Transport Infrastructure Resilience to Disruptive Events in RECI project countries

Talaibek Makeev, Kyrgyzstan
Resources

- Study report on resilience of road and rail infrastructure in Kazakhstan
- Study report on resilience of road and rail infrastructure in Kyrgyzstan
- Study report on resilience of road and rail infrastructure in Mongolia
These reports were commissioned to make a brief analysis of the situation with the risk and threats of disruptive events to the transport operations and infrastructure in Kazakhstan, Kyrgyzstan and Mongolia are parties of the Asian Highway and the Trans-Asian Railway networks and to provide recommendations for their increased post-COVID-19 resilience.
Kazakhstan had -2.5% loss in GDP in 2020. Improved transport\transit connectivity were main factors of a comparable resilience of the economy. Multibillion investments of Kazakhstan in the past decade to the transport infrastructure strongly contributed to that.

Kyrgyzstan had -14% GDP decline in 2020 due to losses in transport and tourism. COVID-19 restrictions and connectivity limitations are the causes of that.

Mongolia’s economy is suffered significantly too. In the first quarter of 2020, its gross domestic product (GDP) shrank by 10.7 percent and exports and imports declined by 41.5 percent and 9.7 percent respectively, compared with the same period in 2019.
Figure 1: Quality of infrastructure in Kyrgyzstan, Kazakhstan and the Russian Federation
On a scale from 0 (worst) to 100 (best)

Source: OECD (2019)³
Main lessons learned

The disasters and emergencies management systems, as COVID-19 shows, possesses systemic shortfalls, when it comes to pandemics. Pandemics made one of the last priorities and have vague descriptions of the prevention, preparedness, and response measures in the existing set of legal, regulatory acts, action programmes and plans.

At the regional level, cross border operations both for freight and passengers are to be revisited. Fast-track joint border and custom treatment, less paperwork with less actual contacting, remote scanning and the use of the modern digital technologies may allow to improve efficiency and increase resilience of cross border transport operations.

COVID-19 showcased that railway freight operations are less affected in conditions of pandemics and quarantines. The railway, firstly, increases freight capacity and lowers the cost per ton-kilometers and, secondly, it is more resilient to disruptive events due to its distinctive advantages of less crew and low physical contact thus being less affected by the pandemics. Freight by road transport has more limitations with more human contacts, more labour intensity and due to that has lengthier border clearance and crossing procedures.

Better coordination and operational collaboration among the border-crossing points, including the “single window” system may significantly reduce the time and cost of freight transport both for bilateral trade and transit of goods through international transport corridors. Remote screening, online and advance paperless procedures will bring more benefits.
Key recommendations

The infrastructure co-deployment provides an opportunity to enable the access to the ICT and mobile communication lines along the Asian Highway and Trans-Asian Railway networks. It is important to increase disaster preparedness and risk reduction upon operating transport corridors.

Take into account the interconnections between different infrastructure systems in different sectors and locations and the cumulative impacts in terms of environmental, social and economic sustainability throughout the infrastructure lifecycle;

Digitize transport operations. Digitization can turn them into effective tools for mitigating the impact of pandemics, since these processes eliminate the need for direct contacts between people for customs clearance.

Develop long-term and strategic principles for environmentally friendly and healthy transport systems based on sustainability and resilience.

Organize, as necessary, regular intersectoral and international meetings to exchange experiences, as well as to regular review and discussions between different modes of transport and multimodal platforms in order to prevent the international spread of infectious diseases through transport and to strengthen regional and interregional coordination of efforts to facilitate border crossing. These issues could also be placed on the agenda of the existing intergovernmental platforms like Working Groups on the Asian Highway and Trans-Asian networks, SPECA and others.

The transport and health authorities should work together on improving roadside medical aid and the other health services, including for medical tests. Single multilingual aid hotline for international transport corridors in roads and railway networks can be developed to improve health emergencies’ preparedness and response. The use of e-document and online services in such case is vital both for receiving the medical aid as well as results of the medical check and tests. The multilingual telemedicine could be a part of these services.
Thank you for attention!

talaibek.makeev@gmail.com