State regulation of tariffs for services of the main rail network in Kazakhstan

Natalya Baigazina

JSC "National Company Kazakhstan Temir Zholy", Astana, Kazakhstan

Corresponding author’s e-mail: baigazina764@mail.ru

Received 1 March 2015, www.isma.lv

Abstract

Price regulation - an integral part of the mechanism of state regulation of the economy as a whole. The problem of state regulation of the activity of transport parties, which are legally defined as natural monopolies, is extremely urgent. As well as around the world, in our country there is the search for effective regulatory principles and processes of formation and regulation of tariffs are inextricably and intimately linked. The effectiveness of state regulation is determined by the quality of its organization and the quality of decisions.

Keywords: railway transport, services of the main rail network, tariffs, tariff estimates, the investment component, the permissible level of profit, adjustable base of operating assets

1 Introduction

Adaptation of rail transport to market conditions, while maintaining state control and ownership of the main railway infrastructure with the optimal combination of state and private enterprise is a great challenge, because nowhere in the world there is a uniform method and complete experience of railway reform.

The liberalization of the market segments of rail services has occurred in Kazakhstan after the reforms in the railway sector, initiated in the late 1990s.

In the early 2000s, based on a single railway company there was created a large number of smaller companies. The largest enterprises providing services of locomotive traction services for the provision of rolling stock, to provide services for the use of infrastructure and services for the maintenance and repair have become independent entities as part of the national rail holding company "Kazakhstan Temir Zholy" (hereinafter - KTZ).

Currently, KTZ is both a holding and an operating company. As the operating company, KTZ provides two types of services: freight services, and services to provide for the use of infrastructure. KTZ is the only cargo carrier in Kazakhstan.

Despite the liberalization of some segments of the market of railway services, KTZ and its subsidiaries are major players in their respective market segments and, as a result, are subject to state regulation.

2 General aspects of state regulation of the railroad industry in Kazakhstan

Currently, the railway sector in Kazakhstan is regulated by two state agencies:
- Committee of Transport of the Ministry for Investment and Development (hereinafter - the Committee of Transport)
- is responsible for the technical regulation, including issues related to security, access to infrastructure and licensing.
- Committee on Regulation of Natural Monopolies and Protection of Competition (hereinafter - Regulator) is responsible for tariff regulation of natural monopolies and companies occupying a dominant market position.

The state is involved in the development of the railway sector and the support of the relevant enterprises by providing various types of subsidies:
- Direct subsidies from the state budget and natural grants to finance the modernization and development of infrastructure;
- Direct subsidies from the state or local budgets to passenger carriers under socially significant destinations;
- Loans from the National Fund to finance infrastructure development.

According to the Law of the Republic of Kazakhstan "On natural monopolies and regulated markets" in the field of railways the services of the main rail network (hereinafter - MRN), including the lease of the main railway network and rolling stock company badge on it. [1] are considered a natural monopoly.

In accordance with the Law of the Republic of Kazakhstan "On Competition" KTZ is included in the State Register of market subjects, having dominant (monopolistic) position on a specific product market services for the carriage of goods by rail [2].

Thus, in the market of railway services in Kazakhstan the price is subject to government regulation fee introduced by the carrier for using the services of the main railway network. The remaining components of the rail fare (services for the provision of locomotives and rolling stock, freight and commercial work) belong to the competitive sector, changes in the prices of which shall be agreed with the Regulator. The present structure of services in the market of freight traffic by rail and the system of price regulation of these services are presented in the figure (Figure 1).
The peculiarity of the state tariff regulation is to provide the regulator the ability to apply in exceptional cases, instead of or together with the main methods of regulation [6].

1) the investment rate - used in cases where it is inadmissible to raise tariffs for all consumers of services because of the need to ensure an accelerated return on investment in a single project of a new building;

2) a temporary reduction factor - set when the planned annual consumption exceeds the consumption of services provided in the current tariff estimates and / or tariff regulated entity, ie, an organization can receive from consumer service fees unreasonably increased volume due to increased consumption of consumer services;

3) temporary compensatory tariff - applied in cases where tariffs regulated entity in previous periods of regulation were unreasonably high (taken into account unrealized investments include extra costs).

The current structure of the freight market and price regulation is voluminous, complex and covers almost all aspects of their activities.

List of the main applied methods of tariff (price) regulation of natural monopolies is defined in the Law of the Republic of Kazakhstan “On natural monopolies and regulated markets”. [1] The functions of government regulation to prevent unreasonable growth of tariffs for regulated services of natural monopolies carries the Regulator. The main functions of the Regulator under the tariff regulation and methods of implementation are presented in Table 1.

TABLE 1 Main functions of the Regulator under the tariff regulation and methods of implementation

<table>
<thead>
<tr>
<th>Functions</th>
<th>Methods of implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of tariffs or ceiling</td>
<td>Regulation of the expenses included in the fare</td>
</tr>
<tr>
<td>Approval of the tariff estimate</td>
<td>Limiting expenditure within the technical and technical standards of consumption of raw materials, fuel, energy, and normative technical losses</td>
</tr>
<tr>
<td>Approval of the temporary reduction factor</td>
<td>Adoption of the list of expenses not taken into account in the formation of tariffs</td>
</tr>
<tr>
<td>Adoption of a special order of formation costs</td>
<td>Limitation of profit to be included in the fare</td>
</tr>
<tr>
<td>Approval of the procedure of separate accounting of revenues, costs and involved assets</td>
<td>Matching used methods of depreciation of fixed assets</td>
</tr>
<tr>
<td>Harmonization of accounting policies</td>
<td>Matching revaluation and use of funds of depreciation provided for pay scale subjects of natural monopolies</td>
</tr>
<tr>
<td></td>
<td>Regulation of the expenses included in the fare</td>
</tr>
</tbody>
</table>

Currently there are 64 regulatory acts governing the activities of natural monopolies, of which 28 belong to the field of railways.
3 Regulation of tariffs for MRN and its shortcomings

3.1 PROCEDURE FOR CALCULATING TARIFFS FOR THE SERVICE OF MRN.

The current system of regulation of tariffs for natural monopoly services of MRN was established within the framework of the transformation of the railway industry in Kazakhstan in 2004.

Until 2004, in Kazakhstan for the calculation of railway tariffs were applied uniform tariff schemes for cargo transportation in accordance with the prevailing price list. Separation between infrastructure services, locomotive traction services and services for the provision of rolling stock did not exist, because the railway company is a vertically integrated state-owned enterprise.

As a result of reforms in the railway sector tariff rates previously applied for cargo have been divided into the tariffs for the use of infrastructure, tariffs for locomotive traction, tariffs on freight and commercial work and tariffs for renting vehicles.

To date, the main railway network - a key infrastructure services among the most profitable monopolies and regulated railway transport services.

In the formation of tariffs for MRN services meter "tonne-kilometer" is used on the basis of which formed the base tariff rates for MRN services approved by the Regulator.

The tariff for the services of the infrastructure for freight transport is defined by indexing the basic tariff increase on the list price ratios for different types of cargo.

Raising rates to the basic rates for MRN services for different types of cargo (reflect economic characteristics, namely, the price of cargo and inflation) adjusted annually and approved by the regulator.

The calculation is based on the coefficients approved at the next control period, the tariff revenue for services and MRN forecast turnover.

As a result of the calculation of tariffs for MRN of the raising factors established by the regulator for different types of goods transported, the highest rate for the regulated MRN services on some high-yield sorts of goods (eg, crude oil) can be 10 times higher than the lowest rate (for example, coal stone or grains). In fact, the prevailing rate for other types of goods (about 75% of the regulated turnover) below average.

This kind of differentiation of tariffs is considered to be an additional tool for socio-economic policy of regulating the level of economic activity in various sectors of the Kazakh economy by controlling prices.

3.2 THE PROCEDURE OF FORMATION AND REGULATION OF TARIFFS FOR NATURAL MONOPOLY MRN SERVICES.

A fundamental principle of formation of tariffs for services of natural monopolies, including MRN in the Republic of Kazakhstan is a consumer-based compensation cost provider associated with the provision of regulated services, and ensuring an acceptable level of profit, ie, government regulation of the rate of profit. [1]

Fees for use of infrastructure are calculated on a full indemnity basis of average costs and involves getting an acceptable level of profit (the principle of valuation profits, Rate-of-Return), when a reasonable costs associated with the provision of services, added the permissible level of profit, which allows companies to operate, provide quality services and to develop (1). Cost recovery for the provision of services is made according to the approved tariff estimate regulator KTZ.

\[
Tariff = \frac{Cost + Profit}{Volume},
\]

where: Cost - economically justified costs associated with the provision of services; Profit - permissible level of profit; Volume - the volume of services provided. State regulation in the sphere of tariff applies to all three components, in most cases, as experience shows, leads to a significant reduction in the approved tariff compared to apply.

3.2.1 Regulation of the cost-part of MRN tariff.

Cost-part includes KTZ costs for the production and delivery of services, including material, labor, financial and other expenses. KTZ is obliged to document and justify the need to include the costs of materials purchase prices, raw material costs and rationing of labor. For example:

- The level of normative technical losses, regulatory staff, norms of consumption of raw materials, fuel, energy must be pre-approved by the regulator.
- Staffing, level of salaries of executives of administrative staff, the costs of repair and overhaul, as well as changes in the accounting policies require the prior approval of the regulator.

The Company is obliged to adhere to the approved level of costs. In the case of deviations from the approved cost rate of more than 5%, penalties are applicable. In case of exceeding the actual costs of providing services in excess of the approved level, these costs (exceeding size) are non-refundable by the tariff. In fact, the company has no incentive to optimize costs.

Expenses not directly attributable to the production process and the provision of services that are not included in the expense part (such as lease payments for productive assets) [4].

Cost-part tariff estimate is too detailed to the level of the individual components (often material). In practice, this leads to complications in the procedure of formation of the application and consideration of the tariff.

The revenue part of the tariff reflects the level of profit, which provides efficient operation and development of the company.

In practice, the level of profit (net income) is defined on the basis of the values of the assets and the rate of return on regulated base of operating assets (2).

\[
Profit = Stake income * ABOA,
\]

where:

ABOA – adjustable base of operating assets

3.2.2 Regulation of the revenue part of the MRN tariff.

Adjustable base of operating assets (ABOA) - is the total value of non-current assets (fixed assets and intangible
assets) used in the provision of regulated services. [5] ABOAis defined as the product of the actual value of the assets involved in the provision of services by a factor of involvement of assets (3).

\[ ABOA = CA \times Kza \]  \hspace{1cm} (3)

where: CA-actual value of the assets involved in the provision of the regulated services; Kza - the coefficient of involvement of assets.

Residual values are used to determine ABOA.

Coefficient of involvement of assets is determined by a natural monopoly subject in coordination with the Regulator.

The rate of return reflects the weighted average cost of capital (services) of the company, taking into account the specific risks (4).

\[ SP = ( (1 - g) \times Re) + (g \times Rd) \]  \hspace{1cm} (4)

where: \( g \) - the ratio of debt and equity financing in the overall structure; Re - the interest rate on equity; Rd - interest rate on borrowed funds.

The volume of services provided reflects the planned annual consumption of services based on the company's obligations on quality and customer service is not discriminatory, and opportunities of the company.

3.3 NEGATIVE EFFECTS OF THE CURRENT REGIME OF PRICE REGULATION ON ACTIVITY OF NATURAL MONOPOLY SUBJECT

As part of the current activities of the approved tariffs, do not respect the basic principles of price regulation, "the balance between the interests of suppliers and consumers of services."

Often, during the adoption of tariffs for regulated services occur minimizing and cuts costs included in the tariff estimates.

According to analysis data held by the European Bank for Reconstruction and Development the actual costs associated with the provision of infrastructure services, higher than the level approved by the flow regulator in the tariff estimates. The tariff budget approved by the Regulator in the past two years does not cover the costs inherent in the company with a deficit of 13% [3].

The deficit arising as a result of the approval of smaller costs associated with the services of MRN, KTZ had to cut various expenses. As a result, according to the administrative account, the actual costs of providing for the use of infrastructure will exceed the approved value knob to 11%. The corresponding loss of the company is forced to cover the expense of profit from the services of MRN, leading to a reduction in investment in infrastructure, or from other types of services.

This situation is contrary to the legally binding obligation on the full reimbursement of operating expenses associated with the provision of regulated services, in Vol. H. MRN including services [1].

A scarce rate estimates is the result of inefficient two rules:

1) Expenditures that are included in the tariff estimates and reimbursed by the tariff, regulated by rules and limitations set by the controller [1].

For example, bonuses and additional payments to employees, the system of bonuses and reimbursement of the cost of rental housing are not included in the tariff estimates and are not reimbursable by service users.

Interest expense on loans may be included in the tariff estimates, respectively, and shall be reimbursed for the expense of consumers, only if they are employed for the purposes of investment. The tariff estimates do not include interest on borrowed funds used for working capital and overdraft facilities.

Moreover, according to the rules, the rate used for the calculation of interest expenses, which are included in the tariff estimates is limited. For example, for loans in tenge it should not exceed the interbank interest rate (ie 5.5% as of December 2014), more than half (ie 11%), while loans in foreign currency - LIBOR (approximately 0.25% as of December 2014) is more than four times (ie 1%). These interest rates are much lower than current rates on loans or companies available.

2) The amount of expenses that may be included in the tariff estimate and is refundable by tariffs, regulated by standards costs, including standards of technical losses, technical and technological norms of consumption of raw materials, fuel and energy standards staff.

For example, the actual number of permanent employees KTZ engaged to provide services to MRN, 1.6 times higher than in the metered tariff estimates. At the same time, labor costs are key and make up 40% of the total cost. In addition, wages are approved by regulators for inclusion in the tariff estimates is limited to the average wage in the country.

However, this restriction is questionable, taking into account the level of responsibility and the qualifications required of railway workers.

As a result, the regulator approved tariff estimate does not correspond to the actual costs necessary for the provision of regulated MRN services and ensure the quality and safety of its supply.

Therefore, the current level of the tariff does not cover actual operating expenses, as it does not provide sufficient income for full funding of investments in modernization and reconstruction of the railway infrastructure.

In addition, the regulatory body has an effect on the investment activities of Kazakhstan Temir Zholy, determining the amount of investment. Restriction in costs and intervention in investment activity led to significant losses of the company, reducing the quality of services, and problems with the implementation of investment projects.

In practice, the controller is guided by the above formula for determining the maximum amount of profit that can be included in the fare. At the same time the actual size of the profit is determined solely on the basis of the needs of the approved investment program.

As practice shows, initially regulator approves the investment program infrastructure units KTZ for the next year (in fact, the Regulator to apply restrictions to the investment program, which does not allow the individual to pay back investments due to the tariff). The regulator also claims costs, including depreciation.

Further, a controller determines the level of the tariff the profit to be enough (without excess) to finance the approved investment program.

Mathematically, profit is calculated as follows: from the pre-approved capital expenditures minus approved...
subtracted depreciation, i.e. the rest of the capital costs to be financed by profits.

According to data cited in the report of the Bank, the cost of ABOA taken into account in the calculation of the fare, may differ significantly from the actual replacement cost of the assets. So the cost of 1 km of newly built sections of backbone networks is 10 times higher than the current value of ABOA. The present value of the railway infrastructure, adopted in ABOA services for MRN, reflected in 2004 prices. Given that the level of deterioration of the railway infrastructure is 60%, according to the Bank’s actual cost of ABOA can be several times (up to 4) higher than that adopted today in the tariff estimates [3].

Moreover, Kazakhstan’s economy is characterized by high inflation. In this connection, the present value of ABOA reflected in 2004 prices may be understated by several times since and the price level rose by more than twice. Thus, the difference between the rate adopted in the calculation of the cost of ABOA and approved by the regulator value leads to an underestimation of the costs of depreciation and profits artificially high (Figure 2).

The figure shows that at the current rate of fees for access to the infrastructure of the actual income is less reflected in the tariff estimates (taking into account the present value of the current ABOA).

If the actual cost of ABOA is four times higher than regulator approved tariff estimate, the actual rate of return on ABOA seeks to 0%.

It differs significantly from the yield approved by the regulator, which is indicated when filing tariff applications.

In addition, it is also necessary to consider the presence of uncovered loss of operating costs (discussed above).

Moreover, it should be understood that the expansion and modernization of infrastructure will be funded on the basis of current rather than historical prices.

4 Recommendations

Given that the current tariffs are not sufficient for the purposes of the effective operation of the railway infrastructure and to ensure the level of quality and safety of MRN services, it is recommended to calculate the optimal level of tariffs, which will improve quality and safety, as well as to modernize the railway infrastructure taking into account its wear.

The recommendation to provide adequate or reasonable level of tariffs includes two integrated solutions, which, for the purposes of achieving the desired effect to be implemented simultaneously.

1. Full reimbursement of operating expenses due to the tariff;
2. Providing the required level of profit to be included in the fare.

To implement the proposed solution offers:

- To amend the current methodology in order to oblige the new wording regulator to approve the profit calculated according to the current methodology, and include it in the tariff estimates without any further adjustments by the regulator;
- To amend the current methodology and include the requirement to carry out regular mandatory revaluation ABOA no less frequently than every five years;
- Oblige the regulator to approve an overvalued ABOA immediately after the submission of the evaluation report, in accordance with national standards of assessment;
- Make it compulsory for the subjects of natural monopolies on the recognition of the value of fixed assets for the purposes of tariff at fair value in accordance with IFRS;

Given the possible significant increase in the cost of ABOA, after reassessment, the Regulator may decide to gradually increase ABOA in accordance with the current methodology. However, it proposed to restrict a further period of regular revaluation, i.e. five years. The transition period will allow the smooth increase of ABOA possible impact on rates. In addition, the regulator is Practicing a detailed methodology for calculating the tariff “cost plus” by setting strict limits of all components and sub-components of the tariff estimate. This indicates an excessive market regulation, which in turn leads to lower performance and development of the company.

It is recommended to reduce the excessive level of control by stopping the practice of setting hard limits for each component of the tariff estimate. This measure will significantly reduce the administrative burden, as it eliminates the need for controlling every single component of the tariff cost estimates. Regulation will be subject only to the total amount of the tariff, or its expensive part on the whole. This practice will enable us to determine the cost structure, which enhances performance.

5 Conclusion

The article analyzes the current practice of cost and income forming part of the tariff for natural monopoly MRN services in Kazakhstan.

As a result of the revaluation of the proposed infrastructure KTZ could grow by several times. Correction values of ABOA to the current market value may lead to an increase in profits included in the fare. In addition, as a result of the ABOA value adjustments depreciation shall increase. As a result, rates will need to increase, but at the same time.
increasing the depreciation will provide a larger volume of investment in maintenance and modernization of infrastructure.

In general, the growth of tariffs for MRN will allow KTZ to strengthen its financial position and increase revenues. Thus it is possible to stimulate the investment program and to reduce the amount of state support.

As a result of these measures, KTZ will be able to extract the necessary income, which corresponds to the market value of its assets and the present value of equity. Currently, part of the revenue generated by KTZ is formed by users of railway transportation services.

The proposed recommendations are designed to help KTZ overcome investment objective difficulties and try not to reduce at the same time the competitiveness of its customers.

References

[4] "A special order of formation costs" approved by Order of the Chairman of Kazakhstan Agency for Regulation of Natural Monopolies on April 25, 2013 №130-ML
[5] "Guidelines for calculation of the rate of return on regulated base of operating assets of natural monopolies, providing services of the main rail network and access roads” approved by Order of the President of the Republic of Kazakhstan Agency for Natural Monopolies Regulation of 6 December 2004 N 472-OD
[6] "Rules of approval of tariffs (prices, fee rates) and tariff estimates for regulated services (goods, works) of natural monopolies” approved by order of the President of the Republic of Kazakhstan Agency for Regulation of Natural Monopolies and Protection of Competition on March 19, 2003 N 82-OD

Author

Natalya Baigazina, 1964, Astana, Kazakhstan.


University studies: graduate degree in accounting and auditing Institute of Economy and Management, Kokshetau in 2004.

Scientific interest: tariff policy for railway transport services in the sphere of freight operations.

Publications: 1 paper.