

Overdue waiting of wagons on railway branch tracks: problems and solutions

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Abstract. The purpose of the study: to prevent wagons from being waited aimlessly by freight owners (Railway customers) on the branch roads of freight cars in rail transport, and to improve wagon turnover indicators Method of study: on the basis of statistical data, comparisons were made on the example of regional railway nodes of the railway in the case of the fact that cars remain standing due to the fault of Railway customers on Branch roads for more than a specified period. The history of the occurrence of the coefficient of the amount of the current fine was studied. it was studied to what extent the statement of the indicators of the amount of fines on the main myory cells was correctly interpreted on the secondary myory cells, and analyzed by comparing the definition of fines for leaving wagons waiting for myory abroad. The main result from the research. The amount of the fine levied for the time of waiting for railway-owned wagons without a goal is obtained as a result of increasing their effectiveness in relation to Railway customers, the wagons on the branch roads received a traffic jam. The number of re-releases of wagons decreases, Efficient use of shunting locomotives and freight fronting over-unloading machines. The station leads to a mutadillation of the operating mode, in a word, by increasing the turnover of wagons, an improvement in the indicators of the effective use of wagons is achieved.

1 Introduction

Article 333 of the Civil Code stipulates that in the event of the debtor's fault, he is liable for failure to fulfill the obligation or failure to fulfill it to the required extent, unless otherwise specified in the legal documents or the contract. One of these cases is the overstaying of wagons at stations and railway branch roads. The amount of property responsibility for this situation is specified in the Railway Charter approved by the Cabinet of Ministers of the Republic of Uzbekistan on October 23, 2008 No. 232. Article 132 of the Charter stipulates the following fines for parking ordinary wagons (closed wagons, semi-open wagons, platforms).

Article 132 of the Charter stipulates the following fines for parking ordinary wagons (closed wagons, semi-open wagons, platforms).

- from 1 to 6 hours - 0.05 per hour per wagon;

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- from 7 to 12 hours - 0.1 per hour per wagon;
- from 13 to 18 hours - 0.15 per hour per wagon;
- for more than 18 hours - from consignors for detaining (stopping wagons) the wagons that have been loaded, unloaded, and reloaded on the vehicles of consignors, consignees, in the amount of 0.25 per hour of minimum wage per wagon or fines are levied on consignees.

A stop of up to 15 minutes is not taken into account, a stop of 15 minutes or more is considered a full hour.

The fine for parking tankers, cement carriers, transporters, semi-open wagons with bunkers and other special wagons (except refrigerators) is increased by 2 times, and for parking refrigerator wagons by 3 times.

Fines are levied in the same amounts for parking wagons at the designated railway station, intermediate and neighboring railway stations, waiting for unloading, reloading, and loading for reasons that depend on the consignee, the owner of the railway branch road.

A fine of 50 percent is levied for wagons owned or leased by organizations and individuals parking on railway tracks.

In accordance with Article 136 of the charter, when difficulties arise at railway stations due to the failure to unload cargo on time and the consignee's failure to transport it, the head of the regional division of the railway shall charge up to five times the amount of fees for the storage of unloaded cargo for more than 24 hours at railway stations or railway branch roads. and having the right to increase the fine for stopping the wagons up to two times the minimum wage, and for the wagons of other countries up to ten times, the increased fees and fines for the storage of goods and the parking of wagons, after posting an announcement about this at the railway station Implementation after 24 hours is specified [1,3,5,7,10].

According to statistical data, the dynamics of one-day waiting of wagons for unloading at the stations owned by Uzbekistan Railways JSC ("UTY" JSC) is presented in Fig. 1.

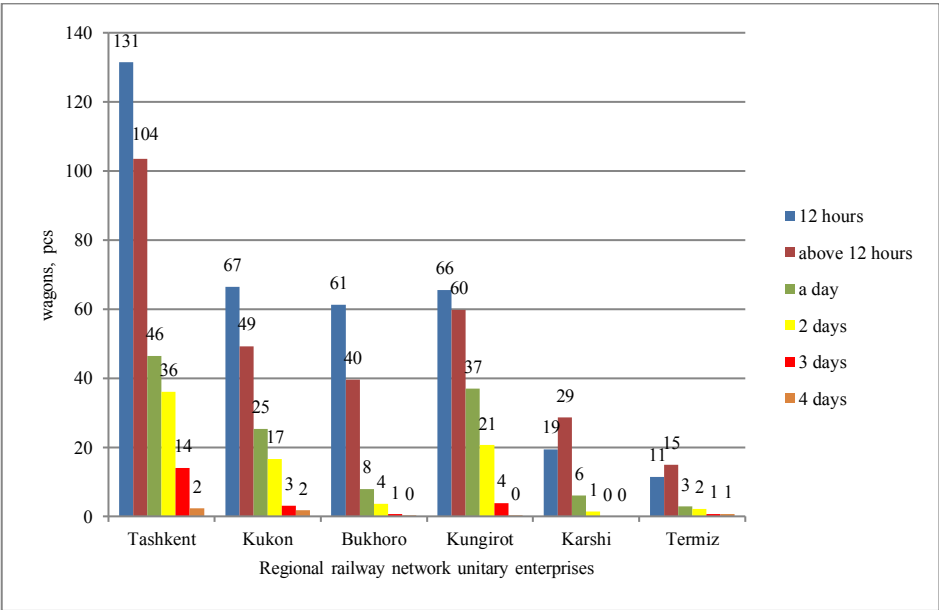


Fig. 1. Number of wagons waiting to be unloaded.

Figure 1 shows the number of wagons waiting for unloading in November 2022 in the section of unitary enterprises of the regional railway network. According to this, the waiting time for the most wagons is 12 hours, and we can see that it is high in all Regional railway

junctions. If we compare all Regional railway network unitary enterprises, we can see that in all the selected times, there are more wagons in Tashkent Regional railway network unitary enterprises than in other Regional railway network unitary enterprises.

Above, in the section of time, the waiting time after the wagons are transferred for unloading of goods for regional railway network unitary enterprises within JSC "UTY" is presented in Figure 2.

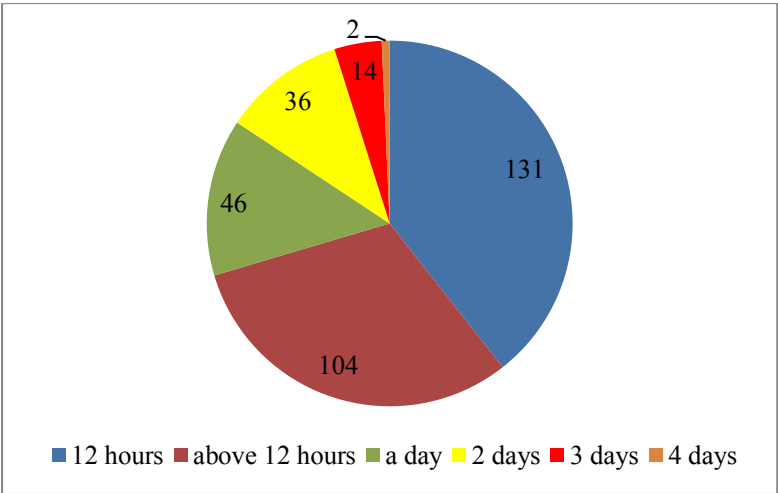


Fig. 2. Waiting time of wagons for unloading operations in all regional railway network unitary enterprises.

As can be seen in Figure 2, 104 wagons have been waiting for more than 12 hours in all regional railway network unitary enterprises, which is more than 31% of the total number. Wagons waiting up to 12 hours make up 131 wagons, which is about 39%. 36 wagons in 1 day, 36 wagons in 2 days, 14 wagons in 3 days and 2 wagons in 4 days.

Compared to the penalty for overstaying the wagons, it is more cost-effective to increase the turnover of the wagons.

When wagons are waiting for unloading without a purpose, this situation causes economic damage to all transport participants (shipper, receiver, freight forwarder, railway organization, etc.), taking into account this situation, preventing wagons from waiting on the roads Also, in order to use the wagons effectively, the charging of fines for the waiting wagons is provided for in the Charter, as mentioned above.

According to the charter, the amount of property liability depends on the type of car, the time spent on parking and who owns the car. The amount of the fine is determined based on the minimum wage, taking into account the peculiarities of the market economy.

In the tariff manual No. 1 "pereyskurant 10-01" the calculation table for determining the amount of the penalty depending on the time when waiting for the wagons is presented in the following form:

Table 1. Calculation table for determining the amount of speed penalty depending on the time when the wagons are waiting

Excessi ve dwell times (hours)	Wagons			Excessi ve dwell times (hours)	Wagons		
	Standard wagons (closed, semi- open, platform)	Special wagons(tanker, ledger, cement truck, bunker truck, semi- wagon, transporter, etc.)	Refrigerator		Standard wagons (closed, semi-open, platform)	Special wagons(tanker, ledger, cement truck, bunker truck, semi- wagon, transporter, etc.)	Refrigerator
1	0,05	0,10	0,15	26	3,80	7,60	11,40
2	0,10	0,20	0,30	27	4,05	8,10	12,15
3	0,15	0,30	0,45	28	4,30	8,60	12,90
4	0,20	0,40	0,60	29	4,55	9,10	13,65
5	0,25	0,50	0,75	30	4,80	9,60	14,40
6	0,30	0,60	0,90	31	5,05	10,10	15,15
7	0,40	0,80	1,20	32	5,30	10,60	15,90
8	0,50	1,00	1,50	33	5,55	11,10	16,65
9	0,60	1,20	1,80	34	5,80	11,60	17,40
10	0,70	1,40	2,10	35	6,05	12,10	18,15
11	0,80	1,60	2,40	36	6,30	12,60	18,90
12	0,90	1,80	2,70	37	6,55	13,10	19,65
13	1,05	2,10	3,15	38	6,80	13,60	20,40
14	1,20	2,40	3,60	39	7,05	14,10	21,15
15	1,35	2,70	4,05	40	7,30	14,60	21,90
16	1,50	3,00	4,50	41	7,55	15,10	22,65
17	1,65	3,30	4,95	42	7,80	15,60	23,40
18	1,80	3,60	5,40	43	8,05	16,10	24,15
19	2,05	4,10	6,15	44	8,30	16,60	24,90
20	2,30	4,60	6,90	45	8,55	17,10	25,65
21	2,55	5,10	7,65	46	8,80	17,60	26,40
22	2,80	5,60	8,40	47	9,05	18,10	27,15
23	3,05	6,10	9,15	48	9,30	18,60	27,90
24	3,30	6,60	9,90	Above 48 hours	For a 48-hour charge, added per hour		
25	3,55	7,10	10,65		0,25	0,50	0,75

In the article, when determining the time of waiting of wagons longer than the norm after separating from the railway of the former Soviet Union, according to the currently used tariff manual No. 1 "pereyskurant 10-01", the amount of fine is calculated depending on the time when the wagons listed in Table 1 are waiting. it is proposed to create a method of forming an effective calculation table other than the table [2,4,8]. This method can be justified as follows.

According to the Railway Charter of the Russian Federation, the Republic of Kazakhstan, the Kyrgyz Republic, and the Republic of Tajikistan, which operated on the railways of the former Union on the basis of the same Charter and at the same time are members of the Commonwealth of Independent States of Railways, the collection of fines due to the time of waiting for the wagons in accordance with the following times Based on Table 2, we compare:

When forming the schedule, based on the formation of information based on the Charter, the fines for waiting for the wagons are mentioned below.

2 Method

Article 156 of the Charter of the former Union Railways: For delays beyond the established deadlines for wagons submitted for loading, unloading or reloading by the shipper, consignee (wagon downtime), a fine is collected from the consignor or consignee.

When ordinary wagons (covered wagons, gondola wagons, platforms) are idle, a fine is collected in the following amounts:

- 60 kopecks each wagons per hour - idle time from 1 to 6 hours;
- 1 ruble 20 kopecks each wagon per hour - with idle time from 7 to 12 hours;
- 1 ruble 80 kopecks each wagon per hour - with idle time from 13 to 18 hours;
- 3 rubles each wagon per hour - when idle for more than 18 hours.

Downtime of up to 15 minutes is not taken into account; downtime of 15 minutes or more is considered a full hour.

When tanks, cement tankers, conveyors, bunker gondola wagons and other special wagons (except refrigerated wagons) are idle, the fine increases twice, and when refrigerated wagons are idle - three times.

The same amount is levied as a fine for the demurrage of wagons at the destination station while waiting for them to be delivered for unloading or reloading for reasons depending on the consignee, the owner of the railway access track.

When wagons owned or leased by enterprises, institutions and organizations are not working on railways, a fine of 50 percent will be charged for idling.

If there is a delay beyond the established time limit for loading, unloading or reloading of part of the wagons of a refrigerated train or refrigerated section, a fine for demurrage is collected from the consignor, consignee both for the wagons delayed during loading, unloading or reloading, and for the wagons of the train or section awaiting completion cargo operations.

When transporting goods on narrow gauge railway lines, the amount of the fine for demurrage of wagons is established by the Ministry of Railways in agreement with the USSR State Committee on Prices.

The fine for demurrage of wagons is collected regardless of the fine for failure to fulfill the cargo transportation plan. (as amended by Resolution of the Council of Ministers of the USSR dated April 26, 1979 N 380) [3,9,11].

Article 100 of the Charter of Railways of the Russian Federation: For the delay of wagons in the cases provided for in Articles 47 and 99 of this Charter, a fine in the amount of 0.2 of the base amount for calculating fees and fines is collected from the shipper and consignee by the carrier for each hour of downtime for each wagon.

For delay due to the fault of the carrier in the delivery of wagons for loading and unloading of goods or onto railway exhibition tracks, as well as for delay in the removal of wagons from places of loading and unloading of goods on non-public railway tracks or from railway exhibition tracks in the event that the cleaning of wagons is carried out by the carrier's locomotives, or for a delay due to the fault of the carrier in accepting wagons from non-public railway tracks, the carrier shall pay the consignor or consignee a fine in the amount of 0.2 of the base amount of fees and fines for each hour of delay of each wagon. The fine is assessed for the entire time of delay from the moment of violation of the deadlines for delivery and cleaning of wagons provided for in the relevant contracts.

For the delay of tanks, cement tankers, bunker gondola wagons, mineral carriers and other specialized wagons, the amount of the fine provided for in this article is doubled, for the delay of refrigerated wagons and conveyors - three times.

A delay of wagons of less than fifteen minutes is not taken into account; a delay of wagons from fifteen minutes to one hour is taken as a full hour [4].

Article 133 of the Railway Charter of the Republic of Kazakhstan: For delays beyond the established deadlines for wagons (downtime) submitted for loading, unloading or reloading by means of the shipper, consignee (downtime of wagons), from the consignor or consignee, as well as for the delay of wagons on railway lines under construction and at stations to which these lines adjoin, a fine will be collected from the enterprise or organization carrying out this construction.

When universal wagons (covered wagons, gondola wagons, platforms) are idle, a fine is collected in the following amounts:

- 8 tenge per wagon per hour - with waiting time from 1 to 6 hours;
- 16 tenge per wagon per hour - with waiting time from 7 to 12 hours;
- 24 tenge per wagon per hour - when waiting from 13 to 18 hours;
- 40 tenge per wagon per hour - when waiting for more than 18 hours

Downtime of up to 15 minutes is not taken into account; downtime of 15 minutes or more is considered a full hour.

When tanks, cement tankers, conveyors, bunker gondola wagons, mineral carriers and other specialized wagons (except refrigerated ones) are idle, the fine increases twice, and when refrigerated wagons are idle - three times.

The same amount is levied as a fine for the demurrage of wagons at the destination station while waiting for them to be delivered for unloading or reloading for reasons depending on the consignee, the owner of the railway access track.

When wagons owned by shippers, consignees or rented by them are idle on railway tracks, a fine for demurrage is collected in the amount of 50 percent.

For delays beyond the established time limits for loading, unloading or reloading of part of the wagons of a refrigerated train or refrigerated section, a fine for demurrage is collected from the consignor, consignee, both for wagons delayed during loading, unloading or reloading, and for train wagons or sections idle awaiting completion cargo operations [5].

Article 112 of the Railway Charter of the Kyrgyz Republic:

For delays in excess of the established time limits for wagons (excessive downtime) during loading and unloading, the railway will collect a fine from the shipper or consignee for each hour of excess downtime of a universal wagon (covered, gondola, platform), equal to:

- 0.1 of the size of the calculated indicator - with idle time from 1 to 6 hours;
- 0.2 times the size of the calculated indicator - with idle time from 7 to 13 hours;
- 0.3 of the size of the calculated indicator - with idle time from 14 to 18 hours;
- 0.4 of the calculated indicator - with idle time of more than 18 hours.

Downtime of up to 15 minutes is not taken into account; downtime of 15 minutes or more is considered a full hour.

In case of excess downtime of tanks, as well as cement tankers, conveyors, bunker gondola wagons, mineral carriers and other specialized wagons (except refrigerated ones), the fine increases twice, and in case of excess downtime of refrigerated wagons three times

For delays beyond the established time limits during loading or unloading of part of the wagons of a refrigerated train or refrigerated section, a fine for excess downtime is collected both for wagons delayed during loading and unloading, and for train wagons or sections idle awaiting completion of cargo operations.

For excess downtime of wagons at a railway station due to their failure to deliver them for unloading for reasons depending on the consignee and other reasons beyond the control of the railway, a fine in the amounts specified in this article.

In the event of excess downtime on the railway tracks of wagons owned by shippers, consignees or leased by them, awaiting delivery for loading and unloading for reasons

depending on the consignee, consignor, the railway shall collect a fine in the amount of 50 percent of the fines established by this article.

For excess downtime of wagons when transporting goods on narrow gauge railway lines, a fine is collected in the amount of 50 percent of the fines established by this article.

The fine for excess demurrage of wagons is collected regardless of the payment of the fine for failure to fulfill an accepted application for the transportation of goods [6,12].

Based on the above Charters, the fines charged for overstaying the specified wagons are compared in Table 2 below.

Table 2. Universal (enclosed, semi-open, platform, private and leased) carriages are compared based on the Charter of the former Union Railways and the Charters of several Railways currently members of the Commonwealth of Railways.

Part	Charter of the Railways of the Union of the USSR (Approved by Decree of the Council of Ministers of the USSR of April 6, 1964 No. 270, Reissue (as amended on January 1, 1983, Article 156.)	Charter of railway transport of the Republic of Uzbekistan (Resolution of the Cabinet of Ministers of October 23, 2008 No. 232, Article 132)		Charter of railway transport of the Russian Federation (Federal Law “Charter of Railway Transport of the Russian Federation” dated January 10, 2003 N 18-EZ (as amended on February 28, 2023) Article 100.)	Charter of railway transport Republic Kozogiston (Resolution of the Cabinet of Ministers of the Republic of Kazakhstan dated February 27, 1995 N 206. Lost force - by Decree of the Government of the Republic of Kazakhstan dated February 9, 2005 N 124 (P050124), Article 156)	Charter of railway transport Republic Kyrgyziston (Approved Decree of the Government of the Kyrgyz Republic dated June 2, 2000 N 315, Article 112)		
		Rub		f		Tenge	Som	
1	60 pennies per hour for each wagon - with a waiting time of 1 to 6 hours;	0,6	in the amount of 0.05 minimum wage per wagon per hour - with waiting time from 1 to 6 hours	0,05	0,2	from 1 to 6 hours - 8 tenge per wagon per hour,	0.1 sizes from 1 to 6 o'clock;	10
2		1,2		0,10				20
3		1,8		0,15				30
4		2,4		0,20				40
5		3,0		0,25				50
6		3,6		0,30				60
7	1 ruble 20 kopecks per wagons per hour - with waiting time from 7 to 12 hours;	8,4	in the amount of 0.1 minimum wage per wagon per hour - with waiting time from 7 to 12 hours	0,40	1,4	from 7 to 12 hours - 16 tenge per wagon per hour,	0.2 sizes from 7 to 13 o'clock;;	80
8		9,6		0,50				100
9		10,8		0,60				120
10		12		0,70				140
11		13,2		0,80				160
12		14,4		0,90				180
13	1 ruble 80 kopecks per wagons per hour - with waiting time from 13 to 18 hours;	23,4	in the amount of 0.15 minimum wage per wagon per hour - with waiting time from 13 to 18 hours	1,05	2,6	from 13 to 18 hours - 24 tenge per wagon per hour,	0.3 sizes from 14 to 18 o'clock;;	200
14		25,2		1,20				230
15		27		1,35				260
16		28,8		1,50				290
17		30,6		1,65				320
18		54		1,80				350
19	per hour - when waiting for more than 18 hours;	57	in the amount of 0.25 minimum wages per	2,05	3,8	over 18 hours - 40 tenge per wagon per hour,	0.4 sizes over 18 hours	390
20		60		2,30				4,0

21		63	wagon per hour - for downtime over 18 hours	2,55		4,2		840		470
22		66		2,80		4,4		880		510
23		69		3,05		4,6		920		550
24		72		3,30		4,8		960		590
25		75		3,55		5,0		1000		630

Here: f- the coefficient obtained in relation to the "minimum amount of wages" of the countries where the railway is located

3 Results

In table 2, the distribution of the waiting time for wagons in the Republics of Uzbekistan, Kazakhstan, Kyrgyzstan, depending on the time interval. The statement of the law of time distribution in the former Union is uniform from 1 to 6 hours, from 7 to 12 hours, from 13 to 18 hours according to the Charter. However, the percentage of the minimum wage for proportional work at these time intervals will vary. This honor is treated differently in the railway charter of the Russian Federation.

Tariff Guide № 1” pereyskurant 10-01” speed determination of waiting wagons is described in table 1 above.The formation of this table is based on the sentence “determining fines for waiting for wagons depending on the time” mentioned in paragraph 132 of the current Charter.Misunderstanding was allowed for users in the formation of the table .In particular, Table 1, when the first 6-hour time interval -from 1 to 6 hours-0.05 for each wagon hour,and for the second 6-hour period –from 7 to 12 hours- each wagon hour.It is indicated that it is calculated by multiplying the minimum amount of labor remuneration based on a coefficient of 0.1 . If we fulfill this requirement,the coefficients presented in the table will be as follows.

Table 3. Comparison table of fines for standing wagons

Excessive dwell times	Wagons	
	Ordinary (closed, semi-open, platform)	
	The method used	Recommended style
1	0,05=1x0,05	0,05
2	0,10=2x0,05	2x0,05=0,10
3	0,15=3x0,05	3x0,05=0,15
4	0,20=4x0,05	4x0,05=0,20
5	0,25=5x0,05	5x0,05=0,25
6	0,30=6x0,05	6x0,05=0,30
7	0,40=6x0,05+1x0,1	7x0,1=0,7≠ 0,40
8	0,50=6x0,05+2x0,1	8x0,1=0,8≠0,50
9	0,60=6x0,05+3x0,1	9x0,1=0,9≠0,60
10	0,70=6x0,05+4x0,1	10x0,1=1≠0,70
11	0,80=6x0,05+5x0,1	11x0,1=1,1≠0,80
12	0,90=6x0,05+6x0,1	12x0,1=1,2≠0,90
13	1,05=6x0,05+6x0,1+1x0,15	13x0,15=1,95≠1,05
14	1,20=6x0,05+6x0,1+2x0,15	14x0,15=2,1≠1,20
15	1,35=6x0,05+6x0,1+3x0,15	15x0,15=2,25≠1,35
16	1,50=6x0,05+6x0,1+4x0,15	16x0,15=2,4≠1,35
17	1,65=6x0,05+6x0,1+5x0,15	17x0,15=2,55≠1,65
18	1,80=6x0,05+6x0,1+6x0,15	18x0,15=2,7≠2,05
19	2,05=6x0,05+6x0,1+6x0,15+1x	19x0,25=4,75≠2,05

	0,25	
20	2,30 =6x0,05+6x0,1+6x0.15+2x0,25	20x0,25= 5≠2,30
21	2,55 =6x0,05+6x0,1+6x0.15+3x0,25	21x0,25= 5,25≠2,55
22	2,80 =6x0,05+6x0,1+6x0.15+4x0,25	22x0,25= 5,5≠2,80
23	3,05 =6x0,05+6x0,1+6x0.15+5x0,25	23x0,25= 5,75≠3,05
24	3,30 =6x0,05+6x0,1+6x0.15+6x0,25	24x0,25= 6≠3,30
25	3,55 =6x0,05+6x0,1+6x0.15+3x0,25	25x0,25= 6,25≠3,55

As can be seen from Table 3 above, a separate coefficient is set for every 6 hours, but this coefficient is included in the next 6 hours. As a result, the amount of the fine in the 6th hour will be equal to the coefficient of $6 \times 0.05 = 0.30$ of the minimum wage. However, a 0.40 coefficient is set for a car that has been standing for 7 hours, based on the law of $0.40 = 6 \times 0.05 + 1 \times 0.1$, more precisely, 7 hours are initially taken as a coefficient of 0.05 for 6 hours, and only the 7th hour is considered to be equal to a coefficient of 0.1 done. As a result, the penalty calculation coefficient was equal to 0.4. In fact, for 7 hours, it is appropriate to accept a value equal to $7 \times 0.15 = 1.05$. If we proceed from the fact that $0.4 \neq 1.05$ is not equal, the difference between the coefficients is equal to $\Delta = 1.05 - 0.4 = 0.65$.

If we take into account that the table for determining the amount of fines for stopping wagons in the tariff manual No. 1 is based on the current Charter, we can see that there is no error in paragraph 132 of the Charter, and the exact coefficient is given for each 6-hour interval.

The information provided for in Clause 132 of the above-mentioned current Charter is the requirements developed in order to prevent the same situations based on many years of experience. . The Charter of the former Union Railway was approved by the Council of Ministers of the Union on April 6, 1964 with No. 270, in which Article 156 of the same Charter does not differ much from Article 132 of the current Charter, only in setting fines, it is not the minimum amount of remuneration for labor, as in the current Charter but due to the fact that the money of that period remained unchanged for a long time, the fines were specified in the exact amount of money. For comparison, in the current Charter - from 1 to 6 hours - 0.05 per hour per wagon is set, while - from 1 to 6 hours - 60 kopecks per hour per wagon, accordingly, in the current Charter - from 7 When it is up to 12 hours - 0.1 per hour for each wagon, and when it is from 7 to 12 hours - it is 1 ruble 20 kopecks for each hour. . According to the current Statute - from 13 to 18 hours - 0.15 per hour per wagon, and - from 13 to 18 hours - per hour per wagon is defined as 1 ruble 80 kopecks.

Another important aspect is that in the tariff guide No. 1, fines for wagons standing still are given in the schedule of determining the speed - in the case of more than 18 hours - at the minimum cost of 0.25 labor wages per wagon hour, loading, unloading and it is stated that a fine will be levied from the consignors or consignees for detaining wagons brought in for reloading (stopping wagons) beyond the specified time. . But in the same table, it is stated that it is formed up to 48 hours and 0.25 coefficient is added for every hour that exceeds 48 hours.

For example: in table 1 above, if the wagon is parked for more than 21 hours during loading by the consignor's vehicle, then if we analyze the calculation of the fine, it will be as follows:

- the amount of the fine for the first six hours is $6 \times 0.05 = 0.3$ by the coefficient;
- the amount of the fine for the second six hours is by a factor of $6 \times 0.1 = 0.6$;
- the amount of the fine for the third six hours is increased by a factor of $6 \times 0.15 = 0.9$;
- the amount of the fine for the last three hours is a coefficient of $3 \times 0.25 = 0.75$.

The sum of the achieved coefficients is equal to $0.3+0.6+0.9+0.75 = 2.55$. If the amount of the fine in soums for waiting for the wagon for more than 21 hours is determined as a result of increasing the coefficient of 2.55 to the minimum amount of payment for labor, $2.55 \times 980,000 = 2,499,000$ soums (the minimum amount of payment for labor is from March 29, 2023 980,000 soums per month. Below, in all the examples, the minimum amount of wages was used in the accounting books).

This fine of 2,499,000 soums will have to be collected by the railway from the consignor on the basis of a duly prepared and signed GU-46 form, without acceptance. But the charging of 2,499,000 soums for 21-hour waiting time is not enough to speed up the customers, which has caused a sharp decrease in the waiting time of the wagons at the loading and unloading fronts. . If we are counted on our account, according to the Charter - when it is more than 18 hours - the minimum wage of 0.25 per hour is set for each wagon, and according to it, it is $21 \times 0.25 \times 980,000 = 5,145,000$ soums for standing for 21 hours. . This is more than 2,646,000 soums compared to 2,499,000 soums calculated according to definition manual No. 1.

We can find out that the table given in the definition manual No. 1 was formed incorrectly from pages 359-359 of the book of candidate of legal sciences G. B. Astanovsky "Commentary on the Statute of the Railways of the USSR" in Moscow in 1986. . Article 156 of the Charter is analyzed in it, and the following example is given in paragraph 3 of page 359: one wagon takes 6 hours and 10 minutes. If he waits, the fine is 3 rubles 60 kopecks equal to 60 kopecks per hour. If he waits for 6 hours and 15 minutes, the fine is increased from 1 ruble 20 kopecks for every hour. Rounding up the time from 6 hours 15 minutes to 7 hours, 8 rubles 40 kopecks should be charged.

If we see that 3 rubles 60 kopecks were received for 6 hours and 10 minutes, then $6 \times 60 = 360$ kopecks = 3 rubles 60 kopecks;

If we analyze that 8 rubles 40 kopecks correspond to 6 hours and 15 minutes, since it is 15 minutes, rounding it up to 1 hour, it is assumed that the train has been standing for 7 hours, and $7 \times 120 = 8$ rubles 40 kopecks. . Now, if we look at the valid tariff manual No. 1 at that time: assuming the minimum wage of 60 kopecks as 1200 rubles, the coefficient for one wagon to stand for 7 hours is equal to $6 \times 0.05 + 1 \times 0.1 = 0.4$. . Then $0.4 \times 1200 = 480$ kopecks = 4 rubles will result in a fine equal to 80 kopecks. This results in $8.40 \neq 4.80$. In this method, we can see that $\Delta = 8.40 - 4.80 = 3.60$ rubles less fine will be charged than the previous calculation.

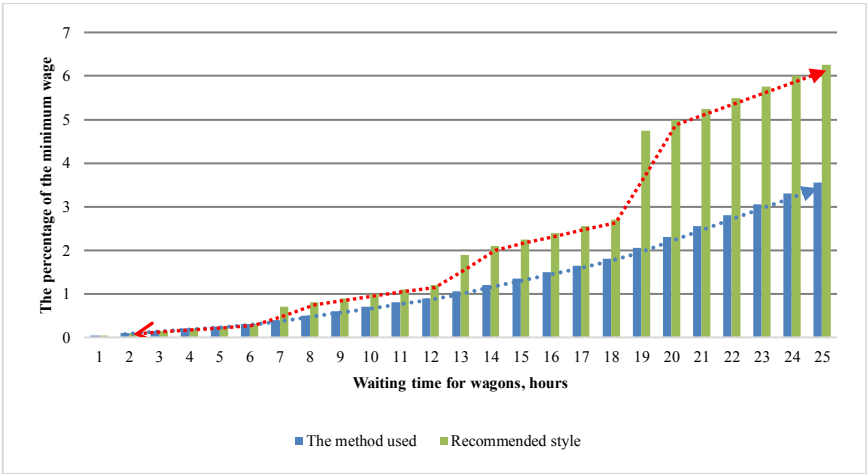


Fig. 3.Graph of comparison of current and proposed values of fines that can be incurred while waiting for a wagon

As we have seen above, as a result of wagons standing on branch roads, a small fine was imposed on the customers, and the railway suffered a lot of damage. In addition, the small amount of fines has a negative effect on the circulation of wagons, as a result of not being able to scare customers, it is better to use the wagons as a warehouse than to pay a fine, and it has led customers not to take actions and measures that prevent wagons from standing.

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