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Transport, Water, and Urban
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Technical Department,
Europe and Central Asia Regional Office
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Railway Reform in the Central and Eastern European Economies

Philip W. Blackshaw
and
Louis S. Thompson

A strategy paper for restructuring railways to meet the changing needs of the Central and Eastern European countries.

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This paper — a joint product of the Transport Division, Transport, Water, and Urban Development Department and the Technical Department, Europe and Central Asia Regional Office — is part of a larger effort in the Bank to clarify and refine the Bank's approach to institutional reform. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact TWUTD, room S10-029, extension 31005 (May 1993, 18 pages).

In May 1992, the World Bank hosted a Railway Roundtable in Vienna, Austria, attended by transport ministers, advisors, and senior railway staff from the Central and Eastern European (CEE) countries. The Roundtable reviewed recent trends in the railways' roles in these countries and identified appropriate actions to address emerging transport issues in the CEE region. The Bank prepared this strategy paper based on the discussions and the apparent widespread consensus that emerged at the Roundtable.

The financial situation of the CEE railways is beginning to deteriorate rapidly, and the CEE railways are not well positioned to provide good, reliable service to their increasingly market-driven customers. These countries are thus under increasing pressure to restructure their railways to relieve financial pressures and meet future needs.

Railways in market economies have faced a steadily declining role in the transport market, and have typically dealt with emerging problems by "tinkering at the margin" — for example, by debt write-offs — and thus delaying attacking their underlying structural problems. Many of these governments have come to the conclusion that "drastic surgery" is required — as illustrated by the British, German, and Japanese railways.

The agenda for change that emerged from this Roundtable emphasized developing a strategic plan for restructuring the railway. This plan should define the market; project the level of activity (tons, ton-kilometers and freight tariffs, passenger-kilometers and passenger fares) for all business activities; include a five-year financial plan for the different lines of railway business (to make options concrete); and define all government policies and changes that would put the railway on a level playing field with competing modes of transportation.

Two items on the agenda for change (among many others) are to:

- Convert the current railway "enterprise" or ministry into a joint stock company (JSC) or, at least, an independent enterprise operating under normal commercial law. The board of directors should include representatives from government, the railway executive *and* high-level business or public representatives from outside of government. Formation of a JSC or independent enterprise does not necessarily imply privatization of the railway because the underlying assets may well remain in public hands. The objective is to change the enterprises' authority and enhance their commercial orientation.

- Have the explicit mission of the railway be to operate freight and intercity passenger services on a commercial basis, with revenues from services covering all costs, including a return on investment. "Social" services, such as urban passengers, should be identified and supported by the appropriate governmental agencies.

The World Bank

RAILWAY REFORM IN THE CENTRAL AND EASTERN EUROPEAN (CEE) ECONOMIES

Philip W. Blackshaw
Louis S. Thompson

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RAILWAY REFORM IN THE CENTRAL AND EASTERN EUROPEAN ECONOMIES

INTRODUCTION

1. In May 1992, the World Bank hosted a Railway Roundtable in Vienna, Austria, attended by transport ministers, advisers, and senior railway staff from Central and Eastern European (CEE)[1/] countries. The purpose of the Roundtable was to review recent and prospective trends in the role of the railways in these countries and, based on experience with similar situations in other countries, identify appropriate actions to address emerging transport issues in the CEE region. While the Roundtable did not attempt to reach agreement on a formal communique summarizing conclusions, this strategy paper has been prepared by the Bank on the basis of the discussions and the apparent widespread consensus emerging at the Roundtable.

2. The financial situation of CEE railways is beginning to deteriorate rapidly. In Hungary, the railway (MAV) operating loss doubled between 1987 and 1991, is forecast to double again in 1992 and accounts payable have almost trebled since 1989. In Czechoslovakia, the railway (CSD) subsidy doubled just between 1990 and 1991, and is climbing rapidly in 1992. In Poland, the ratio of operating revenues (before subsidy) to operating costs fell from 87 percent to 70 percent between 1988 and 1991. In Croatia, the same ratio fell from 83 percent to 49 percent between 1985 and 1991. All of the CEE railways are losing traffic and market share, with rail traffic in Hungary, Poland, and Czechoslovakia now hovering at about 40 percent below 1988 levels. In Bulgaria, despite substantial tariff increases, revenues fell far short of covering working expenses, and the railway is facing bankruptcy. Further, there is clear evidence that the transport systems of the future are going to require high quality and reliable service, requirements which the CEE railways are not now well postured to meet. All of these factors are working together to cause governments and their railways to embark on programs to restructure the railways to meet future needs. These pressures have four sources, of which three have tended to reduce the railway's role and one has acted, or may act to increase the railway's role slightly.

3. First, the formerly socialist CEE economies are undergoing a basic change in structure, away from the production of basic materials and heavy industry (both natural rail markets) and toward the production of manufactured goods and services where transport speed and reliability requirements are higher. Secondly, as the transport infrastructure develops, markets are deregulated, and road transport privatized, competition from other modes of transport, especially road, will erode the traditional market share which railways have held. Thirdly, the loci of economic activity are becoming less centralized, placing higher emphasis than in the past on the ability of a mode to provide door-to-door services, and to provide convenient connections with road-oriented Western

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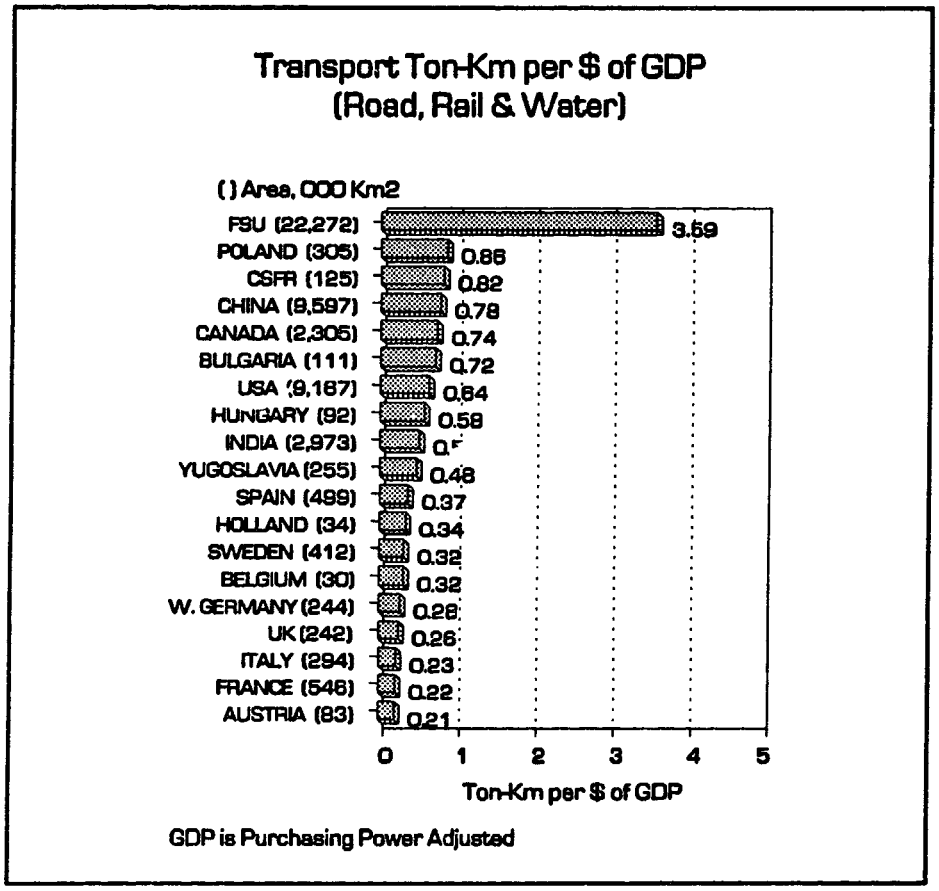
1/ For purposes of this paper, "Central and Eastern Europe" includes Albania, Bulgaria, The Czech Republic, Hungary, Poland, Romania, and The Slovak Republic. It does *not* include the Commonwealth of Independent States (CIS) countries or the Former Soviet Union (FSU) countries, which may (or may not) have similar problems. In this paper, "Czechoslovakia," "CSFR," and "CSD" refer to the former Czech and Slovak Federal Republic and the railway which existed before these countries decided to separate. At the present time, it appears that many of the prescriptions in this paper may apply to at least some of the CIS countries as well, but exactly how, and in what relative proportions, is not yet known.

provide door-to-door services, and to provide convenient connections with road-oriented Western Europe. The fourth factor, operating in the direction of increased rail demand, is the environment: all economies are facing the problem of growing air and noise pollution in their major urban centers. Under certain circumstances, rail's environmental advantages will encourage more rapid development of rail services in urban commuter applications.

4. All of the above considerations will operate with particular force in the structural transformation which the former socialist economies in the CEE and the CIS countries are now undergoing. This is because the past practice of emphasizing production of basic industrial materials and on under-pricing of transportation relative to other activities has acted to create excessive use of transport. Figure 1, for example, compares the intensity of transport use (measured in ton-km of total transport per US$ of GDP - purchasing power corrected).[2/] The uniform ranking of socialist economies toward the top furnishes strong evidence of their excess use of transport per unit of economic activity compared with use of transport in market economies. Figures 2-5 display typical examples of the reasons for transport intensity: all of the primary commodities and materials of construction, and most of the heavy, low value commodities generating transport activity, are produced in much greater quantities in the CEE countries and the former Soviet Union (FSU) than in the western economies.

Figure 1



2/ This is at best an approximate calculation. Detailed studies broadly confirm the conclusion that the former socialist economies are highly transport intensive. See, for example, Esra Bennathan, Julie Fraser, and Louis S. Thompson, "Freight Transport Demand, Determinants and Intensity," World Bank, INUTD, September 1992.

Figure 2

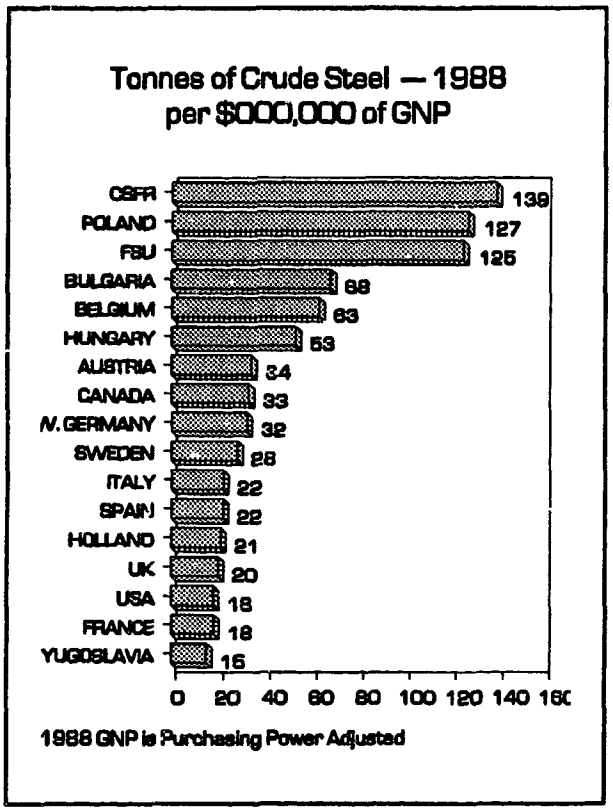


Figure 3

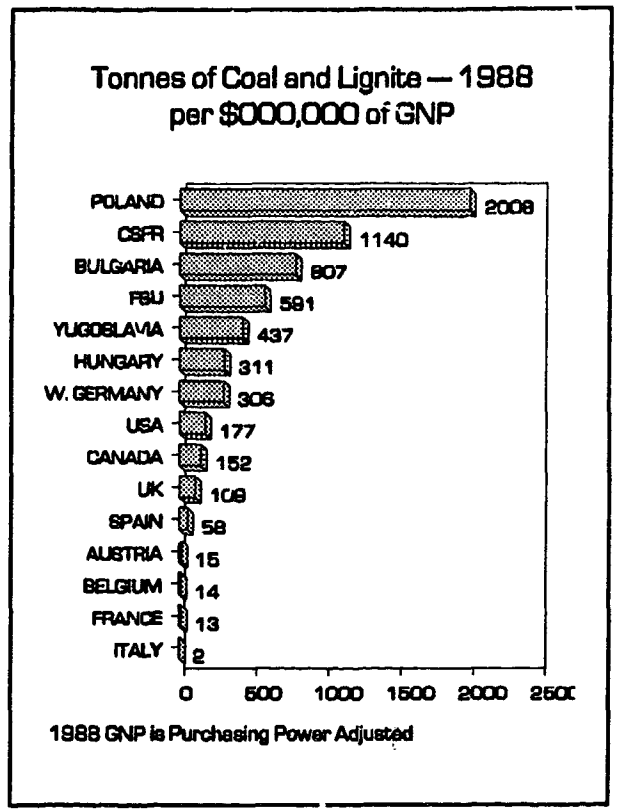


Figure 4

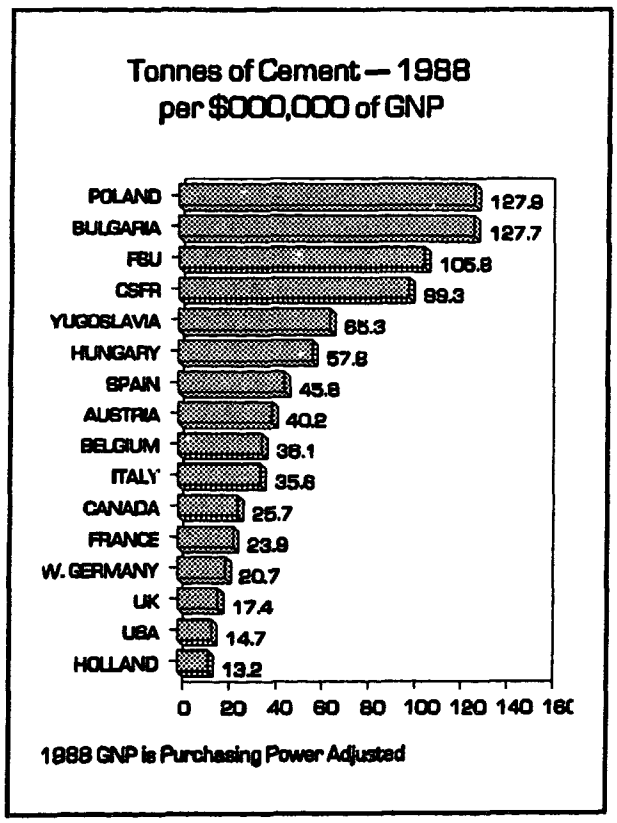
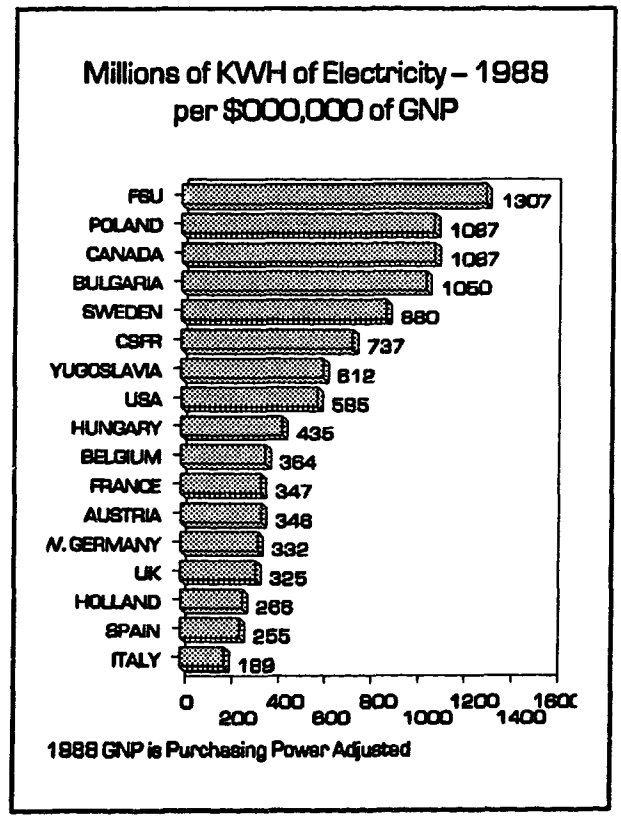


Figure 5



5. Figure 6 carries the transport intensity issue one step further. It shows for socialist and non-socialist countries the degree to which rail dominates the surface transport market available to rail and truck. Figure 6 also takes into account the size of the country, by comparing rail share with the average length of haul for rail, an adjustment to take into account rail's advantage over longer trip lengths. From Figure 6 it is clear that the socialist economies make a distinctively higher use of rail. As these economies restructure, it seems equally clear that there will be a shift in the modal balance of transportation away from rail and toward truck. Figures 7-9 display much the same point for passenger services in the socialist economies, showing that rail occupies a disproportionate share of the passenger market when compared with the developed economies of the West, primarily because the rates of automobile ownership have been artificially constrained, but are now growing rapidly in the CEE and CIS countries.

Figure 6

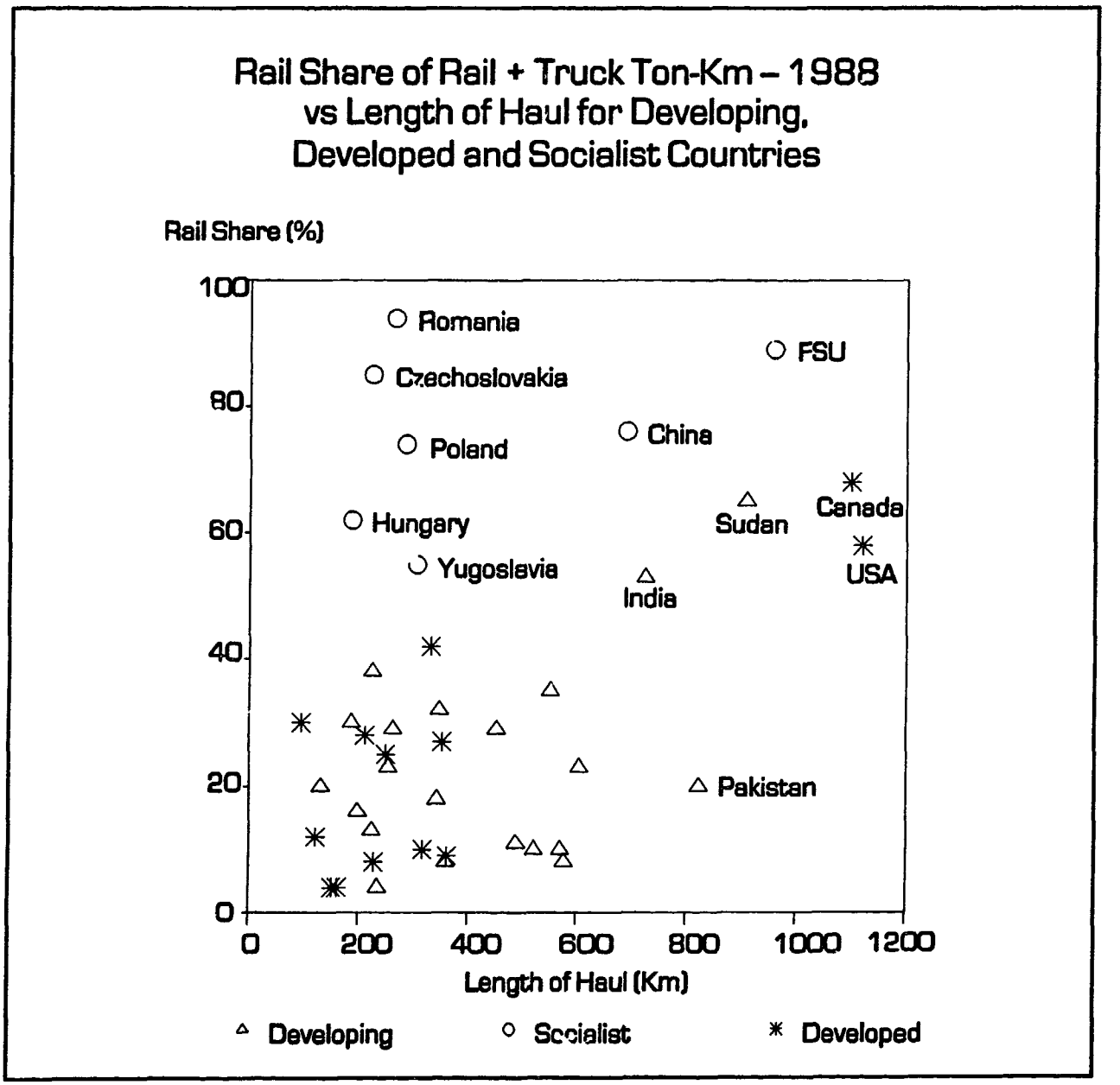


Figure 7

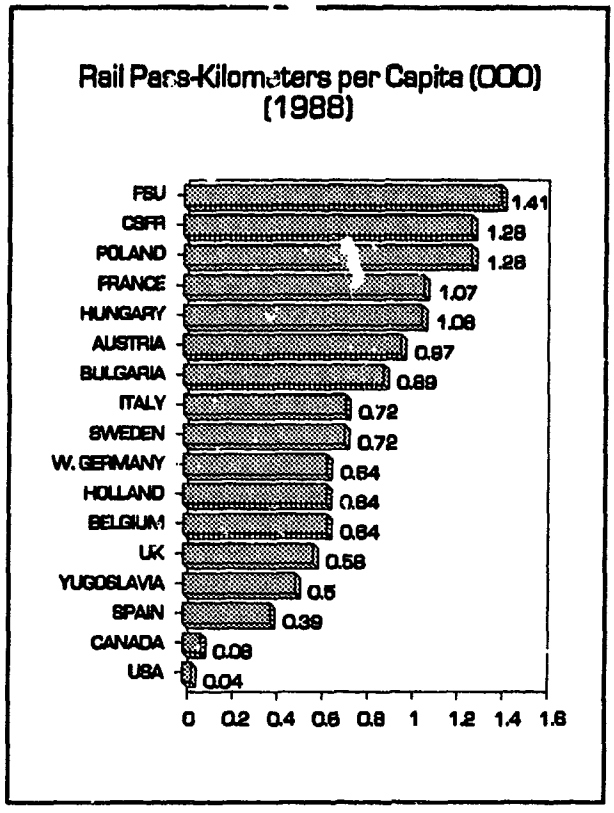


Figure 8

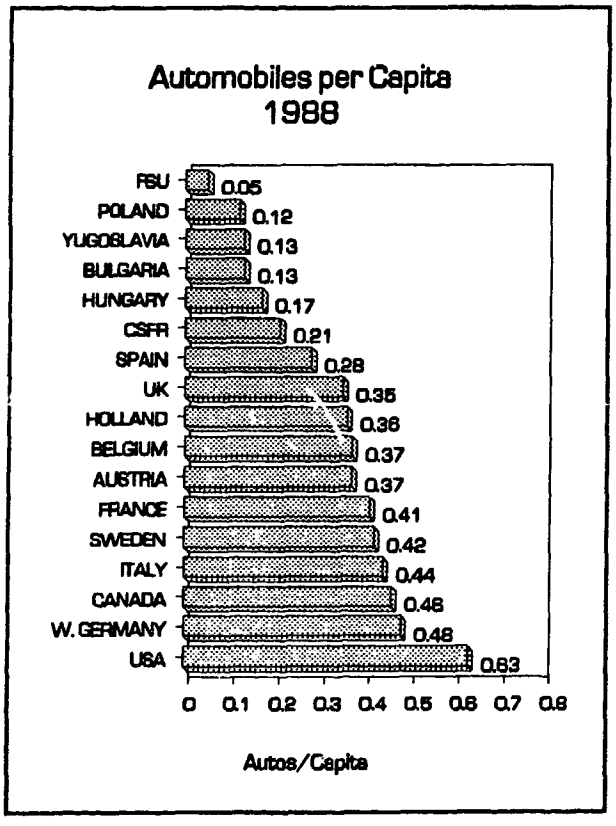
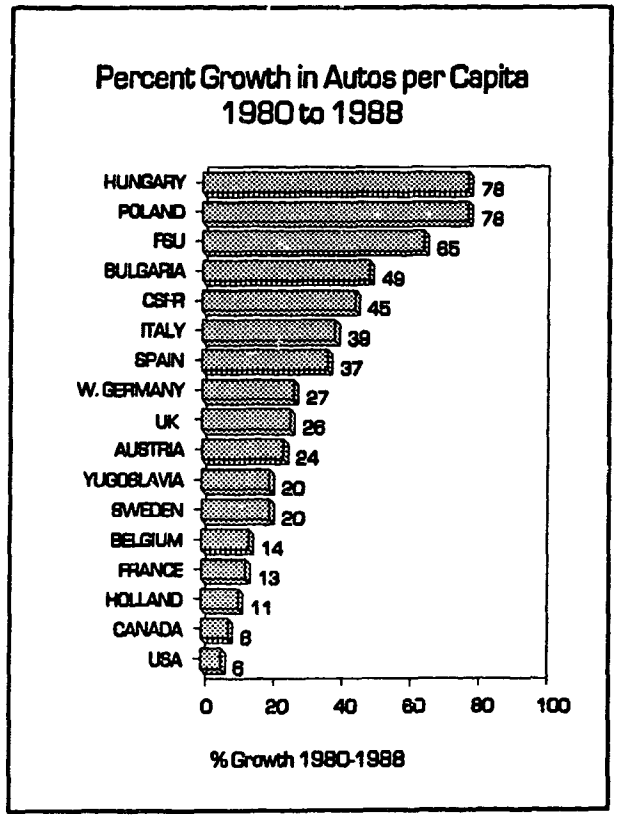
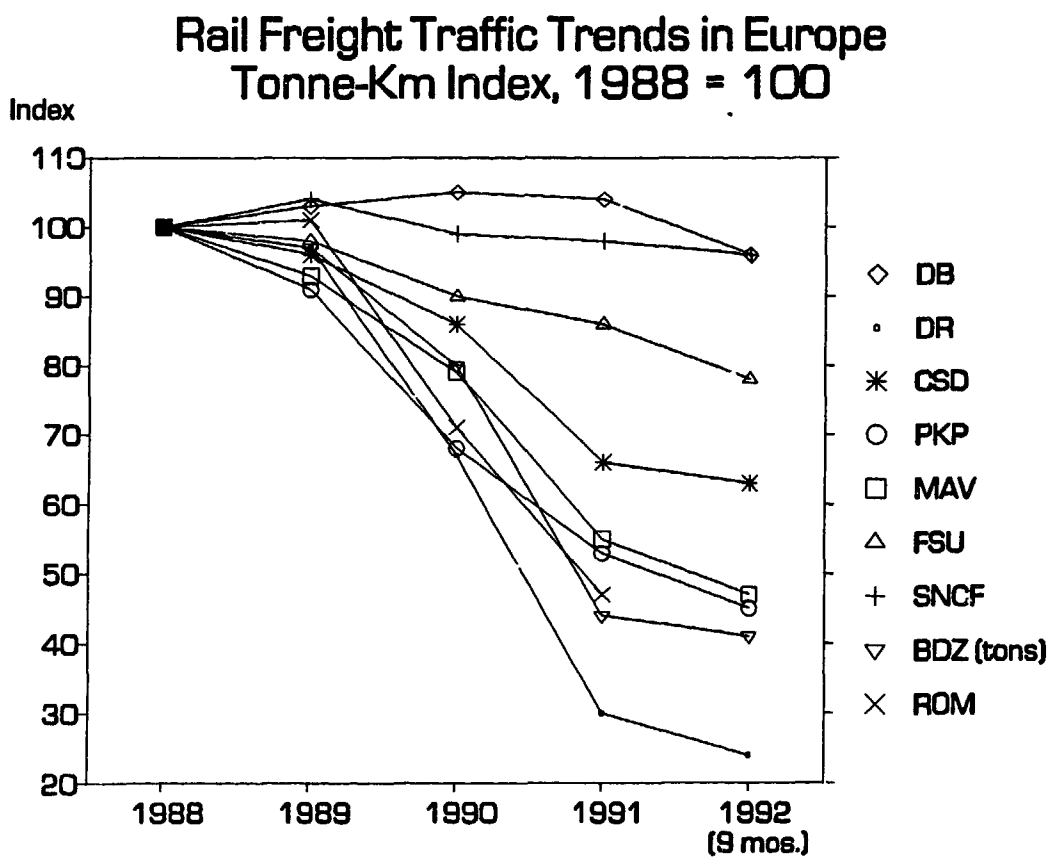


Figure 9



6. Figure 10 shows the changes already happening in the CEE and CIS countries as compared with France and the former West Germany.[3/] As Figure 10 shows, rail freight activity in the CEE countries has now fallen to 60 percent, or less (to only 25 percent on the DR), of its level in 1988. To some extent, of course, this loss of rail traffic merely reflects (hopefully) temporary factors such as the drop in total economic activity in these economies and disruptions to rail traffic among the former socialist countries (especially with the former Yugoslavia). At the same time, though, it is clearly early evidence of the more permanent structural changes described above. Much of the rail traffic that has been lost will never return, and total rail traffic is not likely to enjoy 1988 levels for many years, if ever. Trends in the CIS are, as yet, not as dramatic as in the CEE countries, but that is primarily because economic restructuring activity in the CIS began later, has proceeded more slowly, and still has not undergone the same degree of change as in the CEE countries.

Figure 10

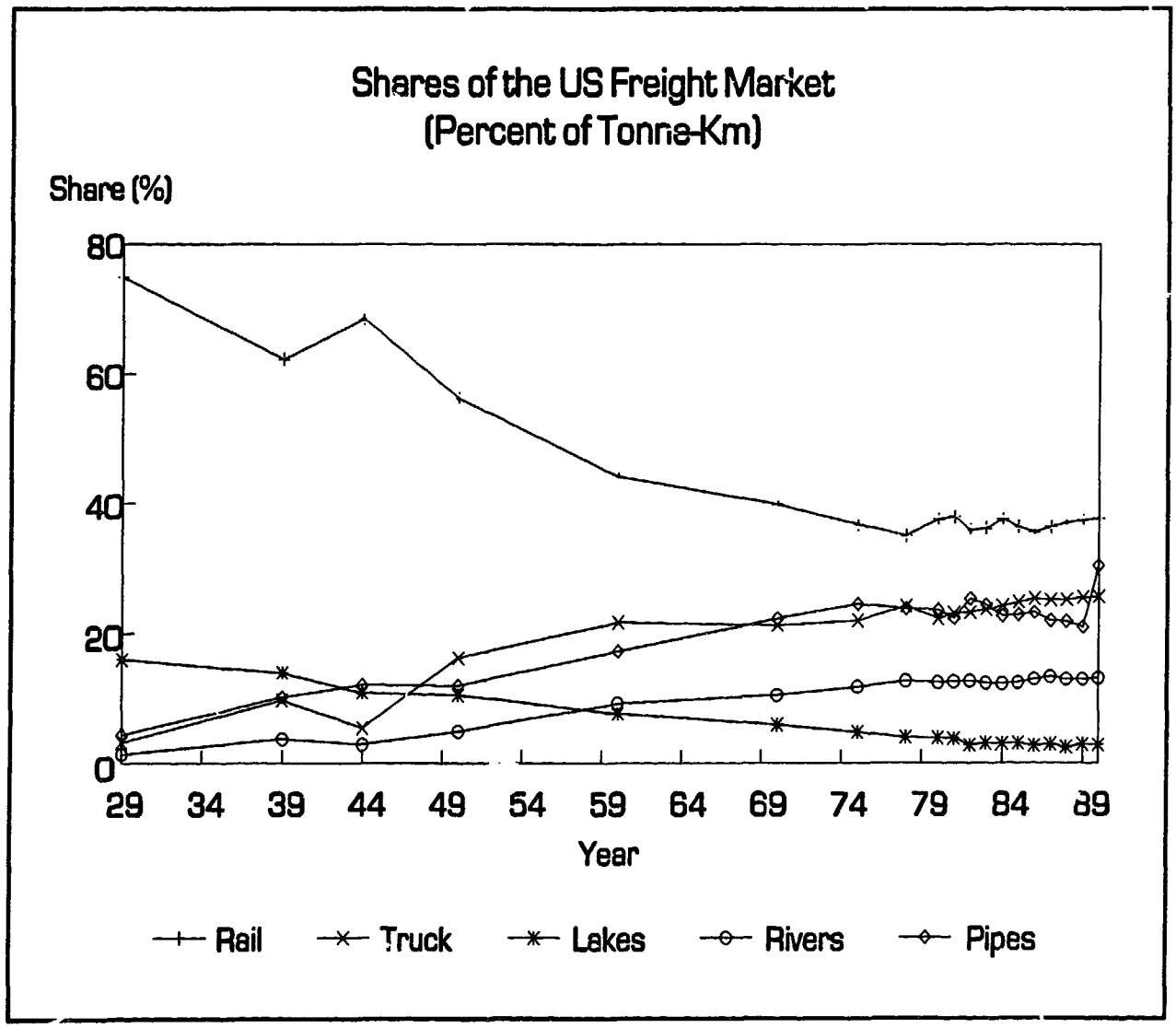


1992 FSU is actually based on Russia for first 5 months. 1992 BDZ is estimate for entire year.

3/ Fortunately, the data are still available to compare the former West Germany with the former East Germany. Traffic on the Deutsche Bundesbahn (DB) in (former) West Germany has remained stable, while rail traffic on the Deutsche Reichsbahn (DR) in the former East Germany has collapsed.

7. The combined results of these forces acting together seem very clear: first, the total use of transport per unit of economic activity by the restructuring socialist economies will decline significantly; second, the role which rail plays in the transport system is also going to decline. As a result, the process of transition will lead to a more rapid decrease in rail activity than in overall economic activity, and a much slower increase (if any)[4/] in rail activity as the economies bottom-out and begin to grow again. In a general way, this broad transition from basic production to services has occurred since World War II in all the western economies, with a resulting decrease in the role of rail (see Figures 11-14, for example). The difference in the case of the CEE and CIS countries is that, whereas the broad transition took place over three to four decades in the West, it will necessarily be compressed into a much shorter time period (as short as five to ten years) in the formerly socialist economies, and the kind of gradual adaptation which occurred in the western economies simply will not be feasible.

Figure 11



4/ The future of rail traffic will depend on the balance between structural and cyclical effects, which will vary from country to country depending on their stage in the restructuring process.

Figure 12

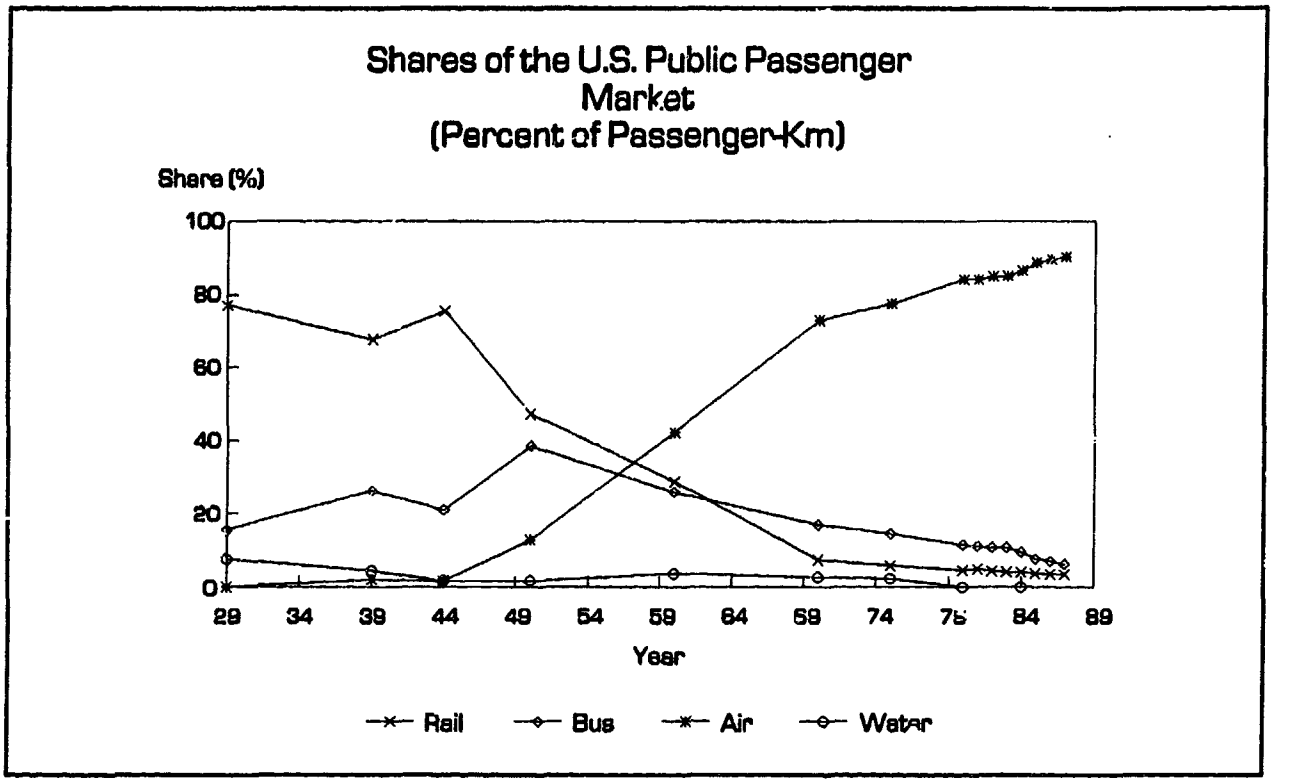


Figure 13

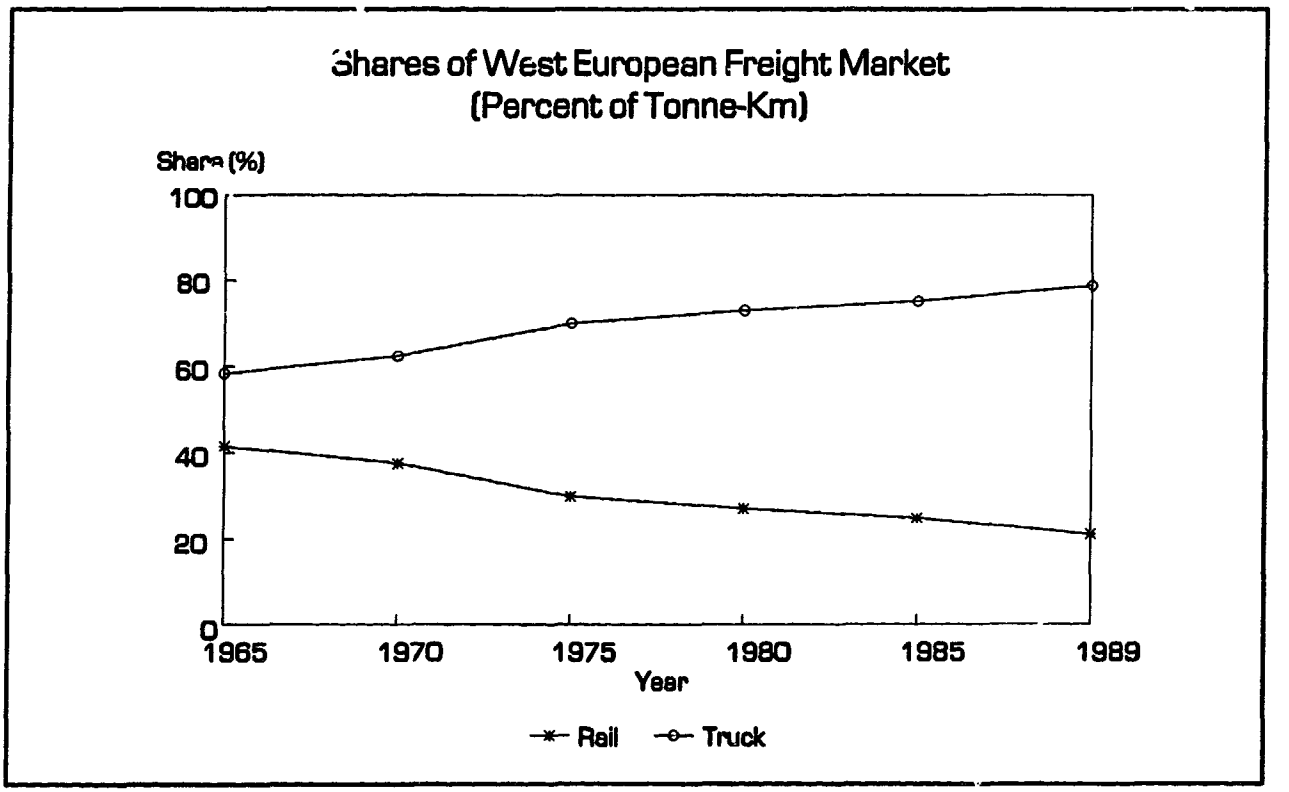
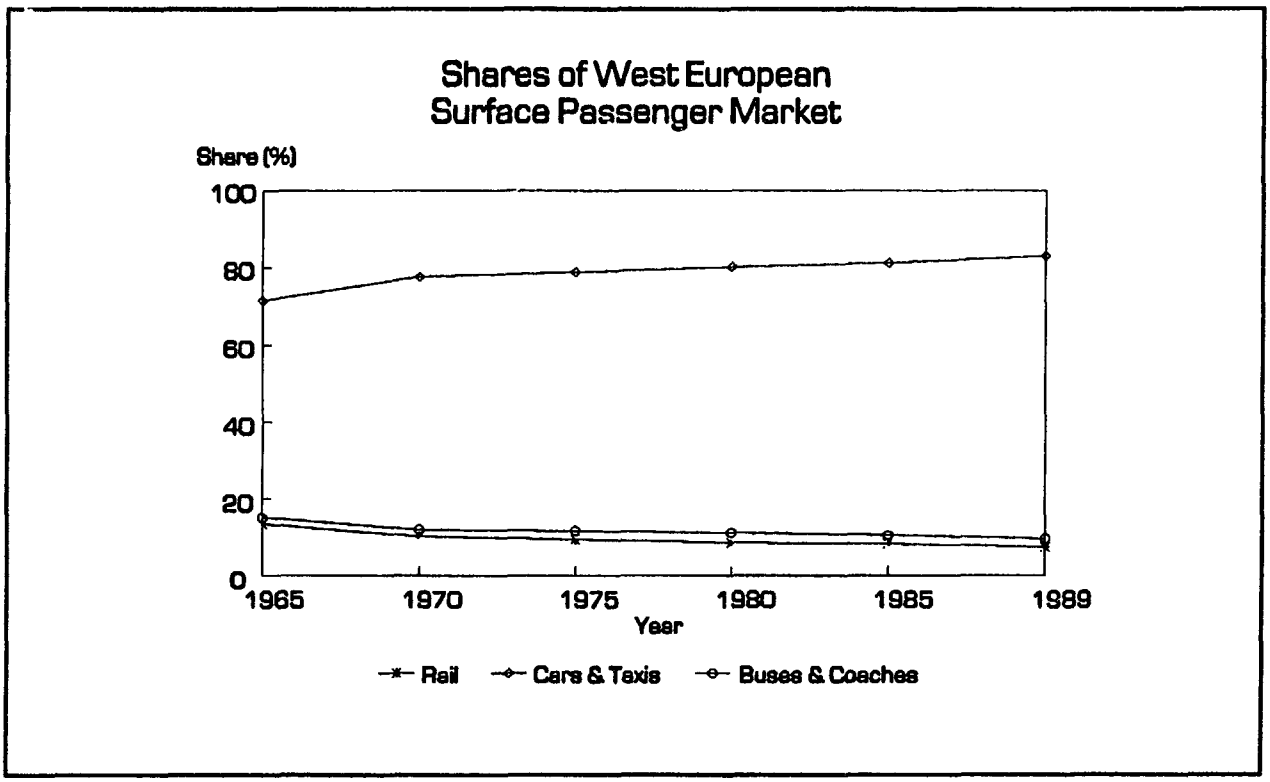


Figure 14



8. This rapid and wrenching change in the railway role means that there must be a corresponding change in the organization of the railway and in its relationship with the government and the transport sector. When the government commanded the economy, the railway role was simple: just as all other sectors of the economy were required to do, the railway served the "Plan." As competitive, market-oriented structures begin to drive the economy, CEE and CIS railways must make the same transition in organization and mentality as has been, or is being, made in the market economies. The railway can no longer focus on the operation of trains and the repair of track (a production-driven role); it must instead focus on the needs of the customer.

9. This will not be a simple transition. Nor will it take place on the same time scale in all the CEE economies because some are already further ahead than others in the transition. This restructuring of the railway may also not include exactly the same aspects or facets in all of the different countries because the size and function of the railway varies considerably among the economies (see Figure 6). This being said, there are a series of initiatives which, with an appropriate adjustment for the particular characteristics of each economy, should probably form an underlying, comprehensive agenda for use in the restructuring process. This agenda is described below.

AN AGENDA FOR CHANGE

10. As noted in paragraph 7, railways in market economies have faced a steadily declining role in the transport market. Typically, rail management and governments dealt with the emerging problems by "tinkering at the margin" -- for example, by debt write-offs -- only to find that the problem reappeared within a few years. Following a series of such failures to attack the underlying cause of the malaise, governments in the market economies are increasingly coming to the conclusion

that "drastic surgery" is required. This is illustrated by the current approaches of the British, German, and Japanese railways.[5/] Because of the much greater speed at which the changes are occurring in the CEE countries, and much more severe budgetary constraints faced by their governments, the CEE countries cannot afford the luxury of gradual adaptation: bolder initiatives are required. As important as the statement of what the future railway will do, is the statement of what it will not do. In this connection, it is important not to confer on the railway exclusive rights (e.g., for intermodal traffic) which might have the effect of restricting competition and the role of the private sector.

11. **Develop a Strategic Plan for Restructuring the Railway**. The most important initiative to be undertaken, and it should be done as rapidly as possible, is the development of a strategic plan for the railway. This plan, developed jointly by the cognizant ministry or ministries[6/] and railway management, should include market definition and projection of activity (tons, ton-km and freight tariffs, passenger-km and fares) for all business activities. Next, the strategic plan should include a five year financial plan for the railway by lines of business, showing revenues, costs and profits, PSO contract payments (see footnote 7 below), and all other payment amounts and sources. The financial plan is important because it puts numbers on the various policy options -- thus making concrete, and probably more difficult, that which would otherwise be abstract. Another major element of the strategic plan is a definition of all government policies and changes therein which will put the railway on a level playing field with all the competing modes of transportation.[7/] The overall purpose is to ensure that the new railway has a valid mission and adequate resources and authority to accomplish that mission.

12. **Joint Stock Company**. As soon as possible, the current railway "enterprise" or ministry should be converted into a Joint Stock Company (JSC) or, at least, a limited liability company under normal commercial law.[8/] The JSC should have a Board of Directors selected from government, the Railway Executive ***and*** high level business representatives from outside government. This action would have the effect of transforming the identity and management practices (and public image) of the railway toward that of a commercial enterprise and away from that of a government ministry. This would include, ***inter alia***, changing the railway's accounting standards to those of a corporation

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5/ See Report of the Railway Reform Commission (Germany), Fukui, and British Government White Paper.

6/ In general, the cognizant ministry should be the Transport Ministry. Under certain circumstances, the Ministry of Finance and/or the immediate office of the Chief Executive of the country may also be included in the group preparing the strategic plan.

7/ See Huff and Thompson for a more thorough discussion of the content of a strategic plan, and for further discussion of performance agreements. In the terms used in that document, the objective in this paragraph is the preparation of the strategic plan (SP). It would be the responsibility of the new railway management to develop the management plan (MP) as it is described in Huff and Thompson.

8/ The terms "Joint Stock Company" or "limited liability company" have slightly different meanings in different countries. What is meant here by JSC is that the new railway will issue stock certificates which represent the equity ownership of the company, the owner(s) of these stocks will have full control over the business decisions of the company, and that the liability of the shareholders shall be limited to the value of the stock. Placing the company under normal commercial law means that the company should function like any other commercial entity. It should not enjoy the sovereign powers or rights of a government ministry. It can sue or be sued, must pay its obligations, and can go bankrupt.

under the commercial laws of the country rather than a government ministry, and a shift in the status of the labor force from civil service to corporate status.

13. Formation of a JSC does not necessarily imply privatization of the railway: the initial objective is, instead, to secure the changes in enterprise authority and commercial orientation that the enterprise form will bring. Among other things, however, the JSC form *will* make dealing with the truly private sector easier and more effective, and will facilitate the contracting and joint ventures which will represent a better balance between private and public. At some point in the future, the JSC form would be helpful in facilitating true privatization, when that becomes appropriate, through sale of branch lines, franchising of particular operations, or other possibilities.[9/] Certainly, adopting eventual privatization as a serious commitment will exert useful discipline on rail management.

14. **The Railway Mission.** The railway shall have the explicit mission to operate freight and intercity passenger services on a ***commercial*** basis; i.e., revenues from these services should be adequate to cover all costs associated with providing them, including a return on investment (preferably, if the playing field is to be kept level, at least roughly equivalent to that earned by its private sector competitors). In general, the railway approach to these markets should be exactly that of a commercially driven enterprise: prices should be as high as competition permits, and costs should be as low as is consistent with the level of quality the market demands. The suburban or commuter services of the railway should be operated efficiently under a contract with government (or governments -- there is likely to be a role for regional and local governments in the definition of, and funding for, local suburban services), under which the railway shall be compensated for all appropriate costs of an efficient entity, including investment, not covered by fares or Public Service Obligation (PSO) payments.[10/] It is vital to agree, also, that whatever is not profitable and not subject to adequate PSO support can and should be dropped, solely in the business judgement of the new railway: PSO services must be terminated if the PSO payments are not made. While much of the discussion in paragraphs 3-6 focussed on the structural changes in rail's role in the freight market, it is important to recognize that probably the biggest single adjustment that has to be made in CEE rail operations is on the passenger side. Passenger revenues are often covering only one-third of costs on average, with many services covering much less than this. The railways, and their governments, need to consider very carefully their future role in such markets.

15. **The Contract Plan (or Performance Agreement).** The intent of performance agreements is to clarify the relationship of the railway with the government in those cases where the government wishes to keep a continuing role in policies and operating practices of the railway. In general, a

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9/ See Moyer and Thompson, "Options for Reshaping the Railway," The World Bank, Infrastructure and Urban Department, WPS 926, June 1992, and Louis S. Thompson, "Increasing the Role of the Private Sector in Railway Transport," paper for World Conference on Transportation Research (WCTR), July 1992.

10/ PSO payments can be made either as operating support or as capital support. A public authority might, for example, acquire passenger rolling stock and transfer it to the railway for operation. The railway would not need to earn a rate of return on such public investments. See "Cost and Revenue Allocation" below. "Public Service Obligation," or PSO, has become a common term in Europe to describe the circumstance under which a public entity wishes the railway to provide a service for which revenues cannot, or will not be permitted to, cover costs. Typical examples are found in urban commuting, but also include student discounts, discounts to the elderly or veterans, and rural passenger services, among others. Though not often viewed this way, other examples should be uneconomic branch lines carrying mostly freight, and the added costs of mandated excess labor where the railway is, in effect, acting as a welfare agency on the government's account and under the government's instructions.

thorough transition to the JSC form, and a clear statement of the new corporation's roles and responsibilities, combined with a suitable Board of Directors and the signing of PSO contracts, should obviate the need for a performance agreement between railway and government.[11/]

16. **Costs and Revenue Allocation**. The railway should develop and implement (with agreement from the government) a reporting system for allocating the railway's costs and revenues among the markets designated as lines of business. This cost and revenue allocation system should include agreed formulae and methods for PSO contract billing so that PSO payments can be audited ***ex post***, but will not be subject to dispute and approval prior to payment. However, adjustment of the scale of rail operations to the new market realities should not await the development of refined cost and revenue allocation methods. Even on the basis of existing allocations, or other rough "rules of thumb," the grossly inviable businesses can be identified, and remedial action taken.

17. **Regulation**. The railway's freight tariffs should not be regulated at all, except in those cases where the railway is shown to be abusing its monopoly position.[12/] That is, regulation should be passive rather than interventionist. The railway should not have to file tariff schedules or contracts as a matter of routine; the regulator should intervene only in response to shipper grievances. In general, the need for railway freight regulation will decline rapidly as competition emerges and as shipper choice becomes more important on transport decisions. The railway's intercity passenger fares should also not be regulated except, perhaps, for sliding price controls during the transition period when all other prices are changing. Railway PSO fares should be set by the terms of the contract with the governmental authorities: in general, the railway would be compensated for the difference between costs allowable under the contract and fares, and the contract should contain incentives for productivity improvement, such as price cap regulation. An appropriate regulatory authority or agency may need to be established in order to assess efficiency and adjudicate cost reporting and allocation in order that acceptable and adequate information is available for regulatory and PSO payment purposes. This paragraph assumes, of course, that all other modes, especially trucking and buses, will be similarly unregulated.

18. **Government Support**. Apart from PSO compensation ("railway mission" above) and initial assistance in making up for any deferred maintenance which may exist ("sins of the past" below), government support should be limited to equity investment in and loans (on essentially commercial terms) to the railway. There may be economic justification for making capital grants to the commercial railway (freight and intercity passenger, as per "railway mission" above) for purposes such as a one-time correction of the deferred maintenance backlog of the past, once the enterprise has been set up with an appropriate initial balance sheet tailored to its future earning potential and

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11/ BR does not have an explicit performance agreement with its government. Amtrak does not have a performance agreement with the US Government because Amtrak's status as an "as if for profit" corporation under District of Columbia law, combined with government membership on the Amtrak Board (and the need to submit Amtrak's subsidy and capital budget to the President and the Congress for approval) make additional agreements unnecessary. The new JR companies in Japan do not have performance agreements as their profitability targets are sufficient for guidance and evaluation.

12/ Abuse of monopoly position can be evidenced either by individual tariffs which are far above their cost, or by the generation of total revenues greater than those needed to provide earnings adequate for capital replacement and expansion requirements.

borrowing needs.[13/] Government may choose to pay some of its PSO contract compensation in the form of capital grants (e.g., for new line construction or coaches for commuter operations) and indeed this form of compensation should replace ongoing compensation for revenue shortfalls vis-vis operating costs, because it is more explicit and less "open-ended." The issue of capital grants and PSO support will probably have a resolution unique to each country.

19. **The Sins of the Past.** The new, restructured railway should commence operation with an efficient labor force, adequate financial resources, and an appropriate financial structure. It may well be essential, similar to the experience in Japan and the proposal in Germany, to establish a "settlements" agency, or its equivalent. The settlements agency would have immediate responsibility for redundant labor and administration of labor redundancy schemes and re-training programs. If there is excessive debt on the railway's current balance sheet, this excessive debt should be transferred to the settlements agency as an obligation which can be managed over time. Finally, as was the case in Japan, many of the non-core or non-rail activities and assets should be transferred to the settlements agency, along with all uneconomic properties (such as branch lines which are being closed) which will not be operated by the new railway.[14/] This has the benefit of prompting railway management to focus on railway business from the outset of the restructuring and furnishing a pool of assets which can be used over time to offset the labor redundancy and excess debt obligations of the settlement agency. In any event, it separates the issues associated with past policies and practices from the need to provide viable rail service in the future.

20. **Reorganization.** The management of the new railway must develop a clear organization chart showing the assignment of functions, objectives, and staffing by activity (profit or cost) center. In general, the activity center should either be a line of business (including both revenues and costs allocated to the line of business), or should be a cost center in the case that certain functions (the legal or accounting departments) will be centralized in order to reduce overhead costs.

21. **Lines of Business.** The railway should have appropriate lines of business activity where both revenues and costs are collected and compared. These should reflect the different markets the railway serves. Generally, these lines of business will be freight (with appropriate sub-lines such as coal, steel, international, containers, etc.), intercity passenger (with appropriate sub-markets such

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13/ Any disadvantage that the railway inherits, such as deferred maintenance of track on commercially viable parts of the network, should be reflected in the values attached to the relevant assets in the initial balance sheet, rather than in compensatory capital grants to overcome backlog needs during a transitional period. The latter practice runs the distinct risk of allowing the existing engineering and production driven budgeting approach to control a large capital program which a commercially driven management would probably not undertake at all, and certainly not to the same degree. The objective is, as rapidly as possible, to permit commercial considerations to determine what assets are repaired or improved, and to reflect only these values in the balance sheet. See Fukui.

14/ In Japan, the Settlements Corporation also "owns" the shares of the new railways. If, and when, they are truly privatized, the Settlements Corporation will be able to use the proceeds to defray the costs of paying off the obligations it assumed. Depending on the time frame within which sale of the stock to the public is to take place, it may, or may not, be appropriate for the Settlements Agency to have ownership and control of the voting rights of the railway's stock.

as international, long haul, regional[15/]), and suburban passenger services (generally broken down by the major city around which the subset of suburban services is focused). Each line of business activity should have its own assigned emphasis and should own and manage (and pay for) its solely related facilities such as specialized rolling stock, equipment shops, stations, and yards. The purpose of line of business organization is to permit profit responsibility to be assigned at a level below that of the General Manager.

22. **Infrastructure Accounting and Maintenance.** As required in the European Community Directive, a separate "cost center" should be established to account for infrastructure maintenance and construction for facilities, primarily track structures, electrification and signalling, which are common to more than one line of business. This does not mean that the so-called "Swedish Model" of establishing a separate and independent agency to own and maintain the infrastructure is necessarily an appropriate approach. It does mean that cost for infrastructure should be separated, with the maintenance of infrastructure performed in accordance with (and only with) the business needs of the railway, and that the management of the infrastructure maintenance should be fully under control of the railway's Executive. As envisioned in the Community Directive, the infrastructure costing should also be adequate for use in billing other railways which may use the infrastructure of the owning railway.

23. **Infrastructure Operations.** A separate cost center should be established within the railway to manage those parts of infrastructure operations which require integration among the lines of business. This would include a common train scheduling unit and a train dispatching unit which would operate in accord with agreed dispatching rules and service priorities. Figure 15 (organization chart) illustrates ***one*** way[16/] in which these principles might be put together.

24. **Ancillary, non-Rail Operations.** The railway should divest itself of all non-rail related activities, such as schools, hospitals, and manufacturing facilities (signal companies, locomotive manufacture, etc). Experience indicates that these types of activities are performed much more effectively outside the railway in a market economy.

MEASURES AND ISSUES FOR IMPLEMENTATION

25. Experience with railway restructuring to date indicates that there will be a series of critical issues of implementation as the points discussed above are brought into practice. In most instances, these issues will apply with particular force to railway restructuring programs within the former socialist economies.

i. **Cultural Change.** The railway constitutes a unique culture which, in the past, has been highly engineering and production oriented, even by comparison with other economic entities within the country. In general, existing railway personnel will resist the transition to a market oriented method of operation because it reduces

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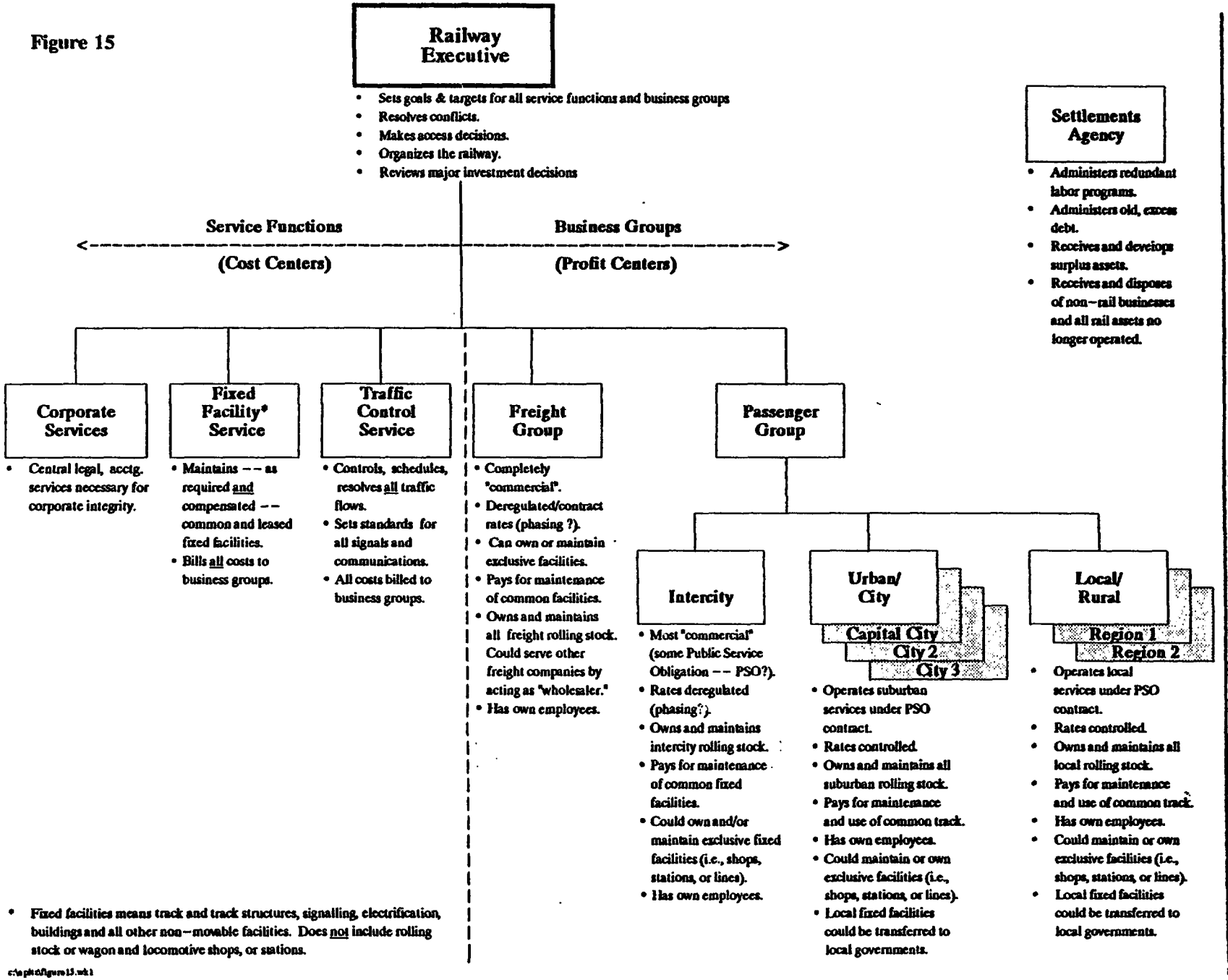
15/ In some cases, as in Britain, the regional line of business will need to have separate status if there is a separable and large set of rural, "regional" lines which constitute a separate activity and whose justification is primarily local or regional, and not national. Other examples would be the state and locally supported routes of Amtrak in the US, or similar activities by SNCF in France.

16/ There will obviously be many alternatives: Figure 15 is illustrative only.

Figure 15



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their role, status and security. Change in the railway culture will require forceful action on the part of the government, a clear definition of the railway's mission, re-training of railway staff, and hiring from outside the railway to fill those key executive positions which require business and marketing skills. As was the case in BR, JNR and Conrail, it may also require dismissal of those key personnel who do not fully support the restructuring.

ii. **Redundant Labor.** The management of redundant labor is emerging as one of the key issues in railway restructuring everywhere. That there is redundant labor in the CEE railways is beyond question: Polish railways, for example, has nearly twice as many employees as the entire US railway industry, but only one-ninth of the traffic.[17/] This labor force must find more productive use elsewhere in the economy, but the transition will have to be supported by financial assistance, such as redundancy payments and a significant re-training effort, as well as help in finding other employment.[18/] This issue will be one of the primary focuses of the settlement agency.

iii. **Management Skills in a Market Context.** Although they are often highly competent in the technical and managerial issues of running the railway, railway management in the CEE countries often lack the techniques and skills necessary for management in a market economy, such as strategic planning, market definition and forecasting, traffic pricing, and financial modeling and investment analysis. Over the short term, this gap will almost certainly have to be filled by bringing in a limited number of key executives from outside the railway, and by an extensive training program in management skills.

iv. **Regulation.** Most (with the partial exception of Hungary) CEE railways occupy a position of market dominance, even monopoly, in many areas of the transport system of their countries. It will thus be necessary to focus on the development and implementation of an appropriate system of regulation to control the abuse of monopoly power. Several models of such regulation are available,[19/] but the emphasis should be on establishing the absolute minimum of regulatory authority necessary to control market abuse so that the old relationship between government and railway will simply not be recreated through a regulatory authority.

17/ Admittedly, allowance needs to be made for the much higher proportion of (more labor-intensive) passenger operations on Polish railways, but even so the relative orders of magnitude clearly demonstrate a serious degree of labor redundancy.

18/ The design of redundancy payments and other instruments for dealing with surplus labor needs to be adapted to the particulars of each case -- for example, where national unemployment insurance or social security is inadequate, it may be necessary to allow dismissed workers to retain health benefits or housing, at least for a transition period. Similarly, regional differences should be taken into account: for example, the prospects for finding alternative employment will usually be greater in the capital cities than in more remote regions. Lump sum payments may be more costly than monthly payments, but may be justified if they are more likely to be successful (in part because they provide employees with the means to start small businesses). Voluntary separation schemes need to be carefully targeted, to avoid losing key skills still needed by the enterprise. For more on this, see Galenson and Havlicek.

19/ The US, Canada and the UK have useful approaches.

v. **Accounting.** In general, the books of account of the CEE railways reflect the management policies (if any) of public authorities in a planned economy. They suffer both from the fact that the structure of the accounts does not provide useful business management information, and the fact that the input information on costs of inputs is completely distorted. A significant effort will be required to restructure the accounts so that they will support decision making in the new lines of business and so that they will be adequately responsive to the input cost changes which will occur over the next few years as prices are adjusted to market clearing levels.

vi. **PSO Contracts.** The signing of a PSO contract implies a completely different relationship between railway and governmental authorities. The legal foundation for this kind of relationship will be entirely new or may not even exist at this time. A significant effort will be required in order to understand the existing legal framework defining relations between governmental authorities and suppliers of services and to modify this framework, if required, for effective contract provision of rail services by the railway to government(s).

vii. **A New Allocation of Government Responsibilities.** Under the current, highly centralized government forms in the CEE countries, most local or regional authorities do not have the legal authority or the financial resources necessary to carry out their side of a PSO contract for local services. If, as appears desirable, the local authorities are going to be asked to take some share of the responsibility for planning and funding of regional or local passenger services which are not of national importance, then the authority and resources of local governments vis a vis national government will have to be appropriately changed.[20/]

viii. **The Private Sector.** Although great emphasis has been placed on converting the railway to the JSC form, it appears likely that true and complete "privatization" of the railway or some of its major business groups (by which is meant actual sale of a majority of the stock to the private sector) may be beyond the immediate agendas of the governments involved. Privatization also probably awaits several years of proven performance before a price can reasonably be placed on the stock. At the same time, private sector ***development*** (by which is meant a shifting of the boundary between the railway and the private sector) is highly desirable. This could take a number of forms, including sale of non-core activities to private investors, contracting with the private sector for provision of services (such as equipment maintenance) which are now provided within the railway, transfer of smaller pieces of the railway for private sector operation in connection with the railway, and joint ventures for the development of real estate which the railway will continue to own because it is also essentially for railway services.

26. The approach discussed above is sufficiently ambitious that a full description of all of the aspects of the agenda is beyond the scope of a summary presentation such as this. Most of the issues are described in greater detail in the sources below.

20/ See "Poland: Decentralization and Reform of the State" in references below.

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