Some Aspects of Public Decision-Making in Goods Rail Transport

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Abstract

Albanian Railways in the last two decades has experienced a fierce competition of the road transport, which has constantly taken parts in its transport market. Being a railway of a small country will modest freight and passenger traffic volumes, its survival depends on a political decision that has to be taken by Albanian government. The paper deals with the possibility of the coming back to rail of chrome ore, gravel and fuel transport. These transports are permanent part of rail transport, but about a decade ago left the railway. The paper purpose is not to analyze removal causes of chrome ore, gravel and fuel transport by rail, but to explain the importance of time line concept to the return of these transports volume again in railway. Taking into account the social costs in the form of environmental pollution and roads blocking caused by road vehicles, in the material presented proposeds the idea of a cost-benefit analysis. This analysis should be developed in order to justify a public decision to increase the rail volume by returning the goods mentioned above in the railways. The paper develops the idea that decision-making by private viewpoint of transport operators, has not the necessary elements for solving the blocking roads and environmental pollution problem, so should not be taken into consideration for the development of transport policies in urban areas. For this purpose must be used a cost-benefit analysis to pave the way for an integrated transport or a decision making in favor of the public interest.

Keywords: cost benefit analysis, integrated transport.

1. General presentation

Albanian Railways has a small extension of 440 km line in the western lowland and south eastern part of the country. Through a connection of the Albanian railway network in the northern part of the country with Montenegro railway network, it is possible the connection of Albanian railway to European rail transport. As a railway of a small country, its survival would be very difficult or impossible if this connection did not exist. Globalization processes demanding integration of the economies of various countries, increase in a sizeable measures the need for transportation between them. So really is such a fact as can be said that a rail of an isolated place or country is impossible to survive in our time. In the socialist period of its development, Albanian railways due to its economic and political conception enjoyed a monopoly position in the freight and passenger transport market. This position was ensured by the prohibited moving of freight and passenger road transport operators parallel to the railway line.

So necessarily under the force of law, all the volumes of freight and passenger transport where was the rail line were made by train. After democratic revolution of 1992 things began to change in disadvantage of the rail transport. Rail transport volumes began to fall rapidly, while more rapidly increase the freight and passenger transport volume to the road. Moreover, the structure changes to the Albanian economy, especially in the mining sector and the large enterprises, which are directly related to the need for rail transport, transformed the railway in a shadow of what it had been before. Thus in 1993 the volume of freight transport by rail decreased ten times or 100% compared to the level of freight transportation of 1980 -1990 period, while passengers transport around 4 times or 400%. Legal support to force transport needs to be carried out by rail where was rail lines did not exist.(Automotive vehicles of every dimension had begun to invade the streets with a dizzying speed Analysis of the economic activity of the society. File No. 2. Time of conservation forever.) As a reference for this purpose, can be mentioned that over the course of 1989 – 1994 years, the number of cars increased from 2362 units to 62633 units, the number of buses from 1798 units to 7275 units, the number of good transport means from 16363 units to 37829 units. Throughout the post-communist period and up to date the market share of passenger and goods of rail transport constantly have passed in road transport.(Study of the Future Role of Albanian Railways (1995) CIE Consult, World Bank. Albanian Railway Directorate.)
Such a phenomenon has positioned railway at a crossroad regarding its future. The causes of such a situation can be ranked as follows:

1. Albania is a small country of a passenger distance of transport around 50 km and a good distance transport around 70 km. Such distances have positioned the road transport compared railway in the privileged conditions for many reasons.
2. The structure of the Albanian economy due to the ongoing deregulation attempts to leave from the mining and large enterprises, focused on small and medium one’s. In this economic context, the demand for larger loads were replaced with the need for small loads suitable for road transport.
3. The Albanian government consistent orientation throughout the past two decades have been focused on roads, because of their poor condition inherited from the past socialist system. As a result, is reflected a big difference in roads investment compared to rail.

### Table 1. Passenger transport volume by rail for the period 1993-2010 (mil / pass / km)

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<tr>
<td>Mil/pass/km</td>
<td>225</td>
<td>215</td>
<td>197</td>
<td>168</td>
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<td>116</td>
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<td>105</td>
<td>89</td>
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<td>80</td>
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### Table 2. Freight transport volume by rail for the period 1993-2010 (mil / pass / km)

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<tr>
<td>Mil/ton/km</td>
<td>54</td>
<td>52.6</td>
<td>52.7</td>
<td>41.6</td>
<td>22.7</td>
<td>25.4</td>
<td>25.8</td>
<td>28.1</td>
<td>19</td>
<td>21</td>
<td>31.4</td>
<td>31.7</td>
<td>25.5</td>
<td>35.5</td>
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### Table 3. Freight transport volume of crossing point with Montenegro

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<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
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<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tr>
<td>Mil/ton/km</td>
<td>1.9</td>
<td>8.5</td>
<td>8.9</td>
<td>7.4</td>
<td>24</td>
<td>23</td>
<td>31.4</td>
<td>58</td>
<td>48</td>
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### 2. Albanian Railways Opposite to the New Road Problems

Besides Albanian Society immigrant movements in the early nineties, in the later period, have steadily continued its migratory movements. These movements originated in the north and east-south of the country have attempted axis Durres - Tirana, which currently represents the most rich markets in Albanian Society. Concentration of approximately half of the country’s population in the cities of Durres and Tirana and rapid development of the area in the two last decades have made inevitable a rapidly growing need for transport. Despite the construction of a new highway connection between two cities about a decade ago and a number of improvements to roads and other accessory, the pollution and bottleneck road phenomena have started to be serious and the cause of the discussions at different level of the government decision making. The two cities of this axis, Tirana and Durres are connected between them by a service of interurban passenger transport by buses and vans, as well as a rail service, which preserves the form and content of same decades ago. Despite the difficulties and negative phenomena highlighted in roads, rail passenger transport is facing a very little part of the transport volume of this axis, around 2.5%. The question arises, if such a situation really represents the role to be played by the railway passenger transport on this axis. (The data are drawn from the author’s observations). One other question arising in this case could refer to the fact, whether the continuing further interventions to expand the actual road will be avoided the problems created in this axis in the form of pollution and road blockades. Such a situation leads to solutions that offers an integrated transport and decision-making for this purpose should be subject to complex solutions that enables an analysis in terms of costs and benefits. Axis Durres - Tirana can be seen as the most interesting segment to rail passenger transport for the future of Albanian railways in this sector (Look at Applied Transport Economics. Stiuart Cole. Third Edition. Chapter 12:Funding an integrated Transport). If we would come back in time a few years ago Albanian society probably would not have started to discuss the problems of pollution and blocking motorways. Moreover, it would be unthinkable that connecting highway between the cities of Tirana and Durres would be considered inadequate to cope with the movement in this axis. Axis Tirana-Durres is going to evidenced every day more as a single urban center. In such a conception the rail is evidenced for the large carrying capacity of passengers currents from one to another point of the area. Besides this axis, another one, that from Milot to Vora and from Durres to Rrrogozine, despite of their own international designed standards and construction, have begun, especially in peak periods to display the same problems identified between Tirana and Durres. So as intense passenger and freight transport
movement area can be considered all area from Milot to Rrogozhine. In the entire area in question alongside the road lies railway lines. Situations offers an overview of the road every day expanding and the railway line almost forgotten due to lack of movement and investment. It is clear that the introduction in the game of rail transport throughout the extent of this area, will be motivated by the same phenomena as well as in the Tirana – Durres axis. The axis from Milot to Rrogozhine have traditionally faced large road and railway transport volumes for goods and passengers. Only a few years ago transport of inert goods, chrome ore and fuel, passed from rail to road. The cause must be searched in a broad spectrum of factors, from technical and commercial to those addicted to illegal or segmental interests. Removal of such goods, that traditionally have been part of the rail transport should be treated very carefully. Let’s treat by another more visionary view the problem in question. As was mentioned earlier in this paper the axis from Milot to Rrogozhina will be subject of air pollution and roads blocking. Social costs that will arise from this fact, in a not distant future will be part of the decision to regulate the traffic problems. In this view, the social cost precisely estimated to such voluminous goods (fuel and inert) can pave the way to a public decision-making and can turn back on rail transport such cargo. Trends for the movement of vehicles on the road will be higher for at least the next twenty years. In this reasoning level, the roads will continue to create pollution problems and (bottleneck), even though they will continue to expand and modernize. Configuration of a visible contrast between road overflowing with vehicles and unexploited railway line, would necessarily lead to the necessity of an integrated transport.

3. Traffic of Goods that can be Returned to Railways

3.1 Fuel transport

This transport left the railway in 2009. In this year fuel rail transport signed a volume of 33065 tons. In periods prior to this year rail fuel transport volumes have been greater, reaching up to 80,000 tons a year. The transport includes distances from processing plants of Ballsh to the cities where there was the rail line and relevant plant fuel storage. There is a direct connection of the main rail line with auxiliary lines that lead to the respective fuel warehouses in every city of the country.

Priorities of a fuel rail transport in relation to road vehicles will be ranked as follows:
1. The train operation costs of fuel transport are small compared to the operating cost of the road vehicles for this purpose.
2. The fuel rail transport integrates with environmental pollution and blocking roads in a much more acceptable level compared to road transport.
3. The fuel rail transport integrates into a higher level with rational use of land compared to road transport in the urban area. Instead of a train that goes to the railway line in an urban area would be needed a dozens of road vehicles that will need more mobility place and greater surface position compare to train.
4. The fuel trains will integrate at a higher level in relation to the safety and welfare issues in general.

The tendency towards a transport policy based on cost-benefit analysis, in order the orientation of decision making in transport market from private interest to a public viewpoint, may have deviated fuels traffic from the road to the railway.

3.2 The chromium transport.

This mode of transportation has historically been part of rail transport and passed from railway to road in 2001. In this year the transport volume was 21 440 tonnes. In the preceding period the transport rail volume of chromium has been two to three times greater, up to 60,000 tons per year. This type of transport originated to Bulqiza Mine in the north west of the country, was done by road truck to closest railway station of Lac, where the train loaded through a specialised stakade for this purpose and brought into the port of Durres for export. A part of it is sent into Elbasan Metallurgical Combine to be processed and returned chrome concentrate, where again by rail is sent to the port of Durres for export. For the same reasons mentioned above for the fuel transport there exist the possibilities that transport of chromium in the form of combined transport truck - train, be carried by truck from Bulqize up to Lac and from Lac to the port of Durres by train. As Laci railway station and the port of Durres has specialized squares for loading and unloading the train and the ships with chrome ore.

3.3 The gravel and ballast transport

This type of transport has had a tendency to secede from the railways since the first post-communist years, perhaps of
the biggest development of the construction sector that happened in these years. In the different cities throughout the country selling inert points set up anywhere near their centers. These selling points began to be directly supplied by specialized trucks that bear gravel directly on the banks of river mainly in Milot and ballast from different mines built in various points of the country. The way it were built and operated as selling point makes up a typical inert treatment in relation to cities environment and traffic. Albanian Railways has in any rail station in every inhabited center of the country free squares where can be concentrate the selling of inert and can be constructed plants for the preparation of prefabricated elements for construction. The use of these railway stations for this purpose would create a direct link via rail to places where gravel or ballast deals. In the same time rail station will be a center for distribution of these materials in every urban area linked with rail line. Distribution of inert sail points in the cities is an serious case in relation to cities pollution. For many reasons of the treatment of this problem from this viewpoint, the inert traffic should be part of rail transport.

4. General conclusions

Removal of fuels, chrome and gravel traffic from rail must be analyzed very carefully. From the respective time they occurred together with relevant subjects privatization processes that have traditionally been customers of railways. The performance of these subjects in the first years of privatization may have had different tendencies and interests within their segment to remove this type of traffic from rail transport to profitable purposes. Although good’s traffic deviations from one transport mood to another are generally competition consequences in the transport market, for the rail case, they must be subject to a state analysis. This analysis should reveal the causes that led to the abandonment of rail transport to reach their objective assessment.

First: Is it true that these railway traffics left only for reasons of competition in a transport market subject to the law of demand and supply.

Secondly: it is true that these transports were made by private operators who provided transport fees really smaller compared to rail or became by transport means of these private enterprises.

Thirdly: It has been possible to the railway decision making to reduce tariffs level to keep these traffics in rail transport.

If all these questions had an answer, would have served to improve decision making of railway operation. Deviations of the above traffic coincide in time with the improvements of the road main axes. Investments in the roads along the entire time period of last decade have been much higher than in railway. Such a scheme has given priority to road transport. But the roads themselves during all this period have produced other movement, especially of cars and something like this inevitably produces environmental costs and bottleneck phenomenon.

To answer the question whether to invest in rail to avoid the movement of cars and trucks from the roads (in our case Milot – Rrogozhina axis) and to throw back on railway the traffic mentioned above, a broader analysis of cost and benefit is necessary. Removal of fuel, inert and chrome ore by rail can not be a simple decision to market competition. This market itself has not all appropriate mechanisms to regulate the transport problems in the right direction of public interest.

Such an analysis would help Albanian government political decision to determine its role in the most appropriate option for the Albanian future railway development.

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