries and by many international organisations, some important questions remain as challenges in future efforts:

- (a) How can capacity be built to identify the relevance of transport policy to gender equality?
- (b) How can culture change within transport sector be created so that indicators are useful tool or generating better performance within public bodies within sector towards developing policy?
- (c) How can public bodies in this sector be audited to ensure compliance?
- (d) How can change be encouraged in the private sector delivering public services?
- (e) How does our interaction with communication technologies change mobility patterns, knowledge creation, employment practices and participation in policy and decision-making?

III. POSSIBLE ACTIONS BY THE INLAND TRANSPORT COMMITTEE

36. All subsidiary bodies of the Economic Commission for Europe have been mandated to consider ways of gender mainstreaming in their substantive activities. The above review has shown that gender issues in transport are very complex and transport policies need to take into account gender aspects both in transport planning and operations. Considering and tackling gender aspects of transport would not only contribute to a more equitable and optimal delivery of services but would also strengthen overall national economic capacity and help create favourable conditions for a more sustainable social development.

37. Bearing in mind the competencies of the Committee and its subsidiary bodies, as well as in order to raise awareness about gender issues in transport two approaches seem to be appropriate:

38. One possibility would be to mandate all the relevant Working Parties of the Committee to consider, when they deem appropriate, the relevant gender issues within their activities. Questions which might be considered and discussed could include the following:

- (a) Does the transport sector strategy address gender issues?
- (b) Do transport policies and planning procedures explicitly take gender into account?
- (c) Are gender gaps and gender specific needs, capacities, constraints and opportunities identified?
- (d) Is there promotion of safe transport facilities and modes of transport?
- (e) Have women and men civil society stakeholders for transport programs been consulted or included in teams analyzing policy and strategy or included in decision-making?
- (f) Does investment in the transport sector increase access to schools, markets, health, financial and other services?
- (g) Is privatization of transportation under consideration and what are the implications for pricing and safety factors that could negatively impact vulnerable sectors of society?
- (h) Is there a system for monitoring the implementation of gender components of transport sector policies and strategies?
- (i) Is there a ministry focal point or unit responsible for advocacy and gender inclusion at the policy and project level?
- (j) Is there a gender balance in the transport-related ministries' work force? Is there gender expertise?
- (k) Policy reforms with significant gender impacts (e.g., Increased fuel levies, increased public transport costs, retrenchment).

39. Another possibility would be to consider organizing an Inland Transport Committee round table on gender issues in transport. This Round Table would provide an opportunity not only to respond to the request by the Commission, but also to raise awareness about multifaceted aspects of gender issues in transport as well as to more clearly identify the possible concrete topics to be taken up by the Committee's subsidiary bodies.

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