

The research of the possibility of innovative development of coal industry at the expense of cancellation of the customs duties on machines and the equipments, not having Russian analogues

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Abstract - In article the possibility of overcoming of the basic system restrictions of growth of manufacture of coal production by cancellation of the customs duties on the import equipment for stimulation of modernization of the coal enterprises at the expense of its acquisition is investigated.

Index Terms: coal industry, innovations, mechanical engineering, the customs duties, power strategy. machines and the equipments

1. The analysis of existing position on use of cars and the equipment in the coal industry

After the termination of restructuring of the coal industry of the Russia which has led to decrease of infrastructural and social the expenses of the coal enterprises, the positive trend of annual growth of deliveries of coal on the internal and external markets was outlined. Even in the conditions of the burst financial crisis the coal mining in Russia in 2009 has made 300,6 million t. that approximately on 30% above a minimum level reached in 1998. Moreover, according to Power strategy of Russia (2009), a coal mining in 2030 should increase to 395 million t, having caused increase of a share of coal resources in fuel – power balance of the country [1].

At the same time, possessing reliable stocks of coal and essential demand in the external and internal markets, the coal industry of Russia faces system restrictions of intensive growth of manufacture the main things from which are:

- Insufficient capacities of the enterprises of coal mechanical engineering;
- Necessity of reproduction of new mining techniques at the level providing innovative development of branch.

Till now operating capacities of coal mechanical engineering of Russia and could not even replace capacity of machine-building factories which as a result of disintegration of the USSR

"remained" in the near abroad countries. Their basic problem is poorly financed research base and absence of experts. Cooperation with machine-building factories of the countries of the far abroad has not got still effective character. All it has led to rupture between coal mining level in Russia and manufacture of domestic underground techniques.

So, over the last 5 years a coal mining has increased more than on 15 % (fig. 1), and manufacture domestic eo mine loaders a combine did not increase, remaining at level of the middle of 90th years (fig. 2 [a]), the lowest volumes of the reached extraction being in the years [2,3].

The similar situation is characteristic practically for all spectrum of the equipment intended for an underground and open way of a coal mining. The quantity of units of cars and the equipment which is let out by domestic machine-building factories, has decreased in comparison with early the period from 3 to 15 times (fig. 2 [b,v]). In the same sizes there was a falling of specific quantity of the let out domestic equipment having on one million of tons of extracted coal (fig. 3).

The analysis of specific quantity of the let out equipment testifies that rupture between an optimum level of specific quantity of the equipment (in days of the maximum extraction) and its operating level makes on:

- the mine loaders – 10 times;
- the bulldozers – more than 5 times;
- the dredges – 4 times;
- driving out to combines – more than 2 times.

In this situation many coal companies are compelled to work on the old, worn out equipment which middle age sometimes reaches almost 24th years. Such position in an essential measure reduces competitiveness of the coal companies, especially on foreign markets. It is necessary to notice that recently in the developed coal-mining countries there was so essential jump in technology that coal industry for

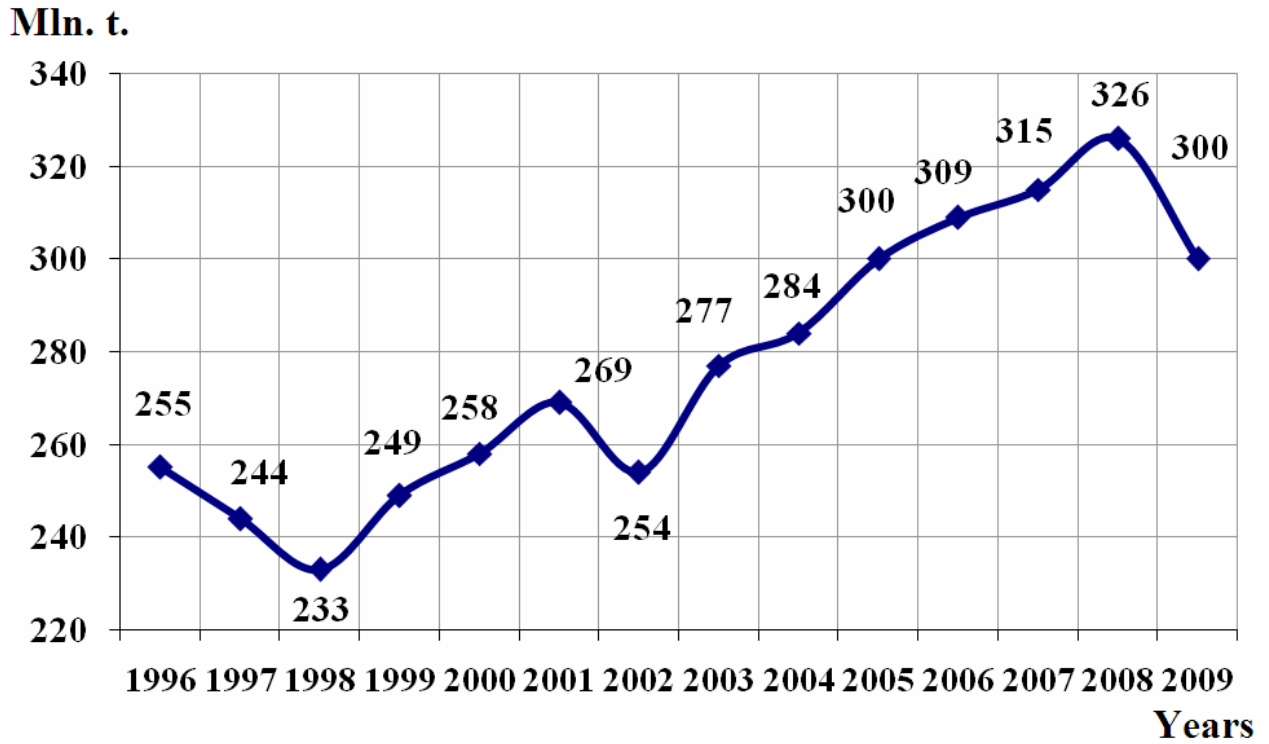


Fig. 1. The Russian coal production in period 1996 – 2009 years

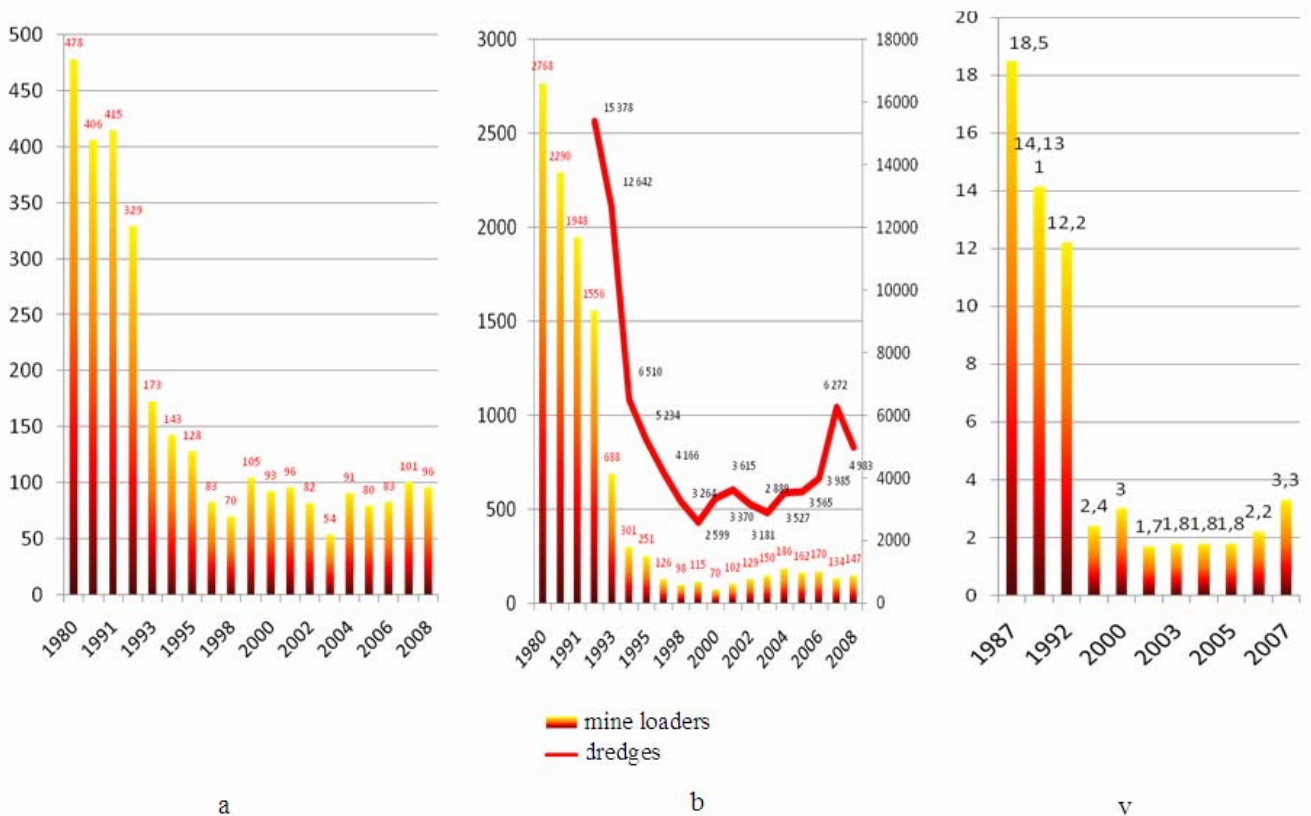


Fig. 2. Dynamics of release of the mining equipment in domestic mechanical engineering:
 a - preparatory combines, piece; b - dredges and mine loaders, piece;
 v – bulldozers, piece

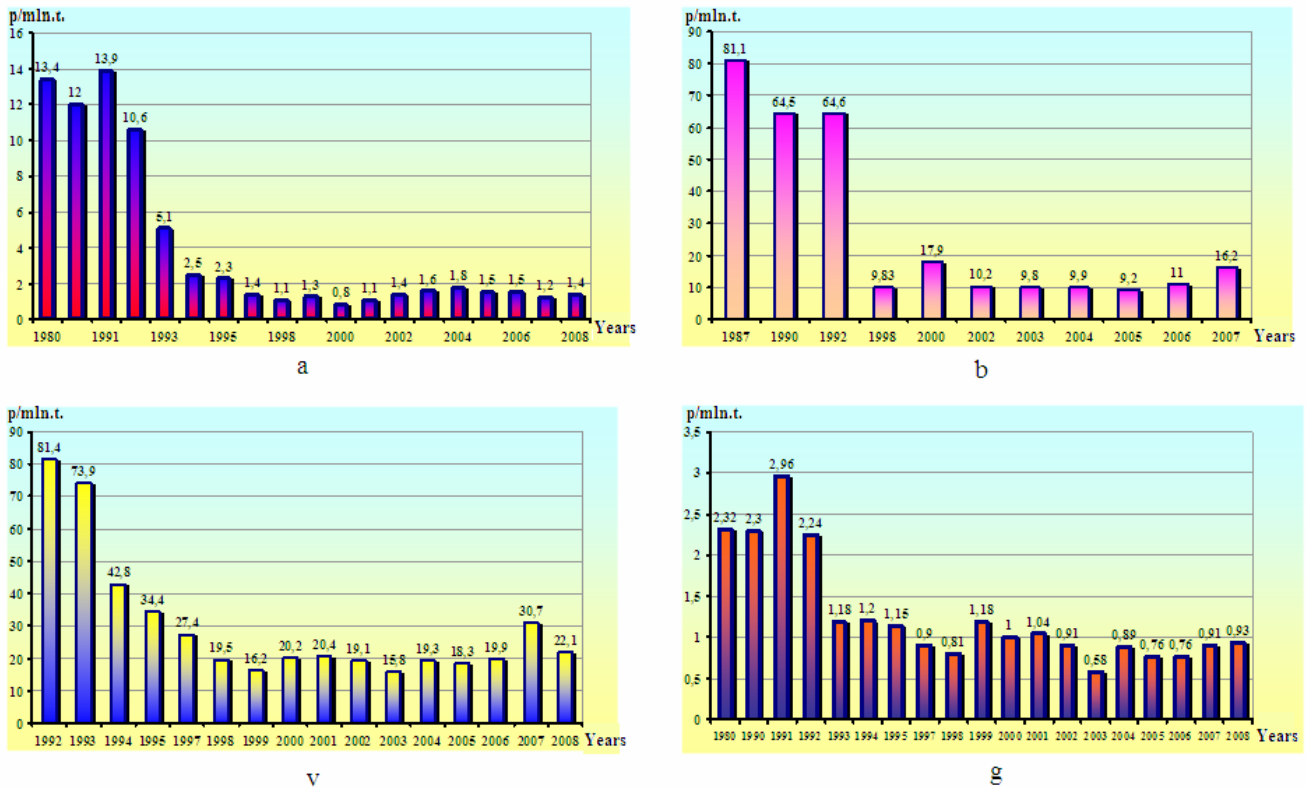


Fig. 3. Dynamics of specific quantity of the domestic mining equipment on 1 million t the extracted coal:

a - mine loaders; b – bulldozers; v - dredges;
g - driving out combines.

competitiveness maintenance considerable re-equipment of the enterprises is required to Russia. Backlog in sphere of new technologies of extraction and coal processing already now leads to that average productivity work in the coal industry of Russia in 5 - 10 times more low, than at the leading foreign world companies (fig. 4). Accordingly, the cost price of a coal mining of the Russian companies above, than at the leading world companies, thus, that quality (heat allocation ability) the coal extracted in Russia, can be more low, than at foreign. In many cases the used domestic equipment on parameters of installed power per employee and productivity does not allow the coal-mining enterprises to "leave" even on a designed capacity.

For example, according to coal company SUEK, the maximum loading on the clearing face equipped with domestic combine K500, almost on 30 % more low, than at use in the same face of foreign combine SL300 (fig. 5). Application carrying out firm JOY complex on

company "Vorkutaugol" mine "Vorgashorsky" has allowed to pass in August, 2009 one face of 1 thousand meters of mining developments that became a record of Russia and that could not achieve, applying the existing domestic equipment [4].

Moreover, the domestic equipments are not always allowed to use in rather difficult mining-geological conditions. For example, on a cut "Cheremhovskiy" companies "Vostsibugol" coal layers have difficult structure. The coal mining is traditionally made in the total way. Coal packs are taken from bowels together with prolayers of dead rocks that predetermines high the ashes maintenance and necessity of the subsequent enrichment at concentrating factory which is located in 30 km. From a place of conducting mining works.

All it increases operational expenses of the company. Use of combine "Wirtgen Surface Miner 2200", capable to develop a file thin layers (from 1,0 inch), allows to provide continuity workings out to improve quality of an

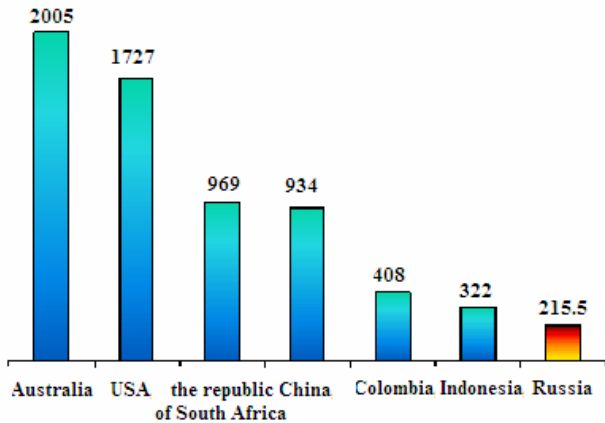


Fig. 4. Average labour productivity of the worker on a coal mining in the open way, the t/people - month (2007).

extracted mineral, having lowered the ashes maintenance the extracted coal on 10 - 12%, reduce operational and technological losses that allows involve in working off the coal layers carried at traditional technology to sub-standard [5] to a minimum.

This similar backlog not only negatively affects economy of the coal companies that their modernization brakes, but also weakens their competitive positions in the world market.

Besides of that high degree of a deterioration of the equipment in coal branch leads to increase in risks of failures, increase of threat of a life and personnel health. On an indicator of a deadly traumatism on 1 million t a coal mining Russia with the big separation has overtaken all leading coal-mining countries of the world (fig.6).

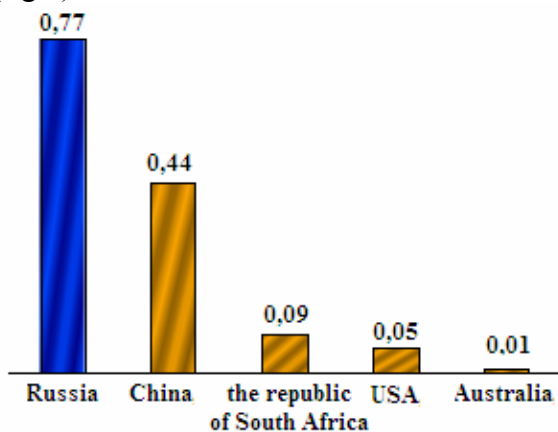


Fig. 6. A deadly traumatism on 1 million ton of a coal mining (2007).

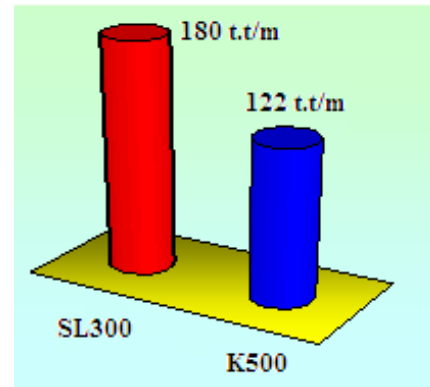


Fig. 5. Comparison of productivity of combines K500 and SL300 at operation in equal underground-geological conditions.

Absence of a network of factories and the enterprises for repair of the mine equipment and cars while the centers of warranty service and repair of the import equipment are any more in the country the manufacturer, and in region of the buyer when not the consumer "adjusts" the equipment to the conditions, and the supplier changes parameters under the concrete buyer – all it also negatively affects domestic mining mechanical engineering.

Meanwhile, in the basic coal-mining countries of so considerable falling of manufacture of the mining equipment it is not observed. Many years successfully mining techniques are represented by Byelorussians, Poles, and Japanese. For the last 3-4 years the Chinese manufacturers "were sharply tightened", and them equipments corresponds to the best world standards both on quality, and at the price of [6].

One of variants of maintenance of development of the coal industry in the conditions of a high competition on external and internal the markets and deficiency of capacities of domestic mechanical engineering use by the coal companies of the foreign process equipment of new level is. Acquisition of such equipment is expedient in the absence of its Russian innovative analogue.

However, the import equipment by delivery to Russia is assessed with the customs duties which size varies in limits from 5 to 15%. Thus the sum of customs payments joins among oth-

er expenses in the end production cost price that reduces competitiveness of the coal enterprises.

Thereupon on purpose a non-admission of decrease in competitiveness of the coal companies probably time establishment of the zero rate of customs payments for the equipment which does not have the Russian analogues.

In 2006 the decision of the Government of Russia had been made the list of more than 700 kinds of the equipment for various branches of manufacture on which within 9 months the size of customs payments [7] has been lowered to zero. Decrease in rates only for 9 months is connected with the obligation of Russia to EAEU in coordination with partners of longer terms of decrease in rates.

In the 2007 the list of equipment had supplied in addition replenished still nearby with 100 kinds of the equipment.

Zeroing in 2006 of the import customs duties on the import process equipment, which analogues are not made in Russia, there were rather effective step from outside states on increase of updating of manufacture in many branches of economy.

For realization of the above-stated experience in the coal industry it is necessary to make the list of the equipment which does not have analogues in Russia but which the coal companies require. By point 2.1 of article 319 of the Customs Code of the Russian Federation «Occurrence and the duty termination on payment of the customs duties, taxes thus is necessary to be guided. Cases when the customs duties, taxes are not paid the Customs duties, taxes are not paid in case:

- According to the legislation of the Russian Federation or the present Code: the goods are not assessed with the customs duties, taxes;
- Concerning the goods the conditional outright release from payment of the customs duties, taxes, - in action of such clearing is given and at observance of conditions in connection with which such clearing is given [8].

Thus it is necessary to notice that according to operating practice the equipment list is neces-

sary for coordinating with the Union of industrialists and businessmen of Russia for an exception of influence of cancellation of duties on domestic mechanical engineering owing to manufacture in Russia the similar equipment.

2. Formation of the systematized list of cars and the equipment on which decrease in the import customs duties is offered.

Experts of the large coal-mining companies have been involved in formation of the list of cars and the equipment (including: Open Society «SUEK», Open Society «The coal companies "Kuzbassrazrezugol"», Open Society "The coal companies «Uznyi Kuzbas"», Open Company "Company «Vostsibugol"», Open Society "Raspadsky", Open Society "Mechel", etc.) These companies are providing more than 70% of a coal production. With a view of carrying out of expert interrogation, the project of the preliminary list of the hi-tech equipment and cars for the coal industry for which cancellation of the import customs duties is supposed has been made. The project of the preliminary list has been directed experts of the coal companies for an estimation of each position of the list on five ranks to a scale defining «importance degree» the import equipment which does not have the Russian analogue in increase of efficiency of coal output. Besides, experts of the companies also were offered to establish the minimum and maximum term of granting of "zeroing" of the customs duties at purchase of the import equipment. This term intended to define from a position of time of possible occurrence of the Russian analogue of the equipment.

On the basis of the analysis of the data received from the companies it has been established that offered duration of term of clearing of duties changes in limits from 2 till 10 years. Experts of the companies consider that on the average for replacement of the import equipment by the Russian analogue it is required nearby 5 - 6 years.

The total list of the cars and the equipment were estimated for the purpose of actualization of its positions with account of greatest expert "importance", and also system of the restric-

tions generated by practice of inquiries of the coal companies in the Ministry of economic development and trade of Russia for last 2 years.

In according to this practice the below-mentioned restrictions which have been set up by refusal of the Ministry of economic development and trade in zeroing of the import customs duties on the below-mentioned import goods are established:

Illegitimacy of reference of group of the goods to the process equipment category: some positions the commodity nomenclature foreign trade activities of Russia – building cars and mechanisms, auto-loaders, bulldozers, graders, schedulers, dredges. (Commodity positions 8427 and 8429 the commodity nomenclature foreign trade activities of Russia), and also 2 some positions presented by products from ferrous metals (spare parts – code the commodity nomenclature foreign trade activities of Russia 7326 90 980 9) and products from copper (code the commodity nomenclature foreign trade activities of Russia 7419 99 900 0);

- Absence of economic "obstacles" for modernization of the enterprises buying for these purposes the import goods about operating 5% by the rate of import duties: the goods on 5 some positions – to air compressors (code the commodity nomenclature foreign trade activities of Russia 8414 80 190 9), to electric fur-

naces and other equipment with electric heating (code the commodity nomenclature foreign trade activities of Russia 8419 39 900 8), to the equipment of rolling mills (codes the commodity nomenclature foreign trade activities of Russia 8455 22 001, 8455 22 000 9), to machine tools detachable (code the commodity nomenclature foreign trade activities of Russia 8461509009);

- The established earlier and already operating mode established earlier without duties import of the goods: on 4 some positions – to cars foundry (code the commodity nomenclature foreign trade activities of Russia 8454 30 900 9), to camps hire the continuous rolling-mill (code the commodity nomenclature foreign trade activities of Russia 8455 22 000 2), working and basic platen for hot and cold rolling-mill (codes the commodity nomenclature foreign trade activities of Russia 8455 30 310 0 and 8455 30 390 0).

The algorithm of formation of the list is presented on fig. 7

Taking into account the above-stated expert estimation and operating system of restrictions the additional list of cars and the equipment for which zeroing of the rate of the import customs duties (in view of great volume of the received list within the limits of given article it is offered is received not resulted).

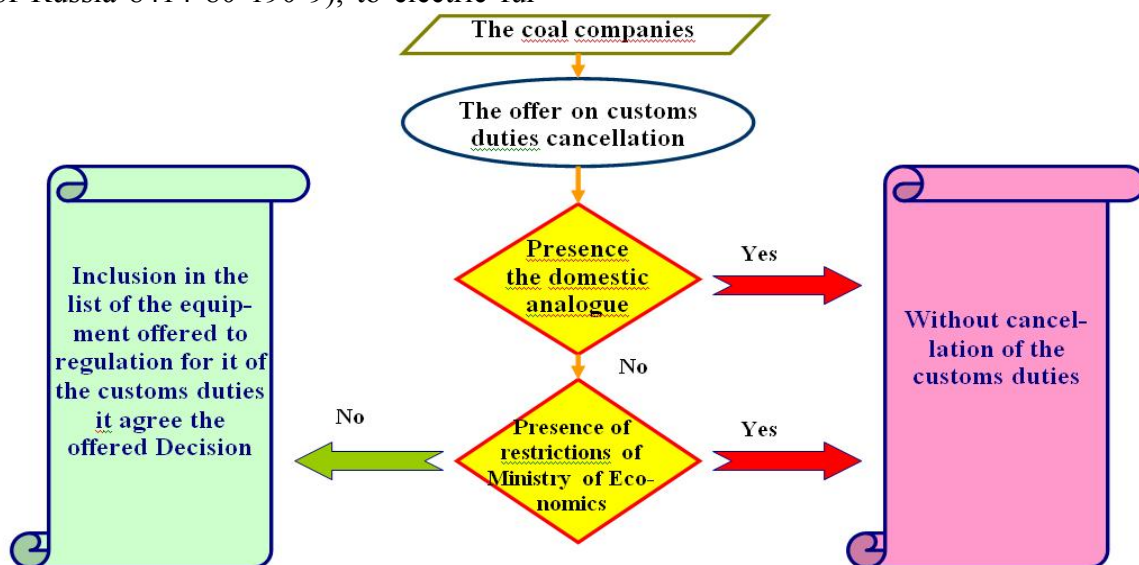


Fig. 7. Algorithm of formation of the list of the equipment offered to regulation for it of the customs duties.

With a view of stimulation of demand coal on the domestic highly technological equipment it is offered to realize "a smooth" mode of zeroing of rates duties. Considering that according to the interrogation, necessary average term of cancellation of duties makes 6 years, it is offered to enter lowering factors to rates of operating duties:

- The factor equal 0 - for the two-year period of time of decrease in the rate of the duty;
- The factor equal 0,35 - for the period of time more than 2th years, but less than 4th years;
- The factor equal 0,70 - for the period of time more than 4th years, but less than 6th years

The actual rate of the import customs duties is defined by multiplication of the current rate to the lowering factor.

The corresponding Governmental order of the Russian Federation making the amendments in the Customs Code of the Russian Federation has been developed for realization of possibility of clearing of taxation by the customs duties of cars and the equipment.

CONCLUSION

The domestic coal industry has all preconditions for innovative development. One of variants of overcoming of the basic system restrictions of innovative development is cancellation of the customs duties on the import equipment, not having the Russian analogues

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BIOGRAPHIES

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