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Item 5 of the provisional agenda

**Preparation of the Fifth High-level Meeting on Transport, Health and
Environment****Mobility during and after an epidemic in the short-medium
term****Further recommendations for Green and Health Sustainable
Transport*****Note by the Task force on the development of green and healthy
sustainable transport principles, chaired by Austria***Summary*

Following on from document ECE/AC.21/SC/2020/9–EUPCR2016697/5.3/9, additional information has been submitted by the Task Force for consideration at the Steering Committee Session.

The present document was submitted by the task force to the secretariat following the fifth meeting of the task force (online, 24 September 2020) with information received until 2 October 2020.

* The present document was submitted after the standard deadline as a result of consultations with the member States. This document has not been formally edited.



I. List of titles for themes

1. A number of themes have been agreed by the Task Force:
 - (a) Theme 1: Consideration of public space allocation for all modes of movement in the urban, peri-urban and rural environments with emphasis of the opportunities offered through spatial planning and infrastructure investment.
 - (b) Theme 2: Increasing investment in public transport to meet current and future needs as well as to ensure that it is safe (and attractive to use) for users and workers.
 - (c) Theme 3: Encourage the adoption of e-mobility solutions as a fundamental part of powering public transport and active mobility.
 - (d) Theme 4: Introduce mobility management solutions to manage transport demand in an environment-friendly and healthy way taking into account the user-perspective/raising awareness of transport users, to facilitate the switch to greener modes of transport and to make the transport system more efficient.
 - (e) Theme 5: Facilitate the adoption of innovation and technology in transport to increase accessibility and safety and to reduce emissions and environmental impacts leading to increased health benefits.
 - (f) Theme 6: Supporting active mobility as a sustainable and healthy mode of transport.
 - (g) Theme 7: Rebuilding the transport system in a fair and inclusive way while avoiding social disparities and particularly taking into account the needs of vulnerable and disadvantaged groups in society.

II. Examples from individual themes

1. Theme 2

2. To regain people's confidence in public Transport after the COVID 19 crisis, France's recovery plan devotes € 1.2 billion especially for the development of public transport such as metro, tram, bus and RER metropolitan to provide mobility solutions that are eco-friendly in the densest urban areas. These resources complement the financing of local authorities and could allow a total investment in the territories close to € 5 billion. This measure will generate jobs for carrying out the work estimated at over 55,000 full-time equivalents.
3. In addition, the French recovery plan devotes € 4.7 billion to support the rail sector to offer an attractive and efficient alternative to road transport, both for passengers and for goods. It will regenerate and modernize the national network and will invest in the 'small lines' of the territory to increase the offer in less dense territories and better connect them to urban areas.
4. In Kazan (Russian Federation) pursuant to the principles of transport system sustainable development, the city is contributing to the development of urban on-ground electric transport, including by creating a support tram network, maintaining and developing a trolleybus network, renewing the public transport fleet. In Kazan public transport has been segregated from other traffic and routes of communication. Furthermore, the introduction of priority public transport lanes in the main streets has helped to establish transport links between the residential areas, the city centre and streets with access to external roadways.
5. Similarly, in Moscow, a number of initiatives have been pursued recently to promote the use of public transport. A number of infrastructure improvements have been introduced including the creation of bus lanes and priorities at intersections, the creation of dedicated public transport streets, the renovation of tram lines and the introduction of transit hubs such as the Kutusovskaya hub aimed at facilitating the switch between transport modes. In addition, efforts have been targeted at making public transport more attractive through improved information at bus stops and the installation of more ticket machines. This has been

coupled with the upgrading of the tram, train and bus fleets to electric traction where possible and dedicated upgrades to the fleets to make them more comfortable.

2. Theme 3

6. France made 60€ million available to boost e-micro mobility solutions after the lockdown. This money will be used for a variety of measures including the construction of new cycling infrastructure. As a part of this, Paris and several other large cities have announced large rollouts of cycle lanes for during and after the lockdown. Paris alone is planning to create 650km of cycle paths.

7. The UK announced a £2 billion package putting cycling and walking at the heart of Britain's post-COVID transportation plan. With the help of this money new infrastructure for walking and cycling will be implemented and "fix your bike voucher scheme" where citizens can apply for a voucher of £50 to repair their bike will be introduced.

8. In Greece a subsidy for the purchase of bicycles as well as scooters and electric cars was announced. The law provides a discount equal to 15% of the retail price of cars (with a limit of €5,500), 20% for scooters and 40% for bicycles.

9. During the 2020 COVID-19 crisis, the Italian government introduced a "mobility bonus", providing citizens living in the larger urban areas a one-off voucher of up to EUR 500 (or 60% of the purchase cost) to buy bikes, e-bikes or scooters. The bonus scheme appears to have boosted sales of two-wheelers. Recent surveys show that more than 2.5% of the population owned an e-scooter by September 2020 and Italian bicycle retailers remarked a 60% increase in sales in May in comparison to the year before.

3. Theme 4

10. THE PEP study on Managed Mobility, published in the first half of 2020 identifies a number of good practice examples of managed mobility solutions adopted across the region. Three of these examples that are of particular relevance here for their innovative approach are set out below.

National mobility management campaign in Austria klimaaktiv mobil

11. The klimaaktiv mobil program, Austria's climate protection initiative in transport, is the main source for supporting and funding mobility management measures contributing to GHG mitigation.

12. With the klimaaktiv mobil programme, the BMNT provides active support for Austria's cities, municipalities and regions, businesses, fleet operators and associations, tourism operators, schools, youth initiatives and citizens in the transformation towards clean mobility. The financial support programme covers alternative vehicles, hydrogen vehicles and electromobility, always based on renewable energy sources, the promotion of active mobility as well as mobility management and innovative mobility services. Apart from subsidies, the klimaaktiv mobil programme also comprises target group-specific consulting and awareness-raising programmes, partnerships, as well as training and certification initiatives.

13. The five pillars of klimaaktiv mobil are:

- Consulting programmes;
- Financial support programmes;
- Awareness raising programmes;
- Training and certification;
- Partnerships.

14. The successful track record of klimaaktiv mobil (numbers up to 2018):
- More than 15,000 climate-friendly mobility projects were initiated; they were implemented by around 12,500 businesses, 1,200 cities, municipalities and regions, 900 tourism and leisure organisations, as well as 400 schools.
 - Current annual savings of approximately 450,000 tonnes of CO₂ are recorded.
 - Financial support for mobility projects amounting to a total of approx. EUR 122.4 million, including approx. EUR 112.6 million from the national funds of the BMNT via klimaaktiv mobil, the Climate and Energy Fund and the national environmental support scheme, as well as EUR 9.8 million from EU funds (European Agricultural Fund for Rural Development, EAFRD), having triggered an environment-related investment volume of EUR 816 million.
 - Around 7,000 “green jobs” were secured or created.
 - Financial support for about 34,300 alternative vehicles, including more than 31,600 electric vehicles.
 - Financial support for approximately 280 cycling projects, including the expansion of cycling infrastructure in the federal states and cities.
 - Training of roughly 2,100 klimaaktiv mobil competence partners, such as EcoDriving trainers, bicycle technicians, cycling instructors, youth mobility coaches and graduates of the klimaaktiv mobil “E-Mob-Train” training course on electromobility carried out in cooperation with partners, was provided, and 38 klimaaktiv mobil driving schools were certified.
 - Around 77,500 children and young people as well as 5,000 teachers have been reached so far, and approx. 985,200 car trips and thus more than 800 tonnes of CO₂ saved.
 - Some 115 youth mobility projects were implemented, and more than 15,900 young persons were involved.

Home to work mobility

15. In 2016 Infineon Technologies Austria AG launched the mobility management initiative “Green Way” in order to promote sustainable mobility as an alternative to the daily trip to work by car. A mobility survey and an analysis of the employee’s residential location was carried out at the beginning of the project that provided useful insight on the mobility habits for home-work trips (Wukovitsch, 2018):

(a) More than 70 per cent of the employees travelled to work by car due to inadequate public transport connections, long commuting distances, shorter travel times, perceived lack of alternatives;

(b) Only 25 per cent of the employees live within 5 km (road network) of the company, around 50 per cent lives within 10 km and more than 20 per cent over 30 km away;

(c) A considerable number of employees were willing to carry out at least part of their home-work journey by bike;

With this background, a number of specific mobility management schemes were adopted to facilitate modal shift through:

(a) Improvement of Public transport;

(b) Upgrading cycling related infrastructure;

(c) Introducing reserved carpooling parking spaces and the development of a dedicated app;

(d) The creation of electric mobility parking spaces;

(e) Allowing smart working;

(f) Communication and visibility programmes to facilitate take-up ;

(g) Other measures and local collaborations;

16. As a result of these actions the amount of car trips fell from 76 per cent to 50 per cent, therefore 50 per cent of employees commute with sustainable modes of transport and the ongoing efforts continue to increase this percentage with a particular focus on public transport.

Urban freight mobility management

17. The city of Utrecht was concerned about the negative impacts of freight distribution in the city centre including damage, blocking of streets due to loading and unloading, accidents, noise and air pollution. As a result, over the years it has introduced different vehicle restrictions such as time windows for freight traffic to deliver goods and a low emission zone. One of the most successful initiatives was the introduction of waterborne freight distribution for last mile deliveries to the city centre to decrease city centre traffic and make full use of waterborne freight distribution.

18. The Municipality of Utrecht introduced waterborne freight deliveries through the establishment of the Beer Boat, a specially adapted diesel barge that carried out beer deliveries to bars and restaurants along the canals. This measure proved very effective in reducing the number of trucks and the related negative impacts at the city centre while it guaranteed the delivery of beer and compliance with labour laws (for carrying barrels and crates). Following the success of this service an electrically powered vessel was introduced in 2010, increasing the load capacity to 18 tons while reducing emissions.

19. The development of this service has reduced congestion in the city and the electric vessel has led to a reduction of emissions of CO₂ by 17 tons, nitrogen oxides (NO_x) by 35 kg and PM₁₀ by 2 kg per year. Deliveries have also become more efficient and faster. The success of this service has led to a further vessel being introduced for the collection of waste in the city centre.

20. There are a number of other solutions identified in this publication, and additional examples published on the EPOMM website that can further steer discussions within member States.

21. Furthermore, it is important to highlight the key lessons learned as identified in this study:

- Ensure that there are alternatives to the car;
- Introduce both push and pull measures;
- Know the target group;
- Ensure there is a long-term approach with commitments from all stakeholders in the area and integration with other programmes;
- Dedicate resources to awareness raising and communications;
- Make it fun and rewarding.

22. These lessons are still of significant importance in the post-COVID-19 situation as the return to commuting into offices slowly picks up. This gives managed mobility solutions a strong opportunity to influence the manner in which people move around cities as well as to and from cities.

4. Theme 7

23. Almaty, Kazakhstan: A project for the first Bus Rapid Transport line, as designed in 2015-16 was introduced. The advantages listed included: saved surrounding space; minimum station-to-sidewalk distance; accessibility for people with reduced mobility; and passengers can board or alight at stops quickly with the height of the platform allowing for unhindered access to low-floor public transport vehicles for people with reduced mobility.

24. Ireland: In response to the pandemic, the Irish Government is implementing a €250m jobs stimulus package. This stimulus package includes €40m for pedestrian infrastructure, €42m to support urban and rural cyclists, €21m towards improving rail journeys, €10m for

the adaptation of the road network to protect it in respect of climate change (including repairs to damaged roads as a result of severe weather events), €2m for new and expanded local bus services, €0.25m to support the transition of local link services to zero-emission vehicles in areas of rural Ireland.

25. Switzerland: Pilot project carpooling app for rural Switzerland: This project addresses the problem of public transport in rural areas being under even greater pressure as a result of COVID-19 to provide cost-effective services. The project is piloting carpooling services to help increase the number of people sharing privately owned vehicles, thus reducing the overall traffic volume.

26. Lyon, France: Sustainable Urban Mobility Plans (SUMPS) are examples of well-integrated planning approaches. Lyon's SUMP strategy seeks to promote independent mobility and the current SUMP (2017-2030) includes 122 actions along 8 strategic themes. One of these themes is promoting access to mobility for all. All metro stations in Lyon, except one, are now accessible, with sound-system lifts and embossed buttons and braille. Seventy percent of bus stops are equipped for people with reduced mobility.

27. Madrid, Spain: Another example of a SUMP is Madrid's SUMP, approved in 2014, which puts a strong focus on the peripheral districts of the city. Among its main aims is more inclusive mobility, which takes into account the needs of all citizens, in terms of gender and accessibility.

III. Theme 5 text

Introduction

28. In the post-COVID-19 era, in what may come to herald a green and just recovery for global and local economies, transportation modes and networks will need to respond to new forms of urban and rural living, work patterns and modes of mobility. E-commerce has rapidly transformed consumerism, and delivery logistics. For those wealthy enough, spending on online shopping worldwide increased by 40% in March 2020 relevant to 2019 values. New forms of production have promoted home-working and will augment new residential and commuting patterns. Freight as well as personal transport sectors will seek to innovate or apply existing technologies to cater for these different transport and mobility demands.

29. The challenge ahead for a green recovery, enhanced by technological innovation, will prioritise active travel and more integrated mass transit. Private vehicle usage, with the move to more affordable e-mobility and zero-emission vehicles, will remain a factor, but the transformation will not only come about by technological innovation, but human determination to ensure that transportation policies are centred on moving people around cities and rural areas, not cars.

30. People and freight mobility, perhaps increasingly embedded in a mainstream adoption of the 15-minute city, will move towards more active travel modes as e-cargo bikes, or zero-emission boats and trains, maximising the efficiency of existing linear infrastructure.

31. Now established Global Positioning System (GPS) and radio frequency identification technologies to enable time-spatial positioning have been complemented by movement tracking via fixed objects such as mobile phone towers, entrance gates to urban rail and bus systems, and bike sharing docking stations. So-called smarter technologies provide not only management and warning functions to regulate and advice traffic flow, artificial intelligence advances have moved beyond the successes of accurate sensing, fast processing and reliable control, to possess higher order capacities for prediction, self-optimisation and interoperability.

32. The analysis of big data has fed into new forms of network analysis, but while technology has rapidly opened up these new frontiers of live data-driven transport planning and management, future steps should be careful not to let the macro override the particular

context of the local – the key social, environmental and political contexts that shape consumer experience and responsive transportation delivery.

Implications of failing to adopt and adapt to new technologies

33. Cities and societies that are unable to adapt and adopt to innovate transport technologies face the risks of:

- (a) Broken and outdated transport and regulatory systems;
- (b) Increasing air pollution, congestion and the diseconomies of dated, inoperative transport networks;
- (c) Disgruntled customers and electorate;
- (d) Lack of evidence-based, data-driven planning and management.

Proposed recommendation

34. Key areas could shape the transportation and mobility networks:

- (a) The expansion of integrated mobility as a service platform, combining modes of transport with state and corporate interests;
- (b) The replacement of the internal combustion engine with zero-emission vehicles and active travel;
- (c) The evolution of monitoring and enforcement systems;
- (d) Block chain information systems providing transparency in transportation management, planning and delivery;
- (e) Flexible, responsive and fair revenue management systems that facilitate equity in access to sustainable transport.

IV. Proposed conclusions chapter

35. The text below provides the proposed conclusions chapter as submitted by the Russian Federation.

1. Recommendation 1

36. Introduce modern principles and tools of spatial and urban planning in urban, suburban and rural environment, allowing to ensure the accessibility of the main places of attraction to the population, minimize the generation of transport demand and streamline investments in infrastructure, including through:

- (a) ensuring a rational estimated building density (population density) relevant to the transport system carrying capacity and its "mixed use" (integrating housing, basic services, e.g. education, health care, retail, leisure, etc. and workplaces);
- (b) further development of digitalization of society and economy;
- (c) ensuring a unified and coordinated approach to integrated spatial and transport planning;
- (d) ensuring the assessment of the full range of impacts of transport and mobility on the economy, environment and public health;
- (e) and, on its basis, conducting a cost-benefit assessment as a prerequisite for the implementation of any major construction project;

- (f) introduction of urban assessment methodology by mapping access to "green", "blue" and quiet places, data on GDP and public health in order to inform future planning decisions;
- (g) design of new residential buildings (e.g. social housing) with access to "green" and "blue" spaces in walking distance;
- (h) creating "green" corridors that combine the advantages of environmental corridors with opportunities for active mobility;
- (i) ensuring that spatial and urban planning guidelines and policies pay close attention to meeting the needs of vulnerable users, in particular persons with reduced mobility;
- (j) using the recommendations of the UNECE and THE PEP Handbook on Sustainable Urban Mobility and Spatial Planning.

2. Recommendation 2

37. Minimize the negative impact of private motor vehicles in cities and give priority to sustainable mobility, including through:

- (a) ensuring the use of high-quality and environmentally friendly public transport for regular long- and medium-distance travel, and active modes of transport (bicycles, kick scooters, pedestrian traffic) for short trips;
- (b) providing convenient and simple transfers to public transport;
- (c) providing safe, cozy and weather-proof storage areas for bicycles, strollers, etc. in hubs;
- (d) concentration of vehicular traffic on suitable routes;
- (e) restricting the use of personal motor vehicles through fiscal and physical measures to internalize external costs - promoting the development of urban logistics hubs outside the city centres to consolidate last-mile travel;
- (f) implementing a balanced parking policy.

3. Recommendation 3

38. Create conditions for high quality of life at the local level, including through:

- (a) implementing urban planning initiatives aimed at improving the quality of life of people (socially, economically, environmentally, medically and transport) and meeting their needs by providing access to everything they need within a 15-minute radius from home, such as a "short-distance city", "15- (or 20-) minute city" or "last mile ecosystem", aimed at achieving high results through improved urban and transport planning and design;
- (b) implementation of the "transit-oriented development" model of large cities;
- (c) integrated planning and design of urban and transport systems, providing for the wide involvement of various actors in the local community on a partnership basis:
 - local business owners;
 - schools;
 - city logistics providers;
 - employers.

4. Recommendation 4

39. Provide reliable funding for public transport, active vehicle travel and sustainable urban logistics, including through:

- (a) evaluating additional benefits in terms of land value;
- (b) prioritizing the development of public transport (primarily electric transport) for decision makers. Public authorities should play a leading role in this process by ensuring coordination of funding and planning between local, regional and national authorities, each with clearly defined objectives;
- (c) identify alternative sources of funding for public transport, such as green bonds, public-private partnerships and involvement of local businesses in public transport investments, active mobility and sustainable urban logistics so that they can benefit from their wider use;
- (d) ensuring that existing public transport funding focuses on comfort, reliability and frequency to encourage further shifts towards these modes of transport;
- (e) refocusing investment funding on sustainable transport solutions such as public transport, active mobility, sustainable urban logistics.

5. Recommendation 5

40. Ensure the development of public transport and improve the quality of its services to meet the current and future needs of the population, as well as to ensure its safety (and attractiveness in use) for users and workers, including through:

- (a) ensuring the return of public confidence in the use of public transport after the removal of restrictions due to the sanitary and epidemiological situation, by providing conditions for physical distance, anti-epidemiological treatment of rolling stock, active informing the population about the measures taken, etc.;
- (b) ensuring proper priority of public transport (primarily - electric) in the urban environment through a dedicated or separate infrastructure to make it faster and more reliable than a private car;
- (c) promoting the use of public transport;
- (d) ensuring the safety of stops and transfers and rolling stock;
- (e) ensuring the availability of rolling stock of public transport for all categories of users;
- (f) ensuring that the decisions taken in the field of public transport, which are the basis for decisions in the field of urban transport, are effectively planned to create a well-linked and integrated system for all modes of transport (including active and shared mobility solutions), contributing to a reduction in the use of private cars;
- (g) placing users as the centre of the decision-making:
 - ensuring that affordable solutions are found for all segments of society, thus providing an easy access to public transport for all communities, with a special focus on vulnerable users and persons with reduced mobility;
 - ensuring that the transportation services offered are accessible, reliable and provide door-to-door solutions for users, especially considering the new models of travel after COVID-19;
 - promoting integrated ticketing solutions for all public transport modes and, where possible, through active and shared mobility solutions;
 - maximizing public transport accessibility by providing accurate, easy to understand and up-to-date information for users.

6. Recommendation 6

41. Promote decision-making in the field of electric mobility as a fundamental part of energy supply for public transport and active mobility, including through:

- (a) comprehensive assessment of the impact of large-scale implementation of e-mobility solutions on pollutant emissions, health and congestion of street and road networks (in terms of emissions - both in terms of end-use emissions, for which tools such as urban transport roadmaps can be used, and in terms of emissions in the “life cycle”);
- (b) promoting long-term infrastructure investments that make the use of e-micro mobility more attractive and safer for users;
- (c) applying incentives to use e-mobility vehicles if their use provides environmental and health benefits;
- (d) ensuring cooperation and coordination between local governments and solution providers for the sharing of e-mobility facilities;
- (e) ensuring that e-mobility vehicles, and especially lightweight electric vehicles, marketed meet high standards to make them safe to use;
- (f) explore the possibility of cooperation between the public and private sectors to encourage investment in e-mobility infrastructure and related services.

7. Recommendation 7

42. Implement mobility management solutions to shift transport demand to cleaner and healthier ways of movement, including through:

- (a) creating and implementing mechanisms to ensure that mobility management plans are developed at the local/urban, enterprise and organizational levels;
- (b) focusing on innovative solutions such as mobility sharing, telework/home office, green logistics and delivery, as well as environmentally friendly first- and last-mile solutions in the transport chain;
- (c) intensifying the use of mobility management solutions for passenger and freight transport, building on existing experience at national and international levels;
- (d) promoting innovation and investment in mobility management, as well as adapting the developed solutions to the situation after COVID-19.

8. Recommendation 8

43. Improve the infrastructure and organization of the use of active mobility means as a sustainable and healthy mode of transport, in particular in the context of COVID-19, including through:

At the stage of imposing restrictions:

- adapting street and road infrastructure to facilitate the organization of bicycle lanes, while maintaining sufficient space for sidewalks and public transport lanes and tram tracks;
- linking decisions on infrastructure development in emergency conditions with long-term goals formulated in relevant strategic documents (strategies for development of bicycle and pedestrian traffic, strategic plans for development of active mobility network, etc.);
- reducing speed limits to ensure a safer, healthier and more liveable urban environment;
- control over the use of infrastructure and service delivery system along with their updating in the event of increased demand, problems and shortcomings, etc.;
- ensuring adequate support for the development and use of means of active mobility.

At the stage of medium- and long-term actions (after the restrictions are lifted):

- amending traffic regulations and introducing of bicycle promotion practices.
- ensuring that specific authorities at the national and/or local levels are held accountable for pedestrian and bicycle traffic policies;
- promoting the exchange of best practices among all stakeholders that contribute to the development of cycling and pedestrian traffic by creating "knowledge hubs", such as bicycle academies, etc.;
- creating protected spaces for parking bicycles and other facilities;
- encouraging children's training in safe walking and cycling, including by developing appropriate manuals.

9. Recommendation 9

44. Taking into account the social aspect of the pandemic, as well as the need for a fair transition to a "green" and healthy transport system: Restore the functioning of the transport system, given the issues of equity and inclusiveness, while avoiding social imbalances and, especially, bearing in mind the needs of vulnerable society groups, including through:

- collecting data to assess the level of "transport inequalities";
 - adequate planning of transport networks to avoid the emergence of transport-isolated areas;
 - focusing future transport investments on transport-isolated areas and areas with low transit accessibility;
 - design of public transport services that takes into account the interests of vulnerable groups.
-