State and prospects of developing primary branches of transport engineering of the republic of Kazakhstan

Shuakhbay Zamanbekovich Zamanbekov

Kazakh State Women's Pedagogical University, Ayteke bi street, 99, Almaty, 050000, Republic of Kazakhstan

Abstract. Transport engineering of Kazakhstan is the major industry defining its successful functioning in conditions of intensifying process of globalization and internationalization of international competition problem. Transport vehicles available in the republic provide uninterrupted transportation of loads and passengers in the country. But despite the observed positive phenomenon in use of these conveyances, there are many problems in transport engineering of Kazakhstan demanding its solving. The level of developing own transport engineering of the republic is not so high as a whole, appreciable part of vehicles of the country replenishes due to import deliveries, so that US \$ 10 billion are annually spent. The resource base of transport engineering of Kazakhstan doesn't allow to use more effectively its transit potential and deepen integration with neighboring countries of the Central Asian region. Special problem is caused by incompleteness of process on creation of infrastructure of transport system and slow expansion of Kazakhstani share in assembly of rolling stock of railway transport, automobile and trucks, construction and road cars. In total it attached priority significance to development of vehicle production in the country. In recent years the state accepted a series of programs on formation and primary development of machine-building complex of the Republic of Kazakhstan, for change-over of transport engineering on innovative basis, on cluster creation in this branch and use of private and state partnership. Nowadays dozens enterprises of transport engineering in the republic are being built, projects on construction and reconstruction of automobile and railway tracks for introducing of domestic goods both on internal, and foreign markets are realized. In this connection competitive advantages of transport engineering of the country especially railway transport were researched. Implementation of innovative modernization is of great importance for technological updating of vehicle production at the operating enterprises. For this purpose creation of independently functioning design office for mastering new types of transport vehicles and test base in the territory of the country is very important. It gives Kazakhstan after entering into force in 2015 technical regulations of the Customs union on safety of vehicles and opportunity to get approval on release of buses, cargo and automobile cars with various modification and achieve their competitiveness on sales markets. Cluster creation in transport engineering with the use of private and state partnership mechanisms will provide accelerated development of transport engineering in the country with accompanying enterprises of small and middle-sized business.

[Zamanbekov S.Z. State and prospects of developing primary branches of transport engineering of the republic of Kazakhstan. *Life Sci J* 2014;11(11):448-455] (ISSN:1097-8135). http://www.lifesciencesite.com. 77

Keywords: transport engineering, infrastructure, potential, technology, innovation, integration, localization, modification, subsidizing, cluster, standard

Introduction

The Republic of Kazakhstan is included in the first ten large countries of the world community by the size of its territory. It is situated at the crossing of transport route between North and South, West and East so, automobile and railway tracks that connect countries of Central Asia and China to Russia and further with countries of Western Europe pass through them. The Great Silk Way which is being built nowadays and passing through the territory of Kazakhstan is a basic element of total transport infrastructure of the country within international corridor "Western Europe - Western China" [1].

Favorable geographical location of Kazakhstan in the center of Eurasia created necessary condition for developing of transit transportation by all means of transport in the republic: railway, water, aviation, pipeline and automobile. Before

disintegration of the former Soviet union Kazakhstan represented part of systematically functioning production cluster of the USSR and had enough transport vehicles for carrying out passenger and cargo carriage. But after union's disintegration with its centralized management system Kazakhstan experienced the most powerful economic recession in engineering production, including transport vehicles that was caused by destruction of economic ties with the enterprises of other republics and morbid transition of national economy to the market way of developing by means of a shock therapy. During the Soviet period the share of engineering production in gross domestic product of the republic made 20%, but when it became an independent state and was in transition period to market economy this share was reduced to 2% [2]. In order not to disgrace oneself before roughly developing countries of Europe and Asia in that period, not to be on a roadside of world

scientific technical progress and not to be their raw appendage, Kazakhstan had to:

- set up its own control system of transport;
- create an independent railway system and system of freight and passenger traffic of the country;
- build transport relationship at interstate level between CIS countries on a contractual basis;
- carry out privatization and privatization of separate means of transport;
- organize its own scientific and technical base for developing its own transport, as the whole scientific and production potential of engineering was concentrated in the European part of the union [3].

As a result of the taken urgent measures transport engineering in Kazakhstan was founded for the short period of time according to historical measures and it became the major industry which in many respects began to determine successful functioning of its other branches and at the same time depend on them. Available modern transport vehicles in the republic for the present day provide uninterrupted transportation of loads transportation of passengers, effective use of its transit potential and integration with neighboring countries. Today its structure with a low cost of transportation has essential impact on improving state of economy of the country, its branch and territory structure, promoting rise in efficiency of their development. At the same time production within the branch of transport engineering is developing on the basis of internal needs that increase in volume for its services from branches of national economy and its regions.

Necessity of complete satisfaction of these requirements demands further increase of resource base of transport engineering, development and improvement of a rolling stock on an innovative basis, augmentation of production share of domestic engineering industry. At the present time the republic provides its needs in machine-building production including transport vehicles due to import which share makes about 42%, so that annually US \$20 billion is allocated to it [4]. Therefore the state pays much attention to creation of its own transport engineering and renders necessary support to its development in order to provide requirements of the economy and population in baggage, loads, mail and passenger transportation and implement loading and unloading transport-forwarding works, etc.

Now on the basis of the accepted state programs in Kazakhstan all types of transport engineering are steadily developing, but primary development is gained by the railway and motor transport, road-building cars which have competitive advantages and it gives priority importance to them.

These branches of transport engineering hold a monopoly position in the sphere of transportation, more than 90% of cargo and passenger turnover as well as transit transportations falls to their share [5]. For their accelerated development on an innovative basis in the republic the large-scale plan on creation of transport infrastructure and its integration into the world transport system is realized. According to this plan the network of transport and logistic complexes as centers of consolidation and distribution of transit freight traffics and centers of Kazakhstan export promotion is being formed [6]. At the same time tens enterprises of transport engineering are being built, projects on construction and reconstruction of highways and tracks are realized, roadside service and infrastructure of passenger traffic are created.

All above said is an object of research, so it considers the relevance of the problems which reveals a series of problems that have not only practical, but also methodological character.

Materials and methods

The accepted state programs on development of engineering and its subsectors in recent years in particular the Program of developing a machine-building complex of the Republic of Kazakhstan for 2000-2003, the Republican target program for scientific and technical problems of engineering and creation of highly effective cars and equipment for 2001-2005, the Program of diversification and developing a machine-building branch of the Republic of Kazakhstan for 2006-2008, the Program of developing Kazakhstani engineering within the State program of the forced industrial innovative development of the country for 2010-2014 provided during its realization development of a machine-building complex of the country with corresponding transport infrastructure, its integration into the economy of CIS countries and first of all, in countries of the Customs union, and in system of the world economic relations enlarged indicators of production increase of domestic machine-building product [7]. Production output in 2012 in comparison with 2011 increased in engineering branch from KZT 536,9 to 687,2 billion. There was an augmentation of engineering share in manufacturing industry structure from 11,2% in 2011 to 12,6% in 2012. Besides, there was increase of a gross added value. If in 2011 it made KZT 270,4 billion but in 2012 this sum reached KZT 325,4 billion, or increase a year made 20%. Positive dynamics is seen in production of separate types of production, in particular, in release of transport vehicles. In 2012 production of railway engineering in comparison with previous year became 55,2% more and made KZT 94,4 billion, and

production of agricultural engineering respectively made - 69,4% or KZT 20,7 billion.

According to Statistics Agency of RK in 2011 156 enterprises of transport engineering were registered and 6 of them in production of transport vehicles, trailers and semi-trailers. These enterprises of transport engineering are located in northern, central and east regions of the country where production of accessories and spare parts of allied industries are concentrated. The cities of Astana, Almaty, Kustanai and Ust- Kamenogorsk that are situated in these regions are the most acceptable with the point of potential clustering on transport engineering. For formation of clusters by types of transport engineering in these cities there are necessary prerequisites in the form of available qualified labor resources, industrial infrastructure, scientific - technical potential and rather large sales market.

Nowadays the role of transport engineering considerably increased in connection with work expansion on realization of Strategy "Kazakhstan-2050" in the country [1]. In the Strategy it is said that for the last 11 years more than 48 thousand kilometers of public road, and also 1100 kilometers of railroad have been constructed and reconstructed, access to countries of Persian Gulf and large East is open by building the railway line Uzen-border of Turkmenistan. Korgas-Zhetygen road which has laid ways to the markets of China and all Asian subcontinent is constructed. The railroad Zhezkazgan - Beyneu and Arkalyk-Shubarkol is being built.

Therefore great value in Kazakhstan is attached to development of transport engineering as a key industry of economy so that increase and improvement of people's welfare depends on it. In this regard understanding of technological process acceleration necessity in transport engineering of Kazakhstan deepened theoretical ideas on patterns of developing this process and its connection with dynamics of production increase in this branch and changed over their practical rails having bound to possibility of creating cluster for further development of technological progress [8].

As functioning cluster efficiency practice in metallurgy and metal working of Kazakhstan shows cluster association in transport engineering will also allow to overcome scantiness of labor and natural resources and increase production efficiency on the basis of further accumulation of its scale accompanied with structural changes in national economy. Necessary prerequisites were created for this purpose in Kazakhstan, so it is confirmed by the results reached in recent years and prospects of developing primary branches of transport engineering [9].

Results

Proceeding from the objective in the Strategy "Kazakhstan-2050" - "to provide creation of progressive infrastructure of transport system", today transport engineering as before moves forward to one of priority subsectors of engineering in view of importance in national economy development, ensuring dynamism of developing served road branch, implementation of projects on construction and reconstruction of automobile and railway tracks, their future introduction in transcontinental route Asia-Eurasia [10].

The most important condition of this task solution is the Industrilization Card of Kazakhstan and program "Productivity-2020". Within the Industrilization Card 57 projects of engineering for total amount of more than KZT 196,6 billion are realized in the country, 4 projects of them were launched in the first half of 2013. At the present time the program "Productivity-2020" includes enterprises of machine-building branch, among them 4 enterprises of transport engineering - JSC "Aziya Avto", LLC "Saryarka-Avto Prom", JSC "Pavlodar Engineering Plant" and "Agromash Holding". Modernization of production on release of new models of cars is successfully being carried out at these enterprises of transport engineering, cardinal modernization is carried out at other enterprises of transport engineering for release of new types of cars for construction and road branch.

Nowadays as priority subsector of engineering the great value in connection with expansion of intereconomic and interstate communications for advance of domestic goods both on internal and foreign markets is attached to the accelerated development of transport vehicles production. Special attention is paid to development of such types of transport engineering as *railway*, *automobile*, *construction* and road ones.

Thanks to regular measures of state support as exemption of VAT goods of machine-building branch made in customs regime "free warehouse", including the main machine-building production of national companies in the list of obligatory ones at carrying-out its purchases, giving them lower bank innovative grants, subsidizing an exported production, production output of machine-building complex considerably increased [11].

On January 1, 2012 the public transport network of Kazakhstan consisted of 14,9 thousand km of railroads; 97,2 thousand km of highways; 4,4 thousand km of other types of ways and 20,2 thousand km of main trunk line. In 2011 279,7 million tons of loads were transported by rail, and goods turnover made 223,6 billion tons that in

comparison with the previous year is 4,4% more and now it is 4,9% respectively. The number of transported passengers made 20,5 million people and passenger turnover -16,6 billion passengers per km, that in comparison with 2010 is 4.9% more and for 3,2% respectively. Motor transportation by individual entrepreneurs engaged in commercial transportations in 2011 made 2475,5 million tons of load, and goods turnover made 121,1 billion tons/km. In comparison with 2010 the volume of goods transportation was enlarged by 25,6% and goods turnover - for 50,9%. 16622,4 million passengers were transported, and passenger turnover made 164,5 billion passengers per km. that is 26,3% more than in 2010 and 30% respectively. As a result of total increase of transport services volume rendered by all means of transport in goods and passengers transportation their share in domestic gross product of the republic made 5,6% in 2011 that considerably exceeded data of previous vears.

At the present time as it is said above, 42% of engineering production that mainly consists of transport vehicles is imported [12]. Therefore thanks to the taken measures necessity of the republic for locomotives, cargo and passenger cars will be satisfied in the nearest future due to country's own production. According to JSC National company "Kazakhstan Temir Zholv" about 1.4-5.2 thousand cars and 100 locomotives were annually bought by the republic. Now Kazakhstan will considerably reduce import of these types of railway engineering production and start exporting them to the countries of the near and far abroad by itself. Near Astana city locomotive assembling plant with projected capacity of 150 locomotives a year was built in 2010. In 2012 the plant made 74 diesel locomotives, and in 6 months of 2013 - 45 units of this locomotive that 1.6 times more than the corresponding period of the last year. After building the plant on production of "Talgo" passenger cars in Astana city the first 17 units of a rolling stock will be assembled till the end of 2013.

Production of freight cars at the enterprises which are situated in Aralsk and Ekibastuz cities began. Replenishment of material resources of railway transport by new plants on release of a rolling stock and locomotives promoted frequent augmentation of railway engineering production. For the last five years the volume of this production increased in the country from KZT 5193,1 million in 2008 to KZT 94411,8 million in 2012, or by 18,2 times.

For development of infrastructure in railway branch of the country the state program on developing transport infrastructure till 2020 was adopted [13]. According to this program it is planned

to repair 8202 km of railway lines, carry out capital repairs of all 302 railway stations, renew 650 locomotives, more than 20 thousand cargo and 1138 cars [2]. The plant where passenger car "Tulpar-Talgo" assembled by Spanish technology is put into operation in the republic. This plant will produce 150 cars a year, assembling them partially from Spanish spare parts. Deficiency of mobile park existing now in railway branch will be eliminated in the short term.

In 2011 fleet of motor vehicles of the republic made 414 thousand freight cars, 98,4 thousand buses and 3553,8 thousand automobiles, and 149,3 thousand automobile trailers as well. By the beginning of 2012 the transport network consisted of 97,2 thousand km of highways. As it was stated above more than 48 thousand km from these highways were constructed and reconstructed for the last 11 years.

On the basis of adopted state program on development of transport infrastructure till 2020 production of motor transport during the next period has to be enlarged considerably, and accelerated growth in production of car release is provided. For six months of 2013 release of motor cars in the country made 16 400 units, that in comparison with the corresponding period of 2012 it is more for 8943 units, or 1,4 times. Production of lorries and buses still remains insufficient, a large number of them continue to be delivered from foreign countries for fuller satisfaction of requirements in them. However it is necessary to notice that in the next years these types of motor transport will be produced in big quantity. Six automobile plants operating in Kazakhstan which are now engaged in production of cars, will enlarge annual release of lorries and buses, trailers and semi-trailers. This program planned to carry out repairs of 30 thousand km of highways and construction of 260 objects of roadside service.

Now the Kustanay plant "Agromashholding" started to produce light trucks and passenger buses having 20 places. In Almaty area the plant on large junction assembly of commercial automotive vehicles "Hyundai" brand started assemblying small-ton enterprise "Asia-AVTO" trucks. Joint "AVTOVAZ" is going to produce 4 models of buses and 10 models of trucks along with automobile cars (The program of forced industrial and innovative development of the Republic of Kazakhstan for 2010-2014, 2010). In Semey at "SemAZ" plant the release line of high-capacity "Ural" cars is adjusted, here assembly of the bus "Daewoo Bus Kazakhstan" will be made and caterpillar machinery, trailers and semitrailers will be produced as well. The plant has opportunity to let out 400 cars a year. Thus production of cars doesn't decrease, on the contrary,

in Kazakhstan it will have tendency of outstrip development.

Now automobile plants of the country let out 26 models of cars which are realized both within the country, and in CIS countries. The automobile plant in Ust-Kamengorsk city belonging to the company "Asia AVTO" produces automobiles of the following brands: Lada, Shevroll, KIA, Skoda, so it is planned to produce Seang, Yoong, Renault, Nissan. This plant has already started assembly of two more new foreign cars Hatchback KIORIO and three-door Kia pro-Cee'd. The Kustanay plant "Agromashholding" started releasing inexpensive Chance cars, known in the market under the model "Daewoo Lanos". These cars have engines of 1,5; 1,4; 1,3 liters, mechanic or automatic gear-box, additional systems of safety, firm guaranteed and post-guaranteed service. In the current 2013 mass production of Kazakhstani offroad Nomad car with the volume production to 25 thousand units a year began.

The Republic of Kazakhstan despite plants on release of *construction and road cars* (caterpillar and wheel tractors, bulldozers, truck cranes, autograders, loaders) continues to import them feeling the lack of them in connection with construction of new and reconstruction of old highways. The operating plants producing road-building cars are working from the Soviet period with the fixed production asset of that time which have big wear, especially its active part, and its updating coefficient is small because of lack of necessary investments for implementing modernization of industrial processes on a new technical basis.

First of all for developing of construction and road engineering on innovative basis it is necessary to improve the financial condition of existing plants (Kalkaman plant of road cars, Pavlodar engineering plant, Kentau "Ekskavator", plants on production and repair of road equipment in Astana, Almaty, Kustanai, Aktubinsk cities) and increase their investment attractiveness, having created favorable conditions for involvement of leading foreign producers to coproduction of road construction cars in the territory of Kazakhstan that will allow to reduce and then liquidate technological lag in production of these cars from leading world manufacturers.

Discussion

At the present time Kazakhstan having sufficient technological potential develops all types of transport engineering, thus using favorable geographical location of the country that creates necessary conditions for developing of integration with near and far foreign countries (Jonson L.A. 1974). Among republic transport vehicles the leading

part is assigned to *railway transport*. In the sphere of transportation this type of transport holds a monopoly position, more than 60% of goods turnover and about 70% of a passenger turnover falls to its share as it is the most demanded by users. This branch unlike other branches of transport engineering has more competitive advantages as:

- larger extent of tracks, with their further expected increase in future;
- volumes of passenger and freight transportation growing from year to year;
- rather high level of electrification of the railroads;
- development of production on assembly of diesel locomotives and rolling stock with participation of large foreign companies;
- development of production and export of raw material resources and increasing volume of their production;
- rather high receptivity to technological innovations that promote strengthening and expansion of branch positions in the market [14].

The railway branch is in structure of those branches that state and level of industrial production capacity of the country depends on them. Therefore special attention in this branch is paid to safety of transportation on the basis of improving transport service's quality. Taken measures in this regard have to provide first of all full and prompt delivery of loads in safety to consumers at minimum expenses. Furthermore it has to be provided with rational use of technology power of railway transport. Thus activization of innovative activity in the sphere of rolling stock of railway and telecommunications is important. Introduction of resource-saving technologies and new economic technology in operation allows to reduce operational expenses, to increase labor productivity of technology and as a result to strengthen competitive advantages of railway transport [15].

It is known that the cost of railway transportation has essential impact on efficiency of activity JSC National company "Kazakhstan Temir Zholy" and its jurisdictional organizations. Therefore with the aim of reducing rolling stock's operational costs it is necessary to create straightening lines and construction of new regional railroads, enlarge the volume transportation in international communication, including transit ones on subregional transnational railway lines. Along with it, it is necessary to provide extension of rolling stock's service life, strengthen its repair-factory overhaul base, and organize its production on technologies of the western countries, generally at the expense of own component parts. It will allow to eliminate

deficiency of a rolling stock and reduce its import [16].

One of the major tasks facing development of railway transport is increase of Kazakhstani contents in assembly of a locomotive and a rolling stock from the component parts arriving from foreign countries in large number. With advancing rates Kazakhstani producers are developing spare parts for their own rolling stock which consist of domestic knots and details.

During period of 2010-2015 the development of 1215 names of railway production is planned in the republic, but as a result of intensive work on implementation of the Program on increasing share of Kazakhstani component in the volume of purchasing commodity material values from foreign countries 3985 names of this production were developed for the last years that 3,2 times exceeds the planned quantity. When producing locomotive at the plant localization of production during the year of its putting into operation made 18%, and in 2011 [2].

30 %, when the plant operates on full capacity in 2014 localization of characterizing Kazakhstani share in assembly of one locomotive will make 52%. For this purpose technological processes on production of diesel locomotive frames, its diesel and generating compartments, all carrying parts and other more difficult parts of a diesel locomotive were launched. Such works on production of own spare details and knots for production of a railroad rolling stock are made at other plants as well.

Increase of Kazakhstani contents in percentage of a rolling stock assembly of railway transport represents a positive phenomenon testifying about growing possibility of the country independently let out new models of railroad vehicles in perspective. However in conditions of growing competition on the sales markets of foreign countries it would be necessary to have a certificate on details and knots of Kazakhstan origin, confirming quality of their production.

At the present time transport and logistic system of the republic that creates favorable conditions for realization of export and transit potential of the country is formed. All this testifies that the railway transport of Kazakhstan is adapting for new demands of consumers and conditions of integration into the world transport system due to its technological level and scales of organizational work.

The automobile industry in the republic is also one of the most important branches of transport engineering which developed in recent years. This is a new type of transport engineering of Kazakhstan which provides functioning of operating and building enterprises by means of goods and people

transportation. Proceeding from the importance of this type of transport and availability of necessary conditions for its release, own production of cars is created in the republic, and nowadays it gained quite big development [17]. Till 2008 fleet of motor vehicles replenishment was carried out due to import and only insignificant part of it was due to its own production. Now with organization of own production of buses, cargo and automobile cars their import supply quickly decreased, so there was an opportunity to export a certain part of produced domestic cars to bordering states. If in 2007 import of cars made 439 999 units, including automobile cars – 391279 units, in 2011 their number was reduced to 62 877 units and 40 338 units, or by 85,7% and 86% respectively. As a ratio of these indicators shows preferential development in this period is given to production of cars in the republic.

Conclusion

As it is known engineering is a material base of creating productive type of innovation which is necessary for technological updating of production in branches of the economy. Therefore within the program of developing domestic engineering four design offices were created in the republic for mastering new types of engineering production that will assist in further intensive development of this branch in the country. One of these design offices on transport engineering was built in Astana city, so it is engaged in acquisition and development of documentation sets on transport vehicles.

Together with this design office automobile production of Kazakhstan will represent symbiosis of advanced technologies and the most severe demands to quality. In this regard, construction of a new car assembly plant with power of 35 thousand cars a year of different brands and types started in Ust -Kamengorsk city. Along with operating here car assembly plant "Asia AVTO" will promote development of transport engineering of Kazakhstan, thus generating a number of enterprises of small and middle-sized business that are engaged in production of autocomponent accessories and spare parts, such accumulators, tires, windscreen, electrical technology, hardware, etc. It will lead to reduction of quantity and range of details and accessories brought into the country by means of import that in a certain degree will be a step forward in creating independent branch of transport engineering which production will be competitive by functional, power and price criteria as well as by quality and design. Thus another task set by the head of the state N. A. Nazarbayev in his Message to the people of Kazakhstan of January 17, 2014 is being solved, the President said that it is

necessary to develop small and middle-sized business round new innovative enterprises.

To ensure stable development of automotive industry of the country it is necessary to accelerate solution of a task on creation of test base in the territory of Kazakhstan. It is necessary to receive transport vehicles approval because in 2015 technical regulations of the Customs union on safety of transport vehicles will come into force. It gives a chance to the republic confidently let out different types of motor transport with various modification, achieve their competitiveness on sales markets. In these conditions it is necessary to put in mass production release not only motor cars, but lorries of different model and buses which in a considerable quantity are bought by the republic from foreign countries.

In conditions of industrial and innovative development of the country, financial condition of transport engineering plants in many respect depends on development of effective measures of investment projects' state support that are carried out at the enterprises. The accelerated depreciation providing revision of depreciation norm according to modern service life of equipment, preferential crediting, i.e. setting of fixed interest rate and its subsidizing, granting subsidy in the form of compensation of part of expenses on payment of credit percent and profit tax exemptions, VAT exemption of new types of cars produced by the enterprises as a result of implementation of innovative and technological transformations is the most significant for increasing investment resources of the enterprises.

These measures will considerably increase investment activity of domestic producers and their interest in creation of joint ventures with the leading world manufacturers, but only being sure in transferring by them new equipment and technology used in a road branch. Under these conditions it is possible to master production of hi-tech accessories necessary for assembling of domestic road-building cars in short terms and increase their reliability, productivity and profitability to the level of international standards. So requirements in domestic market in such cars will be mainly provided at the expense of domestic production, there will also be an opportunity to enlarge an export volume to foreign countries.

Thus adoption of a law on offset policy in the republic is important, as it provides demand at concluding contracts with users of mineral resources and other foreign investors about organization of imported machine equipment service, staff training and localization of production in Kazakhstan.

For effective development of transport vehicles production it is necessary to create a cluster

in transport engineering branch that will promote to cut down total expenses for production and introduction of innovations at the expense of optimization of industrial and commercial activity. Transport engineering in comparison with other branches of engineering has higher multiplicative effect connected with creation and development of a set of closely connected enterprises, promoting development of finished goods production of a cluster, ensuring mass employment of people in disposition places. Participants of a cluster themselves get additional competitive advantages under the impact of cumulative influence of scale effects, coverage and synergy that is the result of combined efforts. It allows structures that enter into a steadily and effectively carry interconnected cooperation of innovative activity for production of competitive production and rendering high-quality services.

Application of mechanism of private- state partnership which can accelerate creation of this cluster and necessary conditions for carrying out of rational activity is of great importance for formation and development of a cluster in transport engineering. The state having a wide range of power has opportunity to provide full use of scientificproduction, personnel, financial potential of a cluster for developing of a competitive segment market not only transport vehicles, but their components in the interests of the country and its citizens. Participation of the state in cluster formation in transport engineering has to be carried out not only by its direct financing, but also on the basis of stimulating taxation, subsidizing bank interests on the funds attracting cluster development and its infrastructure, granting a subvention, creation of incentive system for attracting foreign and domestic investments for realization of industrial and innovative developing program in activity of the companies-participiants of a transport cluster.

Acknowledgment

Conclusions and offers in the work can be used by the Ministry of transport and communication of the Republic of Kazakhstan for developing of transport engineering, carrying out of restructuring and modernization of machine-building enterprises with creation of small and middle-sized business.

Corresponding Author:

Dr. Zamanbekov Shuakhbay Zamanbekovich Kazakh State Women's Pedagogical University Ayteke bi street, 99, Almaty, 050000, Republic of Kazakhstan

References

- 1. Message of the President of the Republic of Kazakhstan N. Nazarbayev to the people of Kazakhstan of the Republic of Kazakhstan "Strategy "Kazakhstan-2050". New political policy of the state." of 14.12.2012.
- 2. The program of forced industrial and innovative development of the Republic of Kazakhstan for 2010-2014, 2010. Astana.
- Collection of acts of the President of the Republic of Kazakhstan and Government of the Republic of Kazakhstan, 2000. Astana - Alma-Ata.
- 4. Prospects for engineering. The "Kazakhstanskaya Pravda" newspaper of December 27, 2013. Date Views 20.05.2014 www.kazpravda.kz/ida.php?ida=48241
- Industry of Kazakhstan and its regions. Statistical collection, 2012. Astana, Agency of the Republic of Kazakhstan on Statistics, 230 p.
- The "Kazakhstanskaya Pravda" newspaper of November 29, 2013. Date Views 20.05.2014 www.kazpravda.kz/idr.php? idrm=18
- Decree of the President of the Republic of Kazakhstan of the Republic of Kazakhstan "2010-2014 NATIONAL PROGRAM of forced industrial and innovative development of the Republic of Kazakhstan" of 19.03.2010 Volume 958.
- 8. Humphrey, J. and H. Schmitz, 2000. Governance and Upgrading: Linking Industrial Cluster and Global Value Chain Research. IDS Working Paper, 120.
- 9. Miles, R. E. and C.C. Snow, 1978. Organizational Strategy, Structure and Process. New York: McGrow-Hill.

- 10. The message of the President of RK N. A. Nazarbayev to the people of Kazakhstan. "Kazakhstani way 2050: Common purpose, common interests, common future" of 17.01.2014.
- Zamanbekov, Sh. Z., 2013. Innovative Development of Engineering is a Basis of Economy Modernization of Kazakhstan. Middle-East Journal of Scientific Research, 16 (9): 1183-1186.
- Zamanbekov, Sh. Z., 2013. Diversification of the Economy of Kazakhstan as Condition of Engineering Development on Innovative Basis. World Applied Sciences Journal, 25 (5): 747-750.
- 13. The program for mechanical engineering development in the Republic of Kazakhstan for 2010-2014. Resolution of the Government of the Republic of Kazakhstan of 30.09.2010, No. 1002.
- 14. The program of engineering development in the Republic of Kazakhstan for 2010-2014. Resolution of the Government of the Republic of Kazakhstan of 30.09.2010 No. 1002.
- 15. Roman, D., 1980. Science. Technology and Innovation: a System Approach. Ohio, 291 p.
- 16. State program on developing transport infrastructure till 2020. The "Kazakhstanskaya Pravda" newspaper of November 29, 2013.
- 17. Zamanbekov, Sh. Z., 2013. Cluster Development Concept of Kazakhstan Engineering on Innovative Basis Life Science Journal, 10(4).

7/2/2014