CHALLENGES AND SYNERGIES IN ADVANCING AUTOMATION
FOR ALL MODES OF TRANSPORT

Dear Ministers!
Dear representatives of international organizations!
The participants!

On behalf of the Government of Ukraine and me personally let me congratulate the participants of the 81st session of Inland Transport Committee of the European Economic Commission of the United Nations and to thank the organizers for providing excellent conditions and facilities to work together.

Let me express my confidence that today's meeting will give a chance to conclude the results and determine the basic directions of the further development of sustainable and environmentally sound international transport.

Ladies and gentlemen!

Today, our transportation systems are on the verge of unprecedented changes. I am honored to be present here and take part in this session “Automation in Transport”.

To tell the truth, we sew these advancements into every aspect of our daily lives, no matter whether it is tourism, transportation or any manufacturing industry. And they mean a lot for society as we live in the era when new technologies are redefining mobility.
In the Ministry of infrastructure of Ukraine, the key components of our work are digital infrastructure, transport safety, innovative transport and infrastructure network integrated with the world's transport corridors. That is why we are carefully considering the use of innovative means and technologies in the sphere of transport.

We are actively lobbying incentives for digitalization of all the services, introducing powerful automated systems for managing logistics and improving the quality of services for users.

**Innovations (Hyperloop)**

Moreover, we are observing experiments that constantly bring something new to infrastructure technologies, new approaches in energy sector and new means of transport in general - all in one.

In 2018 we have launched HypeUa project in order to revolutionize end-to-end transportation and eventually solve all the collateral difficulties / questions.

We strongly believe that Ukraine can become a testing ground for research and implementation of innovations in transportation, including new modes of transport like hyperloop.
We gathered more than 10 partners that possess engineering skills, expertise and innovative approach in the transport sector to focus work on realization of the project.

We strongly believe that taking into advantage our location Ukraine will be an important player in future transport corridors, and introduction of new, sustainable, energy efficient cost-effective modes of transport will leverage our potential as an emerging market.

**Challenges of automation**

All of us understand the vital importance of the new technologies. We also cannot diminish its effects, among them: automation of processes, reduction of the human factor in decision-making.

At the same time we are faced with new challenges that we need to be prepared to. First of all, driver's job is at risk of automation. According to experts’ opinion, cars that do not need a driver to control can become a reality in the next decade.

But still there are no common rules for all countries regarding the validation and operation of automated systems that manage or will manage vehicles.

Besides, liability for an accident in transport is not determined in case if an event occurred as a result of the actions of automated systems. There
is no defined responsibility line between the driver and the automated machine in case of crash.

Anyway, we have a clear role to play – crafting policies tailored to the current needs of both users and producers’ market. While there are multiple options available, our policies decisions today must balance the desire for implementation of innovative technologies against the comfort and safety of their utilizers.

**Railway**

In recent years, the railway industry has introduced a number of powerful automated control systems (ACSs), the use of which simplifies the management of the transport process and the sales process of transport services, provides taking into account the actual passenger flow, provides the opportunity to receive reliable statistics, financial statements and reports on passenger transportation at different levels of management, as well as obtain the necessary operational information to employees of stations, stations, structural departments units, railways associated with passenger traffic.

In addition to the ASC in the field of passenger rail transport was equipped with Automated Self-Service Systems that enable passengers to receive background information on available seats and costs, the time of departure of the trains from the station, the scheme of the train, the route and the calendar of the course, as well as the Internet-ordering of electronic travel document, etc.
Moreover, we automated the system for processing electronic transport documents. Electronic bill of lading accelerates the turnover of the car, reduces the impact of the human factor when entering data, eliminates the presence of the client at the departure station at the time of registration of the cargo.

Implementation of automation and information technologies in practical activities of railways provides rail transportation with new opportunities, increasing the level of quality of service and providing the formation of additional earnings.

**Sea transport**

Last year we have implemented the Ukrainian National Maritime Single Window. It is a hardware-software complex that is created to simplify and harmonize administrative procedures. It provides rationalizing the formalities for providing information and electronic transmission of information during transportation using maritime transport.

**Safety on transport**

The purpose of automation of the process of ensuring safety on the ground transport is to reduce accidents, reduce the level of injuries and save roads. The introduction of modern automated systems will make it possible to reduce the impact of the "human factor" in the process of ensuring safety
on the ground transport, eliminate the possibility of manipulating powers for the implementation of surveillance and control measures, increase the capacity of roads, increase speed and make it impossible to violate the provision of administrative services, and accelerate the process data processing and document creation.

In order to increase the level of automation in the transport safety, with the support of World Bank, we have started the project of intellectual transport systems. One of them is based on installation of 6 weight – in – motion sites on arterial roads, providing also cameras for speed enforcement and launch of data center for effective collection and analyses of information. Also, today 78 mobile points of dimensional and weight control work efficiently on Ukrainian highways and prevent road collapse, provide security for passenger and freight traffic.

In order to improve the information exchange processes of transport safety system as a licensing authority, the service for the provision of administrative services on motor transport in electronic form - "Electronic cabinet of the carrier" - has been introduced into test operation, which will simplify licensing services for carriers, minimize corruption in this area and improve passenger transportation safety.

**Electric vehicles**

In recent years, the electric vehicle market has achieved rapid growth thanks to the joint efforts of the governments of the countries and industry,
as well as the adoption of high-tech solutions, namely, the reduction of the cost of the battery, and this share of the market is expected to reach about 30% of the world sales of new cars to 2030 and 40% by 2040 respectively.

I strongly believe that electric cars are the future of Ukraine.

The Ministry of Infrastructure of Ukraine is already finishing work on a number of bills to stimulate the development of the electric transport industry in Ukraine. Among the planned:

- significant, up to 22% reduction in the cost of imported and manufactured electric vehicles in Ukraine
- incentive actions for strategic investors and development of national production
- creating comfortable conditions for traveling on electric cars
- development of the infrastructure of fueling for electric vehicles, both national network supercharging, and local networks of "long charge".

We are developing legislation aimed at stimulating the electric vehicles market and infrastructure for their use and providing preferences to electric vehicles and their components manufacturers for the expansion of production in Ukraine.

By 2030 it is planned to transfer all city public transport to the electric, and also create a national network of fast charging stations for electric vehicles.

E-ticket

Today in Ukrainian cities there is a legislative base and freedom of action for the introduction of an automated system for calculating fares in
passenger transport. This is about refusing cash payments for paper tickets and switching to an e-ticket.

For passengers - this is primarily a convenience and comfort. The only ticket for all types of transport, in which there is no need to transfer money for travel, and then wait a long time for the rest in cash. It is also an opportunity to avoid privileged discrimination.

For a city it is a statistic. The account of real passenger traffic, which will make it clear who, how many, when and where they were transported. This will help optimize the routes. Plus the solution to the above-mentioned problem of compensations for privileged travel.

And most importantly, it is the fight against corruption and the withdrawal of a huge amount of cash from the "shadow".

Dear participants,

On my own I want to add that transformational change is always a challenge. It is a constant work and belief in a common purpose. Only the synergy of politicians, government officials, community and business can support these structural changes and transformations that will allow us all to live, learn, work, rest and do business in a "Automated" world, taking active part in its creation and use.

We expect that activity of the working authorities of the UNECE plays a key role in this transformation.

It will be important to assure organizational and legal support for the initiative as well as transition to the ‘automated’ technologies and further
succeeding globalization. This complex will change the conditions of existence of each and every one in our society.

And this is not an assumption or hypothesis, it is a reality. Technology is changing the world and human existence.

Summing up what has been said I want to note that the objectives defined by the Ministerial Resolution on “Enhancing Cooperation, Harmonization and Integration in the Era of Transport Automation” are completely consistent with the transport policy priorities of Ukraine. And I believe that the signing of the joint document of today's meeting will become an effective tool for achieving a common goal.

And in conclusion, once again let me thank you for the support provided for the Ukrainian initiatives in the framework of the UNECE, and to express the hope that such cooperation in the future will be active, productive and focused on the highest result.

Thank you for attention!