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PREFACE

In recent years, nations at every level of economic development have shared the costly experience of troubled railway systems. A large body of analysis has documented the relevant evidence. Governments recognize that no miracle cure is available and many are beginning the arduous but essential process of achieving serious reform and restructuring.

> The facts of railway life are that if things are already bad they are likely to get much worse unless something is done about them. In fact, it is often only when it is seen how much worse things can get that management and ministers are moved to act on their railway problems. Long-term planning is ... the only way in which the employment and other social implications of the necessary changes can be handled in a way which is acceptable to users, workers, taxpayers and governments.[1]

This statement, by a former chief economist at British Rail, particularizes for railways the truth of Professor Parkinson's Law of Delay in bureaucratic organizations, namely, that delay is the deadliest form of denial.

This paper is addressed to those countries which are facing the challenge of fundamental "restructuring"; the transformation of a troubled state-owned railway into a stand-alone enterprise operated on commercial principles (even though the government may retain ownership). It provides a framework -- a set of broad actions -- for achieving practical reform. It is neither a precise road map to guaranteed outcomes, nor a check list needing only the proper boxes to be marked off, nor a rule book with a set of correct answers. Indeed restructuring railways and their governments will immediately realize that in an increasingly competitive world such precision and certainty do not exist. If they are to succeed, the government and railway planners who lead the reform effort must display the same qualities of flexibility, transparency in the assembly and display of information, careful assessment of the risks of alternative courses of action, and prompt and unambiguous declaration of conclusions reached and actions to be taken that the reformed railway is going to have to show if it is to succeed in a competitive commercial transport/logistics environment. Both the reform decision-makers and the reformed railway must be infused by the same spirit, exchanging the static "rules and regulations" code of bureaucracy for the open-minded and dynamic imperatives of competitive enterprise. In essence, reform must become a state of mind.

The paper suggests four general documents around which the reform effort may be organized:

(1) a **Strategic Plan** which relates the restructured railway enterprise to the broader political, social, and economic context within which it will function and addresses major public policy options,

(2) a **Contract Plan** which defines the specific commitments and obligations flowing from the Strategic Plan which the Government and the railway enterprise formally accept as their respective responsibilities,

(3) a **Management Plan** for the railway which establishes an organizational structure, functional responsibilities, and performance measures for effective internal management control, in light of the requirements imposed by the decision to operate as a commercial enterprise, and

(4) an **"Enabling Actions" Plan**, as needed, to list the necessary legislative, legal, and formal administrative changes necessary to carry out the planned restructuring.

Many developed and developing countries have had at least some experience with documents of this type, as shown in the box below. As noted, this is a representative but not an all-inclusive list because more countries are being added and because it is not clear exactly how to classify certain initiatives already underway.

During the discussion below, the boundaries between the four documents are drawn somewhat more clearly than they actually would be in practice. In many cases, some functions or commitments might appropriately be shifted from one document to the other (i.e., from the strategic plan to the management plan, etc.). Each country must make its own decisions in this respect -- what matters is that each of the major issues be identified and resolved.

The body of the paper below concerns itself primarily with outputs--reports, contracts and plans--and not with the process whereby the conditions for producing these outputs are achieved. The process issue is sufficiently particular to each country and each railway to make an exhaustive treatment beyond the scope of this paper. A brief, overall discussion of process may be useful, however, in providing a context for what follows.

The World Bank's reviews of railway crises[2] show very clearly that they do not come about suddenly, nor do they happen by accident. Although the points of emphasis may differ, this conclusion is just as true of railways in the developed as in the developing world. As a broad generalization, railway crises occur because railways have not been encouraged, or allowed, to respond to changes in the economies they serve. Long after major segments of railway traffic have been captured by competitors which are often privately owned and operated, railways continue to offer services which are not in demand, at prices which are often far below cost, and with a quality of service which is inferior to the customer's needs. Typically also, as the railway becomes a fiscal drain on an economy already short of resources, longer range maintenance and capital needs are neglected, further diminishing the railway's capabilities as the years pass. The longer the problem continues, the more difficult and expensive it is to resolve, and the more likely it is to be "put off until next year".

Across all economies and cultures, this situation is the result of some or all of the following forces:

(1) The railway is generally one of the nation's oldest institutions, and its years of history have endowed it with perceived roles--such as a "public service obligation"--and an associated engineering and production-oriented management culture which are uniquely resistant to change.

(2) The railway often has the largest single unionized work force in the nation, giving its workers a great deal of political power which is used to protect the size of the labor force, even when there is little productive work to be done.

(3) Over the years, various classes of passengers (typically commuters and third class intercity passengers) and shippers (often agricultural interests and major government-owned mining or industrial enterprises) have been able to persuade the regulatory authorities of the government to distort the rate structure in their favor. The stated rationale for the intervention in freight rates is as predictable ("the nation needs to control freight rates in order to promote exports, or to control inflation") as the result: nothing positive is achieved because the resulting deficits are merely shifted from one agency budget to the other, and the management incentives of both railway and shipper are badly distorted. Regional interests also believe that the existence of rail service (but not, necessarily, its use) is important either to maintain the local economy, or to protect the possibility of a desired future development program. Eventually the beneficiaries of the system

of cross subsidies come to believe that their favored status is not only important to them, but is also important to the health of the nation, and they defend their positions tenaciously.

(4) The people at large may believe that a railway is "needed", whether or not it is economically justifiable, either because they believe that rail service is a basic "right" (like education or health), or because they consider the presence of a railway to be one of the status symbols of nationhood.

(5) The ministry which owns and operates the railway may be as interested in protecting its organizational domain, budget, and political influence as it is in serving the needs of shippers or tackling the difficult task of restructuring the railway.

(6) Finally, many of the important actual or potential customers eventually switch to other modes because the service may have become sufficiently slow and unreliable that it is no longer economical to use rail. These former users are no longer advocates for change and improvement. Of course, the other beneficiaries of poor rail service, the competing (non-rail) transport modes, are often committed advocates of the status quo as well.

In many instances, the only agency experiencing immediate pressures for change is the finance ministry because ultimately it pays the bills out of the public treasury. At least in the initial years of a developing crisis, the result of this financial pressure is to reduce outlays wherever possible which, unfortunately, typically results in the well known downward spiral of deferred maintenance and reduced capital budgets (and eventual poor service) noted above. Experience indicates, however, that financial pressures alone, even when they reach monumental proportions (such as the US $ 10 billion annual losses of the Japanese National Railways before its restructuring), are rarely sufficient to bring about the right kind of change; real change happens when financial pressure is combined with a realization by the government and railway customers of the true burden imposed on the economy by poor, or unnecessary, rail service and with acceptance on the part of railway management that an economically rational role for the railway is the best guarantee of long term health and stability for the railway. When this point is reached, the measures discussed later in this paper become feasible.

Therefore the real challenge of railway restructuring is political, not solely financial or technical. Absent political will, there is no ready combination of financial aid, technical advice, and training which will accomplish much more than postponing the inevitable, and in increasing its cost when it arrives. The principles of promoting change are well known: the beneficiaries need to be identified and organized, and those suffering harm need to be assisted. Because of the very wide range of interests of the potential beneficiaries and adversely affected parties, **the very highest levels of political leadership must understand and support a program of change**. In turn, all agencies of the government must, through full and open discussion, understand and accept the implications of reform, a stage which will only be reached if the political leadership clearly assigns responsibility and authority for the management of change to an appropriate official -- and makes it clear that results are expected. The official could be drawn from political circles, from a ministry, from the railway, or, as has happened in several developed and developing countries (e.g., the US, the United Kingdom, France, and Uruguay), could be an authoritative and impartial person from outside government and railway. Because the problem is primarily rooted in social and political considerations, the criteria for selecting the official should be broad experience in the operation of large institutions and acceptability to all parties, not necessarily expertise in railway operation or engineering.

The next step is to obtain the support of major users (or potential users) of the system and of railway management. The offer to the user is better and more reliable service in return, in some cases, for higher rates or longer term commitments for traffic. As discussed later, for those users who cannot, or will not, pay rates that cover costs, explicit subsidies from public authorities may be warranted when such subsidies can be justified by legitimate public requirements. The proposal to railway management follows accordingly: although some services may be reduced or eliminated by the reform process, those operations which remain will give the railway a stable basis for future survival and growth, **and** management will be given much broader authority and autonomy to make decisions with a minimum of outside interference.

At the same time, those who are truly injured by the restructuring must be identified and dealt with. In some cases, the damage is so limited or vague ("we need rail service, even though we do not use it, in order to keep the truck rates down"), that no compensation is due. In others, such as the user who has made a legitimate location decision and related investments in the belief that an existing rate structure would continue, at least some transitional assistance, either through subsidy or phase-in of rate changes, may be needed.

Labor will often be a major injured party. Much study has been, and continues to be directed at this issue.[3] Although much remains to be learned, and specific approaches will always need to be tailored to the conditions of each country, two broad conclusions are emerging. First, some form of fair compensation and/or assistance in finding other employment has been a feature of all successful labor redundancy programs. For example, in recent loans to the Sudan and to Zaire, the financing of compensation (though not necessarily by the World Bank) has been an explicit part of the overall initiative. In Uruguay, a vigorous program of assistance in finding other, often better, employment for redundant employees was a keystone. The second conclusion, however, is that the cost of not reducing redundant labor, whether imposed by government or by labor union pressure, is often underestimated because disgruntled employees can extract a price in poor morale, inefficient and undisciplined operations, and inflexibility of service which appears to be quite large, even by comparison with the surplus wage bill. Railways, because of their complexity and the critical requirement for controlled management, are therefore not good places to absorb surplus labor: in the Uruguayan reforms, the Government actually concluded that the railway would be better off if the surplus workers were paid to stay home until alternative arrangements could be made than if they continued to report to the railway. Taking both the explicit and implicit costs into account, the "rate of return" for successful labor redundancy schemes is very high, often much higher than any item on the proposed capital investment programs on the railway's agenda. An acceptable plan for addressing the issue of labor force adjustment is therefore as important to the success of a reform program as the related changes in management and physical plant.

For many reasons, then, railway restructuring is an inherently messy process which is deeply political, often confrontational, and difficult to predict or control in advance. Such programs take patience and time, often measured in years. This does not mean that reorganization must always take so long; but clearly the process should not be approached casually. A crisis which develops slowly, as the result of powerful forces at work, cannot be resolved on the basis of instant decisions. Time invested at the beginning on planning, on bringing all interested parties into the process, and on developing the required degree of commitment to change is always time well spent. The initiator could be the railway, a government agency, or entirely outside forces, but sustainable progress will not be made until all are working together. If the groundwork is properly done, the reform process can begin with reasonable prospects for success.

As a final introductory note, the following discussion describes a series of steps which could be carried out in considerable detail. In many cases, exhaustive detail may not be necessary, or even desirable, certainly at the outset of the process. If choices must be made, it is far preferable to place emphasis on identifying the major policy issues and developing solid agreement and understanding among all parties on the necessary changes than it is to develop plans or "contracts" which are so complex and sophisticated that only the consultants or experts understand their contents.

THE STRATEGIC PLAN

The Strategic Plan (SP) must be prepared cooperatively by the Government and the railway enterprise,[4] and ultimately accepted at the highest levels in each. The SP is the centerpiece of the restructuring effort. Its purpose is to surface for explicit examination all the difficult public policy questions which, if left unattended, can scuttle achievement of workable reform. Indeed, one of the reasons why restructuring programs have often produced initially unsatisfactory results (the case of Conrail is an excellent example) is that they were developed without an adequate assessment of critical strategic issues, due either to lack of information, neglect or to the unwillingness of the parties to face up to them (or all three!).

Strategic planning takes many forms. For instance, it can be a relatively routine exercise in a corporation that has been preparing such plans for many years and engages in a stable line of business. The word "plan" itself suggests a degree of permanency. In this paper, however, we are discussing strategic planning in the context of making often wrenching changes in the status quo which affect numerous sectors of the public. In this setting, Strategic Plans must be fluid, dynamic, evolving documents. Rigidity and inflexibility will result in paralysis and eventual failure.

The SP is the primary document for stimulating and guiding the policy dialogue between government, railway, and public. It identifies major goals and policy options so that the best and most realistic choices can be made, and made openly, laying out the implications for all affected parties of various policy choices and macroeconomic assumptions, receiving feedback about the acceptability of the outcomes foreseen, and revising the assumptions, policies, and objectives accordingly.

In brief, the strategic assessment process will be an interactive one. Certainly, at the outset, several draft or preliminary plans are likely, and those preparing the SP should expect it to be modified. The greater the transparency of this process and the greater the number of interested parties actively participating in it, the greater is the likelihood of: (a) multiple drafts, and (b) a workable final product. The SP should be used to draw the widest possible participation (in part to develop a political consensus for acceptance of difficult public choices), including legislators, other government agencies, regional and provincial authorities, labor, shippers, academics, financial institutions, and the traveling public. It would be rare, and probably indicative of unresolved and buried issues, if an SP were adopted as originally presented. Where successful reform has occurred, it has been common for the SP to be recycled several times before stabilizing around a generally acceptable course of action. Accordingly, sufficient time, resources, and patience must be made available for the completion of this task. As well, the SP becomes the basis for development of a much more effective Contract Plan and Management Plan. The SP is the place candidly to raise and resolve the toughest and most challenging questions about the short term and long term future of the railway. "In the final analysis the most effective universal approach to decisionmaking is to ask the right question at the right time."[5]

Establish the Mission and Objectives of the Enterprise

In the broadest sense, **the mission of the restructured and revitalized railway will be to provide adequate and efficient rail service of goods and passengers by replicating the behavior of a commercial, profit-oriented railway enterprise operating under conditions of adequate competition**. This means that the railway's approach to providing services must be demand-driven, customer-oriented, market-determined, results-led -- if the market (or government) will not pay for a given service, it will not be offered by the railway. This does not mean that the railway or any of its assets must necessarily be privatized; however, incentives and authority should be created so that it is in the railway's interest, and within its power, to carry out the mission defined for it.

The primary objective of the enterprise may be framed in various ways, depending on the circumstances and desires in each country. For purposes of illustration, one plausible definition of the overall goal for the railway enterprise is to recover from revenues funds in an amount sufficient to pay the costs of providing the service, meet interest and principal payments on its debt, and contribute to new investment in the railway. Some countries may settle for the railway simply breaking even (though the meaning of "break-even" must be carefully explained); others may wish the railway to earn clear profits as well, in effect generating dividends for its public owners. Ideally, the railway will become financially self-sustaining. In many instances, political and economic realities will dictate that full achievement of the profit objective be phased in over a period of time, as the railway transitions from its current situation to one in which it operates routinely as a commercial enterprise. The important thing is to define the objective and set a challenging but realistic timetable for reaching it.

Since many restructuring railways carry heavy debt burdens accumulated in the past, decisions must often be made about re-financing. In most of these cases, the reformed railway will be unable to earn enough from farebox and freight charges to pay off old debt, no matter how well it is operated. If this condition is not rectified, the basis for effective entrepreneurial management of the railway will be undermined from the beginning. In some fashion, the Government will probably have to assume many of these obligations (of course, in some instances, the Government may already hold the debt paper or guarantee it) as part of a process of providing a revised capital structure of the railway, which is appropriate to the new scale and mode of operations. The Japanese Government, for example, established a separate Settlements Corporation to absorb most of the debt of the Japanese National Railways (JNR) at the time JNR was restructured.

Given that the objective is to operate the railway as a commercially oriented enterprise, it is possible that governments at various levels will still want the railway to offer certain services (including entire lines) which cannot, or will not be permitted, to cover costs. In such instances, where the railway is given the objective of operating certain uneconomic services in behalf of governments, the governments must commit to paying the full cost of these "supported" services in excess of permissible revenue, assuming efficient operation by the railway. Basically the railway should serve as a contractor to the Government in these situations. In the SP, the Government must clearly specify the uneconomic services (and the related financial obligations) which it is willing to support.

Identify Major Market/Service Sectors

Once the railway's objective has been defined, the Government and railway should identify the market/service sectors which are to be continued, expanded, dropped, or introduced. The shape of this listing is likely to change as the strategic assessment process proceeds, but a representative initial set might well include the following:

(1) Freight - describe major commodities, traffic flows, and volumes, and the services to be provided (e.g., less than wagon load (LWL), wagon load (WL), block train, specialized equipment, intermodal).
(2) Intercity passenger - describe principal market flows served and services offered (e.g., 1st, 2nd, and 3rd class, dining, sleeper, express, local, baggage).
(3) Regional and/or suburban commuter - describe services, frequencies, ridership, specialized facilities required, etc.

A list of services and markets that are considered prime candidates for discontinuation of service -- e.g., LWL freight service and passenger service on remote branch lines -- should also be identified. This listing is likely to change in size and composition as the strategic assessment unfolds. It is also probable, especially at the outset of the strategic planning effort, that the need for physical shrinkage in the size of the system will be evident on many railways. Thus entire segments of rail line will be earmarked as candidates for abandonment.

Finally, the SP should highlight and evaluate the potential for earning additional income from various services ancillary to operation of the railway. Following is a partial listing of such possibilities.

- Leasing or franchising station space to independently owned restaurants, other commercial shops, and government postal and telecommunications agencies, as well as other forms of commercial development of railway-owned real estate.
- Parcel service on freight or passenger trains.
- Repair of non-rail equipment in railway maintenance facilities.
- Manufacturing products for sale to non-rail customers in railway

manufacturing facilities.

- Value-added logistics services for shippers, e.g., warehousing, inventory control, sub-assembly and packaging, freight forwarding, freight consolidation, and intermodal arrangements.
- Intermodal services in collaboration with truck, bus, airline, and water carrier companies, and shipper associations and travel agencies.

Conversely, the Plan should consider the economic wisdom of contracting-out certain railway activities such as rolling stock maintenance, parcel service, terminal operation, and provision of specialized equipment (e.g., containers) to other companies. If private commercial interests can provide these services at less cost and similar or better quality than the railway, it makes sense for the railway to divest them.

In working toward the objective of obtaining revenues sufficient to cover costs, debt service and retirement, and investment needs, the railway enterprise must be relentless in creating value from all its assets. For example, railways the world over have often generated substantial earnings from the sale, lease, or development of surplus real estate, especially in metropolitan areas. The railway must also evaluate the potential of actively persuading new production facilities and other business operations to locate facilities on its real estate which could generate profitable traffic for the railway. As well, operation of hotels, bus lines, and cartage companies may be sources of income (or, depending on the circumstances, sources of net cash drain from which the railway should withdraw). The Strategic Plan should review these "markets" and the railway's relationship to them.

Pose the Crucial Policy Options

Given agreement that commercially-oriented operation of the railway is the objective, and with the desired railway services tentatively identified, the Strategic Plan must next identify those aspects of the national transport policy which apply to the railway, and lay out the crucial policy issues which have to be resolved if the objective is to be met. This process will have an impact on both the objective and the services, probably re-shaping both to some extent, but lead to a much clearer and more realistic understanding of the duties and obligations which each party -- Government and railway -- ultimately must assume.

Each country will have some policy issues unique to it, but virtually all will confront the following:

Cost Recovery from Users. To operate on a commercial basis, the railway must charge its customers rates that cover the operating and capital costs of the services they demand. The strategic planning effort must include a careful assessment of the degree of cost recovery which is anticipated in total, and for each of the market/service segments identified previously. If there is little or no demand for a service and adequate rates cannot be charged, the service should be dropped by the railway. On the other hand, if governments (national, provincial, or local) are prepared to cover the shortfall between revenues and the operating and capital costs for a service, the railway should willingly provide the service: in such situations government would simply become another paying customer. In brief, **the railway should be indifferent to the sources of the revenue provided that costs are recovered**. Both railway and Government must accept the principle of cost recovery. Without it economically efficient operation and effective management cannot be achieved.

It deserves emphasis that the question is not whether cost recovery will be achieved: cost recovery, through some combination of revenues, subsidies, borrowings, or capital erosion is unavoidable. The important principle is that the revenues and/or government support for **each** service should be equated with costs. This is the only way that rational choices, and plans, can be made.

Pricing Policies. Many approaches to pricing exist and they are likely to differ by major line of business. The SP should develop agreement on the pricing principles to be used in each market segment, e.g., fully commercial, "value of service" (often called "Ramsey") pricing[6] for freight and selected intercity passenger services, "marginal cost" pricing for commuters and other intercity passenger services, and competitively-based profit maximization for commercial services such as leasing space in stations to private businesses. It is crucial that the railway be given substantial freedom to negotiate contract rates with its freight customers,[7] and to raise and lower rates in response to competition, in market/service segments that the Government will not directly subsidize. This freedom may be subject to regulatory protection against the extremes of below cost predatory pricing (i.e rates below marginal cost) and the undue exercise of pure monopoly power vis-a-vis captive users of the service (i.e. rates which are sufficiently far above marginal cost so that an individual customer or class of customers is being asked to make an undue contribution to the coverage of fixed costs). Quite simply, where competition exists, railways must be free to compete. The economic logic of "full cost recovery" plus "pricing flexibility" will undoubtedly result in the conclusion in the Strategic Plan that some rail services should not survive, or should not survive in all locations. Where government authorities choose to support an otherwise uneconomic railway service, they will be responsible for pricing the service. The Strategic Plan should contain a clear definition of the pricing policies that the Government will apply to the non-commercial services that it authorizes.

The question of monopoly pricing is an issue which, while it can not be resolved in this paper, requires discussion. The railway is quite likely to carry certain nationally important commodities under conditions which do not permit adequate competition. If so, there is legitimate concern that the railway be prevented from "abusing" its monopoly position -- and this concern usually manifests itself in a desire for various degrees of government intervention in rate setting. There are two countervailing considerations: first, government intervention undermines the essential objective that the railway be free to pursue its commercial interests, and be accountable for doing so; and, second, that the government, as the owner of the railway, is the direct beneficiary of improved financial performance by the railway, so long as the railway does not set its rates so high as to unduly restrict the flow of the commodity in question.

There is no easy solution to this challenge. One approach would be, as has been the case in the US and Canada, to restrict rate regulatory intervention to only those cases in which there is no effective competition, the railway is clearly charging rates far above its variable costs, and the proposed rates significantly restrict traffic movement. Under these cases, some upper limitation could be placed on rates. Alternatively, the traffic could be declared "social" traffic (much like suburban passenger traffic, for example) where the railway could become in effect a contractor to the government and would haul the traffic under contracted terms and conditions. These, or other, solutions should be identified and discussed in the course of the preparation of the SP.

Social Service Commitments. Railways all over the world have been used, explicitly or implicitly, as instruments of social policy. Integrating the country, opening up remote areas to settlement, encouraging economic development or foreign investment, income redistribution and political pacification through low (or no) fares for rail passengers,[8] and various labor-related objectives (discussed below), are a few among many reasons cited historically by governments for requiring their railways to provide below cost service. A commercially oriented enterprise cannot survive such policies, because of both incessant financial drain and the irrational management objectives which they entail. Consequently, the Strategic Plan must specifically identify those uneconomic services that are to be continued, define the levels of required support, and identify the public authorities responsible for providing the funds. Here it is important to clarify the scope of any local services, e.g., commuter operations, which a provincial or municipal (or even private) party would be willing to support, though the national government may not. Removing such services from the budget of the national government -- a form of "denationalization" -- would place responsibility for supporting the service squarely on the users and local authorities that benefit from it most, and thus are best able to decide what the service is worth.

In addition, any extant policies for providing preferential rates for the freight and passenger travel of national government ministries, departments, and public corporations must be examined and annulled (unless the Government or the agency involved wishes to pay for them). Government organizations should pay for whatever railway services they use; otherwise, their budgets are receiving hidden subsidies and efficient resource allocation is diminished. Furthermore, it is essential that the Government pay its financial commitments to the railway **on time** -- whether for freight and passenger services used by government agencies, social service subsidies, or capital subventions -- because late payment (or non-payment) forces the railway to borrow funds at high short-term interest rates, thus deepening its debt position.

The unavoidable truth is that for a railway service which does not cover its costs, either the Government subsidizes the shortfall or the service must be discontinued. The SP provides the focal point for resolving these difficult issues, including careful definition of terms such as "deficit," "subsidy," and "compensation" that is acceptable to both parties.

Labor Adjustments*.* In transforming the railway into a commercial enterprise, the work force will be affected significantly. Experience in many countries has shown that fair and equitable treatment of adverse effects on labor is absolutely crucial to successful completion of a railway restructuring effort. Government must deal with this issue directly, cushioning the impacts in light of the political and economic conditions which prevail. Redundant rail labor must be dismissed, transferred, or retrained for work elsewhere in the economy, and the underlying causes of the redundancy (restrictive practices and government employment policies, among others) corrected. Transferral and/or retraining and other job placement assistance is best managed as a government responsibility. Attrition, early retirement, and job severance payments may all have a role to play. Government must decide and then provide the necessary programs and funding. Government may also need to assume the burden of any unfunded pension liabilities for railway workers. If the issue of labor redundancy is not resolved promptly, however, rail costs will remain too high, efficient management will be thwarted, and the railway's commercial objective will not be achieved.

If railway employees are members of the national Civil Service, serious consideration should be given to removing from the Service those who remain with the railway after the restructuring. Railways cannot compete successfully with private sector companies that are free of Civil Service restrictions. The Civil Service hiring regulations, rigid job classifications and work rules, and tightly circumscribed promotion policies, job protection provisions, and (often inadequate) pay scales collectively tie the hands of a commercially-oriented management which needs new people with new skills and maximum flexibility to redefine task assignments, to reward the most efficient employees with increased pay and responsibilities, to adjust pay commensurate with prevailing labor market conditions, and to reassign or terminate those who cannot perform adequately. Just as civil service regulations stifle productivity in a commercial setting, so too will restrictive labor union agreements. Here again Government assistance may be needed to overcome obstacles that would undermine meaningful reform if left unchanged.

Relevant External Factors

The Strategic Plan must identify and evaluate any external factors likely to impinge on the railway's performance. It should be remembered that railways, and all other transport modes, play a **supporting** role in the economy. Their activity is derived entirely from the activity of other industries and businesses that have need for railway service. Railways, therefore, are very much creatures of their economic environment. Indeed, part of the legacy of deep financial distress on railways today is a product of the old mythology that they (and highways and other transport infrastructure) can, in and of themselves, virtually create beneficial economic activity. Strategic planners must be very attentive to external factors which are capable of conditioning the demand for rail service and make their decisions accordingly.

Economic Forecasts and Policies. Key government macroeconomic policies and forecasts -- e.g., for GDP and interest rates, or more specifically, for new trade and agricultural policies which move the country from being a net importer of a product to being a self-provider, or vice versa -- can provide important clues. Estimates of growth in significant rail commodities may provide grounds for optimism about growth in traffic. However, caution is needed in interpreting such forecasts. First, old "rules of thumb" for gauging the impact on railway activity of increases in commodity output may not apply any longer. The objective of the restructured railway is **not** to carry as many tons or wagon-loads as possible or to earn as much gross revenue as possible. On the contrary, the aim is to attract traffic that makes a contribution to income above costs. Thus increasing the tonnage of money-losing traffic is not in the interest of the railway. Second, estimates of a strong rate of growth in the economy may result in little or no change in demand for rail service if the growth is most likely to occur in industries (or in service sectors) already heavily reliant on lorry transport. In this situation, the railway must carefully assess its chances, if any, of diverting such traffic from the highway mode. Third, "rosy" (colored with undue optimism) macroeconomic forecasts that are permitted to become the basis for substantial investment in rail plant and equipment can be extremely costly to the railway and cripple its effort to restructure. Consequently, considerable realism is needed in determining the implications of macroeconomic forecasts for the operations of the railway.

Similarly, forecasts of increased consumer disposable income may be of little practical value to a railway if it is primarily a carrier of bulk commodities and is gradually withdrawing from unprofitable passenger operations. Government export promotion plans could be of special significance in increasing the demand for rail freight service, again depending upon the nature of the products involved and the competitive strength of trucking and perhaps air freight. The Government should also identify any plans it may have for large scale population relocation or remote area development, and the extent to which it expects the railway system to be involved and on what terms. The railway must not be expected to subsidize such activities, but it must adjust accordingly.

Policy Toward the Competing Modes of Transport. The Government's policies vis-a-vis the highway, inland waterway, and aviation modes must be examined in the Strategic Plan. Properly, there should be a level playing field for all competing modes. If there is not, and one or another benefits excessively from direct or indirect subsidies, even the best attempts at railway reform can be a losing proposition. Just as the reformed railway is expected to cover its full costs, so must the other modes. In many countries, motor carriers are believed not to pay a fair share of the costs of the highway systems they use or of the environmental costs they generate, and to benefit from lax (or non-existent) standards relating to vehicle registration, axle-loading, safety, and financial fitness. These advantages benefit highway trans-portation and disadvantage the railway. Furthermore, government budgets must bear the costs of any such privileges permitted by uncoordinated and inconsistent modal promotional, subsidy, loan, grant, and tax policies.

Planners must approach the level playing field question with caution and finesse. For example, the deficiencies in the railway today which are a legacy of its past, and the practical fact that it may take a period of time before it is properly prepared to compete commercially on even terms with its unregulated competitors, may warrant some privileged treatment for it initially from the Government. Looking to the future, however, it must be established that the railway also is expected to stand on its own, without undue support, vis-a-vis the other modes.

Apart from the issue of unequal treatment among modes, the strategic planners must consider any Government plans for expansion or improvement of highway and secondary road systems. If such plans exist, a realistic assessment of their effects -- largely in terms of freight (and perhaps passenger) diversion -- on the railway will be in order. Of course highway and road expansion may also serve as a reassuring palliative in areas where curtailment of uneconomic services or closure of uneconomic rail branch lines is necessary.

Although not a government policy issue, it is also prudent for those preparing the SP to assess candidly the strength and viability of the railway's competitors. After making allowance for any subsidies they may be receiving, how efficient are the other modes and the firms which operate in them? What are their cost structures? How committed are shippers and travelers to using lorries, water transport, aircraft, buses, and other private means of transportation? What is the range of competitive counter-measures which the railway's competitors are likely to take in reaction to the restructured railway's new market initiatives? (Competitive markets, by nature, are dynamic rather than static. Continuous change becomes commonplace. The railway's commercially operated competitors are far more experienced in operating in this environment.) On a level playing field, to what extent are they likely to sustain an advantage over rail in various market/service sectors? An enterprise operated on commercial principles must "listen to the market." It is foolish to persist in offering services which the market no longer wants, or prefers to obtain from another mode. It makes sense to serve those markets where demand exists, assuming competitive prices and acceptable quality of service. Accurate knowledge of the capabilities of one's competitors will make it more likely that realistic judgments about the attractiveness of potential rail market/service niches will be forthcoming from the strategic analysis.

It is also vitally important that the planners assess the degree to which the <u>demand</u> for transport is distorted. If, for example, most of the freight shippers or receivers are government agencies, and if these agencies experience no effective pressure to minimize their cost of transport, then the market will not respond as expected to a commercially oriented railway. In many countries, correcting distortions on the demand side can play an important role in the process of restructuring the railway's interaction with its markets.

Special Economic Administrative Constraints. Many existing general Government restrictions on economic and financial activity can constrain the effectiveness of a railroad that is being restructured to operate on commercial principles. The Strategic Plan must identify all such discriminatory restrictions that are relevant to the railway. Either waivers (full or partial) will have to be granted to the railway and others so situated, or the impacts of the restrictions on the railway must be calculated and the enterprises's objectives and performance expectations scaled back accordingly. The types of restriction at issue include, but are not limited to, the following: availability of foreign exchange (especially as it relates to the railway's ability to acquire spare parts), import controls, permissible sources of foreign and domestic borrowing, rationing, wage controls, and procurement regulations requiring "local only" and/or "low bid" purchases.[9]

Other Relevant Factors. Each country should identify any other external factors of relevance to its railway and ensure that they are carefully considered in the development of the SP. For example, railways dependent on connections with foreign railway systems for important volumes of traffic must evaluate realistically the likely future performance of their interchange partners, recognizing that the future course of international relations is not easy to predict. Is the foreign system reliable? Can it handle the increased traffic and/or meet the service quality standards envisioned by the restructured enterprise? How crucial are the routing policies of foreign railways and their governments and are they subject to unilateral change? Are there capacity constraints on the foreign railway or at a port which it serves and through which our traffic must flow? Are the revenue divisions between the two systems equitable? Can they be renegotiated? The answers to such questions can significantly condition the performance expectations of the restructuring railway and must not be ignored.

One planning factor pertinent to all railways is the assumption made about technological change. Are major changes in technology anticipated that will significantly alter the efficiency or quality of rail service vis-a-vis competing modes of transport? Are other modes likely to benefit from such changes to the net disadvantage of rail? Will new technologies put a premium on the development of new cooperative relationships between modes and new joint services? Above all, it is unwise to assume continual advance in rail technology and little or no progress in other modal technologies.

The rapid globalization of domestic economies is spawning a challenging new set of logistics problems. Various concepts of total cost, integrated logistics management have been developed to deal with them.[10] Freight shippers, in particular, are demanding more services and greater efficiencies in the performance of the logistics chains in which they participate. Both the restructured railway and its competitors are likely to be affected by this thinking, sooner or later. Whether this development will result in business opportunities for the railway, or disadvantage it significantly, is a matter for prudent consideration.

Assess the Strengths and Weaknesses of the Railway

Typically, in the strategic planning processes within major private corporations, evaluation of essential external factors is balanced by a clear-eyed assessment of the internal strengths and weaknesses of the corporation itself. This same step makes sense in the Strategic Plan. Almost by definition, many of the railways being converted to commercial enterprises are not in top-flight condition. They carry the scars of the deficiencies which the restructuring effort is intended to correct. With this sort of legacy, they need to be strengthened to the point where they may fairly test their ability to succeed as commercial entities. Government assistance may be necessary for this purpose. Beyond the immediate issue of the railway's current capabilities, the Strategic Plan must also consider future opportunities for the enterprise to exploit and future vulnerabilities which it must prepare to avert.[11] Indeed, "[t]here is an enormous payoff to the skilled probing of opportunities and threats in a company's future and relating them in an unbiased study of the company's strengths and weaknesses."[12]

Several of the elements which help to determine a railway's profile have been noted above, e.g., excessive levels of debt, redundant personnel, too much physical plant, and operating and other costs that exceed revenues. However, other factors should be identified during the strategic planning effort which make the status of the railroad absolutely clear. For instance, the age, number, and availability of locomotives and other equipment; the extent of deferred maintenance of way and the general operating condition of rail plant; the availability of suitable computer systems; and the qualifications of personnel at all levels of the organization, in light of the requirement that they operate a commercial enterprise.

With this information "on the table," decisions must be made in the SP about the need for special steps to remedy the critical deficiencies. Some may require significant capital investment (discussed below). Other changes, no less significant, are likely to be primarily institutional in nature. A major issue will be the availability of people, from top management on down, who can function effectively in a competitive commercial environment. While the details of internal reorganization are best left to the railway's Management Plan, analysis and discussion at the SP stage is necessary to ascertain whether Government assistance is required (and to reassure Government that the restructured railway can function and succeed as a business entity). Marketing, pricing, sales, and customer service skills will be urgently needed on the restructured railway. People prepared and willing to act and react quickly and flexibly to meet changing market demand conditions are essential. If they cannot or will not, business will be lost to the competition, perhaps irrevocably. Can such people be hired in-country, from other commercial enterprises; can existing railway staff be trained and, if so, what types of training are required; are consultants necessary, both to serve as expert staff for an interim period, as well as to train; can special arrangements be made with local universities to prepare students for careers in marketing, sales, and customer service? If the latter option is selected, the railway must be prepared to pay competitive salaries lest other businesses bid these graduates away. This provides an example of the critical need for freedom for the railway to hire and fire and to train and develop its personnel without regard to Civil Service regulations.

Similarly, most state-owned railways that become commercial enterprises will need a significant up-grading in the ability to measure the cost of their services. Accurate knowledge of costs is the key to identification of traffic and services which can earn a profit (or contribution to net income) above costs. The objective of the restructured railway is to maximize such desirable traffic and services while eliminating those which cannot pass this test. As with the marketing and sales skills noted above, special efforts may be needed to put people with these skills (and relevant computer support) in place as quickly as possible.

The internal cultural revolution required on a railway that accepts the challenge of operating as a commercial enterprise also extends into the operating and engineering departments. The difficulty involved in achieving the necessary changes in operating and engineering skills and attitudes should not be underestimated. Most railways have been "production led;" that is, the customer is expected to adapt to whatever services the railway chooses to supply, rather than the reverse. A commercially oriented or "market led" railway, on the other hand, focuses on the customer's demand for services and develops the optimum resulting combination of price and cost needed to meet the customer's transportation requirements (even if this implies that costs are not minimized).[13]

Unfortunately, the best marketing theories and most innovative sales packages that can be devised have no meaning if the quality of the rail operations actually performed is faulty. Quality in operations depends on having railway operational personnel who are as sensitive to costs and to the needs of the shipper or traveler as is the marketing specialist. In the phraseology of British Rail:

> Our Quality strategy is not about meeting general targets for service punctuality and equipment availability agreed internally between the Business and Production functions. It is about meeting, time after time, the individual specification agreed with the individual customer.[14]

Trains that are late, use the wrong equipment, lose or mis-route wagons, or tolerate lengthy terminal delays will destroy the best-laid plans with shippers, drive the business away to lorries, inflate costs, and contribute to the rapid demise of the enterprise. Railways which do not offer the services that customers want, will soon have no customers, or at least too few to justify continued operation of the railway on a commercial basis.

The Strategic Plan must conclude that the sort of top management leadership needed to infuse all levels of the railway with the new entrepreneurial spirit, and to focus them all in integrated fashion on a single-minded, shared commercial objective, is available or identify a way to find them. Special incentives may be needed to attract and retain such people.

Develop An Enterprise Forecast

The SP should include a multi-year (between three and ten years) pro forma forecast of the income statement, balance sheet, and funds flow statement for the restructured enterprise. This forecast is **not** intended to serve as a management plan. Rather its purpose is to provide an overview of the results likely to flow from the mix of decisions, assumptions, and policy options developed earlier in the SP. Various "mixes," of course, are possible, and their respective forecasts will provide the strategic planners with clearer understandings of the consequences of their choices in quantitative terms, e.g., from changes in labor force levels, major line abandonments, or introduction of entirely new services, and help to reshape their choices. The forecasts can also be used to explain the restructuring effort to the public and all other interested parties, and they can illustrate the budget implications of Government decisions to support particular uneconomic services.

Prepare a Capital Plan

The capital plan is a statement of the capital resources required to carry out the levels of activity foreseen in the enterprise forecast. It should address each line of business, by year and by major item of investment, as well as any special expenditures undertaken to give the railway an immediate boost in capability. A discussion of the justification for each investment should be included, as well as an indication of the source of the capital, i.e., Government, railway, or some combination of the two. If it is decided that the railway will not be expected, at least initially, to finance all of its capital requirements from customer revenues, then some Government capital subvention will be necessary. The cost of any new borrowing by the railway should be reflected in the pro forma income statement.

Review the Safety and Environmental Aspects of the Railway

Given that **economic** deregulation of the railway's activities is essential to its successful operation on commercial principles, it does not follow that safety and environmental regulation should necessarily be relaxed in the same degree, or at all. Safety and environmental protection are significant public values. If anything, they should be constantly improved and strengthened, and regulation may be necessary for this purpose. There is, however, one important caveat to this proposition; namely, that safety/environmental regulation should not be permitted to mask or disguise other kinds of interventions, such as restrictive labor practices imposed in the guise of "safety," that effectively constrain the railroad's ability to function as a well-managed commercial entity.

THE CONTRACT PLAN

When the strategic planning effort begins to converge on a generally accepted approach, the development of the Contract Plan (CP) should begin. The Contract Plan, as the word "contract" denotes, is a formal ratification by the railway and the Government of their respective obligations. Strictly speaking, it is not a "plan" but rather an implementing or "agreed actions" document.[15] It states their mutual acceptance of the entrepreneurial mission and objectives developed in the Strategic Plan, clarifies the authority and responsibility of the railway, stipulates the performance levels expected of the railway, specifies the commitments undertaken by the Government, and establishes a time period for the duration of the contract (probably three to five years).

Contract Plans have been used in a number of countries since the 1970's. For the most part, it is generally conceded that these plans have fallen short of expectations, apart from improving the quality of communications between government and railway. This record is due to a number of causes, including failure to deal well (or at all) with strategic issues, undue government involvement in detailed internal management matters best left to the Management Plan, failure to relieve the railway of restrictions on its ability to make decisions or a failure of the railway to respond effectively to the opportunities created by such new freedom as was offered by the CP, and the inability of governments to keep the commitments that they had made in the CP.[16] The authors believe that development of a Strategic Plan, along the lines suggested earlier in this report, will greatly improve the likelihood that a concise and effective Contract Plan can be negotiated by the parties.

A workable CP should meet three tests. First, its terms must be clear, complete, and mutually consistent. Ambiguity, incompleteness, or contradictory terms which serve to conceal problems or postpone confronting difficult issues must be avoided. Second, both parties must have the authority, capability, and willingness to carry out their commitments. Otherwise, the CP has no meaning. Commitments that cannot be kept are best not made. Third, the CP must not be an unduly rigid document. It should include provision for making mutually agreed upon adjustments in the light of experience. This is in recognition of the fact that both the Government and the railway are setting out on relatively uncharted waters, namely, to operate a major enterprise on the basis of commercial principles for the first time. The two parties should **assume** that some of the initial assumptions used in the SP will prove to be too optimistic or too conservative, and that there will be unexpected (perhaps unpleasant) developments as the enterprise tests its mettle in a commercial environment. Their responsibility when such occasions arise is to work together to plot the necessary corrections in course, exploring the available options in the same spirit as was done in fashioning the Strategic Plan.

If these three tests cannot be met, there is no point in signing

a Contract Plan.

Affirm the Mission Statement and Objectives

The CP will adopt the mission statement for the railway enterprise developed in the Strategic Plan. That is, to provide efficient transport by replicating the behavior of a commercial, profit-oriented enterprise operating under conditions of adequate competition. In effect, this mission provides the incentive for the railway to provide its services in the most efficient way.

The Government and the railway also jointly adopt the definition of the objective or objectives which the railway is to achieve, as presented in the SP. One plausible definition is to recover from revenues funds in an amount sufficient to pay the costs of providing the service, meet interest and principal payments or debt, and contribute to (or cover in full) new investment in the railway. The parties may wish to set a target percentage return on assets for the Railway or provide other refinements to the definition.[17] In some situations it may be desirable to phase in achievement of the objective over time, in effect recognizing a transition period before full commercial operation is attained. If this approach is used, the interim targets should be spelled out in the CP. Note that while the railway's primary objective typically is expressed in financial terms, it necessarily subsumes achievement by the organization of critical subordinate goals such as motivating the work force, developing marketable services, and building customer satisfaction. (These are matters best dealt with in the Management Plan.)

Most CP's will also assign the railway the objective of providing certain services specified and supported by the Government, as efficiently as possible. The Government may wish to establish a series of goals for phasing down the size of its subsidies[18] or for phasing out particular services,[19] over time. These targets would be stated in the CP.

Delineate the Railway's Authority

The CP must enumerate the areas in which the Railway will have the authority to make decisions, as distinguished from those where Government review or approval will continue to be necessary. It is a sound general principle of effective administration that responsibility **and** authority be located at the same place. This principle is absolutely crucial to the successful operation of a competitive, profit-making enterprise. It must have the authority to make the decisions which control fulfillment of its responsibilities. Obviously the railway must be held accountable **ex post** for any public funds it uses, but it must be freed to the maximum extent possible of the need for **ex ante** consultation with Government about its activities, just as would be the case for a private sector enterprise which viewed the Government as a customer, and not as an owner.

Among the types of railway authority likely to be listed and described in the CP are the following:

(1) Freedom to set and change prices on its commercial (non-supported) freight and passenger services, to negotiate confidential contract rates with freight customers, and to market services as it sees fit.
(2) Freedom to hire, fire, train, classify, pay, assign, promote, and organize its labor force.
(3) Freedom to borrow funds.
(4) Freedom to engage in commercial ancillary services with its assets.
(5) Freedom to enter into contractual arrangements with private sector companies to obtain services that it needs, and to offer new joint and cooperative logistics services to customers.
(6) Freedom to alter the physical size of the railway system and the size and consist of its fleet of locomotives and other equipment.
(7) Freedom to cease railway services that do not meet commercial objectives, and for which Government does not choose to provice financial support.

Establish the Railway's Performance Standards

For unsupported rail services, the only standard needed is the previously set objective of the enterprise. Either it achieves an adequate return on investment (or some other measure of profitability), or it does not. To achieve this objective, by definition it must operate efficiently, invest capital wisely, provide quality service, and market and price aggressively. Such traditional measures as volume or ridership "commitments," number of on-time departures and arrivals, etc. are unnecessary in the CP, though they may appear in the internal Management Plan. Basically, they are variables which are under the discretion and control of the management of the commercially operated railway. Indeed, as noted in the Strategic Plan, a goal to achieve a fixed increase in tonnage, wagonloads, or gross revenue would be self-defeating for the enterprise if the only way to obtain it was to carry the traffic at a rate below the costs of providing the service. The simplicity and clarity of the goal "to earn a profit" (or positive net income) is one of its major attractions. Success or failure is very easy to see.

The Government and the railway should agree on a separate performance measure for those unprofitable rail services which the Government chooses to support for reasons of political and social policy or because a transition period is needed before they can become self-sustaining. The demand forecasting, service quality levels, and pricing of such services becomes the responsibility of the Government, and the railway simply serves as a contractor to the Government for the provision of the services. Its obligation as a contractor is to operate as efficiently as possible.

The two parties must negotiate the terms of the contract, covering the fares/rates (and hence revenue) which the Government will permit, the

Railway's estimated cost of providing the service (greater than revenue), and the differential between revenue and cost which the Government is obligated to pay. Of course, the Government could reduce the size of the differential on passenger service deficits by eliminating the "free pass" and narrowing the range of riders eligible for fare discounts and the size of the discount. For its part, the railway could improve the effectiveness of fare collection to reduce the drain of lost revenue from fare evasion. The Government could also narrow the differential by offering incentives to the railway either to cut its costs more or to carry more passengers (or freight) for the same cost. For example, the Government could authorize the railway to keep a percentage share of any cost savings it achieved below a designated target level of costs for the service, or of revenue gained from improved fare collection. The issue of devising effective incentives in a supported services situation is complex. The Government wants costs minimized without degradation of service below agreed normative levels. The incentives should be devised to encourage the railroad to reduce costs and increase revenue (within the limits of the Government's pricing policy) without reducing the quality of service. Of course, allowing the railway an opportunity to earn some profit on its Government contract operations would serve as a stimulus to the railway to not neglect efficient management of the supported services.

Critical to achieving the objectives of both unsupported and supported services is proper determination of their costs. Therefore the CP should indicate the cost allocation methods which will be used to develop "profit centers" for the commercial services and "cost centers" for the Government's supported services (to permit both proper audit and public justification). Both sides must understand that perfect allocations of cost are not possible, in theory or in practice, because of the many joint and common costs involved in railway operation. Experience will gradually provide a basis for adjusting and refining the allocations. It is, after all, not essential that the allocations be perfect -- they only need to produce predictable results and proper incentives. In the meanwhile, agreement on one or another commonly accepted methodology will suffice.[20] In some cases, agreement will also be needed on a schedule for phasing-in the full application of the costing system. At the outset of the reform process, the railway will have actual costs which are too high, but which cannot be reduced immediately. Raising rates overnight would either lose traffic, or force rates to be too high: an appropriate phasing plan would permit costs to fall before rates are increased. For the Government's supported traffic, the CP should indicate the extent to which the railway will be held responsible for its initial cost projections and settle on the techniques to be used for adjusting costs for any variances in the projected volume of social traffic. These techniques no doubt will have to be adjusted periodically to take account of actual experience. Properly, "costs" for supported services will cover the fully allocated operating and capital costs of these services. It should also be decided whether an allowance for profit will be included.

Railway Commitments

In return for its broader and clearer authority, and in the light of its performance standards, the railway must undertake certain commitments. These would include, among others:

(1) Aggressive and professional efforts to meet the performance standards, such as the financial targets or agreed quality of service standards on supported services.
(2) Effective management of operations, such as efficient labor force size and working conditions, professionally managed procurements, and efficient acquisition and use of capital resources, however derived.
(3) Mutually advantageous relationship with customers, i.e. quality services at competitive rates for commercial customers, and fully satisfactory delivery of services to contract customers (including the government, where supported services are provided).
(4) Monopoly positions, if any, will not be abused.
(5) Forthright and transparent relationship with the government, including accurate financial and operational information as necessary to verify performance against standards or targets, good faith projections of costs and revenues for supported services, and accurate estimates of capital requirements.
(6) Fair and responsible relationship with the labor force, including pay, conditions of work, and incentives (both for labor and management).

Government Commitments

As the relationship between the Government and the railway changes, the Government will have certain obligations to fulfill which will be critical to achievement of the goals of the Strategic Plan. Some of these actions may require legislation, budget allocations, cancellation, amendment, or waiver of regulations, issuance of directives to government departments, promulgation of new policy statements, or reorganization of government departments. The Government's commitments could very well include some or all of the following:

(1) Deregulation of rates and fares, service levels, and decisions to abandon rail plant and services that are not supported by government.
(2) Changes in rail safety regulation.
(3) Changes in government policy toward non-rail modes of transportation in terms of economic regulation, taxation, promotion, safety, etc.
(4) Assumption of past railway debt obligations.
(5) Capital investment payments in the railway (amount and schedule).
(6) Payment of operating subsidies for supported services (amount and schedule).
(7) Removal of railway personnel from Civil Service jurisdiction,

and assumption of unfunded Civil Service pension liabilities.

(8) Funding and other arrangements for a program to reduce the rail labor force, including transfer, reemployment assistance, retraining, severance payment provisions, etc.

(9) Definition of procedures for assuring timely payment by government ministries for charges owed to the railway.

(10) Cancelling, waiving, or modifying certain general regulations, e.g., on foreign exchange availability, imports, procurement, borrowing.

(11) Formal authorization for the railway to obtain goods and services from private contractors, to enter into cooperative arrangements with third party transportation companies and logistics services providers, and to use its assets freely for commercial purposes (leasing space, selling or developing its real estate, etc.).

Finally, the Government must commit to prompt preparation and implementation of the Enabling Actions Plan (discussed below) which will clear the way for a rapid start-up of the railway's operation as a truly commercial enterprise. The Government should also designate -- and endow with the appropriate authority -- a single department, agency, or interministerial group to serve as its principal spokesman and point of contact with the railway. The railway must be protected against the need to deal with multiple government offices, each claiming to speak on behalf of or as "the" Government. There should be a single authoritative Government voice for railway matters, one capable of resolving any differences within the Government as well as requiring government agencies to meet their respective obligations vis-a-vis the railway. This authority could also be charged with making the factual findings associated with tariff protests or line abandonments.

For example, Kenya has recently taken the innovative step of establishing a Railway Monitoring Group (RMG) to oversee the performance of both the railway and the Government in fulfilling their respective obligations under the terms of the Memorandum of Understanding signed by both parties. A similar group is envisioned in Nigeria. Given adequate authority and resources to do their job, independent agencies of this type can play very constructive roles in promoting a successful outcome from the railway restructuring process.

The Board of Directors

In line with the unification of the railway/government relationship is the need to assess the structure of the Board of Directors, or Managing Board. Many railways have traditionally functioned under Boards which are either wholly staffed by railway personnel (which tends to reduce the railway's responsiveness to external forces, <u>and</u> often undermines the authority of the chief executive) or which, however staffed, have very limited authority (some boards, for example, focus entirely on procurement issues, and have no policy authority). Neither situation is conducive to proper management of a market-oriented enterprise. It is likely that a new Board, including authoritative outside appointments and with a broader role in policy decisions, may need to be instituted.

Contingency Provisions

The CP should include a section which identifies the procedures to be used in the event of a major failure, either in meeting the terms of the document or due to some external event which renders it moot.

For instance, what is to be done if the Government fails to make subsidy payments or a major capital investment payment? In that event, can (or must) the Railway discontinue the affected service? How will the Government acquire the funds necessary to fulfill its commitments?

Similarly, to what degree will the railway be required to take responsibility for the cost and profitability projections for the non-supported commercial services? How long should large losses be permitted to accrue? Will the Government make good those losses (or a part of them, at least for a limited period)? Should there be a loss "cut-off" point beyond which the railway will not be permitted to go and a given commercial service suspended or terminated?

And what is to be done to cope with significant change in the external environment? For example, the CP between the French government and SNCF conceivably could be made meaningless if their mutual estimates of the impact of the integrated European market on transportation in France in the early 1990's were orders of magnitude in error. Any country faced with such events should move with great speed to reframe both the Strategic Plan and the Contract Plan.

THE MANAGEMENT PLAN

The Management Plan (MP) is an internal document prepared by and for the railway. In it the activity plans in the Strategic Plan and the performance commitments in the Contract Plan are converted into detailed operational targets for each of the railway's departments

Normally the MP will have a three to five year planning horizon. The performance targets for the first year of operation as a commercial enterprise will take account of the inevitable start-up problems which can be expected as the railway transitions to its new role. The "out years" will also be revised each year to account for year to year changes (internal and external) and experience gained.

Establish the Organizational Framework

It is almost certain that on most railways the switch to a commercial mode of operation will warrant changes in the organizational framework of the entity. The railway's "complex structures hamstrung by tradition are particularly in need of a face-lift to encourage transparency, flexibility and, above all, results-led thinking."[21] Particular attention must be given to the marketing, sales, pricing, customer service, costing, and management information systems functions which are so critical to the success of the restructured enterprise. New departments and authorities may be necessary to insure that the status of these functions is elevated to the highest level. While the actual form of these organizational units is open to discussion, it seems increasingly clear that some form of "business sector" organization deserves careful consideration. For example, this might take the simplest form of freight versus passengers: it could be made more elaborate as appropriate, as in British Rail's Freight, Intercity passengers, Network South East, Provincial and Parcel's Organization. As another example, American railroads are tending to merge "marketing and sales" into a single department oriented to major customers (often called "national accounts"). This has the advantage that customers have a single point of contact to deal with inside the railway; moreover, from a management point of view, administrative "turf" battles between separate customer-oriented departments are avoided and employees are further imbued with the idea that they have a common purpose -- to serve the customer and earn profits for the railway. "Costing" is often located in the finance department and sometimes in the systems department. Costing also warrants careful thought because it is a function that has long been ignored in countries where rigid economic regulation of railways has predominated. It is only when positive net income becomes the objective of the enterprise that the importance of knowing actual costs -- and controlling them -- becomes significant. One of the biggest challenges to the privately owned American railroads since their relative deregulation in recent years has been to overcome decades of neglect in the determination of costs and to design effective profit measurement systems for use by railway management.[22] For a competitive railway, profitability information must be accurate, specific, timely, and accessible to its users throughout the organization. The restructuring state-owned railways will have to confront the same challenge and must give this function adequate status and support within their organizations.

Finally, the administration and personnel departments on the railway have to be evaluated and, where necessary, reinforced, because of the central roles they must assume. Administration must focus on reducing overhead costs throughout the organization. As the restructured railway begins its new life, reductions in overhead are as important as new sales because overhead costs directly reduce net income. Assuming constant revenue, for example, a $1000 reduction in overhead automatically increases profits by $1000. Of course, while the administration department attacks general overhead costs, all other departments must share in the effort to cut costs within the scope of their own responsibility and be given incentive and assistance in doing so.

The personnel department has the critical task of seeking to strengthen the railway's human resources so that it can perform successfully under competitive conditions. Its assignments are formidable: dispense with redundant labor, retrain some workers for new jobs within the railway, recruit new employees (often for new or newly expanded positions in areas such as marketing, customer service, costing, etc.), replace a Civil Service organizational culture with one geared to the operation of a commercial enterprise, devise salary, development, promotion, performance incentive, and employee benefits systems, etc. Personnel must work very closely with each of the other department heads and give them the utmost support as they strive to transform the railway into an effective competitive enterprise.

Freedom from Civil Service restrictions also enables the railway to focus comprehensively on its work force costs, above all attuning them to the prevailing private sector labor market. This may result in restraining wage levels for some categories of worker, as well as increasing wages for others in short supply, i.e., differential pay which recognizes the differential value of work performed. It also provides flexibility for the use of incentive wage programs which reward productivity and outstanding performance in meeting the railway's profitability objectives. These questions pertain to the entire organization.

Determine the Railway's Pricing Policies

Drawing on the discussion of pricing in the Strategic Plan, the Management Plan will reaffirm the pricing principles the railway will apply to the various markets/services that it is authorized to serve on a commercial enterprise basis. As noted in the SP, it could choose to apply fully commercial pricing to freight and perhaps express intercity passenger service, marginal cost pricing to other intercity passenger services and commuters, and straightforward profit maximization to any rail-related commercial lines of business that it undertakes.

The railway will estimate the economic advisability of increasing the volume of its freight moving under contract rates and on what terms. Likewise it should assess the extent to which promotional rates will be offered to attract new (or previously lost) traffic to rail service. This requires careful determination of the appropriate rate level, the amount of potentially profitable traffic likely to be attracted, whether increased volume at the low promotional rate could reasonably be expected to generate sufficient profit, and the point at which the promotional rate could safely be raised (after demonstrating quality of service to the shipper) without losing the traffic.

For the railway's "supported" non-commercial rail services the Government is responsible for making the pricing decisions. The MP, however, should show clearly what the Government has decided and what the implications of those pricing decisions are for operation of the railway.

Specify Responsibilities and Performance Goals

The MP will specify the responsibilities of each department and the managers who direct them. Of crucial importance, however, the general manager (or his equivalent) must impress on the departments that in a commercial enterprise **each** of them has the **same** overall objective, namely, to achieve the target profit, contribution to net income, or rate of return that was determined in the SP and ratified in the CP. This goal will not be met if departments seek either to operate as isolated fiefdoms or set their own private standards of performance. That is a recipe for failure. On the contrary, every effort must be made by the departments to cooperate actively in pursuit of the common objective. Operating the trains on time will not mean much if the marketing demands of shippers have been badly misjudged; likewise, brilliant marketing initiatives can be wiped out by train operations that fail to deliver the quality of service expected by the shipper. The general manager and each department head must devote constant attention to insuring productive and harmonious interdepartmental relations, and, in part, should be evaluated on their success in doing so.

With that in mind, the MP will include goals and performance measures such as the following for appropriate departments and sub-departments:

(1) Revenue targets, based on assessments of demand, expected pricing behavior, and costs. The objective is not gross revenue per se, but revenue which makes a contribution to net income. The obvious corollary is that traffic carried below cost should either receive a tariff increase or be eliminated aggressively. These targets are directly related to the railway's objectives for levels of profitability or return on investment for particular commercial sectors/services.

(2) Forecasts of outputs, along with cost estimates at each level of output.

(3) Cost reduction targets (or increased output per unit of cost).

(4) Basic performance indices, e.g., percent of trains on time, percent of locomotives available for service, percent loaded utilization of wagons, meeting current maintenance of way (MOW) schedules and reducing deferred MOW, percent of revenue collected (where passenger fare fraud is an issue), and efficiency measures for Government-supported services provided under contract. Because of the railway's newness in operating like a commercial company, these targets should be open to continual review and revision in the light of experience, but appropriate performance indicators are a critical element of successful management.

(5) Other performance commitments, such as completion of scheduled investment programs within budget and on time, attaining various productivity targets, meeting staff reduction, recruitment or training objectives, motivating the work force, achieving greater value in the utilization of railway assets (leasing station space, developing real estate, etc.), enlisting new customers, building customer satisfaction, devising marketable

new service offerings, and any other key targets for which a particular department is responsible.

To be useful, in a practical sense, the indices and other performance indicators that are used must be readily measurable, understandable, and reportable. They should also be kept to a relatively small number, because the overriding aim of the railway is to have all employees busy selling and delivering the railway's services, not filling out forms and re-creating the very bureaucratic inertia which the reform effort is meant to eradicate. If large number of employees are needed just to fill out reports, then the wrong indicators have been selected. Pick only those critical indicators which the department manager needs to know to do his job properly, and which he must have available at his fingertips. The ultimate criterion of course, is simply to ask whether each department, manager, and employee is doing whatever it takes to deliver railway services to customers at price and quality levels that will keep the traffic on the railway (and hopefully attract new business) at a cost low enough to enable the enterprise to earn positive net income.

It is important to emphasize, also that the the performance goals in the MP are internal commitments among the railway Chief Executive and senior managers and should generally <u>not</u> be part of the SP or CP. In some, limited cases, it may be desirable for the SP or CP to take notice of certain goals, but only when they are essential to the validity of these documents. What is to be avoided is, for example, the situation where an essentially technical index such as locomotive availability becomes a handle for political debate and intervention.

THE ENABLING ACTIONS PLAN

The "" section of the Contract Plan provides a comprehensive listing of the obligations which the Government has agreed to fulfill. The Enabling Actions Plan takes that list and develops the program of specific steps which must be taken to enable the Government to make good on each of its promises, and enable the railway to begin operating as a truly commercial enterprise as soon as possible.

Necessary new legislation and amendment or repeal of existing legislation must be identified and a plan for achieving the necessary enactments established. In Francophone countries, the "Cahiers des Charges" -- the document which describes the full juridical status of the railway -- would be modified appropriately.

Any new funding authority needed by Government would be sought and provision made for allocations in the national budget.

With respect to regulations, a schedule would be arranged for the issuance of needed new regulations, or the cancellation, amendment, or waiver of old ones, as required to meet obligations agreed to by the Government in the CP. Similarly, any necessary policy or administrative directives would be drafted and issued to the relevant government departments.

The Enabling Actions Plan would also arrange for the implementation of agreed changes in the organization of government agencies and the removal of the railway from the Civil Service. An action program would be developed, for example, to carry out Government commitments to find new jobs for displaced rail workers, to retrain them, to pay severance allowances, and to assume responsibility for their unfunded pension liabilities.

Prompt formulation of an Enabling Actions Plan is crucial to the success of the restructured railway, because the longer legal, legislative, regulatory, and other administrative obstacles delay the efficient commencement of operation as a full-fledged commercial enterprise, the lesser are its chances for success in ending the financial hemorrhaging which afflicts so many national railway systems.

ENDNOTES:

1. Stewart Joy, "Railway Costs and Planning," Journal of Transport Economics and Policy (January 1989), 52.

2. See World Bank, The Railways Problem (1982); Eric W. Beshers, Conrail: Government Creation and Privatization of an American Railroad (1989); and Sir Robert Reid, Institutional Reform in Transport: The British Rail Experience (1989).

3. See, e.g., Dieter Havlicek, Experience with Labor Redundancy Schemes in the Transport Sector in Western Europe, the United States and Japan, World Bank Report INU 9 (April 1988); Alice Galenson, Labor Redundancy in the Transport Sector: A Review, World Bank Report INU 36, (January 1989); and, J.C. Kohon and L.S. Thompson, Institutional Reform in Transport. Case Study: Uruguayan Railways, to be issued by the World Bank in late 1989 or early 1990).

4. Some countries have used specially-appointed independent groups of knowledgeable people to develop such plans. They are presumed to be more objective, and, if properly constituted, can broaden the arena within which all interested groups can make their views known. They can also perform the useful function of serving as lightening rods for criticism from interested parties who perceive that they may be harmed by the Plan. Many of the successful restructurings that have occurred -- e.g., France, U.K., and U.S. -- have used this approach for at least part of the Plan's development.

5. George A. Steiner, Strategic Planning (1979) [hereafter Steiner], p. 192.

6. The term "Ramsey" pricing means a form of discriminatory pricing such that tariffs deviate from marginal cost in inverse proportion to the price elasticity of demand for the service in question. See, for example, W.J. Baumol and D. Bradford, "Optimal Departures from Marginal Cost Pricing," American Economic Review, 60 (1970) 265-283. In the body of the paper this has been called "fully commercial" or "value of service" pricing.

7. Experience to date with rail rate deregulation in the United States, Canada, and several European countries shows that contract rates have been enormously successful from the standpoints of both shippers and railways.

8. For example, in 1984 the Uruguayan railways carried roughly only one-third of its ridership at full fare, one-third on various fare discounts, and one-third on free passes.

9. For example, on an Asian railway, a requirement to accept the lowest

bid in all procurement actions has resulted in the acquisition of 14 different locomotive models. Thus prevented from standardizing its equipment, the railway has had to maintain separate mechanics and parts systems for each model, thereby incurring higher overall costs.

10. "[P]erhaps [the] most significant reason for integrated logistics is that the complexity of contemporary logistics require innovative solutions. The challenge for the coming decade is to develop new ways of satisfying logistical requirements, not simply using technology to perform old ways more efficiently." D.J. Bowersox, D.J. Closs, and O.K. Helferich, Logistical Management, 3rd ed. (1986), p. 15.

11. In business strategic planning circles this weighing of external opportunities and threats against internal strengths and weaknesses is sometimes referred to as WOTS UP analysis (Weaknesses, Opportunities, Threats, and Strengths Underlying Planning). See Steiner, p. 19.

12. Ibid., p. 20.

13. Contemporary shippers which practice "total cost" production and logistics strategies may demand (and pay for) high cost transport services in order to minimize costs elsewhere in their operations.

14. C.J.D. Driver and I.A. Brown, "The Response of British Railways to the Challenge from Road Haulage in a Deregulated Environment," Rail International (February 1989), 19.

15. A better phrase in English might be Memorandum of Agreement or Memorandum of Understanding (a term used recently in Kenya).

16. See John Nellis, Contract Plans and Public Enterprise Performance, World Bank WPS 118 (October 1988).

17. For instance, the objective of British Rail's non-Government supported services (freight, parcels, and intercity passenger) is jointly to achieve a return on assets of 2.7 per cent after charging current cost depreciation but before interest. British Railway Board, 1988 Corporate Plan, p. 2.

18. British Rail set the objective of reducing support to the passenger railway 25 per cent over three years and another 25 per cent in the next three year period. Ibid.

19. Uruguay actually eliminated all passenger services in 1988.

20. The traffic costing models developed by OFERMAT for use in Cameroon and by CIDA for use in Tanzania could serve as useful references.

21. M. Lehmann, "Product Management: A Challenge to the Future of the Railways," Rail International (February, 1989), 5.

22. See, for example, M. B. Lawrence and R. G. Sharp, "Rail Profit Responsibility and Profit Measurement," July 1989, a Journal of the Transportation Research Forum preprint.