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THE CONTRACTION OF THE RAILWAY NETWORK IN POLAND, 1911-2002

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In a paper consisting of three parts, the first characterizes railway closures in Poland. Three periods of more extensive closures can be distinguished. The first embraces the years 1944-1948, when some 38 % of the total railway network was destroyed and then partly divested by the Soviet Red Army troops as war-booty. The second period of withdrawals (1961-1990) relates mainly to narrow-gauge railways and is connected with growing competition from road transport. The third and last period of extensive closures came after 1990 and is exceptional due to its extraordinary scale. The majority of the present closures are linked to the poor economic situation of the Polish rail, and decisions are made on the basis that immediate effects may be gained in the form of a lowering of running costs. This is not a conscious strategy of the state and closures frequently lack any economic, social or ecological background. The reasons of the present withdrawals are given in the second part of the paper. And finally, in the third part of the paper, a typical process of the contemporary railway closure is characterized.

Key words: railway lines, network contraction, closure reasons, closure effects, Poland

INTRODUCTION

According to the Polish Rail Transport Act (Ustawa o transporcie kolejowym, article 4, paragraph 2) of 1997, a railway line is a "rail route jointly with its adjacent piece of land, as well as buildings, constructions and control motion

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devices needed for carrying traffic and grounds occupied by them". The growth of the rail network in Poland is well described in literature (see, e.g. Bissaga 1938, Jerczyński and Koziarski 1992, Koziarski 1990, 1993a and 1993b, Lijewski 1959, 1977, 1984 and 1996, Lijewski and Koziarski 1995, Pisarski 1974, Pokropiński 1980 and 2000, Późniak and Wnukowski 1995, Soida 1996, Taylor 1984, Zamkowska 1991) but its contraction is unfortunately not.

The closures of railway lines and their stretches are not singularly typical. Therefore, the process can denote: (1) separate or joint withdrawal of passenger and/or freight services; (2) withdrawal of services from one or more stations on a route which remains open for through traffic; and (3) complete closure of the route (Patmore 1966).

In the case of freight services, the exact date of closure is sometimes difficult to trace. Freight traffic timetables are not easily available; the stopping of carriage needn't be legally announced well in advance, and goods depots handling little throughput can be unrecorded long before a formal closure. Stopping of freight traffic in Poland is done on the basis of an administrative decision of the minister responsible for transport, at present the Minister of Infrastructure. For example, in the end of 2000 on the basis of one decision of the then Transport Minister, freight traffic was stopped on 76 lines of total length of 2440 km (Fojcik 2001, p. 23). As a result of the above mentioned peculiarities, drawn maps of routes closed may contain some inaccuracies.

More amenable for analysis are passenger services. Data are available and more reliable. Apart from public rail timetables, a chronological list of railway closures to passenger traffic has been published (Lijewski and Koziarski 1995). Therefore, available data are suitable for calculations and cartographic presentation. Thus, on this basis one can trace the whole period from the first recorded closure to the end of 2002. Railway closures to passenger traffic and their social consequences have been presented elsewhere (Taylor 2003a).

In this paper, only routes closed completely to passenger as well as to freight traffic are considered, and not withdrawals of one service and/or withdrawals of service from individual stations or halts. The scope of the paper covers Poland's present-day territory from the very beginning of railway construction to the present. Therefore, the purpose of this paper is to provide insight into characteristics of definite closures, with particular attention paid to the last dozen, or so, years.

RAILWAY LINE CLOSURES

A process of closure and dismantling of railway lines in the present-day Polish territory is to be observed from the beginning of the 20th century. However, in the inter-War years, losses were compensated by a construction of new stretches, and the total length of the network grew. A small, temporary decrease in the total length occurred during the First World War only, and was caused by war damage which mainly embraced standard-gauge railways.

The first closures in the beginning of the 20th century comprised narrow-gauge railways, constructed in majority by private capital which reacted very fast to losses, and, as a result, sold or dismantled segments built just several years earlier. As the first recorded closure, a short stretch of the Słupsk narrow-

gauge rail Żelkowo-Siecie is described (Lijewski and Koziarski 1995). The remains, well preserved embankments and excavations near Żelkowo (NE of the city of Słupsk) may be seen until today. Perhaps even earlier, a stretch of the Śmigiel narrow-gauge rail Wielichowo – Ujazd (SW part of the Wielkopolska region) was dismantled, on which passenger traffic was stopped as early as 1903. However, no traces are to be seen on the premises and the date of divesting is difficult to assign. In the early years, narrow-gauge railways were often superseded by standard-gauge lines. For example, this was the case of the Częstochowa – Blachownia – Herby line in central Poland and the majority of the Słupsk railways in northern Poland. The latter were finally divested by Soviet Red Army troops in 1945.

In the history of railways in the present-day Polish territory, three periods of more extensive closures can be distinguished (Fig. 1). In succession these embrace the years: (1) 1944-1948; (2) 1961-1990; and (3) after 1990. Each of the periods mentioned is different: causes, results and the intensity of withdrawals vary greatly.

Until recently, the first period (1944-1948) was treated as a sort of taboo in Polish scientific literature. It is only after 1989 when some literature, mainly of popular character, on the subject appeared, and today our knowledge of this painful period is much greater. Apart from war damage (some 38 % of total length of the railway network, 46 % of total number of the bridges and viaducts, 37 % of rail buildings, and 72 % of rail movement safety facilities were destroyed), great devastation came at the hands of Soviet Red Army troops (so-called *trofiejnyje bataliony*) which entered the Polish territory parallel to the movement of the front line, and devastated or dismantled all infrastructure elements suitable for robbery (first of all made of steel) and rolling stock.

Sometimes Russians used German war-prisoners for dismantling jobs (Pokropiński 2000, p. 124). One can assume, this "day-light robbery" was carried out in NE Poland from mid-1944, and its greatest intensity took place in 1945 (Mapa sieci kolejowej …, 1945). From other sources we know that some elements of the divested Świnoujście – Ducherow and Świnoujście – Heringsdorf standard-gauge railway lines were taken away through the seaport of Świnoujście as late as 1948. A similar dismantling on a larger scale took place in East Germany, too.

In the years 1944-1948, in total 1548 km of standard-gauge lines were closed, of which some 1500 km were divested by Red Army troops. Additionally, these troops divested 222 km of narrow-gauge lines. These lines have never been reconstructed again. The majority of dismantled lines were in the Masurian and Pomeranian Lakelands, less so in western Poland (the Lubuskie Lakeland) and in Lower Silesia (Fig. 2). Especially devastated was the Masurian network in which only several trunk lines remained untouched. One can try to explain this by the nearness of the Soviet annexed area of Kaliningrad Oblast, and by the greater impunity of vanquishers due to their early entrance to the conquered area. By-and-large, dismantling was done scrupulously, which means apart from embankments and excavations, very few traces can be found on the premises: single rails on level (grade) crossings (especially in the Masurian Lakeland), or remains of wooden beddings and small metal accessories (in Pomerania). Materials regained (rails, crossovers, steel accessories, con-

trol motion devices, the traction net, beddings) were taken away to the former Soviet Union as war-booty, and the buildings devastated.

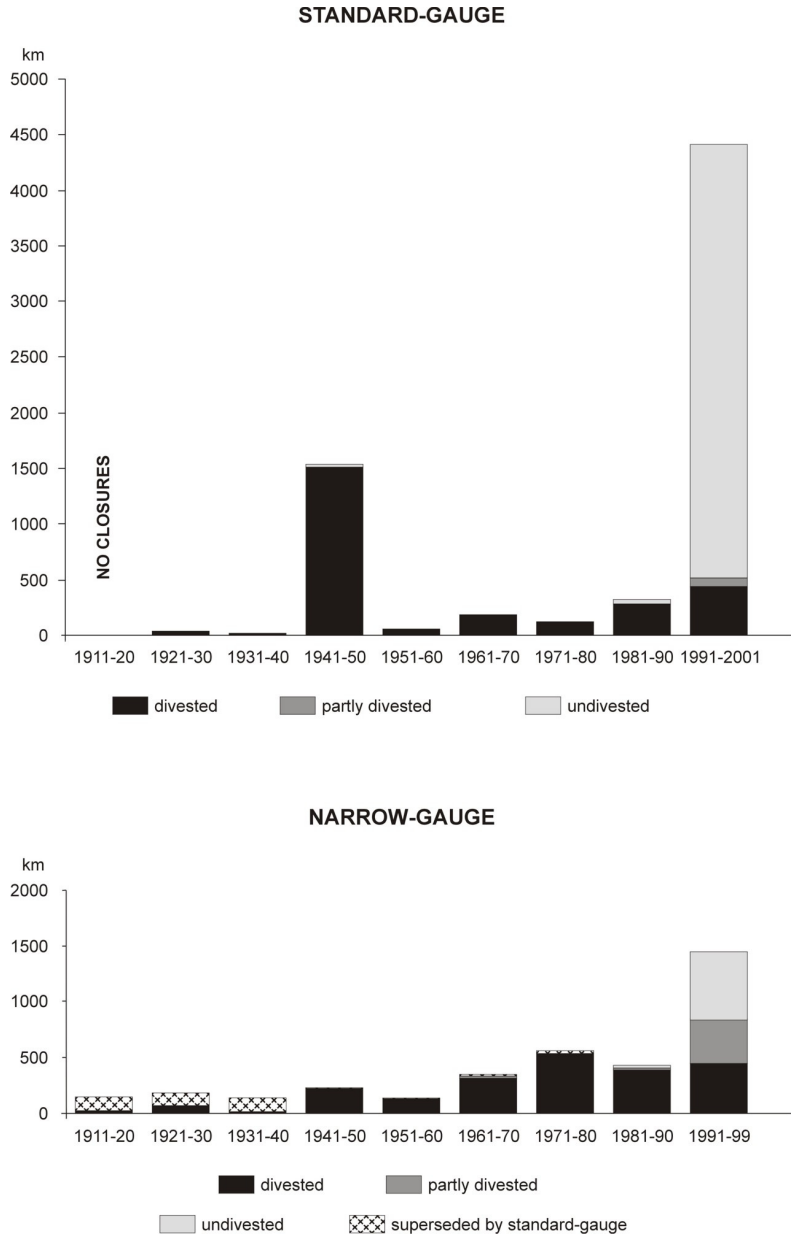

Fig. 1. Railway closures in present-day Polish territory, with a division into decades

Based on data from Lijewski and Koziarski (1995), Pokropiński (1980), Soida (1996) and PKP group, various units, as well as on author's fieldworks (2001-2002).

Moreover, 1787 km of second tracks (Koziarski 1997) on multi-track lines were divested, part of which has never been reconstructed again (Fig. 2). In fact, more railway stretches were dismantled, but in about 1950 Poland partially reconstructed them presuming they had some meaning in a new economic and geopolitical situation. Also around 1950, grounds left after dismantled lines were partly afforested, especially in northern Poland. A similar occurrence also took place in East Germany where as much as almost 4000 km of the second tracks were divested (Kopper 1999, p. 281).

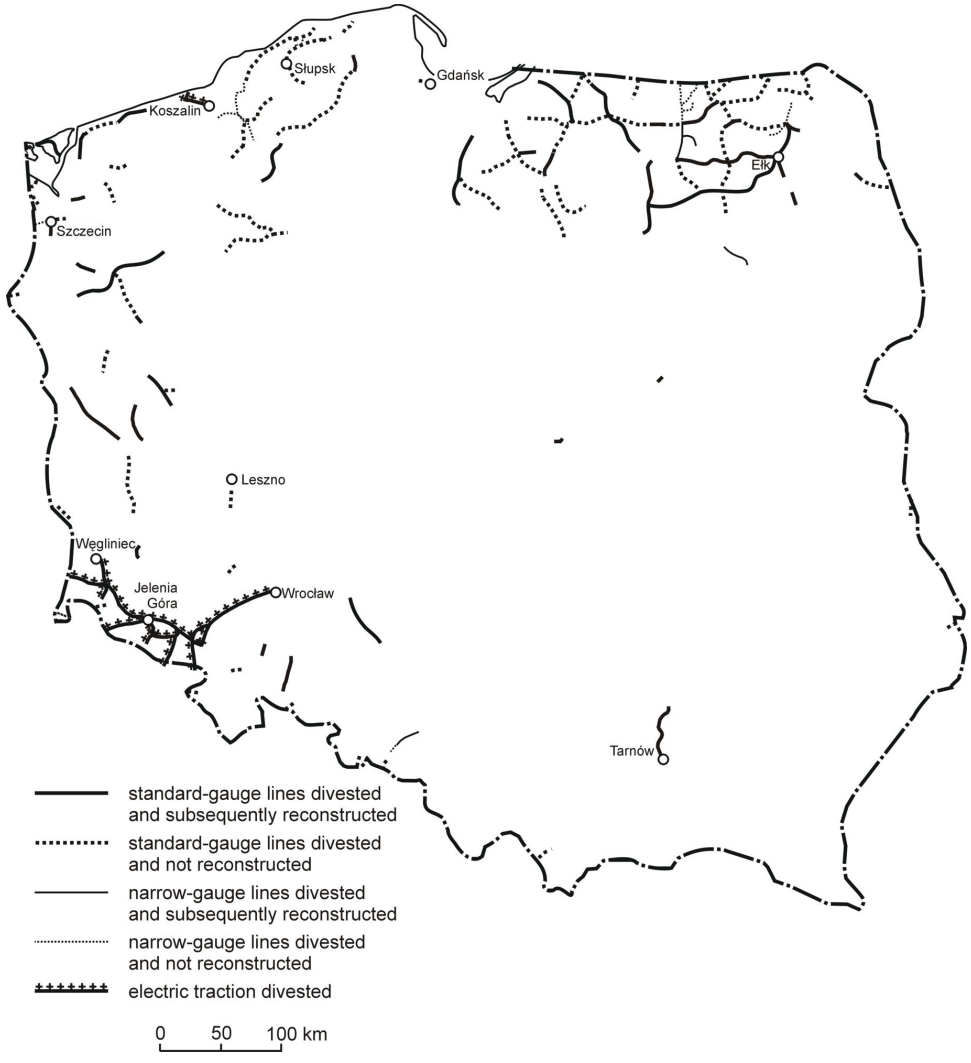

Fig. 2. Dismantling of railway lines by Soviet Red Army troops, 1944-1948

Based mainly on data from Lijewski and Koziarski (1995) and Mapa sieci kolejowej (1945).

Furthermore, the *trofiejnyje bataliony* divested 407 km of electric traction net (Fig. 2), mainly in Lower Silesia (part of which has never been reconstructed again) and on a short stretch on the Baltic coast (Koszalin – Mielno – Unieście). Needless to say, the devastation of the network caused by its partial robbery by Soviet troops has had a great negative influence on the speed and cost of reconstruction of the post-War economy. In Poland of those days, road transport was almost non-existent and railway was a basic transport mode.

The second period of closures (1961-1990) relates mainly to narrow-gauge railways and is connected with the growing competition of road transport in passenger as well as in freight traffic. The most intense period of closures occurred in the 1970s (554 km of narrow-gauge railways of which 528 km were divested), whereas in the 1960s (343 and 316 km, respectively) and the 1980s (433 and 386 km, respectively) the figures were slightly smaller (Fig. 1). It seemed in those days the public transport organised mainly within State Road Transport (PKS) companies efficiently superseded narrow-gauge railways. What is of interest is that the absolute majority of closed narrow-gauge lines were dismantled then. However, dismantling had been carried out not very scrupulously, and still today a lot of traces after divested tracks can be seen (e.g. rails on level crossings, viaducts). Closures and divestitures of standard-gauge railways have been much smaller, and in the 1980s some dismantling of closures did not take place (Fig. 1).

Finally, the third and last period occurs after 1991. As far as physical dismantling being a relatively frequent phenomenon until the end of the 1980s, later on (because of lack of funds) it has been carried out more as an exception. One should remember, however, that the closures nowadays are an administrative act and need not denote the physical dismantling of a line. On the basis of this authors' calculations, in the years 1991-2001 only, 4507 km of standard-gauge lines were closed, that represents the most in the history of railways in the Polish territory, including 106 km transformed into spur-tracks, 433 km divested, and 79 km divested illegally. The remaining 3889 km has been abandoned and undivested. In a similar time-frame, 1422 km of narrow-gauge lines were closed, including 435 km divested, 395 km partly divested (mainly illegally), and 522 km left abandoned (Fig. 1). In Europe, only the closures of the Beeching era in 1960s Britain were greater than those in Poland (British Railways Board 1963).

Disused routes become overgrown with weeds, grass, bushes, and in forested areas also with wild trees. A good example of changes in the last dozen or so years is provided by the railway network of Upper Silesia, once extremely dense, it is much sparser at present (Fig. 3).

Thus, physical dismantling of railway lines in the 1990s was relatively rare in comparison with earlier periods (Fig. 1). This is undoubtedly connected with the necessity of covering additional costs from the state budget and a shortage of funds available. As mentioned above, the majority of dismantled narrow-gauge lines occurred in the 1970s, which is connected with the growing competition of road transport. As opposed to standard-gauge lines, most narrow-gauge ones were dismantled (in total about 59 %, and only 38 % of standard-gauge, see Fig. 4), primarily soon after their closure. An exception here is the 1990s, when proportions between divested, partly divested and undivested lines are more balanced (Fig. 1).

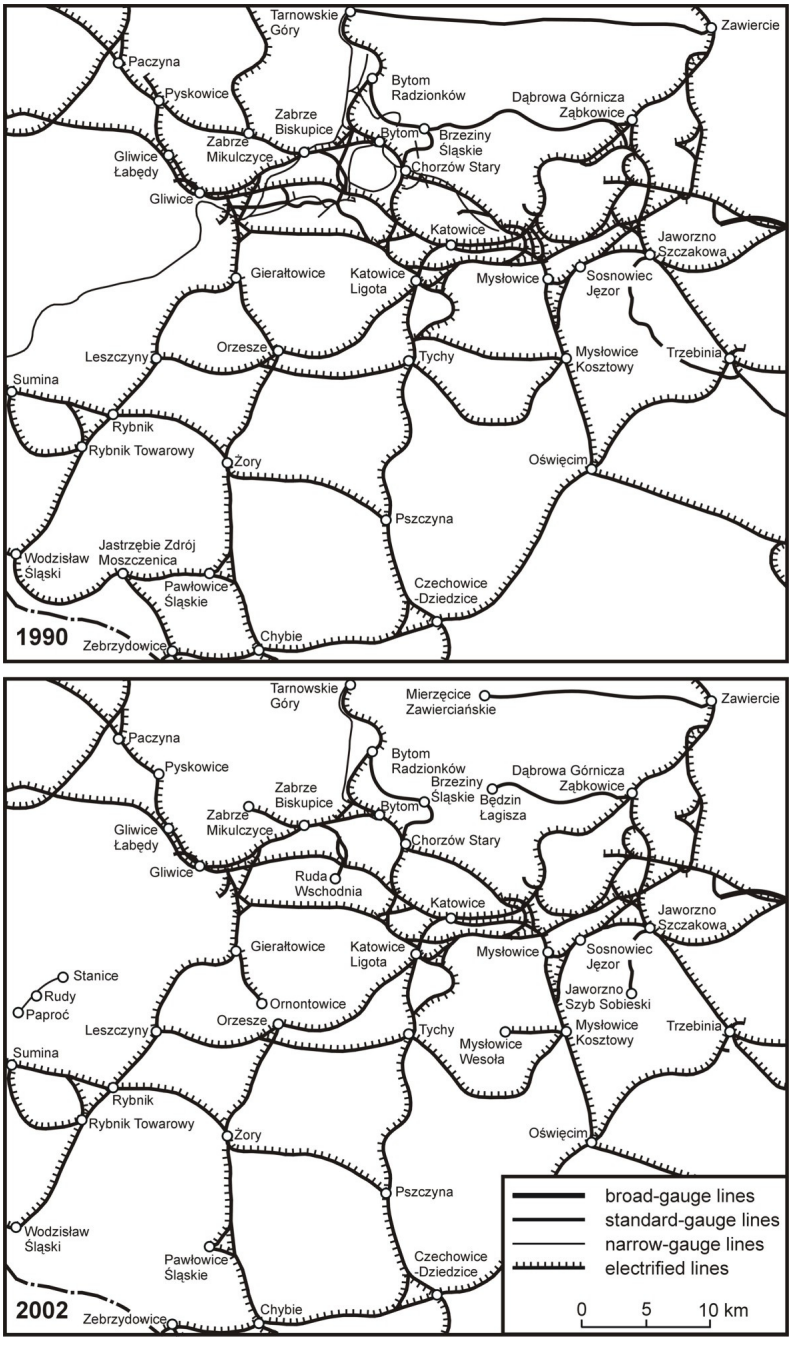

Fig. 3. Railway network of Upper Silesia in 1990 and 2002

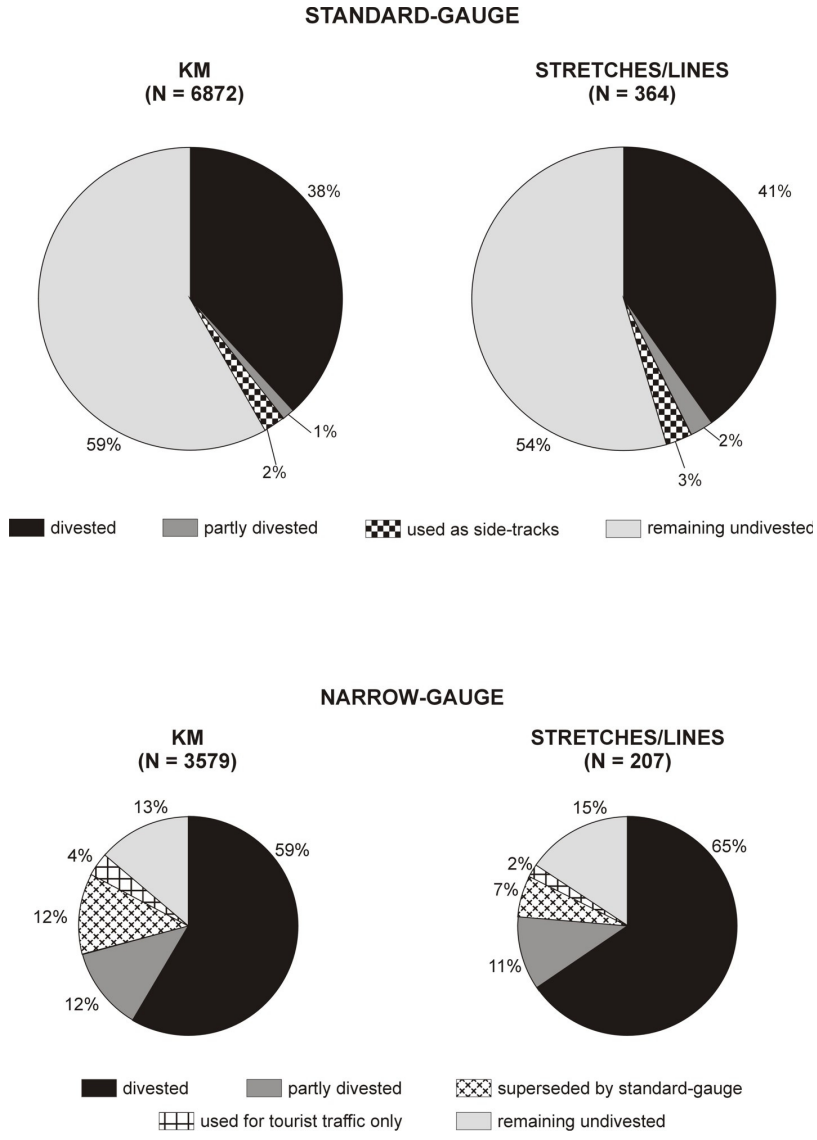

Fig. 4. Present-day structure of railways closed (by percentages of land-use)

Sources: as in Fig. 1

A generalized spatial picture of all closures, including divested railway lines in the present-day Polish territory is shown in Figure 5. As seen, the majority of closures occurred in north-western territories, including the former Prussian sector of the then partitioned Poland. This is the part of the country in which the network had been most dense for historical reasons: Prussia supported rail growth as a means of economic development. Nevertheless, in the remaining

part of Poland, the majority of narrow-gauge lines have been closed, and recently also standard-gauge lines which in majority have fortunately not yet been divested. Thus, paradoxically the closures equalized the differences in network density over the space.

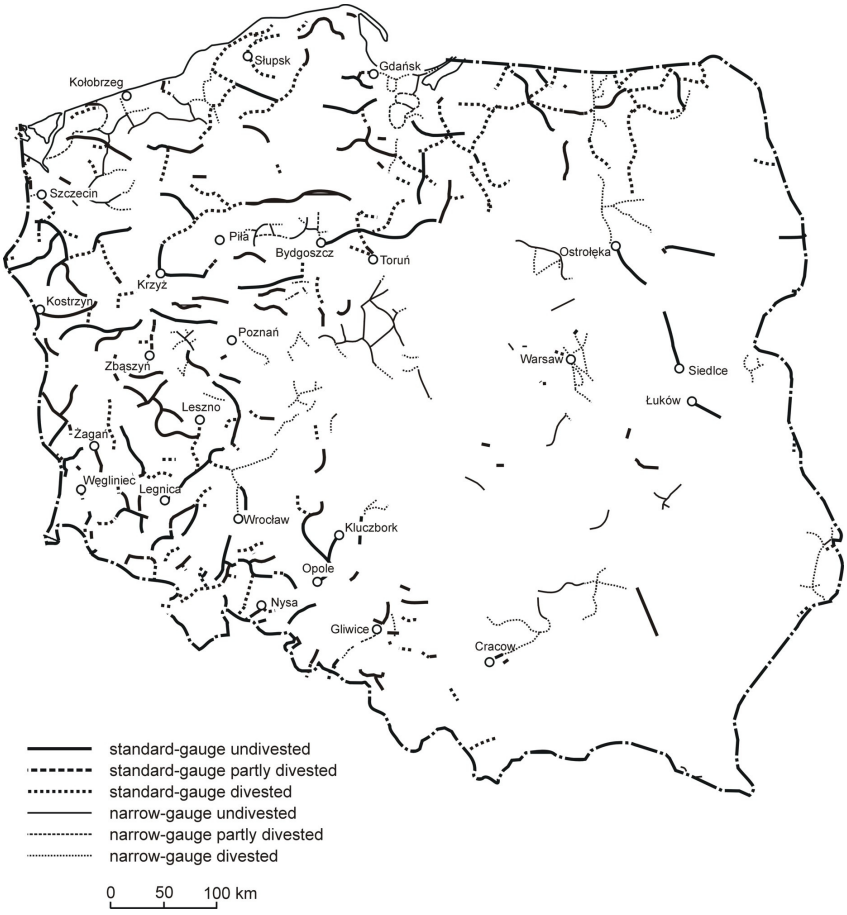

Fig. 5. Railway closures in present-day Polish territory, 1911-2002

Sources: as in Fig. 1

THE REASONS FOR CLOSURES

There are various reasons for closures. In the British situation, J. A. Patmore (1966, p. 108) distinguishes five basic reasons, although "they are by no means responsible for equal proportions of the mileage affected": (1) the technical inadequacy of existing routes; (2) the replacement of existing network to new traffic flows due to commercial reasons; (3) the changes in the commercial relationships between railway companies; (4) the rationalization of facilities subse-

quent to the amalgamation of railway companies; and (5) the excessive length of railway lines, considered in the context of a given time. The latter type of closure has been most frequent and relates to the greatest mileage of closures in the UK. Examples of closures caused by the above reasons can also be found in the Polish situation in the past, but one should remember that the Polish network has never been as dense as the British one.

Present-day closures in Poland may be caused by the physical exploitation of a railway line which is not intended to be repaired and, as a result, traffic is withdrawn. Much more often, however, there are economic reasons for railway closures.

For a dozen or so years the Polish rail (PKP) has been in deep crisis caused by external and internal reasons. Amongst external causes the most important has been an incorrect state policy towards PKP. By-and-large this policy is inefficient, incompetent and inconsistent, and activities taken are usually much delayed. State influence embraces mainly legislative and financial spheres which are much interconnected. The worsening of the financial situation of Polish rail stimulated first, the passing of the parliamentary Rail Transport Act of 1997 and, later, the Polish State Rail Commercialization, Restructuration and Privatization Act of 2000. According to the latter, being a sort of reparation programme, the rail should first be commercialized, and – later – be the subject of financial, property, employment and organisation restructuring (Taylor 2004).

A very important factor is the poor economic situation of Polish rail (PKP) and excessive liabilities, estimated at zloties 12 billion (about €2.6 billion). In 2002 alone, the losses of the PKP group were zloties 2.7 billion (€0.59 billion) despite a zloties 2.3 billion (€0.5 billion) subsidy from the state budget. On the whole, freight traffic is profitable, but more than zloties 1.3 billion are unrecovered debts of iron and steel works, cokeries and coal mines. Thus, one of the largest Polish firms exemplifies the gradual worsening of economic efficiency.

Until now, the main source of rail's financial problems has been unsatisfactory subsidy to passenger services (Wielądek 2002), amounting to a maximum of 22-32 % of expectations. The receipts from ticket sales cover only 18-33 % of costs (on average only about 24 %), and most losses are created in short-distance local and conurbation services. More profitable (about 80 % of costs is covered by ticket sales) is long distance passenger traffic (Stachowska 2001). In the above mentioned reparation programme, statutorily participation of the budget is assured to result in a subsiding of unrenumerative passenger traffic. However, until now there have been tremendous disproportions between the size of necessary subsidies and the real-world amount of passenger services subsidies provided by the state budget. Moreover, from the beginning of 2001, there has been no more possibility to further subsidise passenger services from the incomes derived from freight traffic. Yet in 2000, rail took a decision to suspend local and regional traffic in cases when unrenumerative passenger services were above 80 % (Stachowska 2001). As a result, passengers from side-lines do not feed into trunk-line traffic.

External reasons should also include a decreasing demand for rail transport. As a result, the carrying potential of rail has been used to an increasingly smaller degree. There has been a tremendous decrease in bulk cargo traffic, es-

pecially of coal and coke, as well as in passenger traffic (from 1990 by one-half). In 2000, the share of goods carried by rail fell to 36.6 % tonne-km of the whole transport system, and the share of passengers to 29 % passenger-km ("Infrastruktura – klucz do rozwoju" 2002). The reduction in cargo traffic is a direct result of structural changes in the Polish economy and its transformation towards more intensive development. The reduction in passenger traffic is a side effect of the rapid growth in private motorisation. Polish rail loses about 8 % of passengers annually, while in neighbouring countries a several percent growth is to be observed. The decreasing freight traffic is profitable, while passenger traffic has been unrenumerative.

The inappropriate state policy towards rail, the objective fall in demand for rail transport, the decrease of receipts from rail traffic and the curtailment of budgetary subsidies to statutory reduced rates in passenger services, for example, are not the only reasons for the present-day difficulties of the PKP group. Equally important are: the real-world monopoly of the PKP and all related consequences, its especially too high operating costs, extensive overstaffing, interparty contents, "trade-union nepotism" (Olejniczak 2000, p. 2), illegal transfer of some profits to cargo forwarding and consulting firms, and - first of all - fatal management resulting in waste of means and no general outline of repairing the existing situation. The commitment of rail to implement reforms with only people from within its own structure has not been a good idea.

Fatal management has led to a continuous decapitalization of technical infrastructure – tracks, electric traction net, control motion devices, buildings, constructions. Nowadays, degradation of assets is enormous, and can not be compensated by European Union funds appropriated for modernization of some railway lines. An example is provided by the modernized E20 Rzepin – Warsaw trunk line in which several mistakes were made and means lost irrevocably. Other examples are given by repaired and even electrified lines on which passenger traffic has been stopped soon after. Such procedures testify to chaos in decision-making. A lot of newly electrified lines were recently deelectrified because of possible robbery of traction net, and some even await physical dismantling of the track.

A TYPICAL PROCESS OF CONTEMPORARY RAILWAY CLOSURE

As opposed to neighbouring countries, the intensity of passenger traffic in Poland is rather small. In Hungary, Slovakia and the Czech Republic, trains' frequency is much higher. For example, Czech rail sets out 7238 passenger trains a day, German rail – 30552 trains, while PKP just 4741 in 2000 and about 3650 in 2002 (Instytut Rozwoju i Promocji Kolei, according to the Polish Press Agency). Press announcements indicate that in 2003 their number should be decreased by 25 % more.

When population is taken into acount, in 2002, 6.44 journeys annually per one inhabitant took place in Poland, while in the Czech Republic it was 18.46, in Hungary above 20, and in Germany above 22 trips (Instytut Rozwoju i Promocji Kolei), despite much better developed road transport. These data partly reflect a lower affluence and mobility of Poles but also confirm an interdependence between frequency of trains and frequency of rail usage: the higher number of connections, the higher probability of their usage, and *vice versa*.

The above mentioned empirical regularity also occurs in the case of single lines: a smaller number of links causes potential passengers to become unaccustomed to the usage of rail as a transport mode. According to the author, Polish rail frequently uses this regularity by limiting the number of trains (e.g. to two pairs per day) before stopping of regular passenger traffic. The limitation can take place gradually over several years, and times of journeys can be less and less convenient. Potential passengers have become more and more disappointed with rare and inconvenient times of trains (e.g. at night), and as a result look for another transport mode, for example buses. A lower number of passengers means less money gained but is a basis for stopping regular passenger traffic (Fig. 6). Such decisions are based on the immediate effects of lowering of running cost of rail and taken into account from the position of a bankrupt enterprise, and not a conscious state strategy, often without consideration of all effects in wider economic, social and ecological contexts and by neglecting external transport costs (Kondraciuk-Gabryś 1999, p. 9). Less frequent is the situation when traffic is stopped if a number of trains is greater (5-8 pairs in 24 hours). An exception is the situation when train connections are introduced again after a several-year break.

Stopping of regular passenger traffic can be linked with the possible introduction of a substitute coach service which should alleviate negative social consequences of rail transport withdrawal. Usually private bus carriers run such substitute traffic on behalf of rail. By-and-large, not many people use this sort of transport, and all this business is in deficit. After two years or so, such bus links are closed, but possible social protests no longer take place. This sort of substitute transport was quite frequent in the mid-1990s and nowadays has disappeared.

Occasional passenger services, e.g. for tourist traffic, can take place on lines without regular traffic (Fig. 6). This is in line with the Rail Transport Act of 1997. Usually, the next step is a complete withdrawal of the PKP passenger traffic and, later, of freight traffic. An unused line may also be transferred to a self-government organisation which is possible according to the above mentioned Act. Local connections are often very important for their communities. As a result, many self-governments were recently interested in the free takeover of the existing rail infrastructure, especially if the PKP is not interested in the running of local traffic. Unfortunately, very few standard-gauge lines were taken over by self-governments. Greater success can be seen in the takeover of narrow-gauge lines by self-governments. Then the regular or irregular traffic is run by private operators with varying results.

In practice, there are some problems in taking over railway lines. The main one is the unwillingness of the PKP to transfer all assets, including existing rolling stock. The majority of self-governments have no funds for repair and maintenance of lines, and for purchase of new rolling stock, for example modern rail-buses. On the other hand, some rather few self-governments have used the opportunity of free takeovers to gain interesting fixed assets for other purposes (e.g. for resale), and not for the continuation of carriage activities. Both cases are not in line with relevant law but take place in the real-world situation.

The result of renumerativeness analysis carried out by rail is taken into account during the decision-making process to stop traffic on a given railway line

or stretch. Without entering into detail, a method of three thresholds analysis takes into account partial cost accounting. As a result, the economic threshold of renumerativeness is lowered to a level in which the advantages of carrying traffic are compared. If the level of the first threshold is negative, and self-governments do not agree to support traffic, Polish rail stops passenger traffic, and the existence of a line is threatened. In cases when the first threshold is zero or positive, and the second one – negative, a difference can be established which is a minimum amount of subsidy requested from a self-government. If such subsidy is not received, then the lowering of fixed cost is taken into account, for example by lowering the standard of service. If the analysis reveals no chances for improvement of the situation in the longer run, then a decision is made to stop the traffic on a given line (Wytyczn 2000 and Kuczyńska 2002).

As mentioned above, the decision to stop traffic is made by the Minister of Infrastructure. The closure is not tantamount to the dismantling of rail track. The legal procedure is as follows: total stopping of traffic over at least a six-month period and approval from the relevant self-government. Additionally, at least one of the elements of fixed assets should be divested, therefore making the carrying of traffic impossible. But in cases when traffic is to be reduced only, no approval is needed. As a result, an advantageous position of the rail board in relation to the self-government is visible.

Since physical dismantling of unused line is expensive, it is treated as an extremity in case there are no candidates to take over the facilities. There is no rule as to how fast a closed-line is to be dismantled. Frequently disused line, especially a standard-gauge one, is abandoned (Fig. 6), hence some elements are stolen. Only in very few cases, physical dismantling has taken place some years ahead of the formal administrative decision on railway line closure.

Formally, after the dismantling of track, rail is committed to the recultivation of agriculture and forest areas. For example, if the former line has cut property belonging to one farm, excavations and embankments should be removed. Fieldwork studies in 2001 and 2002 do not confirm this: usually track is divested, sometimes jointly with broken stones. Only in typical agricultural areas of more intensive production are the grounds used for agricultural purposes. Generally, a poor quality dirt road or cycle path run on the former track. More often it takes place along the Baltic coast or in the Pomeranian Lakeland, but in many tourist-attractive areas the land is simply abandoned. Sometimes the acquired premises are used for the widening of roadway or the creation of pavement. Aforestation doesn't take place, which was very common at the turn of the 1940s and 1950s. Station buildings are transformed into houses for former railway employees, less so for other purposes (production, services etc.). However, rail does not rush the transfer of property rights of its buildings, and necessary repairs are not carried out, and as a result a lot of buildings are devastated (Taylor 2003b).

CONCLUSION

Excessive closures of railway lines can leave Polish rail and the Polish economy in a disadvantageous situation. Nowadays the average density of railway network is 1.5 times smaller than in Germany and the Czech Republic, and liq-

uidatory intensions relate to many lines and stretches in the eastern part of the country where the network is very rare when compared with European standards, and their further reductions may bring about a total divestment of some regions from this element of infrastructure (Kondraciuk-Gabryś 1999, p. 9).

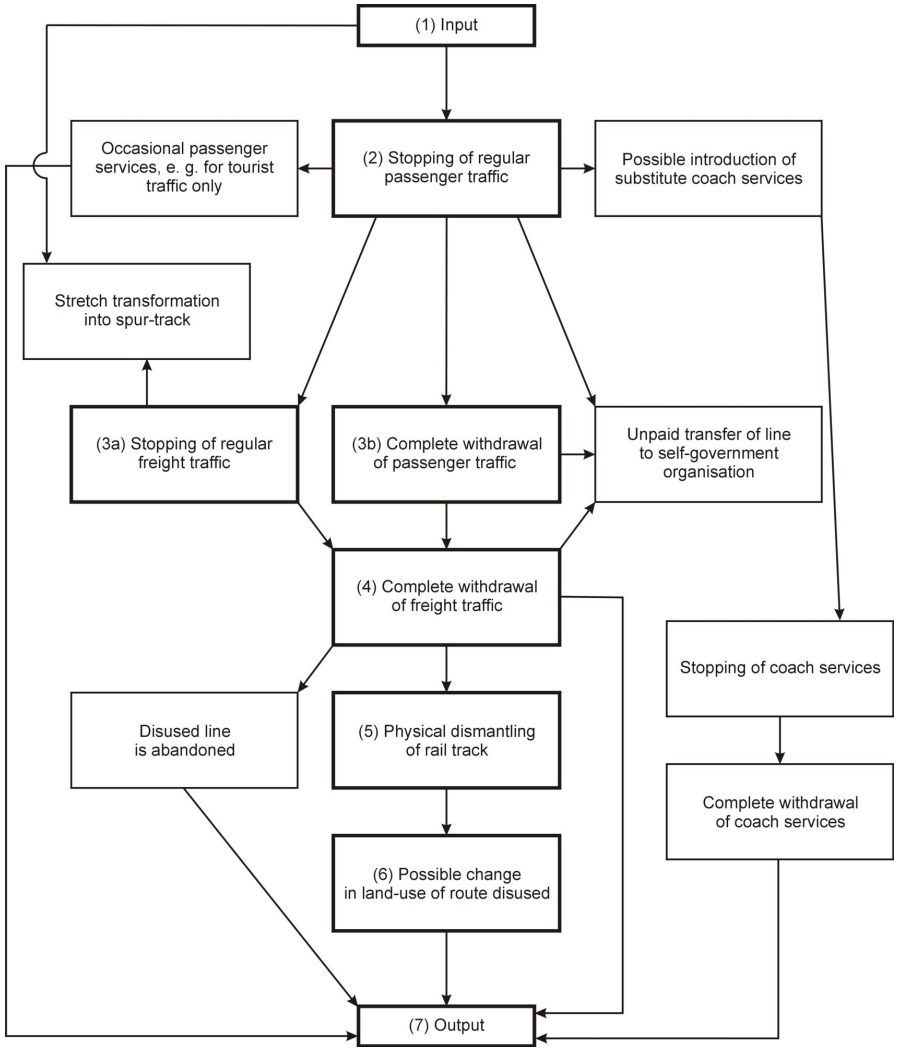

Fig. 6. A typical process of railway closures, 1990-2002

One should remember that the railway network is an integrated system and this element has value. The breaking up of the network into pieces, which has taken place in Poland from dozen or so years and the liquidation of connections existing in the consciousness of passengers, has meant the loss of part of the national wealth. Authorities did not prepare a real programme of regionalization. In this respect Poland is not in line with trends, patterns and experiences of the

EU, taking into account ecological and social aspects (Późniak 1999, p. 5). Rail transport is environmentally friendly, its external costs (unpaid by the user of vehicle or service) in the Polish situation are about 31 times lower when compared with road transport.

One of the prerequisites of the PKP reform should be minimization of social costs and losses. Unfortunately, this assumption has not been treated trustworthily, especially in relation to the results of solutions proposed. Total closure of over 4500 km standard-gauge and 1400 km of narrow-gauge lines, and even greater regress in passenger traffic (over 6200 km and almost 750 km, respectively) confirm this statement. There is no other country in Europe in which such a shock therapy towards rail and citizens has been introduced (Późniak 1999, p. 5).

Self-government regions have a duty to organise and subsidise regional passenger traffic. But the existing legal regulations do not embrace solutions in situations when a subsidy is not provided in whole or in part according to costs incurred. On the other hand, self-governments have not gained real rights for management of local lines. It is only an opportunity to approve the possible takeover of relevant facilities which is left to them. On the whole, the position of self-governments in relation to the PKP is relatively weak. The situation could be changed if self-governments were to receive more funds rather than rail for the local transport.

The low quality of services is one reason why customers are not interested in usage of rail transport, which speaks for an increase of the deficit and the deteriorating quality of carriages. In consequence, the number of passengers and the volume of goods carried is smaller, and a "spiral of the railways' collapse" occurs. A turning-point could be the entering of foreign carriers into the Polish market, which is planned in freight traffic for 2004, and in passenger traffic probably by 2008. A transformation of the PKP group should lead to a creation of commercial firms independent from state administration, but performing public services on a basis of negotiated contracts commissioned by the central government and self-governments.

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Zbigniew T a y l o r

REDUKCIA ŽELEZNIČNEJ SIETE V POĽSKU V ROKOCH 1911-2002

Štúdia, pozostávajúca z troch častí, charakterizuje rušenie železničných tratí v Poľsku. Rozlišujú sa tri obdobia, kedy došlo k väčšiemu rušeniu železničných tratí. Prvé je obdobie v rokoch 1944-1948, keď bolo 38 % tratí zničených a čiastočne zabavených Červenou armádou ako vojnová korisť. Druhé obdobie (1961-1990) sa týka najmä úzkokoľajných tratí a je spojené s narastajúcou konkurenciou cestnej dopravy. Tretie, posledné obdobie extenzívneho rušenia tratí v Poľsku, nastalo po roku 1990 a je výnimočné pre svoj nezvyčajný rozsah. Väčšina súčasných likvidácií sa spája so zlou hospodárskou situáciou poľských železníc, pričom sa rozhoduje na základe okamžitého efektu, ktorý má znižovať prevádzkové náklady. To nie je premyslená stratégia, pretože rušeniu tratí často chýba akékoľvek ekonomické, sociálne alebo ekologické zdôvodnenie. Dôvody pre takýto postup dokumentuje druhá časť štúdie. Jej tretia časť prináša charakteristiku rušenia železničných tratí v súčasnosti.

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