



LKW KAS 504, 14 tons capacity from Kutaissi Automobil Works in Georgian SSR,
(Source: Automobilpraktiker, 1966, issue 4, p. 19)

Trucking in the Eastern Bloc.
Coping with Shortage and Chaos: How the Eastern Bloc
Adapted to the New Technology of Cargo Transport by Truck,
1950-1980

Working Paper in the History of Mobility No. 19/2014

Richard Vahrenkamp
Professor em. for Logistics University of Kassel
Logistic Consulting Berlin
Email: vahrenkamp2@gmx.de
Web: www.vahrenkamp.org
Date: 10 March 2023
Published with the Open Access Server KOBRA of University of Kassel doi:10.17170/kobra-202304017748

Content

1. Introduction	3
2. The Committee of Transport Ministers in the Eastern Bloc.....	4
4. Centralizing of Truck Transport in Moscow.....	14
5. Encounter Traffic in the Russian Socialist Republic.....	19
6. Outsourcing in the German Democratic Republic.....	22
7. Truck Transport in a Shortage Economy with low Productivity effects	23

Published in parts in: Richard Vahrenkamp: Coping with Shortage and Chaos: Truck Cargo Transport in the Eastern Bloc, 1950-1980, in: Icon –Journal of the International Committee for the History of Technology, Vol. 22, 2016, no. 1, pp. 126-146.

Abstract

This article explores the tensions during the Cold War between the need to have infrastructure to enable truck transport in the countries of the Eastern Bloc. Using “shortage economy” as the theoretical framework to analyse the Eastern bloc the article shows restrictions the shortage economy imposed on investments in infrastructure. The Western management started in the 1980s to let the enterprises’ transports to be carried out by external truck transport service providers – a policy which is known as “outsourcing”. But also in the Eastern bloc new forms in the organization of truck transport occurred, as encounter traffic – a term that will be explained later – and outsourcing. The latter one developed even 30 years before Western management started outsourcing. The producing enterprises were deprived from their own truck fleets and the supply with goods deteriorated. The communist leaders were not able to handle the anarchic and subversive character of decentralized truck transport that did not comply to their concept of a centralized economy. Conflicts between authorities that competed to oversee truck transport led to chaos in the overall transport sector and to deterioration in quality of service.

1. Introduction

The case of cargo transport by trucks in the Eastern Bloc nations of Europe involved the transfer of technology between East and West. The technology of truck transport was developed between 1900 and 1930, when the diesel engine was introduced. It gained momentum in the 1950s in both East and West Europe, and this raises several questions: on what kind of infrastructure did truck technology depend? Under which conditions did truck fleets operate in countries of the Eastern Bloc? Did the Eastern Bloc develop special innovations that could be an antetype for the Western world? Could the Eastern Bloc fully exploit the advantages trucking offers for the industrial division of production as learning curves and economies of scale provided by specialisation?

While studies about the railway system in the German Democratic Republic (GDR) are numerous,¹ the issue of truck transport in the Eastern Bloc has not drawn much scholarly attention. In 1978 and in 1980, Bogdan Mieczkowski published volumes on Eastern European transport, focusing on roads, trains and cars. One small chapter dealt with agricultural transport in Poland. Reinhold Bauer published, in 1999, a study on the automobile industry in the GDR but left the subject of truck transport unconsidered. In his study *Cars for Comrades* from 2008, Lewis Siegelbaum pointed out the Soviet Union's lack of road infrastructure and outlined the debate on the 'roadlessness'. This implies that long distance transport by truck played only a marginal role in the Soviet Union and truck transport was conducted only in the vicinity of major cities. Thus, in the 1950s, about 50% of the trucks were concentrated in the capital of Moscow. In his paper 'Little Tsars of the Road: Soviet Truck Drivers and Automobility, 1920s–80s' delivered at the conference 'Cars in Socialism', Lewis Siegelbaum explored the public images of truck drivers in the Soviet Union. He examined the four types of truckers in both the official and the popular imagination, namely heroes, professionals, loners, and wheeler-dealers. Other conference papers addressed cars but not trucks.²

¹ Christopher Kopper, *Die Deutsche Reichsbahn 1949-1989*, in: Lothar Gall and Manfred Pohl (eds.), *Die Eisenbahnen in Deutschland*, (Munic, 1999), 281-319. Rosemarie Schneider, *Das Verkehrswesen unter besonderer Berücksichtigung der Eisenbahn*, in: Eberhard Kuhrt (ed.), *Die wirtschaftliche und ökologische Situation der DDR in den achtziger Jahren* (Opladen, 1996), 177-222. Ralf Kaschka, *Auf dem falschen Gleis. Infrastrukturpolitik und –entwicklung der DDR am Beispiel der Deutschen Reichsbahn 1949 – 1989*, (Frankfurt, 2011).

² Bogdan Mieczkowski, *Transportation in East Europe*, (New York, 1978). Bogdan Mieczkowski (ed.), *East European Transport – Regions and Modes*, (London, 1980). Jacek Romanowaki, *Agricultural transport in Poland*, in: Bogdan Mieczkowski, 1980, 124 – 146. Reinhold Bauer, *PKW-Bau in der DDR – Zur Innovationschwäche von Zentralverwaltungswirtschaften*, (Frankfurt, 1999). Lewis Siegelbaum, *Cars for Comrades: The Life of the Soviet Automobile*, (Ithaca, 2008). Lewis Siegelbaum (ed.), *The Socialist Car: Automobility in the Eastern Bloc*, (Ithaca, 2011). Lewis Siegelbaum, 'Roadlessness and the path to communism: building roads and highways in Stalinist Russia', *Journal of Transport History*, vol. 29, no. 2, (2008A): 277-294.

The theoretical framework of this paper is as follows. To analyze Eastern economies we follow the Hungarian economist János Kornai and Martin Kragh in identifying 'shortage' as a defining feature of state socialist economies. To overcome the bottlenecks in the procurement of material, the enterprises had to procure material from black market sources through special agents or turn to corruption. According to Kragh, the idea of a shortage economy 'allows scholars of command economies to organize observed phenomena, such as delays, production stoppages, spoilage, low productivity, and inefficiency, into a single coherent framework.'³

2. The Committee of Transport Ministers in the Eastern Bloc

Until 1955, the railway served as the most important carrier for cargo transport in many countries in the Eastern Bloc. An exemption was Bulgaria, where trucking had a share of 80% due to the lack of railway links.⁴ But since 1955 one can observe a shift towards the new trucking technology in the Eastern Bloc. The Committee of Transport ministers in the Eastern Bloc (OSShD), founded in 1957, pushed this shift as one can explore in the papers of the journal of the Committee, the OSShD- journal.⁵ The meetings of the transport ministers gave rise to some tensions with the transport section of the Council for Mutual Economic Assistance (COMECON) in the Eastern Bloc.⁶ The Committee mainly coordinated railway policy among the member states. But in one commission, the Commission XI, road policy and truck policy was formulated. The commission stated the importance of delivery by truck as this kind of transport made door-to-door delivery of cargo possible without transshipment of the freight. The truck service was seen as faster than railway delivery and to establish a road network with truck services would require less capital investment than a railway network.⁷ Truck transport seemed to be tailor-made to cope with the growing segment of packaged goods that consisted of machinery parts, spare parts and consumer goods, as e.g. canned food. This assessment of truck transport was the same as in the Western world. The 22nd party convention of the communist party of the Soviet Union (CPSU) in 1961 heavily pushed car transport and truck transport. It envisioned a network of motorways from Moscow to the capitals of the districts and other republics of the Soviet Union that were never built.⁸

³ János Kornai, *Economics of Shortage*, (Amsterdam, 1980), 2 volumes. Martin Kragh, 'The Soviet Enterprise: What Have We Learned from the Archives?', *Enterprise & Society*, 14 issue 2 (2013): 360-394, here p. 372.

⁴ W. Fodorow, 'Report on the first conference on road construction of the socialist countries', 4th to 12th June 1962 in Moscow, *OSShD-Journal*, issue 4, (1962): 4-6, here p. 4.

⁵ OSShD-journal was published in various languages. I refer to the German edition, published in Warsaw.

⁶ The *OSShD-journal*, issue 2, (1961): 25.

⁷ György Hydassi, 'Trucking in Hungary', *OSShD-Journal*, issue 1, (1962): 12-14, here p. 12. *OSShD-Journal*, issue 2, (1962): 22-23.

⁸ Nikita Chruschtschow, Rechenschaftsbericht des Zentralkomitees der KPdSU an den XXII. Parteitag der Kommunistischen Partei der Sowjetunion. Referat des Ersten Sekretärs des Zentralkomitees N. S. Chruschtschow am 17. Oktober 1961, (Berlin 1961). *OSShD-Journal*, issue 2, (1962): 22-23. Mieczkowski, *East European Transport* (n. 2 above), 298.

The railway relayed on technological infrastructures that supported its operations: sheds for locomotives, locations for supply of water and coal, recreation rooms for the locomotive crews, shops for repair. The shift toward the new technology 'trucking' required a new infrastructure similar to that of the railway:

- A network of roads and motorways,
- locations of truck yards, where the trucks had parking lots in the night (cf. Figure 2),
- sheds for trucks to provide shelter against weather conditions,
- recreation rooms for the drivers,
- facilities for care and maintenance,
- repair shops,
- a network of warehouses for storage of spare parts and their delivery to the truck repair shops.

But in an economy of shortage that was characteristic for the Eastern Bloc, this infrastructure was never provided to a sufficient extent. When there were no sheds in the parking yards to protect the trucks against frost in the winter, little ovens beneath the trucks had to keep the motors warm, cf. Figure 1.⁹



Figure 1: Keeping truck motors warm in the winter in the Soviet Union in 1980

So the state socialist countries could not earn the advantages of the new technology truck transport to a great extend.

The Eastern Bloc coordinated national economic policies by the Council for Mutual Economic Assistance (COMECON). This could be a platform to resolve the following questions: Trucks were built in various countries of the Eastern Bloc in a broad variety of models. The forwarders had truck fleets mixed of many models requiring many different spare parts for maintenance. So, it was difficult to supply spare parts for the repair shops. The following figure shows the variety of models of VEB Kraftverkehr Greiz in the GDR at the beginning of the 1970s.¹⁰

⁹ Copyright Wilfried Bauer.

¹⁰ Source: <http://www.vogtlandspiegel.de/100-jahre-busverkehr-im-landkreis-greiz>.



Figure 2: Broad variety of truck models in the parking yard in 1975.

Questions to be discussed at COMECON meetings were: Should this variety of trucks be restricted to simplify the maintenance and the spare part storage and to earn the advantages of the economy of scale? This would be an obvious approach in a centrally organized state socialist economy. Should only one truck model for each class of loading capacity (1 ton, 3 ton, 7 ton, 12 ton) be obligatory for all countries in the Eastern Bloc or at least obligatory in each country in the Eastern Bloc? In addition, which country should this standard truck build? Which country should gain production; which one should lose? If this antagonistic pattern could be resolved, the rationalization in the truck model policy could prove the superiority of the state socialist economies over the Western world. But coordination was not applied to the production of trucks by COMECON.

The Council's resolutions to coordinate remained in the state of declarations and were not implemented as national policies.¹¹

In the countries the economic interests were strong to build own trucks. For example in 1965 the GDR – building since the 1957 the 1-ton delivery van Barkas – started to build the W50 truck with 5 tons loading capacity in the newly erected factory in Ludwigsfelde close to Berlin (cf. figure 4). The Figure 3 shows this truck, which the GDR could sell on export markets.

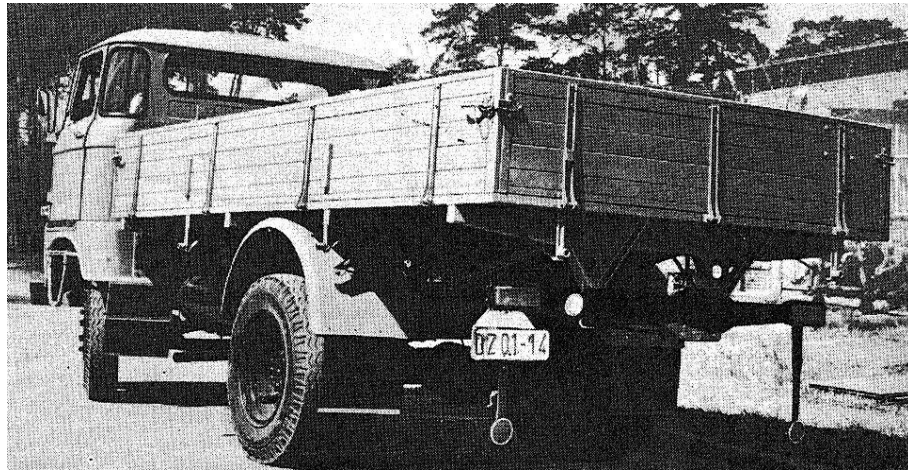


Figure 3: GDR Truck W50 in 1965¹²

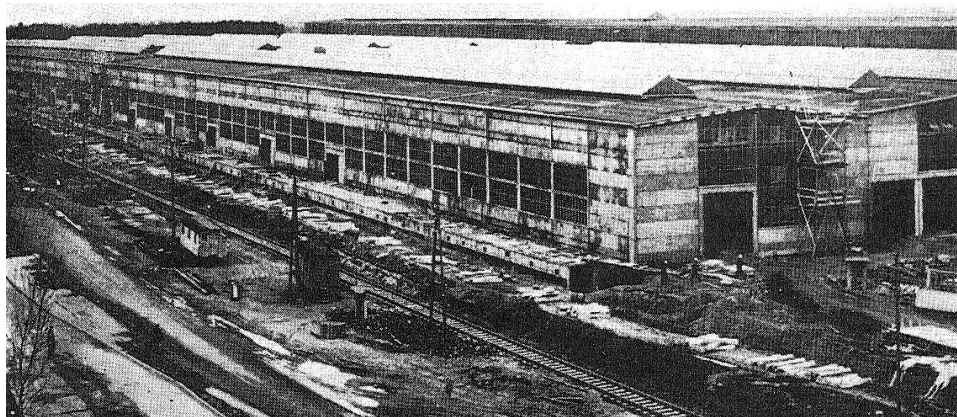


Figure 4: W50 plant in Ludwigsfelde 1965¹³

¹¹ Ralf Ahrens explored the policies of Comecon in his book: *Gegenseitige Wirtschaftshilfe?: Die DDR im RGW – Strukturen und handelspolitische Strategien 1963 – 1976*, (Cologne, 2000), 155s. The Leipzig fair in 1966 displayed 23 truck models produced in the Eastern Bloc, see *Verkehrspraktiker*, issue 3, (1966): 21.

¹² Source: *Verkehrspraktiker*, issue 7, (1965): 16.

¹³ Source: *Verkehrspraktiker*, issue 7, (1965): 15.

The Commission XI underscored also its view that international truck traffic crossing the border inside the Eastern Bloc would become more and more important.¹⁴ The issues that had to be discussed in Commission XI were the acceptance of the driver license in other countries, the import of the truck's reserve of fuel at the border, and the provision of insurance and the supply of fuel and lubricant in the foreign countries – an important question in economies of 'shortage'. The cross border truck traffic towards Western countries was important for the export of high valued finished goods to earn hard Western currency. But how would maintenance of the trucks be provided when they were abroad? For trucks produced in the Eastern Bloc there was no network of repairs shops with the necessary 'Eastern' spare parts abroad. Hungary solved this problem by employing a fleet of West-German Mercedes trucks for the sole purpose of getting exports into Western Europe, where a network of repairs shops for Mercedes trucks existed.¹⁵

For long term planning in road construction, the Commission XI prepared in 1969 to count the traffic inside the countries and to count the traffic of the cross border traffic inside the Eastern Bloc that was conducted in 1970. The traffic density assumed peak values of 5000 units (car, motorbike, bus, truck) per day inside a certain road network of the GDR. In other countries this value could be attained only in the vicinity of the great cities, but the quality of roads were there not sufficient for that value. The cross border traffic was counted on three days in August 1970. The data are displayed in figure 5. The main traffic was between Hungary (H) and Czechoslovakia (CSSR) with a share of 39%, between Hungary and Romania of 15% and CSSR-GDR of 14%. The great share of the Hungary-CSSR and Hungary-Romania (R) traffic can be explained by the 60 % cession of the Hungarian state territory with Hungarian speaking population to CSSR and Romania in the Trianon Treaty in 1920. The following figure exhibits the cross border traffic, measured in units in three days of August 1970. Notable is the weak traffic at the border of the Soviet Union, particularly in regard to the great economic importance of the Soviet Union. This indicates a weak degree of car culture in the Soviet Union. The data of figure 5 also contains the number of trucks crossing the borders and show the small extend of import-export-movements carried by trucks.

¹⁴ *OSShD-Journal*, issue 3 (1959): 22.

¹⁵ Siegfried Karbaum, 'Kraftverkehr und Außenhandel in Ungarn', *Verkehrspraktiker*, issue 6, (1966): 36-37, here p. 37.

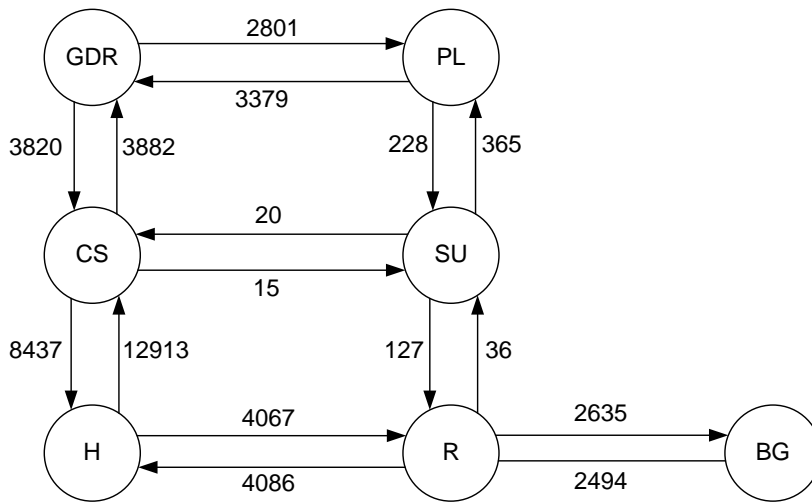


Figure 5: Cross border traffic inside the Eastern Bloc 1970¹⁶.

The Commission XI served also as a platform to introduce new concepts of truck delivery that were developed in the transport ministry of the Russian Socialist Republic (RSFSR), and in all countries of the Eastern Bloc. Examples are encounter traffic and the dissolution of enterprise truck fleets and their centralization in large public forwarder enterprises (cf. section 4).

¹⁶ Source: Tamas Fleischer et al.: 'Erste internationale Verkehrszählung auf den Strassen europäischer OShD-Mitglieder', *OShD-Journal*, issue 6 (1974): 1-5, here p. 2.

3. The Structure of Truck Transport in the Eastern Bloc

For this section, one must distinguish between the terms ‘forwarder’ and ‘own truck fleets’. When one observes a truck riding on a road in East or West, the truck can be employed in two modes that are hidden for the observer. The truck can belong to a truck service company (forwarder) conducting transports for an industrial enterprise that has to delivery products to its customers. Or, the truck operates as part of an industrial enterprise’s own truck fleet. So, to deliver products or merchandise to a customer, an enterprise had two choices: Either to give a transport order to a forwarder or else to transport the goods by one’s own truck fleet (transport ‘on own account’). If one compares only the cost of transportation, in many cases, transport by a forwarder is cheaper than transport by one’s own fleet because the forwarder can make better use of truck capacity by bundling several orders with a similar destination into one shipment. However, the effect of bundling only occurs on long distance transports. For local trips inside cities, the economic advantage of bundling vanishes because of transshipment costs of bundling– as the broad debate on logistic solutions for city delivery in the 1990s shows.¹⁷ The main objection against enterprise truck fleets refers to ‘dead mileage’. When an enterprise delivers products to a customer with its own truck, then the truck rides without load back and returns to its home base which is called ‘dead mileage’, whereas a truck of a forwarder could collect cargo for the way back and uses its capacity for transport of cargo. This critique on enterprise truck fleets state socialist traffic planners in the Eastern Bloc underscored in many statements from 1950 to 1990. But – as demonstrated by the broad debate since the 1920s concerning the economic advantages an enterprise can achieve using own truck fleets – there are other benefits to using one’s own fleet that countervail the cost argument.¹⁸ Many of these advantages result from the close ties between production and transportation, which also applied to enterprises in state socialist countries. In addition, the enterprises don’t just take the isolated cost of transport into account but also the gains that were induced by immediate delivery, no waiting time for delivery and a close relation to their customers. Also in local transport, which is characteristic for example in the construction trade and in the delivery of shops, a bundling of transport capacity through a forwarder provides no gains over the cost of bundling.

In their political statements the transport ministers in the socialist countries often made the accusation that in capitalistic countries brutal competition and chaos ruled the transport sector, but in socialist countries the different carriers (i.e. ship, railway, airplane, car, bus and truck) were coordinated and operated according to uniform principles of the socialist economy.¹⁹ In the case of the railway carrier, it was not difficult to govern the

¹⁷ Richard Vahrenkamp, *The Logistic Revolution –The Rise of Logistics in the Mass Consumption Society* (Cologne 2012), 190.

¹⁸ *Ibidem*, 84.

¹⁹ Herbert Krunau, ‘Kraftverkehr und Bauwesen. Zur Auswertung eines Erfahrungsaustausches in Moskau’, *Der Verkehrspraktiker*, 3 issue (1960): 10-14, here, p. 14. Erwin Kramer, ‘Für ein einheitliches sozialistisches Verkehrswesen’, in: *Verkehrspraktiker*, issue 4, (1960): 6-12.

railway towards a state socialist direction. The railway represented the same hierarchical organization as the communist party. When the communists came to power in Eastern Europe after 1945, they only had to exchange the management with loyal comrades. But in the case of truck policy the situation was different. Although trucks need infrastructure (cf. section 2) they did not constitute a 'system' like the railway, which is characterized by uniform norms in technical equipment and in operations based on voluminous instruction manuals. Rather the truck's operations were completely decentralised and local with mixed equipment and different modes of operation. Every industrial enterprise could employ a truck fleet, every local or regional authority could do it. Every ministry could establish its own forwarder fleet. In contrast to the assertion – that in socialist countries the different carriers were coordinated and operated according to uniform principles – one can observe in the trucking segment of traffic policy a struggle among different ministries and enterprises how to conduct trucking to serve their interests. So, a real chaos could be observed in the trucking segment. The uncoordinated coexistence of enterprise fleets, public forwarders and branch forwarders induced many truck trips without load (dead mileage), a shortage of capacity in the autumn peak for harvest and uneconomic parallel structures in the network of repair shops and spare part delivery.²⁰ This is demonstrated in the following.

The formal structure of truck traffic was different in the Eastern Bloc. In the Soviet Union many enterprises were centrally led by branch ministries of the different economic sectors: Mining, steel production, machinery production, agriculture, food production, wholesale trade and retail trade, construction and railway. These ministries could operate their own trucking companies that served as forwarders for enterprises in their sector or branch. Further, there was a special ministry specifically for transport in the construction industry.²¹ In addition, each enterprise could employ its own truck fleet (on 'own account') so that the enterprise did not have to depend on the branch forwarder. Independent of this structure, the transport ministry of the Russian Socialist Republic RSFSR operated in different cities its own truck forwarder enterprises. These trucking services were called 'public' truck services. Every enterprise, regardless of its branch or sector, could call for a truck. The public truck service was also responsible for local delivery at railway stations. Railway wagons had to be loaded and discharged, and the cargo had to be shipped from local sources to the railway station and vice versa. This local truck service linked the carrier railway with the road network. In 1956 in the Soviet Union, the public truck transport, which started in 1951, carried 276 million tons of cargo. In 1956 in Moscow, it carried 65% of construction material, 23% of the goods for the retail trade and 70% of the local traffic for the railway. The cost for each unit of ton-kilometer were below the cost of company fleets by 28%.²² One can observe how in the Soviet Union trucking assumed a more important role in comparison to the railway. The number of transport nodes in the railway network, from where cargo could be transhipped, was reduced by 60% in the 1950s. Transshipping points that fewer than six wagons per day were closed. The average distance between two adjacent nodes was doubled to 20 km and the ensuing gaps

²⁰ Hydassi, 'Trucking' (n. 7 above), 13. Schejnin, 'Einführung neuer Technik im Kraftverkehr in der RSFSR', *OSShD-Journal*, issue 2, (1961): 7-19. *OSShD-Journal*, issue 4, (1960): 21.

²¹ Up to 1953 the Soviet Union had numerous ministries, for example one for cotton farming, see *Ost-Probleme*, issue 13 (1953): 544. An account on the counsel of ministers in 1962 is given in *Ost-Probleme*, issue 7 (1962): 220-221.

²² *OSShD-journal*, issue 3 (1959): 21.

of service were compensated by truck transport.²³ In the Socialist Republic of Hungary one can find the same structure as in the Soviet Union. The company fleets had, in 1960, a share of 52%, the public forwarders 30% and the branch forwarders 18% (measured in tons of freight).²⁴

In the Socialist Republic of Poland the structure of truck transport was as follows.²⁵ Poland had for administration the counties Gdansk, Krakow, Lublin, Poznan, Szczecin, Warsaw und Wroclaw. The industrial enterprises which were led by counties had company fleets of 150 to 600 trucks. The company fleets had, in 1964, a share of 70%, the public forwarders 10% and the branch forwarders 20% (measured in tons of freight). The public forwarder was organized in a hierarchical manner: The central office was located in Warsaw, the regional offices in the main towns of the counties and as last level there were offices in regional towns. This structure was split in two parts: the pure forwarder branch, called PSK (Domestic Spedition Company), concluded the contracts with the customers, issued bills and provided insurance. But this branch did not operate own trucks as carrier. The second branch, called PKS (State Automobile Communication), established as a parallel structure with the same formal network of offices like PSK, operated the trucks and got its orders from PSK. PKS was responsible for the truck yards, for care and maintenance, for repair shops and assignment of the drivers. To complete a transport order PSK had to cooperate with PKS. One recognizes fragmentation in Poland's truck sector with many interfaces where problems in operations could arise to deteriorate the delivery service.

One can observe in all state socialist countries a high share of company truck fleets on the truck transport performance (tons*km). How can this high share be explained? Applied to the sector of transportation a shortage economy meant that the necessary infrastructure for truck transport, that was mentioned above (cf. section 2), was never built to a sufficient extend. The lack of infrastructure hampered truck transport. Roads were bad and trucks were idle due to insufficient supply of spare parts. For example, in Poland in the 1970s, 25% of all truck capacity was disabled due to shortage of spare parts. Fleischer reported that in 1986 only one third of county roads in Hungary were in a sufficient condition.²⁶ These shortages resulted in poor delivery service. The deliveries were too late and the cargo was partly damaged or spoiled. When state socialist economies were characterized by shortages and a low degree of labor division the enterprises in the East Bloc could not access a reliable network of suppliers like in the Western world.²⁷ Thus, they developed internal supplier relations by vertical integration ('Kombinat'). As one element of vertical integration, they also employed own truck fleets to evade the trap of poor service by the socialist public trucking enterprises. In statements that they issued, GDR transport ministry officials

²³ Gunther Fechner, 'Einführung der Wagenladungsknotenbahnhöfe in der UDSSR', *DDR Verkehr*, 1, issue 4 (1968): 139.

²⁴ Hydassi, 'Trucking' (n. 7 above).

²⁵ H. Lieber, 'Der Aufbau der Binnenspedition in der VR Polen', *Der Verkehrspraktiker*, 8, issue 5 (1964): 14-18.

²⁶ Mieczkowski, 'European Transport' (n. 2 above), 298. Tamas Fleischer, 'Infrastruktúra-fejlesztési csapdák', *Közgazdasági Szemle*, 33, issue2, (1986): 150-161. (Traps in Infrastructural Development. English translation provided by Tamas Fleischer), table one.

²⁷ Andrei Yudanov, *Large Enterprises in the USSR – The Functional Disorder*, in: *Big Business and the Wealth of Nations*, edited by Alfred Chandler, Franco Amatori, and Takashi Hikino, (Cambridge, MA, 1999), 395–432, here p. 417.

always took note of the high share that company fleets held in the GDR truck transport realm and interpreted this share as 'disproportionally high'. However, they were unaware that this was a consequence of the shortage economy. In many meetings of the Commission XI, the delegates tried to temper the shortages. The construction materials to build new roads were short, so Commission XI discussed new sources to gain material, for example; drop-off of industrial production. Spare parts for trucks were short and the Commission XI sought ways to overcome this shortage.²⁸

4. Centralizing of Truck Transport in Moscow

The 20th party convention of the CPSU in Moscow in 1956 became famous when party leader Nikita Khrushchev accused Stalin of despotism. But at the same convention Khrushchev also promoted new organizational concepts for using passenger cars and trucks. I focus here on trucks.²⁹ As former party head of the district Moscow, Khrushchev knew very well the special circumstances of the transport sector in Moscow with the coexistence of many uncoordinated truck fleets in enterprises, authorities and organizations. He stated at the 20th party convention that the truck fleets in Moscow were highly fragmented, declaring that there were enormous hidden truck capacities among Moscow's state-owned enterprises if they would consolidate their own fleets of trucks.³⁰ All that the state socialists had to do was to withdraw trucks from enterprises and to concentrate them into separate public transport service enterprises. State socialist planners claimed that truck capacity would be used more efficiently in large-scale enterprises compared to individual enterprises. They dreamed of large-scale truck enterprises that concentrated 200 to 500 trucks, thereby leading to so-called 'economies of scale' and resulting in low unit costs in the transportation trade. This policy to transfer enterprises' truck fleets to public transport service enterprises was an important innovation in trucking sector and should prove the superiority of socialism over capitalism. In the Western World management called the policy to transfer companies' truck fleets to forwarders 'outsourcing'. Interesting is, that the state socialist planners put this policy in action in the 1950s, that means 30 years before Western management started to 'outsource' truck services in the 1980s and they used a more radical approach than their Western counterparts – and all of this without any theoretical insight into business processes.

Whereas outsourcing of truck fleets was in Moscow obligatory this was left to the discretion of management in the Western world. The outsourcing movement in Western management started in the 1980s. Not only were logistics services outsourced, but also computing and administration services such as billing. But the outsourcing movement in Western management was only partial and not as radical as the communist outsourcing. Western

²⁸ A. Gajkowicz, 'Hauptaufgaben des Strassenwesens in der polnischen Volksrepublik', *OSSH-D-Journal*, issue 4, (1959): 6-7. *OSSH-D-Journal*, issue 5, (1960): 22s.

²⁹ The case to consolidate car fleets describes Siegelbaum, 'Cars' (n. 2 above), 244s.

Management acted very cautiously. Before a service was outsourced, business partners entered into long negotiations. The advantages and risks of outsourcing were precisely described in comprehensive contracts.

The law of economies of scale, on which Moscow's transport policy was based on, is established theory in capitalist societies and explains the strong decrease of unit costs when the scale of the factory expands – at least in the capital-intensive process industries.³¹ State socialist politicians declared this law as central to their Marxist-Leninist ideology.³² They observed that in many private sectors, small-scale production still exists, for example in agriculture, in handicraft production and in the construction industry. But the tendency toward large-scale production was an inevitable step in the march of history. The state socialists sought to connect this theory to reality. They assumed therefore that this law would apply also to service industries such as transportation, but they did not fully consider the possible results. In the 1950s, a policy aimed at concentrating truck enterprises was put into action in Moscow, where 50% of the Soviet Union's truck fleet was based. Experiments concentrating truck yards with up to 1000 trucks were carried out.³³

The local Soviet of Moscow established a special administration for truck transport which was split in three parts for the transport in the sectors construction, retail shops and industry in order to regard the peculiarities of these sectors. The administration operated enterprises for truck transport that were called 'centralized transport'. Alone the part for construction operated 25 enterprises for transport. The truck 'Kombinat Number 1' possessed 1100 trucks (including hangers) that were decentrally located to reduce dead mileage when the trucks started in the morning. The number of truck fleets in Moscow dropped from 5000 in 1950 to 2000 in 1958.³⁴ This was seen as rationalization in the transport sector. Also, the traffic jam at the railway cargo terminals in Moscow should be cleared. Instead of 5000 trucks emerging each day from local industry and wholesale warehouses at the railway cargo terminals the policy of centralized public transport decreased this number to 1500 trucks.³⁵ This centralization of cargo terminal transports was an innovation that in Germany was also discussed since 1880, but

³⁰ Nikita Chruschtschow, *Rechenschaftsbericht des Zentralkomitees der KPdSU an den 20. Parteitag*, (Berlin, 1956), 60.

³¹ Alfred Chandler, *Scale and Scope: The Dynamics of Industrial Capitalism. A History 1880s – 1940s*, (Harvard, 1990). Chandler stated on page 22 that in such labor-intensive manufacturing industries as apparel, textiles, lumber, furniture and printing, the decrease in unit costs was only marginal.

³² For the USSR, see Andrei Yudanov: 'Large Enterprises', (n. 28 above). Helmut Fleischer (ed.), *Short Handbook of Communist Ideology: Synopsis of the Osnovy Marksizma-Leninizma* (Dordrecht, 1965). Osnovy marksizma-leninizma was published 1960 in Moscow and was translated into nearly all European languages by the local national communist parties. German edition: *Grundlagen des Marxismus-Leninismus. Lehrbuch*, edited by Horst Ullrich (Berlin, 1960), 650-660.

³³ Herbert Krunau, 'Kraftverkehr und Bauwesen. Zur Auswertung eines Erfahrungsaustausches in Moskau', *Der Verkehrspraktiker*, 3, issue 3 (1960):10-14. Inbert Gobermann, 'Zur Reorganisation des Kraftverkehrs in Moskau', *Der Verkehrspraktiker*, 2, issue 6 (1959): 15-17. Wolfgang Bober, 'Werkverkehr und gewerblicher Güterverkehr in der UdSSR', *Der Verkehrspraktiker*, 1, issue 2 (1958): 13-15. Whether the outsourcing in Moscow resulted in a deterioration of transport services remains unknown and is left to further research.

³⁴ Krunau, p. 11. Gobermann, p. 16. Bober, p. 14.

³⁵ Gobermann, p. 17.

never implemented.³⁶

When central public transport was enforced in Moscow this changed the balance of power. Enterprises in construction, retail trade and industry had to give up their truck fleets. When the enterprises were depended on public truck service, which had a transport monopole and was not subject to competition, they had to wait for service. Urgent deliveries could not be carried out by own fleets and economic losses occurred due to late delivery. The poor service resulted in long queues for service and provided the service enterprises a high degree of capacity utilization which served – absurdly – as justification for public transport.³⁷ This policy stirred resistance and enterprises with large political influence could keep their fleets, as the construction enterprises ‘Metro Construction’ and ‘Academy Construction’. Also industrial enterprises with ‘special products’ could keep their fleets.³⁸

One can assume that the centralized public transport weakened the quality of transport service in terms of punctuality and quantity of construction material that was delivered to the construction sites. Unfortunately, there are no empirical studies to substantiate this assertion. In the account of Krunau in 1959 on the transport in Moscow’s construction sector, the author highlights some points of bad service in the GDR construction sector that also could apply to Moscow.

³⁶ Vahrenkamp, ‘Revolution’, (n. 18 above), 98. The traffic jam at railway cargo terminals in Germany in the 1920s is shown by Richard Vahrenkamp, ‘The limits of railway transportation in a mass consumption society: Germany, 1900-1938’, *Journal of Transport History*, 32, issue 1, (2011): 1-16.

³⁷ Tamas Fleischer put forward this argument in the case of Hungary. See his paper (n. 27 above), (English translation provided by Tamas Fleischer, p. 5). That the capacity utilization rises with the length of the queue is known in traffic science and production theory, see Ravi Ravindran, ‘Operations Research and Management Science Handbook’, (Boca Raton, 2008), chapter 9 on queuing theory.

³⁸ Bober, p. 14, Gobermann, p. 15.

His demands of the GDR were:³⁹

- The transport enterprises should fulfil every order and not to pick only those orders which were easy to fulfil. They denied transporting small orders, for example urgent spare parts. These orders did not afford a full truck load and did not accord to their goal system to maximize the transport volume in tons or the haulage capacity in tons*km.
- Transports had to be punctual (This hints at unpunctual transports).
- If a truck failed to operate this incident had to be communicated to the dispatcher immediately (This hints at delayed communication).
- The material had to be transported to the sites that had been notified (This advice points to black market operations of material delivery to other sites).

Transport is a local activity. Therefore, a decentralised organization of transport provides the necessary flexibility. The communist traffic planners did not take this into account when they centralized transport orders in Moscow's Soviet as described by Krunau:⁴⁰ The centralization of transport order management in Moscow's administration for the construction sector could induce delay in the fulfilment of orders. One can assume some thousand transport orders for construction material each day which had to be communicated from the construction sites to the construction material wholesale organization, and from there to the central transport administration in the Soviet. The latter had to transfer these orders to one of the 25 transport enterprises where the orders were carried out as transport from a certain factory of construction material to a prescribed construction site and local dispatchers supervised the orders (cf. Figure 6) However, it is unknown how the communication of the transport orders was processed: Were they sent by telephone (quick but inclined to errors), message boys, telegraphy or postal letters (slow communication)? The order system sketched so far would perhaps be feasible in the year 2000 with the technology of internet communication and computers. But if one imagines some thousand orders, each one on a paper sheet, on the desk of the central administration to be processed each day one can conclude that delays and errors were likely. Gobermann mentioned also that delays were induced by centralization of the truck yards. He called for more local yards to respond quickly to transport demands of the construction sites.⁴¹

³⁹ Krunau, p. 14.

⁴⁰ Krunau, p. 12.

⁴¹ Gobermann, p. 16.

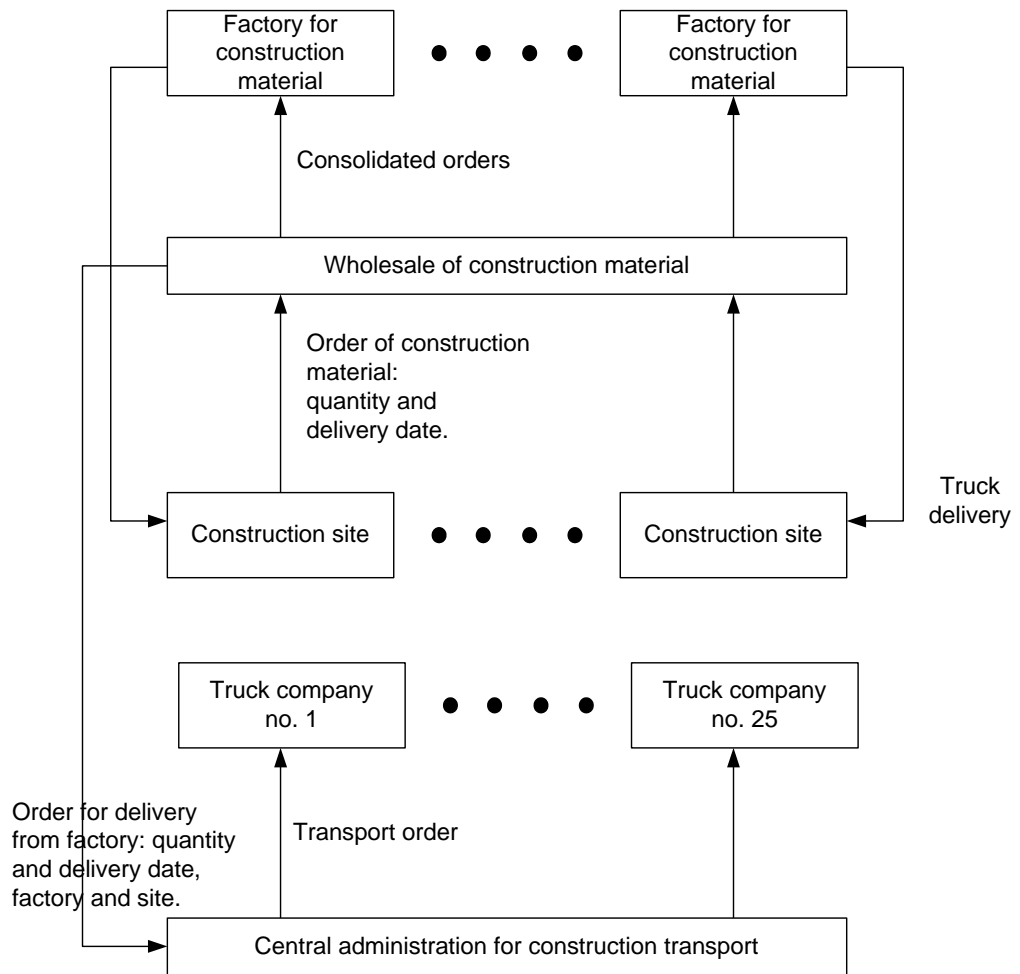


Figure 6: Flow of orders in Moscow's construction industry

5. Encounter Traffic in the Russian Socialist Republic

In the Russian Socialist Republic RSFSR, the public truck transport was introduced in 1951. Until the year 1959 this kind of transport reached a share of 40% of all cargo transported by trucks (measured in tons). During this period about 50,000 trucks had been transferred from enterprise fleets and authority fleets to public transport. There was some uncontrolled growth of enterprises of public transport so that in some cities there existed different enterprises of public transport without coordination. The ministry of public truck transport of the RSFSR centralized these enterprises to one enterprise in each city.

The ministry also started public long distance truck transports in 1957 at the relations Moscow – Rjasan and Moscow – Kalinin and extended the relations to 81 lines until 1960.⁴² As innovation in the truck transport the ministry introduced as new concept of long distance transport the so called swap- traffic or encounter traffic.⁴³ For example, if a driver rides a truck on the long distance of 725 km between Moscow and St. Petersburg (Leningrad) he (or she) needs several stops for rest and stays overnight. The encounter traffic concept divides the long distance in several pieces of 130 km till 230 km length:

1. Moskau – Kalinin of 169 km
2. Kalinin – Wolotschok of 131 km
3. Wolotschok – Nowgorod of 231 km
4. Nowgorod – St. Petersburg of 194 km.

When a driver has reached the end of one section he (or she) meets with a truck of the following piece which arrived from the starting point of the following piece in reverse direction. Both trucks had the technology of trailer trucks, cf. Figure 7. So they can remove their trailers from the motor unit, swap them and drive back on their section. In the evening the driver reaches his (or her) home base and he (or she) can return to his (or her) private home. The Figure 7 shows the trailer truck MAS 504, built in the Soviet Union with a capacity of 14 tons.

⁴² F. Kalabuchow, 'Der öffentliche Kraftverkehr in der RSFSR', *OSShD-Journal*, issue 4, (1960): 9-10.

⁴³ O. Smirnow, 'Einige Erfahrungen über den zentralisierter Strassengütertransport im Fernverkehr nach einer neuen Methode', *OSShD-Journal*, issue 3 (1960): 12-14.



Figure 7: Trailer Truck MAS 504 in 1965⁴⁴

To organize the encounter traffic, trucks had to drive according to a tight time schedule and repair service had to be provided to guarantee punctual arrival. Only under these conditions, that were not easy to set up in an economy of shortage, they were able to meet at the swapping points without long delay. The transport time for cargo between Moscow and St. Petersburg was reduced from two or three days to 23 hours by this new method. The following figure displays the network of encounter traffic with Moscow as centre.⁴⁵ From Moscow to St. Petersburg the traffic of public trucks was low in 1960. Only two trucks drove in each direction each day. This number rose till 1966 to 28.⁴⁶

⁴⁴ Source: *Der Verkehrspraktiker*, issue 4 (1966): 19.

⁴⁵ L. Tschernjawski, 'Organisation der Güterbeförderung im Kraftverkehr nach der Methode der Umlaufstrecken in der UdSSR', *Der Verkehrspraktiker*, issue 4 (1966): 20.

⁴⁶ Smirnow, p. 14. L. Tschernjawski, p. 19.

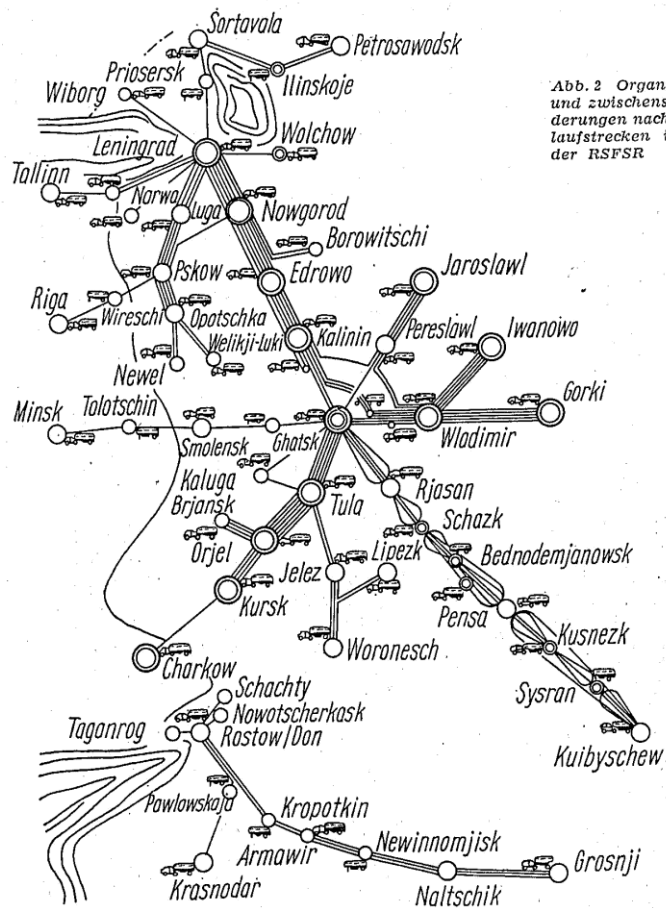


Abb. 2 Organisationsplan für Fern- und zwischenstädtische Güterbeförderungen nach dem System der Umlaufstrecken im europäischen Teil der RSFSR

- Legende
- Truck yard and trailer swap point
 - Trailer swap point
 - Round trip of the trailers
 - Round trip of the drivers

Figure 8: Encounter Traffic in RSFSR

6. Outsourcing in the German Democratic Republic

In the German Democratic Republic (GDR) there were not only centrally led enterprises, but also regionally led ones like in Poland so that one can identify a regional level to enrich complexity in traffic policy. Other than in the Soviet Union, in the GDR the branch ministries did not employ own truck forwarder enterprises. In 1959 the public truck transport had only a share of 19% on the truck transport performance (measured in t*km).⁴⁷ The officials in the transport ministry underscored the better capacity utilization of public transport compared to enterprises' truck fleets.

At the first glance there were many similarities in traffic policy between communistic East Germany and liberal West Germany in the 1950s and 1960s despite completely different institutional settings. As heirs of the Nazi era, the GDR had a dense autobahn network connecting important cities within the Saxonian industrial belt and with the capital of Berlin. The GDR expanded its autobahn network with new lines: Between Leipzig and Dresden in 1971 and between Berlin and Rostock in 1978.⁴⁸ As in the Western world, the GDR stepped-up its production division; partly because of the railway's poor performance in freight transport – especially in the packaged goods sector – it gave priority to truck transport on the autobahns.⁴⁹ Many documents show that the transport department's officials regarded the railway as old fashioned that could not meet modern transport requirements. The railway had to be 'relieved' by expanding trucking. This position was more radical than the traffic policy in West Germany where the officials took the position to protect the railway from the competition by trucks.⁵⁰ Like in the Western world, the GDR (slowly) changed the railway traction to electric power and made fragmentary rationalization investments in cargo transport. This includes container yards and the mechanization of cargo transshipment with palettes, boxes, cranes and forklifts. But these modern equipments were employed only fragmentarily and to a small extend so that no seamless transport chains could be established and the gains of modern logistics could not be earned.⁵¹ When the Soviet Union restricted oil supply for the GDR in 1980, the GDR made a fundamental change in cargo transport. Long-distance transports by trucks that required diesel fuel were cancelled while cargo transport via railway was reactivated.⁵²

⁴⁷ Siegfried Nobis, 'Bis 1965 sind 47 Tausend Tonnen Laderaum umzusetzen', *Der Verkehrspraktiker*, issue 2, (1960): 5.

⁴⁸ Axel Dossmann, *Begrenzte Mobilität – eine Kulturgeschichte der Autobahnen in der DDR*, (Essen, 2003). Richard Vahrenkamp: *The German Autobahn 1920 – 1945. Hafraba Visions and Mega Projects*, (Cologne 2010).

⁴⁹ Hans Bremer, 'Grundfragen des Guterkraftverkehrs bei der weiteren Entwicklung des gesellschaftlichen Systems des Sozialismus in der DDR', in: VEB Guterkraftverkehr Potsdam (ed.), *Ökonomische Probleme im Güterkraftverkehr*, (Potsdam, 1968): 9. Rosemarie Schneider (n. 1 above), 182.

⁵⁰ Vahrenkamp, 'Logistic Revolution' (n. 18 above).

⁵¹ Siegfried Gatsch: 'Der Stückgut Knotenverkehr – Stand und Perspektiven', *DDR Verkehr*, (1971): 59-64. Walter Hammer: 'Drei Jahre Containerverkehr in der DDR', *DDR Verkehr*, (1971): 224-226. Archival sources report on the lack of electrical batteries for forklifts.

⁵² Christopher Kopper, 'Deutsche Reichsbahn' (n. 1 above): 313. The railway did not depend on oil, but got its power by an electrical network generated by local low grade coal (lignite).

In a long series of statements in the 1950s and 1960s, the officials of the transport ministry of the GDR promoted truck outsourcing, following the ‘shining example’ of Moscow. The trucks should be concentrated in public forwarder enterprises that were called ‘VEB truck’ enterprise.⁵³ The officials adapted Khrushchev’s view of highly fragmented truck fleets and accused nationally-owned enterprises of insufficiently using their truck capacity. They reported on the supposed economic advantages of large-scale public truck enterprises where capacity could be fully used.⁵⁴ The transport policy in the transport ministry put the outsourcing policy in action at the end of the 1950s. The VEB truck enterprises continued to be a ‘showcase’ of the shortage economy. They started in the 1950s, when they emerged from very modest beginnings marked by a scarcity both of trucks and yard space. The trucks were old and workers earned low wages, leading the best to drift toward more lucrative employment. The nationally-owned truck enterprises didn’t have the necessary capacity for repair and maintenance work. Archival sources show that in the 1950s and 1960s there was a considerable shortage of trucks, parking space, workers and repair and maintenance facilities in the nationally-owned truck enterprises. Accordingly, truck enterprises could offer only poor quality service.⁵⁵

7. Truck Transport in a Shortage Economy with low Productivity effects

The collapse of the Eastern Bloc in the 1990s highlighted the different transportation structures in the East and West. In the following, the differences in transportation, logistics, and economic systems are to be revealed. The deep structure of specialized suppliers is a distinguishing mark of the economies of Western style and contrasts sharply to the structure of the communist economy in the former Eastern Bloc. The transport infrastructure was poor, rendering a just-in-time delivery impossible. No network of motorways existed besides the GDR, only short and unconnected strips. The Motorway Prag – Brno in CSSR opened as late as 1980. Ambitious plans drawn up in the 1950s for a system of motorway routes from western Russia to central Europe failed to ever materialize.⁵⁶ Sadly, no efficient transport by truck was possible.

⁵³ VEB means owned by the state („volkseigener Betrieb“).

⁵⁴ Siegfried Nobis, ‘Bis 1965 sind 47 Tausend Tonnen Laderaum umzusetzen’ (n. 48 above). Siegfried Nobis, ‘Es ist notwendig, den Werkverkehr einzuschränken’, *Der Verkehrspraktiker*, 2, issue 6 (1959): 9-14. Otto Glum, ‘Sozialistische Großbetriebe – Bestandteil der Rekonstruktion im Kraftverkehr’, *Der Verkehrspraktiker* 2, issue 3 (1959): 7-11. Volkmar Winkler, ‘Über die Zweckmäßigkeit des Werkverkehrs’, *Der Verkehrspraktiker* 1, issue 3 (1958): 4-9.

⁵⁵ VEB Guterkraftverkehr Berlin, *Maßnahmen zur Sicherung der Planerfüllung 1961 on 30 March 1961*, in State Archive Berlin, file Rep. 114/344. Richard Vahrenkamp, ‘The dream of large-scale truck transport enterprises – early outsourcing experiments in the German Democratic Republic, 1955 – 1980’, *Journal of Transport History*, 36, issue 1 (2015): 1-21.

The state economy of the Eastern Bloc eliminated competition, preferred heavy industry and relied on the railway carry out transportation. The economic system failed with the production of consumer goods, leading to crisis and stagnation in the 1960s and 1970s.⁵⁷ Conglomerates of military and heavy industries (combined works) produced the largest share of consumer goods – merely as an additional service. Therefore production performance of consumer goods was only poor. Car production was also weak, a fact confirmed in the GDR by the grotesque delivery period of 13 years for a Trabant car.⁵⁸

Valentina Fava reported on the case of CSSR, where the suppliers for car production were led by different ministries and no coordinated behaviour was possible, hampering the output of car factories.⁵⁹ According to Marius Jastrzab's analyses only 20% of the families of white collar workers in Poland possessed a car.⁶⁰ Cars were distributed as favours of the Counsel of Ministry. In Hungary only the political elite had access to private cars.⁶¹ In 1964 the Soviet Union produced only 185.000 cars for a population of 170 million people.⁶² The meagre car production failed to transfer enough power to the car lobby for road construction to be pushed forward. The road network was in poor condition. This was the conclusion of an account on the Hungarian road system of Tamas Fleischer.⁶³ Since the 1920s, the problem of 'lack of roads' had been repeatedly discussed in the Soviet Union, but the problem was far from being solved. As late as 1986, the 27th Congress of the CPSU called for all collective farms to be permanently connected to the district towns via roads.⁶⁴ A car culture with service facilities such as workshops, spare parts supply, gas stations and rest areas could not develop under these circumstances.⁶⁵ The lack of spare parts caused available transport capacities to fall even further. With the exemption of the GDR,

⁵⁶ Krueger, Karl, *Der Ostblock*, vol.1, (Berlin 1961): 157-160. Mieczkowski, 'European Transport', (n.2 above), 298. Dossmann 2003 describes the construction of the motorway Berlin-Rostock in the GDR.

⁵⁷ Jiří Kosta, *Die tschechische/tschechoslowakische Wirtschaft im mehrfachen Wandel*, (Frankfurt a.M. 2005), 100. The construction performance in the basic industries of the Eastern Bloc fascinated many observers. As late as 1974, U.S. economic historian Thomas Hughes enthused, based on propaganda material of the Soviet Union, about the supposedly better adjustment of the Soviet Union's electricity daily load curve compared to the German network in the 1920s, see Thomas Hughes, 'Technology as a Force for Change in History: The Effort to Form a Unified Electric Power System in Weimar Germany', in: Hans Mommsen et al. (eds.), *Industrielles System und politische Entwicklung in der Weimarer Republik*, (Düsseldorf 1974), 153-166, here p. 155. A critique on the Soviet Union's electric power policy can be found in Klaus Gestaw, *Die stalinschen Grossbauten des Kommunismus*, (Munic 2010).

⁵⁸ Jonathan Zatlin, 'The Vehicle of Desire: The Trabant, the Wartburg and the End of the GDR', *German History*, 15 (1996): 358-380, here p. 369. See also Jonathan Zatlin, *The Currency of Socialism*, (Cambridge, MA, 2007). Zatlin argues that the totally inadequate supply of motor vehicles destroyed public confidence in the economic policies of the SED and contributed significantly to the demise of the German Democratic republic (GDR). For the construction of new Autobahn lines in the GDR see Dossmann, 'Mobilität' (n. 49 above).

⁵⁹ Valentina Fava, 'The Elusive People's car: Imagined Automobility and Productive Practices along the "Czechoslovak Road to Socialism"', in: Lewis Siegelbaum (ed.), 'Socialist Car', (n. 2 above), 17-29, here p. 28.

⁶⁰ Marius Jastrzab, 'Cars as Favours in People's Poland', in: Lewis Siegelbaum (ed.), 'Socialist Car', (n. 2 above), 20 – 46.

⁶¹ György Peteri, 'Alternative Modernity? Everyday practices of Elite Mobility in Communist Hungary, 1956- 1980', in: Lewis Siegelbaum (ed.), 'Socialist Car', (n. 2 above), 47-70.

⁶² Siegelbaum, 'Cars for Comrades', (n. 2 above), 219.

⁶³ Tamas Fleischer, (n. 27 above).

⁶⁴ *Dokumente zum 27. Parteitag der KPdSU*, German edition, Moscow, Progress Publishers, 1986, p. 227. Lewis Siegelbaum, 'Cars for Comrades', (n. 2 above), Chapter 4. Siegelbaum, 'Roadlessness' (n. 2 above).

⁶⁵ About the lack of car culture in Russia see also documents to the 27th Congress of the CPSU, p. 227.

motorways existed only on short segments – if at all.

The Eastern Bloc was characterized by the lack of a developed consumer goods industry with associated truck-based distribution systems. The shops for consumer goods were intermittently supplied by rail, whereas the quality of supply was of secondary importance in an economy of shortage. So no transport logistics in the modern sense existed characterized by speed, precision and the handling of a large variety of goods. Instead punctuality of deliveries was disastrous and threatened the efficiency of spare parts supply. According to the 'Workers and Peasants Inspection', transit times of packaged goods by train in East Germany (GDR) were 17 to 58 days in the 1980s. The same source reports that the transport of so-called express goods in the GDR, in the conurbation Karl-Marx-Stadt (Chemnitz), had absurdly long running times between 6 and 8 weeks, with many of the goods lying disorganized on platforms and exposed to the weather instead of stored safely in warehouses.⁶⁶ The Eastern Bloc was poorly adapted to the transportation requirements of high value goods. In the GDR, many consumer goods were damaged during rail transport due to the lack of shock-resistant packaging.⁶⁷ Also in the transport of unprocessed crops from fields to processing plants, Eastern Bloc logistics displayed serious deficiencies in transport, handling and storage capacity. CPSU General Secretary Mikhail Gorbachev spoke in 1986 of losses between 20 to 30% in the transport chain.⁶⁸ The low rank the transport economy assumed in the political decisions in the Eastern Bloc becomes apparent by the low wages transport workers earned. So the transport sector attracted only the lowest stratum of workers who assumed little if any responsibility for their work. The work force was plagued by absenteeism and a high rate of fluctuation such that the truck companies could not develop a reliable permanent staff. In the cargo service point for packaged goods of Nordhausen (GDR) about 50% of the workers were former prisoners in jail.⁶⁹

The low level of logistical services in the Eastern Bloc was not only induced by the shortage economy but was also based on a second factor, that the communist parties only had a confined view of the infrastructure needs of an economy, due to their Marxist fixation on production. Truck-Transportation and warehouse management were viewed as services that were secondary to production. This assertion is backed by the low wages for transport workers. The communist parties did not consider that only sufficient transport and storage capacity allows the supply of the goods required for production:⁷⁰ Only these infrastructure services, including truck transport, enabled uninterrupted production and therefore 100% utilization use of production capacities. In addition, these infrastructure services led to the structure of an economy based on the division of labour, which can exploit the learning curves and economies of scale provided by specialisation.

⁶⁶ Rosemarie Schneider, 'Das Verkehrswesen' (n. 1 above), 201s.

⁶⁷ Ibidem, 203.

⁶⁸ Mikhail Gorbachev, *Politischer Bericht des Zentralkomitees der KPdSU an den 27. Congress of the CPSU*, Moscow, Progress Publishers, German edition, 1986, p. 51s.

⁶⁹ ABI-Bericht Verbesserung des Stückguttransports on 25 April 1978, Federal Archive Berlin, file DM 1/9949.

⁷⁰ Zygmund Berman and Claes G. Alvstam, 'Investment Policy in the Polish Transport Sector', in: Johannes S. Tismer, John Ambler and Leslie Simons (eds.), *Transport and the Economic Development – Soviet Union and Eastern Europe*, (Berlin 1987), 328-378, here p. 345.

