

UDC 339.9;339.9:061(100)

<sup>1</sup>Mukhtarova K. S., <sup>2</sup>Pilipenko A. I., <sup>3</sup>Madenova M.

<sup>1</sup>Al-Farabi Kazakh National University, al-Farabi av., 050038, Almaty, Kazakhstan

<sup>2</sup>People's Friendship University of Russia, Moscow, Russian Federation

<sup>3</sup>Al-Farabi Kazakh National University, al-Farabi av., 050038, Almaty, Kazakhstan

E-mail: madenova.m@gmail.com

## **Analysis and Measuring Performance of the International Transport Corridor Project «West Europe-West China» in the Republic of Kazakhstan and Propose Ways for Its Development**

**Abstract.** The paper aims measuring performance of the project of international transport corridor «West Europe-West China» in the Republic of Kazakhstan and propose ways for its development.

Recognition of the role of international transport corridors (ITC) in the modern world has generated a large number of theoretical and applied researches.

The nature of ITC, projects of their creation and their role in competitive advantages formation are the subject under consideration in works of commissions in different countries all over the world.

The competitiveness of the economy and the state, in the context of globalization, given the vastness of the territory of Kazakhstan, will largely depend on the efficient operation of transport and communication complex.

**Key words:** transport corridor, transportation, Kazakhstan, EAEC, freight traffic, transit, development prospects, «Western Europe-Western China» corridor.

### **Introduction**

The paper aims measuring performance of the project of international transport corridor «West Europe-West China» in the Republic of Kazakhstan and propose ways for its development.

Recognition of the role of international transport corridors (ITC) in the modern world has generated a large number of theoretical and applied researches.

The nature of ITC, projects of their creation and their role in competitive advantages formation are the subject under consideration in works of commissions in different countries all over the world. E.Y Vinokourov, M.A Jadraliyev, Y.A. Shcherbanin studied transport corridors in Eurasian Economic Commission (EAEC), their effectiveness and future development at national and regional levels. The authors describe the transport system and transit opportunities of the Republic of Kazakhstan.

Foreign authors, who investigated this field of research, are K.P Glushchenko, A. Golovin, A.V. Nesnov, V.M. Sovereign, O.A. Padbyarozkina, Hibbs J. (2003), Holslag J. (2010), Tridivesh M. (2012).

Local professors and Doctors of Sciences T.K. Balgabekov, J.M. Kuanyshbayev, Ph.D. Professor

N.K. Aydikenova, G.A. Bodoubayeva work in this field. In their articles, they consider the problems and prospects of development of transport corridors of the Republic of Kazakhstan [1].

The competitiveness of the economy and the state, in the context of globalization, given the vastness of the territory of Kazakhstan, will largely depend on the efficient operation of transport and communication complex.

### **Methods**

The prerequisites for the analysis of the transport corridor project «West Europe-West China» were many factors, but chief among them are an increase in the volume of turnover between the two or more countries and the inefficient use of existing transport corridors as rail and maritime communications. This corridor is of fundamental importance for the countries: China, Kazakhstan, and Russian Federation.

In this paper we were investigated the statistical data provided by the sites of the Russian Federation and the Republic of Kazakhstan, China. Theoretical and methodological basis of the work are legislative acts, these statistical books, periodicals, works

of foreign, Kazakhstan scientists in the field of economic research of the international project.

Modern literature in economics suggests a variety of methods and models to assess the effectiveness of projects, as well as strategic management system (Tafti, SF, Jahan M., EMAMI, SA, 2012, Kortelainen, S., Y. Bogatin, Shvandar VA 2009 Vilna PL, Livshits VN, Smolyak NA, 2009) [2,3,4].

We used statistical functions in Excel such as TREND () and the formulas created by the authors to calculate the economic benefits from the introduction of the project ITC «Western Europe-Western China».

### Research findings and results

The research has two parts:

1. Analysis the project of transport corridor WE-WCh.

2. Measuring performance of the project of international transport corridor «West Europe-West China» for Republic of Kazakhstan.

In the result of first part of research, we found out main information according the project.

The official name of the project «Western Europe-Western China» has been defined in the decree of the President of the Republic of Kazakhstan, Nursultan Nazarbayev, on April 6, 2007 № 310 «On further measures for the implementation of the Strategy of Development of Kazakhstan till 2030». Later announced in the letter of President of the Republic of Kazakhstan to the people Kazakhstan on February 6, 2008. Heads of transport departments of Russia and Kazakhstan in December 2007 decided to consider the inclusion of the route Western Europe – Western China through Kazakhstan and

Russia in the list of the Asian Highway within the UNESCAP Asia-Pacific region and other international consolidation of the above route [5].

The value of the corridor for RF due to its location between the two rapidly developing world centers – Europe and Asia, so that it plays a special role in ensuring Euro-Asian relations.

The attractiveness of this route for cargo is to reduce the cost and time of delivery of goods in comparison with the sea through the Suez Canal.

The corridor has greater importance for the Republic of Kazakhstan. The country is landlocked, which significantly complicates the process of normalization of international relations. However, despite that out of 209 countries in the world Kazakhstan trades with 192[6]. In addition, the territory of the republic might take transit routes to other countries interested in trade with the countries bordering with Kazakhstan, especially since one of them is China. He has several decades is the priority trading partner for every country in the world.

By 2020, the possible increase in the volume of export transactions in Kazakhstan from 96 million tons to 147 million tons, which, in turn, will require additional cargo flows to Russia, China and South Korea, Europe and Central Asia from the transport and logistics service system [7].

Overall, the project cost is 825.1 billion tenge. With all of this will require minimum cost from the state budget. Economic and political stability in the country made it possible, in the context of the global financial crisis, in such a short time, realize the borrowing of funds from international financial institutions (see. Figure 1) [6].

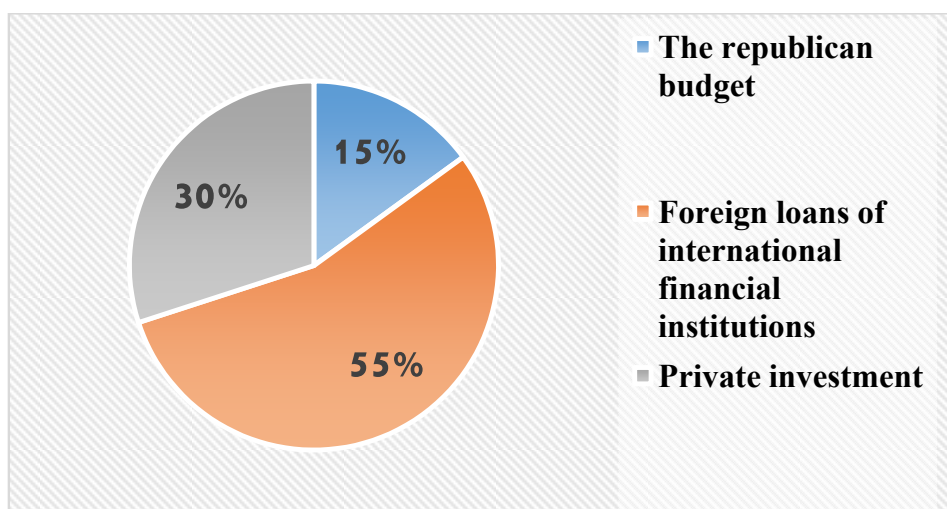


Figure 1 – Sources of financing of the «Western Europe - Western China»

Figure 1 shows the three main sources of funding TC «WE-WC» project in Kazakhstan, where international financial institutions funded 55% of the project, 30% are private investments, and 15% of the national budget.

After analyzing the concepts of the project, the authors analyze the effectiveness of the project.

Construction of the WE-WC Corridor has great importance for improving the external economic relations and the economic situation of the countries through which the corridor will pass (Russia, Kazakhstan, and China). High positive effect has a connection corridor with China. This fact is caused by the fact that China, in spite of the internal problems of the country, now is virtually the only country with a steadily growing economy.

In the coming years, China will be the center of international trade flows. The country remains the

world's major exporter and manufacturer of goods, will buy more imported goods. Analysts say that in 2030 12 of the 20 largest existing trade flows are attributable to China.

In this regard, the project can be justified by the creation of a corridor-effective in terms of improving external relations with China.

To calculate the economic benefits associated with the reduction of the costs of operation of motor vehicles (MV) per 1 km of road for each site until 2020, it was necessary to predict the data traffic volume of vehicles on portions of the transit corridor through 2020. For this we used function TREND () from package, Microsoft Excel functions.

The following Table 1 with the data to predict the intensity of motor traffic on portions of the transit corridor to 2020 was obtained based on calculations.

**Table 1** – Forecast of traffic density of vehicles on portions of the transit corridor to 2020 items / day [\*]

The road section name	2013	2014	2015	2016	2017	2018	2019	2020
Border RF.-Martuk	2 389	2 580	2 786	2982,5	3181,25	3380	3578,75	3777,5
Martuk -Aktobe	6 989	7 548	8 152	8726,108	9307,6	9889,092	10470,58	11052,08
Aktobe – Khromtau	4 533	4 896	5 288	5659,9121	6037,078	6414,245	6791,411	7168,577
Khromtau – Karabutak	1 767	1 909	2 061	2206,5455	2353,586	2500,626	2647,666	2794,706
Karabutak – Irgiz – Aralsk	1 050	1 134	1 225	1310,8028	1398,152	1485,502	1572,851	1660,201
Aralsk – Kazalinsk	1 181	1 276	1 378	1474,8583	1573,14	1671,422	1769,704	1867,986
Kazalinsk -Zhusaly	2 573	2 779	3 001	3212,2052	3426,261	3640,316	3854,372	4068,427
Zhusaly – Kyzylorda	2 641	2 852	3 081	3297,514	3517,254	3736,995	3956,735	4176,475
Kyzylorda – Shiili	2 933	3 167	3 421	3661,7171	3905,727	4149,737	4393,748	4637,758
Shiili – border region	3 246	3 505	3 786	4052,169	4322,198	4592,227	4862,257	5132,286
Border-area Turkestan	3 160	3 413	3 686	3945,5329	4208,456	4471,379	4734,302	4997,226
Turkestan-Tortkol	5 170	5 480	5 809	6125,6709	6445,19	6764,71	7084,229	7403,748
Tortkol – dressings Badan	9 282	9 839	10 429	10996,87	11570,47	12144,08	12717,68	13291,29
Pow. at Badan – Shymkent	13 708	14 530	15 402	16240,897	17088,03	17935,17	18782,31	19629,44
Shymkent-gr.obl	5 400	5 724	6 067	6397,6513	6731,357	7065,063	7398,769	7732,475
c. Region – 529 km	7 479	7 927	8 403	8860,7547	9322,938	9785,121	10247,3	10709,49
529 km (on the bypass)	2 147	2 276	2 413	2544,0863	2676,788	2809,489	2942,19	3074,892
405 km Taraz	6 973	7 392	7 835	8261,7867	8692,727	9123,668	9554,608	9985,549

405 km (on the bypass)	1 318	1 397	1 481	1561,5953	1643,049	1724,503	1805,957	1887,411
Kulan – Merke	6 853	7 264	7 700	8119,6846	8543,213	8966,741	9390,27	9813,798
Merke-dressings Blagoveschenka (Kynar)	3 452	3 660	3 879	4090,4019	4303,76	4517,118	4730,477	4943,835
pov.na Blagoveschenka – p.Korday	7 042	7 464	7 912	8342,7696	8777,934	9213,099	9648,264	10083,43
p.Korday – pov.na Otar	6 186	6 558	6 951	7329,719	7712,042	8094,366	8476,689	8859,012
dressing. on Otar – Uzunagash	6 057	6 421	6 806	7176,4509	7550,78	7925,108	8299,437	8673,766
Uzunagash – Kaskelen	9 919	10 514	11 145	11751,692	12364,67	12977,65	13590,62	14203,6
Kaskelen – Almaty	27 212	28 844	30 575	32240,373	33922,05	35603,73	37285,41	38967,1
Almaty-Alekseyevka	31 638	33 536	35 548	37484,4	39439,61	41394,83	43350,04	45305,25
Issyk-Alekseyevka	21 346	22 627	23 985	25291,121	26610,32	27929,53	29248,73	30567,93
Issyk-Shelek	11 212	11 885	12 598	13284,256	13977,17	14670,09	15363	16055,92
Shelek-Kokpek	3 884	4 117	4 365	4602,2751	4842,333	5082,391	5322,449	5562,507
Kokpek – Chundzha	3 041	3 223	3 417	3602,9763	3790,91	3978,844	4166,778	4354,711
Chundzha – Koktal	3 504	3 714	3 937	4151,5211	4368,067	4584,614	4801,16	5017,706
Koktal – Zharkent	3 617	3 835	4 065	4285,9833	4509,543	4733,103	4956,663	5180,223
Zharkent – Horgos	8 619	9 136	9 684	10211,489	10744,13	11276,77	11809,4	12342,04

[\* Note- Compiled by the authors based on 6, 8, 9, 10]

Table 1 shows that by 2020 is expected to significantly increase intensity of motor-vehicles movement by the corridor and which increase the economic efficiency of the corridor, as the planned introduction of toll roads along the corridor.

During the development and implementation of the project, leading economists and managers in the field of project management, we conducted numerous studies of the feasibility study of the project. The results of these studies show that by 2020 the volume of freight traffic will increase by 2.5 times – from 13 million tons to 33 million tons per year.

For the economy of Kazakhstan, as well as for all EAEC and European countries, project has great importance, especially in terms of development of individual regions. Regional development will have five major regions of the country, through which

the corridor passes – Aktobe, Kyzylorda, South Kazakhstan, Zhambyl and Almaty.

Route the Western Europe – Western China will improve transport links between Europe and Asia. Its construction is planned to be completed by 2020 [6].

By 2020, it is planned to achieve the following indicators:

- The total turnover of 283 billion. tcm (including the implementation of projects SPAIID)
- Growth of transit cargo – 28 million tons, including container -. 1.5 million TEU..

Commissioning of the transport corridor «Western Europe – Western China» will speed up the economic development of regions of the country, which has a positive impact on its socio-economic status.

**JEL Classifications:** *F14, F15*

---

**References**

1. Balgabekov T.K, Maksutova Z.K, Balabekova K.G. The Development of the Transport and Logistics System in the Republic of Kazakhstan // Modern High Technologies. – 2014. – № 3.
2. Bogatin J.V, Shvandar V.A. Evaluation of Efficiency of Business and Investment. – M.: Finance, UNITY – DANA, 2009. – 430 p.
3. Vilna P.L, Livshits V.N, Smolyak N.A. Evaluating the Effectiveness of Investment Projects: Theory and Practice: Teaching – a practical guide. – M.: Case, 2009. – 832 p.
4. Kovalev V.V, Ivanov V.V, Lalin V.A Investments: – M.: Prospect, 2009. – 440 p.
5. The Construction of the Kazakh Section of the International Transport Corridor Western Europe – Western China [electronic resource] Everyday online ed. Kazakhstan Today, 2009. URL: <http://www.kt.kz> (reference date 12/20/2015)
6. The official website for «WE-WC» project [electronic resource] URL: <http://europe-china.kz/>
7. The CIS Interstate Statistical Committee. [Official site of the CIS Statistics] URL: <http://www.cisstat.org/>
8. The official website [electronic resource] URL: [www.strategy2050.kz](http://www.strategy2050.kz)
9. The official website of Statistics Kazakhstan project [electronic resource] URL: <http://stat.gov.kz/>
10. Asian Development Bank; The Economist [electronic resource] URL: <http://www.horgos.kz/>