An Overview about Intelligent Transport Systems and Infrastructure in Kazakhstan*

Onur GUVENC[1], Gulmira BODAUBAYEVA[1], Saule Yolcu[1] and Madina DUCHSHANOVA[1]

[1]School of Management, Almaty Management University, Almaty, Kazakhstan

Correspondence should be addressed to: Onur GUVENC; o.guvenc@almau.edu.kz

* Presented at the 39th IBIMA International Conference, 30-31 May 2022, Granada, Spain

Abstract

Intelligent Transportation Systems (ITS) have continued to change supply chain management in the modern era (SCM). In the first stage of our research in 2021, we produced a comprehensive view of ITS and SCM in CIS countries. In this second stage of the study, we did the similar research for Kazakhstan as a representative evidence for ITS usage. The study employed a mixed method design to explore the primary issues encountered by intelligenttransportation systems and supply chain management procedures using a sample of 510 respondents in the survey applied to users and 220 respondents in the survey applied to providers in Kazakhstan. According to the findings of the study, providers are most concerned about the security of their goods, weather conditions, road conditions and the queues at the borders. The study finds that Kazakhstan's infrastructure development offers competitive benefits in the utilization of ITS systems but some other ITS related issues should be introduced in the future to increase the benefit. Kazakhstan is better than CIS average in all parameters that we analysed. For example the number of cases of lost items in Kazakhstan is lower than the CIS average.

Keywords: logistics, transportation, supply chain management, intelligent transport systems, infrastructure

_____