Urban planning and urban mobility-how to move to more sustainable solutions?

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A few introductory notes

• A lot has changed in the world over the 20 years of the THE PEP existence.
• Unfortunately, many problems have still remained and even worsened, at the same time some new ones have appeared (epidemiological safety in PT, for example).
• Now there is an understanding that it will not be possible to solve transport problems only by technical and organizational measures dealt with transport supply (vehicles, fuels, infrastructure, technologies and so on).
• It is necessary to go beyond considering only the transport system as itself and raise the issue of regulating and optimizing transport demand.
• This in turn implies a change of emphasis in urban and transport policy and urban and transport planning - from the priority of technical and mobility management solutions - to consideration of the sources and causes of demand for mobility, to accessibility management and, further, to effective mobility management.
• Research and modeling show that the focus only on the use of modern technologies in the conditions of continued growth of transport demand and mobility does not allow us to achieve fundamental changes in the dynamics of decline the negative consequences of urban transport systems work (e.g. Buckle et al., 2020);

• High and continuing to grow mobility is largely the result of the existing structure of the complex “City-Transport” system and the unsettled interactions in this system;

• The best world practice shows that "Avoid-Shift-Improve" approach has the greatest potential in solving the urban transport problems including measures aimed at the reduction of transport demand generation; introduction of affordable, accessible and high-quality alternatives to the use of a private car; implementation of modern digital services; the use of various measures to discourage the use of private cars and so on.
City and transport: how to reduce ("avoid") the demand for mobility?

Development of cities and transport systems are interrelated processes, so many transport problems of cities can be solved or reduced through the correct urban planning policy, which allows to rationalize the generation of transport demand of the population and economy.
The need to transform urban transport policy

• The existing in many countries paradigm of transport policy – "meeting the needs of the population by increasing mobility and speed of movement" - leads to an increase in dependence on the car and transport in general, to an increase in vehicle mileage, an increase in emissions, accidents.

• A radical change in the focus of urban transport policy is needed – from a policy built around the goal of “ensuring mobility” to a policy and strategy focused on redesigning the entire “city-transport” system to ensure a balance between mobility and “proximity” (distances between places of generation and absorption of transport demand). This will allow safer and more environmentally friendly modes of transport and movement, as well as shorter distances between people and their places of attraction to become the norm of everyday life.

• At the same time, the task of such a revision of the priorities of transport policy is not focused on the refusal to travel by car in general, but is focused on limiting its use to those cases when the usefulness of such use by the owner clearly exceeds the costs that arise in this regard in society, including the costs of other users of cars.

• If the main focus of transport policy is to ensure "accessibility" (places of attraction), and not to ensure "mobility", then we come to the task of redeveloping the urban environment to ensure "proximity". At the same time, the range of possible solutions is significantly expanded.
Land use patterns affect mobility and accessibility

- **Density** (number of people or jobs per unit of land area) increases the proximity of common destinations while reducing and shortening the number of trips using vehicles, increasing the demand for walking, cycling and public transport.

- **Mixed land use** (placement of various types of activities—shops, schools, hospitals etc. - and places where peoples live close to each other) and **mixed development** (being in the same buildings of residential premises and commercial and social infrastructure facilities) reduce the number of trips.

- The availability and quality of **pedestrian and cycling infrastructure** can have a significant impact on accessibility, especially for those who do not have a car or travel distances up to 3-5 km.

- The **development and ensuring of connectivity of transport infrastructure**, allowing to connect one urban area with another, allows for more direct trips.
In 2020, within the framework of French-Russian THE PEP Partnership on integration of environment and health issues in transport and spatial policy, a Handbook on Sustainable Urban Mobility and Spatial Planning was developed on the initiative of the Russian Federation.
The last very important issue:

- new global threats, development of new groundbreaking technologies, new vision of urban transport problems solution require new qualifications of experts, combining knowledge in such areas as urban and transport planning, environmentally friendly vehicles and technologies, environmental and health protection, transport economics, the use of digital technologies, etc.

- to solve this problem, the Russian Federation and France in 2017 had established the international Master's program "Sustainable Urban Transport" within the framework of THE PEP Academy, in which the University of Versailles and the Moscow Automobile and Road Construction University (MADI) participate.

- we really hope that the end of the COVID-19 pandemic will allow us to continue our Partnership with our French colleagues.
We need a worth quality of life in our cities!