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Thematic session 6:
Sustainable transport and sustainable cities

Concept note

I. Introduction

Sustainable transport provides critical access to economic opportunities, goods, jobs and services, such as finance, health and education. For this reason, SDG target 11.2 calls for all countries to "*by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons*". Sustainable transport amenities are particularly valuable in cities, due to their densely populated areas and high-volume traffic. According to The Sustainable Mobility for All initiative[1], sustainable transport should offer *universal access and be efficient, safe* and *climate responsive*. Challenges related to business-as-usual urbanization are, among others, unsustainable short-term interventions and inadequate integration of transport and urban planning, resulting in unsustainable urban sprawl, congestion, air and noise pollution, and the risk of leaving vulnerable groups behind. Business-as-usual urbanization also pushes people – including those spatially segregated – towards private motorized modes of transport, further worsening the problem. Transport safety, including road safety, also remains a top concern in urban areas, especially in low- and middle-income countries. This session will discuss how sustainable transport can contribute to the development of sustainable cities that are accessible, healthy, and "liveable" and leave no one behind. It will explore how cities can serve as change agents, promoting sustainable and inclusive transport systems, by using public transport, non-motorized transport, new technologies (smart cities) and sustainable urban models (e.g., compact and "15-minute"-cities), while also addressing (road) safety issues and other challenges. Speakers will share practical and innovative experiences and brainstorm on how to rethink and reshape the way urban transport systems are organized for better living and sustainable development, including in the context of the COVID-19 pandemic. The discussion will also provide insights into trends and progress towards SDG 3.6 on road safety and SDG target 11.2 on public transport.

II. Stocktaking

Close to 4 billion people live in cities, and - if current trends continue - by 2050, 70 percent of the world's population will live in cities and 85 percent of the world's economic output will be generated by cities. 90 percent of urban growth will take place in Asia and Africa[2]. This rapid rise in the proportion of people living in cities, paired with other megatrends, will put a strain on existing transport systems and require massive new investments.

[1] Sustainable Mobility for All initiative (SuM4All): https://www.sum4all.org/

[2] UNDESA. *2018 Revision of World Urbanization Prospects*. Available at : https://population.un.org/wup/.

Adequate public transport infrastructure and affordable transport services are still widely lacking in many cities, with negative impacts on sustainable development. Recent data from UN-Habitat's SDG 11.2[3] database, which includes 1,522 cities from all around the world[4], depicts a global representative average for access to public transport of only 49 percent. Large disparities do exist between continents and regions with 75 percent of the population in Northern America and Europe having access to public transport, and only 33 percent in Sub-Sahara Africa. For persons with disabilities or the elderly, transport services often remain inaccessible due to lack of universal design of the physical infrastructure and poor quality. A review covering over 1.2 million public places mostly in developed countries, indicated that, in 2017, 32 percent of public transportation facilities were not wheelchair-accessible, with underground/subway stations being the least accessible. In developing countries, data for selected countries in Sub-Saharan Africa, Latin America, and Asia showed that 36 percent of persons with disabilities considered that transportation was not accessible for them.

Transport safety remains a top concern in urban areas, especially in low- and middle-income countries.[5] 6 in 10 women in major Latin American cities have, for example, been physically harassed while using transport systems.[6] In addition, road safety, covered by SDG target 3.6[7] in the 2030 Agenda, remains a major concern with road traffic crashes killing about 1.3 million people worldwide in 2019. The death rate is over 3.5 times higher in low-income countries than in high-income countries despite lower rates of vehicle ownership in low-income countries, with more than 93 percent of road traffic fatalities occur in low- and middle-income countries, with the rates highest in Africa. More than half are among vulnerable road users, including pedestrians, cyclists, and motorcyclists. Road fatalities also remain the leading cause of death for children and young adults between 5 and 29 years old. The nomination of the UN Secretary-General's Special Envoy for Road Safety in 2015 and the establishment of the United Nations Road Safety Trust Fund in 2018 marked the commencement of a global approach towards fostering road safety. Numerous efforts have been undertaken over the years by various actors, including regarding safe access to schools, affordable helmets, and speed limits. The 3500 lives campaign embodies many of these goals. In addition, many standards and regulations exist regarding the design, construction, operation, maintenance and management of safe transport systems, and various international Conventions define related international standards and rules. Yet, only 136 UN Member States are contracting parties to at least one of the seven core UN legal instruments on road safety[8]. Based on available data, SDG target 3.6, set to be achieved in 2020, appears to not have been met - this

[3] Its indicator 11.2.1 monitors the "proportion of population that has convenient access to public transport, by sex, age and persons with disabilities".

[4] Data constituting 27 cities in Australia and New Zealand, 191 in Central Asia and Southern Asia, 94 in Eastern Asia and South-eastern Asia, 218 in Latin America and the Caribbean, 770 in Northern America and Europe, 84 in Sub-Saharan Africa, and 128 in Western Asia and Northern Africa

[5] WHO. *The top 10 causes of death.* Available at : https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death.

[6] Sustainable Mobility for All. *Global Mobility Report 2017*. Available at: http://sum4all.org/publications/global-mobility-report-2017

[7] *By 2020, halve the number of global deaths and injuries from road traffic accidents.*

[8] See: General Assembly resolution A/RES/74/299, operative clauses 6 and 7

was also recognized at the third Global High-Level Conference on Road Safety[9]. In 2020, Member States decided to "convene a high-level meeting of the General Assembly, no later than the end of 2022, on improving global road safety with a view to addressing gaps and challenges as well as mobilizing political leadership and promoting multisectoral and multi-stakeholder collaboration in this regard". They also proclaimed the period 2021–2030 as the Second Decade of Action for Road Safety, with a goal of reducing road traffic deaths and injuries by at least 50 per cent from 2021 to 2030.[10]

The global transport sector accounted for 24 percent of direct CO_2 emissions from fuel combustion in 2020, underscoring the critical importance of making its systems greener, including in cities. Regarding urban air and noise pollution, a survey of 4300+ cities worldwide showed that less than 10 percent of the urban population[11] lived in areas that comply with WHO air quality guideline levels for PM2.5, while average particulate air pollution levels in many developing cities can be 4 to 15 times higher than WHO air quality guideline levels, putting many at risk of acute and long-term health problems. Smog, in the form of ground-level ozone, sulphur dioxide, nitrogen dioxide and carbon monoxide, remains a serious problem in many cities and continues to harm human health. Noise pollution from transport sources also has negative societal impacts. At the same time, many cities were investing in electric buses to lower emissions and reduce local air pollution - a critical issue in cities. Electric passenger vehicle sales increased by 43 percent in 2020 alone, illustrating government incentives and shifting consumer preferences. An estimated 10 million battery-driven vehicles were on the world's road by 2020.[12]

In addition, new technologies and concepts, such as smart cities and the "15-minute"-city, have been promising on the path to sustainable development and climate action. Smart cities are particularly effective in addressing transport challenges of larger urban ecosystem. They use "*ICTs to improve quality of life, the efficiency of urban operations and services and competitiveness, while ensuring that they meet the needs of present and future generations with respect to economic, social, environmental and cultural aspects*"[13]. These cities use digital technologies to optimize efficiency of transport, energy, housing, water, waste, sanitation, and other amenities. Singapore, Dubai, Oslo, and Tokyo are examples of cities using smart city concepts. The "15-minute"-city together with similar efforts towards "compact cities" (e.g., car-free cities; superblocks/low-traffic neighbourhoods) have already proven to be successful in increasing the quality of life while helping to address environmental degradation and climate change. Paris and Barcelona are, for example, applying these city concepts.

The COVID-19 pandemic had significant impact on urban transport, for example, dramatically reducing public transport ridership in cities across the globe, decreasing revenues and creating new challenges for financing operation, maintenance, and infrastructure expansion. At the same time – especially in urban areas – renewed interest and a great reliance on active

[9] 3rd Global Ministerial Conference on Road Safety website: https://www.roadsafetysweden.com/
[10] See: General Assembly resolution A/RES/74/299, operative clauses 6 and 7
[11] WHO. *Air pollution.* Available at: https://www.who.int/health-topics/air-pollution#tab=tab_1.
[12] IEA. *Global EV Outlook.* 2021. Available at: https://www.iea.org/reports/global-ev-outlook-2021/trends-and-developments-in-electric-vehicle-markets.
[13] UNECE and ITU definition. *Sustainable smart cities*. Available at: https://unece.org/housing/sustainable-smart-cities.

transport modes, such as walking and cycling, due to telecommuting and remote learning, accelerated re-allocation of public space and pushed for dedicated infrastructure for these modes of transport, reducing the large gap observed in most cities across the globe, especially in low- and middle-income settings. It is to be noted, however, that some of these remote opportunities remained out of reach for those who are unable to work from home (e.g., essential workers) or lacked digital connectivity. It remains to be seen whether the reverse migration back to rural areas due to the COVID-19 pandemic and the potential move to more telecommuting and remote learning becomes a long-term trend with significant impacts on future urbanization, but the pandemic is a great opportunity to rethink urban planning and move towards more sustainable cities and transport systems. The COVID-19 pandemic might, for example, have long-term impacts on how public transport systems are being used and developed, including with regard to enhance cleaning and sanitary measures and social distancing requirements. Many public transport systems- vital to urban mobility, including that of essential workers, have adapted, deploying strict hygiene measures to protect both employees and users. However, with social distancing measures still in place, ridership is likely to remain low, threatening the financial stability of these systems.

Even before the pandemic, micro-mobility companies had been receiving greater investments and since the pandemic, many cities have invested in non-motorized transport and micro-mobility, including bike lanes and bike- or scooter-sharing services, due to increased interest. McKinsey estimates that the industry is poised to increase by 9 percent for private micro-mobility and 12 percent for shared micro-mobility.[14] New opportunities have also arisen for making progress towards sustainable urban transport, in view of sizable COVID-19-related stimulus packages and commitments to achieve net zero greenhouse gas emissions. This unique window of opportunity for urban action towards low-carbon cities that are inclusive, resilient and safe, needs to be seized. Maintaining and expanding sustainable transport measures put in place in response to the COVID-19 pandemic will be key.

III. Proposals for advancing progress in context of SDG Acceleration and Climate Action

"Leaving no one behind" in cities will require sustainable urban transport systems that are safe, affordable, accessible, reliable, inclusive, and efficient as well as accelerated progress towards achieving SDG target 11.2.

Governments and cities have a duty to implement long-term policies supporting sustainable urban mobility with an emphasis on public transport and non-motorized transport modes. A sizable number of urban dwellers will continue using cars which underlines the importance of using adequate incentives to use public transport or active modes and promote the use of low-emission vehicles, such as electric vehicles, in line with the Avoid-Shift-Improve framework. This would have to be complemented by economic instruments, such as parking fees, fuel taxation or congestion charging, to disincentivize and restrict the use of private motorized transport. The generated funds can then be re-invested in sustainable modes, for instance as subsidies for public transport or bike share systems.

Transport and urban planning, design schemes and regulatory frameworks need to work together to promote mixed land use and higher densities, for better accessibility, proximity,

[14] McKinsey. *The future of micromobility: Ridership and revenue after crisis.* Available at : https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-future-of-micromobility-ridership-and-revenue-after-a-crisis.

and walkability. Cities will require strong, high-capacity multi-modal and public transport systems that are well-integrated into the city layout, with access points located within comfortable walking or cycling distances and adequate infrastructure for non-motorized transport modes. In addition, freight transport should transition to integrated, multi-modal and highly efficient systems that not only has socio-economic benefits through the efficient delivery of essential goods and services but also decreases urban air pollution and climate impacts. Improving travel management for both freight and passengers to avoid unnecessary travel and optimize the movement of people and goods is also key.

Establishing, improving, or sustaining road safety systems will be critical, particularly in cities in low- and middle-income countries. Member States should accede to and implement existing UN road safety Conventions and collaborate with other stakeholders to strengthen participatory pathways towards meeting SDG target 3.6. In addition, initiatives to make transport systems safer for women and other vulnerable groups, including the urban poor, children and youth, the elderly and persons with disabilities, and more responsive to their needs will be important.

New technologies, such as artificial intelligence and automation technologies, have great potential to improve urban transport systems. National governments and international organizations should agree on and promote the necessary new standards and regulations in this regard, in order to facilitate the safe deployment of such technologies.[15]

Investments in the coming years will be essential for achieving urban transport systems that are reliable, resilient, safe, inclusive and sustainable. To better understand the prevailing conditions prior to implementing policies or making major investments, countries and cities should invest in gathering data and information from a broad range of stakeholders. They should also work towards strengthening their capacity to understand, assess and address all the impacts related to transport policies, interventions and activities in an integrated manner. The UN system, other international organizations and donors can play an important supporting role in the design of adequate policy and funding frameworks for this transition to sustainable urban mobility in line with the New Urban Agenda, allowing to meet SDG target 11.2 while also bolstering climate action in line with the Paris Agreement. Sufficient means of implementation should be provided to allow developing countries to implement sustainable urban transport systems to ensure that no one is left behind.

IV. Guiding questions

1. How can transport contribute to the development of sustainable cities that are accessible, inclusive, safe, healthy, and liveable? What transport-related policies, programmes, projects, and innovations are needed to accelerate progress towards sustainable urban mobility, including for vulnerable groups? How can countries and cities strengthen their capacity to understand, assess and address the impacts of such transport policies, innovations, and activities?
2. In view of digitalization, remote online working and non-motorized transport trends caused by the COVID-19 pandemic, what changes do you foresee for urban transport

[15] See also the Ministerial Resolution on "Enhancing cooperation, harmonization and integration in the era of transport digitalization and automation" (ECE/TRANS/288, Annex I). Available at: https://unece.org/reports-6.

patterns in the coming years? How can policy makers leverage these changes to enhance sustainability, ensuring equity and inclusivity for all in the long-term?

3. Road safety remains a major concern in both urban and rural areas. How can progress towards achieving SDG target 3.6 be accelerated? What are best practice solutions and how can these be scaled up?
4. How do we facilitate (large-scale) investments in sustainable urban transport, such as public transport and non-motorized transport (walking and cycling), and smart cities? To which extent has COVID-19-related stimulus funding in the transport sector contributed to sustainable urban transport? What are good practices in this regard?

Programme

Co-Chairs:

- H.E. Mr. Dai Dongchang, Vice Minister of Transport, China
- Ms. Olga Algayerova, Executive Secretary, United Nations Economic Commission for Europe

Moderator:

- Mr. Mohamed Mezghani, Secretary General, International Association of Public Transport (UITP)

Panelists:

- Mr. Jean Todt, United Nations Secretary-General's Special Envoy for Road Safety
- Ms. Rehana Moosajee, Former Councilor, City of Johannesburg and Founder, The Barefoot Facilitator, South Africa
- Ms. Jill Warren, CEO, European Cyclists' Federation, Belgium
- Mr. Rob McInerney, CEO, International Road Assessment Programme (iRAP)
- Mr. Zhao Zesheng, First-class Inspector, Urban Construction Department, Ministry of Housing and Urban-Rural Development, China

UN agencies:

- Ms. Maimunah Mohd Sharif, Executive Director, United Nations Human Settlement Programme
- Mr. Tedros Adhanom Ghebreyesus, Director-General, World Health Organization

Other stakeholders:

- High-level Representative, Jakarta Capital City, Indonesia (tbc)
- Mr. Guo Jifu, Director, Beijing Transport Institute, China