

SMART CONNECTIVITY ALONG THE ASIAN HIGHWAY NETWORK IN THE TIMES OF COVID-19

"Transport and trade connectivity in
the age of pandemics: Contactless,
seamless and collaborative UN
solutions"



14. Step-by-step development of
the digital transport corridor
ecosystem of the Asian highway
network



Digital transformation of the transport complex, which is characterized by a significant change in traditional business processes and the transition from paper document management to electronic data exchange, is a stable global trend. As a rule, the goals of digitalization of business processes in the fields of transport and logistics are:

- reducing the share of manual labor and the risks of spreading the pandemic, including COVID-19;
- improving the quality and safety of international road transport services while reducing their cost;
- increasing the "transparency" and manageability (stability) of the transportation process;
- acceleration of the transportation process, introduction of new services and technologies for cargo transportation and handling;
- save money and resources by optimizing (changing) business processes and moving from paper-based document management to electronic data exchange;
- elimination of negative manifestations of the human factor in the design and processing of documents;
- improving the efficiency of control and supervision activities in transport while reducing the administrative burden;
- optimization of the functioning of the state information systems used.



These goals can be achieved by applying a fundamentally new approach to organizing business processes in the field of transport and logistics, based not on the principles of competition, but on the formation of sustainable self-developing business ecosystems of transport participants.

There is a transformation of economic relations based on the principles of tough competition, and the transition to mutually beneficial coexistence and mutual development. The basis of this transformation is the use of digital models and management methods, digital tools that erase borders between States, businesses and individuals, making goods and services as accessible as possible, with minimal dependence on geographical location and borders.

A special impetus to the development of the term "business ecosystem" was given by the accelerated formation of digital services, including in the field of e-Commerce. A significant boost to their development was the impact on the Chinese economy associated with the SARS epidemic in 2003, when the demand for online purchase of goods and their delivery increased sharply due to the quarantine imposed in Chinese cities.



The global economic situation caused by the new type of coronavirus pandemic COVID-19 has been a significant driver and catalyst for the activation of ecosystem creation in the field of transport and logistics. At the same time, the formation of regional or global ecosystems in the field of transport and logistics requires coordinated counter actions on the part of the state and business, including changes to the legislative framework and the creation of applied service solutions.

For example, examples of business ecosystems can be created by "Port Community Systems" in ports such as Rotterdam, Hamburg, Singapore and other ports. As part of the formation of these ecosystems based on the use of digital technologies, a unified information environment for interaction between business and state regulatory authorities is being created. As a result of digitalization of business processes, the time spent on routine operations is minimized, the efficiency of transport hubs is increased, and physical contacts between personnel are excluded (or minimized).

An example of the formation of a regional transport and logistics ecosystem is the creation of the NEAL-NET(1) logistics management system . The NET-NET platform is a transnational, non-commercial mechanism for logistics interaction and data exchange within international transport corridors, jointly implemented by China, Japan and South Korea.



(1)<http://english.nealnet.org/>



An example of an ongoing project to create an ecosystem in the field of international road transport and logistics along the Asian highway network is the formation of an ecosystem of digital transport corridors of the Eurasian economic Union. The EAEU consists of the following States: Armenia, the Republic of Belarus, the Republic of Kazakhstan, the Kyrgyz Republic and the Russian Federation. The work on creating an ecosystem of digital transport corridors in the EAEU space is carried out on the Basis of the order of the Eurasian intergovernmental Council, which defined the tasks and plan for its creation.

The key technological principles applied in the formation of the ecosystem of digital transport corridors of the EAEU are:

- transition from the exchange of documents, including in electronic form, to the exchange of legally significant data on the progress of the transportation process and the interaction of its participants;
 - maximum automatic reuse of existing and previously entered up-to-date information to avoid duplication of information;
 - information integration with state, public and corporate information systems to improve the quality and efficiency of their operation;
 - information integration with related functional information systems, including digital trading platforms and hubs.
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The implementation of the project to create an ecosystem of digital transport corridors in the NPP space will create the necessary conditions for overcoming the negative consequences of COVID-19 on the transport and logistics industry, speeding up the transportation process and improving its efficiency.

The formation of ecosystems in the field of transport and logistics, digitalization of international transport corridors is a complex process that requires organizational changes, changes in the regulatory framework and its harmonization, design and implementation of digital platforms.

Using the accumulated global positive experience in this area is the key to the success of these projects.

