THAILAND: Supporting Railway Sector Reform
Final Report

Prepared by Greg Wood for the Ministry of Finance, the Ministry of Transport, the State Railway of Thailand, and the Asian Development Bank.

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TA-8078 THA: Supporting Railway Sector Reform
March 2013
# ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>BTS</td>
<td>Bangkok Mass Transit System Public Company Limited</td>
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<td>BoB</td>
<td>Bureau of the Budget</td>
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<td>BRPS</td>
<td>British Rail Pension Scheme</td>
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<td>BU</td>
<td>Business Unit</td>
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<td>DOR</td>
<td>Department of Railways</td>
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<td>EGAT</td>
<td>Electricity Generating Authority of Thailand</td>
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<td>EU</td>
<td>European Union</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>ICC</td>
<td>Implementation Coordination Committee</td>
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<td>IDOC</td>
<td>Infrastructure Development and Operating Company</td>
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<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<tr>
<td>Lao PDR</td>
<td>Lao People’s Democratic Republic</td>
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<td>MOT</td>
<td>Ministry of Transport</td>
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<td>MOF</td>
<td>Ministry of Finance</td>
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<td>MRTA</td>
<td>Mass Rapid Transit Authority</td>
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<td>NESDB</td>
<td>National Economic and Social Development Board</td>
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<td>NR</td>
<td>Network Rail</td>
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<td>OTP</td>
<td>Office of Transport and Traffic Policy and Planning</td>
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<td>PDMO</td>
<td>Public Debt Management Office</td>
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<td>PMC</td>
<td>Property Management Company</td>
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<td>PMU</td>
<td>Project Management Unit</td>
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<td>PPP</td>
<td>Public Private Partnership</td>
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<td>PRC</td>
<td>People’s Republic of China</td>
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<td>PSC</td>
<td>Public Service Contract</td>
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<td>PSO</td>
<td>Public Service Obligation</td>
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<td>RITA</td>
<td>Reform Implementation Technical Assistance</td>
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<td>RPS</td>
<td>Rail Pension Scheme</td>
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<td>SARL</td>
<td>Suvarnabhumi Airport Rail Link</td>
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<td>SEPO</td>
<td>State Enterprise Policy Office</td>
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<td>SOE</td>
<td>State Owned Enterprise</td>
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<td>SRT</td>
<td>State Railway of Thailand</td>
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<td>TDRI</td>
<td>Thailand Development Research Institute</td>
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<td>TRA</td>
<td>Thailand Railway Authority</td>
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NOTE

In this report, "$" refers to US dollars unless otherwise stated.
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I. EXECUTIVE SUMMARY

A. Development of Thailand

1. Thailand is currently a middle income country. Over the next 10 years Thailand plans to become a developed country. To achieve that transition, the economy will industrialize further and continue to rely heavily on regional and international trade links across a wide range of commodities. Infrastructure – communications, transport and finance – will be needed to support that increased trade, together with the human capital to take advantage of the developing economic opportunities offered by Thailand’s increased integration into the regional and world economy.

2. Thailand sits geographically in an advantageous position, as the hub of northern South East Asia. Virtually all significant trade movements among the high value countries of the region, People’s Republic of China (PRC), Malaysia, Singapore and Thailand transit through Thailand. As Viet Nam, Myanmar, Lao PDR and Cambodia continue to develop, much of the future trade between those countries will also transit Thailand.

3. As the economy of PRC continues to expand and increasingly the economies of South East Asia grow, trade opportunities will change dramatically. Thailand has the potential to become the switching system for trade in the whole region and beyond. But this will depend on having an integrated – multifaceted transport system that can respond quickly to the needs of the developing economy.

B. Development of Thailand’s Transport System

4. Without aggressive and sustained support and restructuring, the Thailand railway system is likely to become irrelevant within 10 years.

5. Lack of an integrated transport system is now affecting the competitive position of Thailand compared to its neighbors. Heavy investment in road assets over the past 30 years together with more efficient and cost effective road transport operators have resulted in a strong primary and secondary highway network and customer responsive road transport operations throughout Thailand. Unfortunately, the comparable investment in either railway hardware or software has not taken place. As a result railway’s share of the freight market has now fallen to between 2-2.5% from a higher level of 9% in 2000. Internal transport cost of moving goods to ports is 60% of the overall shipment cost - twice the comparable percentage cost for both PRC and Malaysia. The average domestic cost of container movement in Thailand is $1,000. The average for PRC, Indonesia and Malaysia is $500. Thailand’s economy is paying a significant cost premium for a lack of available competitive transport options.

6. The main business of the State Railway of Thailand (SRT) is carrying passengers - of which 90% travel in third class subsidized carriages. Those carriages are old and in poor condition. Fare levels have not been adjusted for over two decades. Subsidized passenger trains account for 70% of the trains operated. While both freight and passenger traffic have declined significantly, SRT was able to cover operating cost from operating revenue until around 2005. At that time the financial situation began to deteriorate and the loss on operations in 2010 is now about 23% of revenue. This loss is exacerbated by the other indirect costs. These include:

(i) depreciation on assets of around 22% of revenue;
(ii) pension obligations of 27% of revenue; and
(iii) debt carrying cost of 22% of revenue.
7. The result is an annual loss of approximately $322 million (Baht 10 billion). The combined losses and other capital investment costs now account for a debt burden of almost $3.2 billion (Baht 100 billion).

8. **Without addressing the systemic cost burden carried by SRT, particularly the indirect costs, no sustainably viable railway service in Thailand is possible.**

C. Potential Benefits of Reform

9. A number of important financial and economic benefits will gradually grow as the railway system in Thailand is re-established as a viable competing mode to the road transport carriers. These benefits fall into three categories, namely:

   (i) Direct financial benefits to shippers;
   (ii) Indirect financial and economic benefits to road providers and road users; and
   (iii) Indirect economic benefits to society as a whole.

1. **Direct Financial Benefits to Shippers**

10. The total value of imports and exports from and to Thailand in 2005 was US$228 billion (Baht 9,184 billion). Based on the work done by the United National Economic and Social Commission for Asia and the Pacific (UN-ESCAP)\(^1\), the inland transport component of the delivered value of imports was 5.71%. This translates into an annual transport cost of $13 billion (Baht 524 billion) if applied to both exports and imports. Reducing the inland transport cost through enhanced completion by 50% to accord with the cost in other comparable economies would thus represent about **$6.5 billion (Baht 262 billion) annually**. This does not take into account non export and import transport costs which would significantly increase the savings.

2. **Indirect Savings to Road Providers and Road Users**

11. At a normative annual road maintenance cost of approximately 2.5\(^2\) of the $75.6 billion (Baht 2,267.91 billion) replacement value of the Thailand road network, the annual maintenance demand for the Thailand road network is approximately $1.9 billion (Baht 56.7 billion). Research has shown the approximately 75% to 80% of the road damage is caused by heavy vehicles. Cars, light trucks and buses have a relatively small impact on the road but heavy vehicles, particularly heavily overloaded vehicles have a high impact. One overloaded vehicle with double the permissible load has the impact of 18 equivalent vehicles loaded legally. The current railway plan calls for increasing the rail freight traffic to 9% of the freight moved in Thailand from the current level of 2%. This 7% would come primarily from the road mode. That transfer of load from the roads to the railways which are designed to carry heavy loads will result in an annual saving of **$100 million (Baht 3.0 billion)**. In addition, the annual saving to road users is an additional **$300 million (Baht 9.0 billion)**.

3. **Indirect economic benefits to society as a whole**

12. A number of studies have examined the differential impact of the movement of freight by road as compared to movement by railway. The comparison in Figure E1 shows how both

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\(^1\) Research and Information System for Developing Countries, India. Paper presented at the Economic and Social Commission for Asia and the Pacific (ESCAP) Regional Expert Group Meeting on Trade and Transport Facilitation for Export Competitiveness, Yangzhou, China, 25 and 26 September 2008.

\(^2\) The value of 2.5% normative maintenance cost is taken from: Asian Development Bank, Project Number: 5925 March 2006 ‘Road Asset Management’.
road and rail compare across a range of externalities. The total impact of road compared to rail is approximately 3 to 4 times larger across the combined range of measures.

**Figure E1: Comparison of Road and Railway External Costs**

![Comparison of Road and Railway External Costs](http://ec.europa.eu/transport/costs/handbook/doc/2008_01_15_handbook_external_cost_en.pdf)

13. The justification for improved railways in Thailand is clear. There is a significant potential saving to shippers. There is a strong potential saving in both road agency expenditure and also for the cost to road users of deteriorating road condition. And railways are much less costly in terms of overall social economic impacts.

D. **International Experience Summary**

14. Many countries have reformed their railways over the past 30 years. The European Union (EU), in the 1991 EU Directive 91/440, made it a legal requirement for independent companies to be able to apply for non-discriminatory track access (running powers) on a EU country’s track. This in effect required restructuring of the previously monopolistic control of the railways by national railway companies to provide for open access to improve the competitive environment and allowing gradual improvements in productivity and services. The move to require open access, in turn, required effective separation between infrastructure and operations.

15. Reforming the Thailand railway system can benefit from that international experience (Appendix A). A summary of the key issues and how the international railways addressed the key issues is presented in table 2 of the main text.

16. The various models of international railway reform offer the following key lessons:

   (i) Restructuring needs to be tailored specifically to each country. It needs to take into account the transport policy objectives in the country, the culture of the country, the

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existing railway business, the entities and their capabilities, their history, the position of the workers and of the unions towards change and restructuring.

(ii) It is normally better to transfer all infrastructure and real estate assets to a new public company created to manage them. The mission of this new company is to manage core railway infrastructure for efficient operations and to independently manage any separate non core assets to achieve maximum financial return. Some assets such as main stations may be considered as a separate asset and developed as combined entities.

(iii) The question of the asset inventory is critical. The asset inventory should be carried out by an independent body and an independent state entity – either a unit of the Ministry or a state owned enterprise - should be responsible for managing those assets. The ministries involved should closely monitor the activities of the entity responsible.

(iv) In virtually all cases, pension obligations are left with the government. In some cases, railway staff continue to contribute to the pension but the management and distribution of the pension remains a government responsibility. The key point is that the pension cost and obligation is not carried on the financial accounts of the railways.

(v) Restructuring is done for a reason. Usually that includes improved service and improved profitability of the railway. This in turn will inevitably place pressure on the staff to perform better and more efficiently. The input of the unions is thus essential to the restructuring process and a strong program of staff development and training is also a key component.

E. Developing a Rail Transport Policy

17. The creation of a railway transport policy is the fundamental first step in defining where the end point of the reform process should be aimed. Lack of a common agreement on a common end point has been one of the key impediments to earlier reform efforts. Creating a railway transport policy helps guide future initiatives to reframe the enabling environment for the reform as well as the types of institutions best able to affect that reform.

1. Target for Reform

18. Before reform can be successful it is critical to know where it is directed. If there is no common view of the end point of the reform process then there is no possibility to obtain consensus from the competing factions that have effective veto power over reform, on how the reform can move forward.

19. Table E1 lists the kinds of key questions that the railway policy makers must answer to define a coherent overall rail transport policy and the response of the key agencies to those questions. The light green cells in the table represent areas where there is a common consensus. The yellow cells indicate areas where opinion is similar but with a slightly different preferred approach. The rose cells are those for which there are differences of opinion on how best to deal with the issue. The full table was discussed by all stakeholders in a workshop in Bangkok. The discussion and concerns expressed by the various agencies, particularly for those issues containing differences of opinion, were used to propose a recommended approach which is indicated in the final row.
| Should SRT be made debt free and with new working capital? | Gov’t Responsibility for railway Infrastructure | Implement responsibility with SRT or new SOE? | Can transfer of land asset offset debt relief and new SRT capital? | Non-core assets with SRT or in new land manage SOE? | Should rev from non-core land be used to cover pensions? | Should rights and benefits of union be maintained in new railway SOEs? | Should Thailand have an Open Access Policy? | Gov’t willing to subsidize ongoing infra costs? | Allow Specials to serve special railway services? | Create a railway regulatory body? | Maintain low cost passenger rail service with PSO subsidy payments? | Is passenger service or freight service more important? | Should Gov’t invest in HSR or left to PPP? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| State Enterprise Policy Office | Debt free. SRT submission | Treat as Public Utility as per constitution | Create new SOE. Cabinet Res. 2007 | Yes, agreed as per SRT long term plan | New SOE. Cabinet 2000 and 2009 | Yes revenue can cover pensions | Yes, maintain rights. State Enterprise Relations Act | Create Open Access Cab. 2007 | Subsidize but increase charges to offset costs. | Yes support JVs. Cabinet res. 2007 | Separate body is needed. | Maintain with PSO but gradually ret. subsidy | Passenger short term and freight longer term. | Separate as per Cabinet res. 2000 and 2009 | Support PPP as per Cabinet res 2007 |
| Public Debt Management Office | Change to debt free but fix accounting problems | Government should be responsible | Create a new SOE | Government can lease or transfer assets. | Current BU should be upgraded to an SOE | Land assets can be used to cover pension or also SRT profits in future | Union agreements will need to be renegotiated | Create Open Access | Gov’t will subsidize in beginning but access charges can help cover costs | Yes, support JVs is way of serving special needs. | Separate body is needed like power sector. | Gradually reduce subsidies and pay support to poor via non distorting means. | Reduced logistics cost and in critical and Thai needs to improve freight service | Long term need to restructure services under open access approach | Government will need to make the investment and use PPP for rail operation and etc. |
| Office of Transport Policy | Change to debt free and recapitalize | Gov’t should be responsible | Create a new public entity | Yes, but only core assets | Leave with SRT to decide | Yes, as per SRT | Leave with SRT to manage | Substitute but use access charges | Yes support JVs with open access | Separate body is needed but may be limited | Yes, Gov’t will pay PSO | Free market will decide. | SRT can compete for PSC. | Free market. Operators will control service structure | Support HSR with PPP. |
| State Railway of Thailand | Change to debt free and recapitalize but not sure the size of working capital needed | Infrastructure should be under Government | SRT needs separate BU and Accounting System | Needs Cabinet decision, can be all or part. MRTA is example | SRT can manage this with BU | SRT has tried to do this but not enough revenue yet. | Yes, but should apply to all employees, not just labour | SRT only operator now. Not possible without changes to operations | NA | NA | There are too many players now. One body would be OK. | NA | Both are important. SRT should be cleared. | Yes, but at the moment, the system is not available to do so. | NA |
| SRT Union | Yes but should remain as an SOE | Yes, treat as a public utility like roads | Gov’t should pay but SRT can manage and Gov’t needs to create full multimodal structure | No should not transfer land. | Non core can remain in SRT but with new independent management company | Pensions are responsibility SRT as per Act 2494 Art. 43 | Yes or improved | No. Do not agree to have new companies like HSR. Better to improve SRT track. | Yes | If JVs are needed Union should be consulted on case basis | No need for separate regulator | Yes | Should focus mainly on passenger service | No don’t separate operations. Accounts can be separated. | Gov’t should not invest in HSR |
| National Economic and Social Development Board | Change to debt free and recapitalize | Gov’t should be responsible | Establish a new SOE with regulation. | Yes that is plausible option. | Transfer to a new company with SRT input. | Yes as part of overall debt restructuring. | Yes, for current members. New members could be different. | Create open access structure | Yes, that is consistent with Gov’t policy | Yes, support JVs as part of Gov’t policy | Separate body is needed. | Yes, pay PSO but use service agreement to prioritize | Yes, pass initially but better track will allow all traffic to benefit | Keep together initially. Separate as needed in future. | Focus of investment should be via PPP |
| Consensus View | SRT should become debt free and recapitalized | Government should be responsible. | Implementation needs to be done by a new public entity but consistent with SRT requirements. | Land can be transferred to another company. But SRT and unions need to have input. | Non core assets need to be managed independently with SRT. | Yes non core land revenue can be used to cover pension obligations. | Yes rights of union members should be maintained in new organizations. | With good regulation an open access policy is appropriate. | Yes, this fits with ongoing government policy. | JVs idea if needed but must include union input | JVs, independent regulator is needed. | Yes, pay PSO but use service agreement to prioritize | Pay. Initially important but freight longer term critical. | The market can define when to separate. Leave to SRT plan. | Minimize Gov’t investment and use PPP to lead |

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This table was prepared following detailed discussion at the Railway Restructuring Workshop on 25th of October 2012.
20. The response to the questions in the above table is remarkably consistent among key institutions. A discussion of the recommended approach for each issue is provided in Appendix B of the main report.

F. Rail Transport Policy Statement

21. A clear policy statement allows all parties to understand the objectives and intentions of the government. A policy statement can act as a check on development of laws or regulations.

22. The basic consensus on the key decision areas in Table E1 helps to define a clear policy which can guide the development of the railway transport system in Thailand. Based on the response in Table E1 and particularly with comments from the two prime policy agencies, the State Enterprise Policy Office (SEPO) in the Ministry of Finance and the Office of Transport Policy (OTP) in the Ministry of Transport, the following is proposed as an overall Statement of Rail Transport Policy.

**Thailand Railway Policy Statement**

The Government of Thailand is committed to providing the people of Thailand with an integrated transport system, whereby they can choose the means of transport that most appropriately moves people and goods in a way that is cost effective, efficient, safe and environmentally sound.

Within the railway sector in Thailand that mission may best be achieved by:

(i) Providing the State Railway of Thailand with a sound financial base to allow it to implement the decisions of government by removing excessive cost burdens including the cost of debt, the cost of long term pension obligations and the excessive cost of infrastructure while providing working capital sufficient for normal business operations;

(ii) Creating a railway network where access is open to current and future operators, including the private sector, to provide users with competitive market and high quality service that best meets their specific needs;

(iii) Establishing independent government owned organization or management unit to be responsible for constructing, maintaining, managing and operating the Thailand railway infrastructure and charging railway operators an appropriate fee for the access and use of that infrastructure;

(iv) Returning ownership of the current railway operation assets including track, stations, signals, maintenance depots to the government, to be operated and managed in the best interests of the people of Thailand;

(v) Ensuring that the current staff of the State Railway of Thailand who are affected by creation of new railway operation organizations are assured of a continuation of their current rights and benefits as are included in the current employment agreements;

(vi) Ensuring that services mandated by the Government and provided by a railway service delivery operator are properly compensated to provide the operator with a reasonable margin of profit on those mandated services;

(vi) Ensuring that service is safe, environmentally sound and provides users with a minimum standard of quality by creating a railway regulatory body to monitor those areas and assure that the operation of the Thailand railway system is open, fair and freely competitive.
23. A fundamental policy statement is a useful tool to help focus concepts and to guide the creation of a legal, financial and institutional enabling environment for railways in Thailand.

G. Priorities for Immediate Action

24. SRT is not viable as an organization under the current conditions. All efforts to address the problems in the rail transport sector which focus on specific issues related to SRT will not succeed until the large issues – mainly financial – are addressed by the government. Until 2005, SRT was able to cover its direct operating costs from revenue. Significant improved revenue options are available but SRT cannot support the existing heavy indirect costs of debt and pensions together with the ongoing cost of infrastructure and hope to be viable.

25. The priorities for action are:

(i) **Debt Relief:** Remove the current SRT debt burden and recapitalize SRT with sufficient working capital to function as a normal company. As a debt free business with a viable capital base and agreed Public Service Obligation or Public Service Contract payments, SRT can become a productive and competitive enterprise. Working capital requirements should be approximately $100 million (Baht 3 billion);

(ii) **Separate Infrastructure and Operations:** Reduce infrastructure costs by separating infrastructure ownership and management from railway commercial operation by establishing a new infrastructure organization either as a Department of the MOT or as a separate Infrastructure Development and Operations SOE (IDOC) under MOT. SRT is now unable to carry the cost of infrastructure. Other railways in Europe have shown that only about 10 to 30% of full infrastructure cost can be recovered through track access charges. The balance must be assumed by the state;

(iii) **Return all land to the new infrastructure organization under MOT.** Division of core and non core assets is difficult. The infrastructure company should maximize return from all non core assets through an independent asset management company and those monies earned should be allocated to offset the cost of SRT staff pension obligations. Capitalization of the SRT Provident Fund can be done in exchange for transfer of non core land. Excess revenue over pension cost can be retained by government to partially offset infrastructure costs;

(iv) **Create a separate regulatory body responsible for safety in MOT.** Establish an independent economic regulator for issues like setting fair pricing, approving PSO agreements, agreeing fair track access charging and track allocation, developing environmental standards, operating service standards and enforcement. The regulator will also have legal enforcement power;

(v) **Create a high level implementation committee to manage the change process;**

(vi) **Based on the above – prepare a new SRT Business Plan by 31 May 2013.**

H. Create a Time Bound Implementation Plan

26. Once the basic five priority areas are agreed, the next step is to establish an implementation plan and timetable. Given the various attempts to restructure the Thailand railway system in the past and the difficulty encountered in getting any traction to move the reform agenda forward, two principles are followed in defining the implementation plan. First, as much as possible, do not rely on legislation to create the enabling environment to achieve reform. Second, do it fast. So often the reforms have been sidetracked by changes in the government or erosion of commit in the government over time. As a result the proposed reform agenda requires the following key components:
(i) A champion;
(ii) A high caliber multi-agency implementation coordination committee (ICC);
(iii) A clear mandate for the ICC with the authority to carry it out, and sufficient capital to finance the key elements such as setting up an infrastructure implementation Project Management Unit (PMU);
(iv) A reporting relationship for the ICC directly to the Cabinet through the Minister of Transport and the Minister of Finance;
(v) Done within 1 year.

1. **Champion**

27. Most successful significant changes in government structure have a strong champion. This was the case with the restructuring of the power sector in Thailand and it likely also applies to the railway. The Minister of Finance and Minister of Transport are the two Cabinet members primarily responsible for the Thailand Railway System and as a result, this reform initiative has the right champions.

2. **High Caliber Implementation Coordination Committee**

28. The choice of the implementation team is critical. The ICC should be led by the MOT but include critical departments of the MOF and SRT to achieve results. The Chairmanship of the Committee should be the Director General of the Office of Transport Policy (OTP) of the MOT. Members of the ICC could include:

(i) Director General – OTP – Ministry of Transport;
(ii) Director – Public Debt Management Office;
(iii) Director – State Enterprise Policy Office;
(iv) Director – Bureau of Budget
(v) Director Planning – State Railway of Thailand.

29. The final decision on the members of the implementation team will be made following further consultation with senior ministry staff.

3. **Mandate**

30. The mandate of the ICC must be clear and well defined and only include the main priority areas. Aspects of the implementation that focus on SRT should be left to SRT to implement. A full SRT five year business plan should be created by 31st of May 2013.

4. **Cabinet Actions**

30. The following steps are the summary Cabinet actions needed to effect the first phase of the Thailand Railway Reform Program:

(i) Obtain support funding for Phase I for implementation team (MOF);
(ii) Agree on amount and process for debt relief and recapitalization of SRT (Cab. Approval);
(iii) If required, prepare a constitution and register new State Owned Enterprise (SOE) for Infrastructure Development and Operation (Cab. Approval);
(iv) Approve establishment of a Department of Railways within the Ministry of Transport;
(v) Arrange transfer of land assets from SRT books to new SOE books or to Department of Railways (DOR) (Cab. Approval);
(vi) Arrange transfer of pension obligations from SRT to Government (Cab. Approval);
(vii) Prepare a constitution for new Property Management SOE (Cab. Approval);
(viii) Arrange transfer of selected SRT staff to infrastructure SOE or DOR (Cab. Approval);
(ix) Prepare draft law for establishment of Thailand Railway Authority (Cab. Approval for new law).

5. Cost Impacts

31. The following are the implications of the railway restructuring program:

a. Structural Reform Costs

Costs

(i) SRT Debt Relief Baht 100 billion
(ii) SRT Recapitalization “ 3 billion
(iii) Urgent infrastructure recovery “ 176 billion
(iv) Pension obligations “ 55 billion
(v) Infrastructure maintenance “ 121 billion

Revenue

(vi) Land revenue “ 55 billion +.

b. Implementation Technical Support

32. The main recommendation above is to establish an Implementation Coordination Committee. That committee will need a technical secretariat to carry out the key priority restructuring steps defined in paragraph 25. The technical secretariat should have as a minimum the following capabilities and skills:

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<th>Duration</th>
<th>Cost</th>
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<tr>
<td>(i) Restructuring Specialist</td>
<td>International</td>
<td>12 months</td>
<td>$200,000</td>
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<td>(ii) Procurement Specialist</td>
<td>International</td>
<td>4 months</td>
<td>$ 64,000</td>
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<td>(iii) Labor Relations Specialist</td>
<td>International</td>
<td>6 months</td>
<td>$ 96,000</td>
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<td>(iv) Institutional/Organizational</td>
<td>Local</td>
<td>8 months</td>
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<td>(v) Legal Specialist (2)</td>
<td>Local</td>
<td>24 months</td>
<td>$360,000</td>
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<tr>
<td>(vi) Administrative Support</td>
<td>Local</td>
<td>12 months</td>
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Total Fees $875,000

(vii) Expenses

- Per diem $140,000
- Airfares $ 20,000
- Local Travel $ 11,000
- Reports/Materials $ 5,000
- Workshops $ 40,000

Total Expenses $216,000

Total Implementation Technical Support $1,091,000

c. Project Management Unit (PMU)

33. The PMU will be contracted by the ICC and will be responsible for the following activities under the authority of the Ministry of Transport:

(i) Design review;
(ii) Procurement training, capacity building and procurement management;
(iii) Materials and equipment supply procurement;
(iv) Contractor evaluation, selection, recommendation;
(v) Construction supervision;
(vi) Quality control/monitoring/completion certification;
(vii) Ongoing monitoring of maintenance performance and certification of compliance.

34. It is likely that the PMU will be required in full for the first five to ten years of implementation of the railway urgent rehabilitation and expansion program. Assuming that the full Baht 176 billion program is implemented inside the five year period, the cost of the PMU will be approximately 4% of the capital cost of the program.

PMU Cost for 5 years 4% of Baht 176 billion Baht 7.04 billion $235 Million

d. SRT Reform Implementation Technical Assistance (RITA)

35. SRT will need technical/capacity building/institutional restructuring support for at least the next 5 years.

RITA 10 specialist - 20 specialist $1.5 - 3.0 M/yr for 5 years $7.5 to $15 M

I. Implications of Reform

36. Following discussion about the recommendations in this report, the Ministry of Transport has developed a proposed organization structure to define roles and responsibilities for the reformed Thailand railway system. That structure is as illustrated in Figure E2.

Figure E2: Proposed Revised Administrative Structure for the Thailand Railway System
37. The following are the implications of the above strategy on the various parties affected by the proposed changes.

1. SRT

38. As noted earlier, the problem for many years has been a continuous requirement that SRT function as a normal company but without offering the environment within which that company could actually perform. This plan does not fundamentally change SRT with exception of its mandate to operate railway services. The potential changes to SRT law, to allow services to be operated by other companies and to allocate responsibility to schedule services on railway infrastructure, can be prepared over time as an amendment to the current SRT law. The authority to schedule services on railway infrastructure can continue with SRT sub-contracting to DOR for infrastructure maintenance and scheduling under DOR direction until DOR decides to carry out those activities itself.

39. SRT will become a normal capitalized state enterprise company with a sound balance sheet and the freedom to operate its business according to sound business principles. Cost for infrastructure will be modest and will be comparable to the cost for road operators. Cost for maintenance facilities will be limited to those facilities used. Pension commitments through the SRT Provident Fund can be capitalized by the Government initially and recovered by the government from the revenue generated by the non core land assets managed by a property management company with a mandate to maximize return on those assets. Under this plan, SRT management and staff, both union and non union, will be free to function as a normal independent State Owned Enterprise.

40. Under the proposed plan SRT will focus on railway operations – both commercial and under public service obligation – and also act as a subcontractor for infrastructure maintenance and operation until such time as the DOR decides to directly assume those responsibilities.

2. Union

41. Selected union staff may be transferred from SRT to the MOT – Department of Railways (DOR) or to the IDOC or under the proposed plan, the union staff will remain with SRT and be contracted to the MOT for infrastructure maintenance and operations. Where staff are transferred, the DOR or IDOC will offer the same conditions of employment to the transferred staff as are currently offered under SRT. For transferred staff, no change will be evident. For newly hired staff or contractors, new conditions of employment will be offered based on the Government of Thailand Labor Law.

42. As has been found in other countries, it may be necessary to develop a series of options for union members who wish not to make the transfer to the new organizations. Those options could include reassignment to a different job within the revised SRT, early retirement for some with the right level of seniority, or termination with a buyout as per existing staff conditions. This process can be defined by the ICC.

43. Given that the above process capitalizes the SRT Pension Provident Fund according to normal actuarial accounting principles, SRT Union concern over pension obligations should disappear. Further concerns over effective management of the non core lands can be overcome by inviting unions to become shareholders in the property management company or if that service is contracted directly by the IDOC, then the union should be invited to nominate one or more representatives on the supervisory board to whom the management company will report.
3. MOT

44. The Government of Thailand through MOT needs to become more engaged in the rail transport system. This means dealing with policy and regulation, with financing and financial monitoring and with direct and clear accountability for implementing reforms and ensuring that the intended outcome of the reform plan is achieved.

45. Railway capability in MOT could be strengthened through the establishment of a Department of Railways within the MOT. Under that option the land assets can be transferred to that Department without raising any issues with the SRT union or management and managed through an asset management company. However, establishment of a DOR will require amendment to the current law and as an alternative, MOT may wish to create a new SOE to undertake the important infrastructure ownership functions as an interim step.

46. The regulation of safety will become an important aspect of MOT operation. That regulation may be limited to the railway or it may be extended to cover other areas of transport safety in addition to the railway. This is a specific task for MOT to consider and resolve.

47. The MOT will also become the infrastructure provider and will contract with SRT to undertake track maintenance and operations as needed.

4. MOF

48. The implications of the above options on MOF are quite significant. Given that a large portion the SRT debt burden is already carried on the Government’s books as a sovereign guarantee, the clearing of that burden from the SRT’s books and transfer of that debt to the Government’s books is essentially just an accounting entry. If the transfer is made in exchange for an equal value transfer of land from SRT to another government entity – either the MOT or a SOE, then essentially, from an accounting perspective, the government is indifferent.

49. The expenditure of $5.9 billion (Baht 176 billion) is significant. Further, the assumption of the ongoing cost of infrastructure including a large component of maintenance will be a long term commitment to the railway sector and will need to become an annual operating budget entry by the MOF.

50. Recapitalization of SRT will require approval of that budget item by the Cabinet.

5. Thailand Railway Authority

51. A railway regulatory body is needed. The Cabinet Decision on 24th July 2007 defined a two tier railway policy. This followed an earlier Cabinet Decision to approve development of the Transport Management Act. That proposed Act separated national transport administration into policy, regulation and operation, clarified the role of the regulator for urban and intercity rail in addition to the other modes, introduced the public service obligation system and encouraged participation of private sector operators.

52. The recommendations included in this report outline the approximate shape of a new regulator for the railway sector – separating safety regulation as a direct MOT responsibility and economic regulation under a separate body.

6. New Companies

53. There are two kinds of companies that may result from the reform effort. One type is SOEs that can address specific aspects of the Government of Thailand railway system. This includes the immediate and ongoing commitment to upgrade the condition of the rail infrastructure across the country, a further interest in opening the door to development of higher speed and high speed trains, extension of the metropolitan commuter rail catchment area and
opening access on the network to purpose created operators such as regional railways or specialized freight railways. A new DOR may be needed to manage those companies or as an alternative, a Railway Management Holding Company could be established by MOT as a parent organization for the specific operating and asset management companies.

54. In the future, other companies may be formed for specific purposes. Those companies may be joint ventures and may tap into private sector funding and private sector expertise. At this time, there is no specific need to establish any of those additional companies but over time there is a need to have flexibility in the system to allow them to be created as needed.
II. INTRODUCTION

A. Development of Thailand

55. Thailand is currently a middle income country. Over the next 10 years Thailand plans to become a developed country. That means at least two important changes need to occur.

56. First, low wage jobs will increasingly disappear as other competitors like Myanmar are able to offer wage rates much lower than Thailand. As a result, the mix of jobs in the Thailand economy will move from routine assembly type activity towards higher value jobs like design and engineering services, systems development and logistics management. Thailand has never been a resource based economy but increasingly the economy will industrialize further and continue to rely heavily on regional and international trade links across a wide range of commodities.

57. Second, this shift in the focus of the Thailand economy will need the infrastructure – communications, transport and finance – together with the human capital to take advantage of the developing economic opportunities offered by enhanced trade linkages and increased integration of the regional and world economy. Thailand needs the infrastructure tools to support the expansion of its footprint in the world.

58. Thailand sits geographically in an advantageous position as the hub of northern South East Asia. Virtually all significant trade movements between the high value countries of the region, People’s Republic of China (PRC), Malaysia, Singapore and Thailand will transit Thailand. As Viet Nam and Myanmar develop any future trade between those countries will transit Thailand as will much of the trade activity of Cambodia and Lao PDR.

59. As the economy of PRC continues to expand and increasingly the economies of South East Asia grow, trade opportunities will change dramatically. Thailand has the potential to become the switching system for trade in the whole region and beyond. But this will depend on having an integrated – multifaceted transport system that can respond quickly to the needs of the developing economy.

B. Development of Thailand’s Transport System

60. An integrated and balanced transport system contributes to both economic growth and social development. In most developed countries, railways carry the foundation materials of the national economy – heavier bulk products like building materials, cement, fuel oil, and increasingly over the past 30 years, containers. Producers normally rely on railways to offer access to high capacity transport at a cost that is lower than can be offered by road transport. On the passenger side, railways can offer valuable service in high demand dense inter-city corridors and often, as a component of the local transport system, in the peri-urban areas of major cities. Moving traffic, that railways are best placed to handle, by road, inevitably results in higher road infrastructure costs, increased traffic congestion, vehicle emissions and traffic accidents.  

61. Lack of an integrated transport system is now affecting the competitive position of Thailand compared to its neighbors. Heavy investment in road assets over the past 30 years together with more efficient and cost effective road transport operators have resulted in a strong

5 Developed from “Governance and structure of the railway industry: three pillars, Amos and Bullock, World Bank Office, Beijing, December 2011.
primary and secondary highway network and customer responsive operations throughout Thailand. Unfortunately, the comparable investment in either hardware or software for railways has not taken place.

62. The road mode dominates and rail is left with either an uneconomic role of carrying subsidized passengers or trying to serve commercial goods markets with limited capacity and poor infrastructure. The result of this imbalance has left Thailand with limited rail inter-regional interconnectivity, high logistics cost, poor service to key shippers, poor track and equipment condition resulting in poor rail service standards and higher transaction costs than other economic competitors like People’s Republic of China (PRC) or Malaysia. As a weighted percentage of total transport cost for all commodities, Thailand’s internal transport cost (59.7%) is approximately 1.5 to 2 times more than its Asian neighbors – People’s Republic of China (PRC) (27%) and Malaysia (33.5%), Japan (39.6%)\(^6\). The average domestic cost of container movement in Thailand is $1,000 and for PRC, Indonesia and Malaysia, the average is $500. The Thai economy is paying a significant cost premium for a lack of available competitive transport options.

63. Government’s key objective is “to increase efficiency and upgrade standards for international shipping in terms of speed, safety and punctuality and to support economic development within a framework of regional cooperation and to reduce the country’s overall logistics cost”\(^7\). As other countries modernize their railway infrastructure and operations, continued improved trade will also rely on Thailand improving its physical interconnectivity – both through enhanced traditional railway connections as well as potential high speed railway connections - to other countries in the region.

1. **Strategic Framework**

64. When we consider strategic railway system options, we first need to define what that railway system will be asked to do. The demand for rail service in Thailand in the 21\(^{st}\) Century includes many different types of railways. These include:

(i) Potential high and higher speed passenger service between priority destinations where demand is sufficient to sustain the high cost of those services\(^8\);

(ii) Lower speed and low cost passenger services to offer a base level of transport to the lower income travellers. This government mandated service must be supported financially by the Government through a Public Service Obligation (PSO) payment or Public Service Contract (PSC) payment\(^9\);

(iii) Low cost bulk freight service over longer distances to support Thailand industry and keep factor costs low and to help maintain efficient logistics links to ports and internal production centers;

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\(^6\) See <www.unescap.org/tid/publication/tipub2543_prabir.pdf>  
\(^8\) The World Bank provided a summary of requirements for successful HSR service in a letter to Prime Minister H.E. Abhisit Vejjajiva on April 29\(^{th}\) 2010, indicating that the cost of infrastructure for HSR is normally in the range of $20-65 million per km about 3 times the cost of a normal line and traffic levels need to reach 20 million passengers per year at normal purchasing power to cover working expenses and interest costs. Full recovery of capital cost would require about double that number of passengers. Current SRT traffic for the whole network is 47 million/yr.  
\(^9\) PSO is a subsidy paid to the carrier to offset losses incurred by carrying non remunerative traffic mandated by the government. A PSC is a contract for delivery of service for a fixed amount per unit of delivery. So for instance, the contract could subsidize 3\(^{rd}\) Class passengers by Baht 50 per trip. This provides an incentive for the supplier to become more efficient and to reduce operating cost in order to achieve a profit on the service. It also offers and incentive to carry more traffic to maximize that profit.
Higher speed freight services for perishable and high value cargo to guarantee shippers both departure and arrival times for their shipments to allow just in time delivery and scheduled departures serving import and export centers;

International through services for both passengers and freight to increase inter-regional trade and fuel efficient passenger transport;

Local Thai regional railway services (short lines) that can keep local costs low and offer basic rail capacity for specialized shippers in regional markets;

Municipal or suburban high capacity and high service frequency rail services targeting mainly commuter trips within the large metropolitan areas such as Bangkok.

Given the wide variety of service types included in the above list, it is not clear that one railway organization can fill all those needs.

2. The Rationale for Railway Reform

SRT is the sole operator of railway services in Thailand. The organization was originally founded as the Royal State Railways of Siam in 1895 by King Chulalongkorn. Most of the growth of the railway system was in the first 35 years, reaching about 3,000 km of railway service by 1930. In the last 80 years, the network has only grown by about 35%, with the five main routes now covering about 4,043 km of which 3,880 km are single track lines. The network consists primarily of main lines that radiate from Bangkok into northern, northeastern, eastern, and southern corridors. The network serves 42 of the country’s 77 provinces, and has the potential to be a strong backbone for land transport.

Track condition is a recurring problem and affects operational efficiency and safety. Constant lack of maintenance funding means that more than 67% of the rails have been in use for more than 30 years; about one-third of the sleepers are wooden; the signal and interlocking system is largely obsolete and not suitable for a modern railway; 89% of its crossings with roads are at grade, causing traffic congestion and accidents; and only 133 of its diesel locomotive fleet of 209 (64%) are available for service. Service quality is slow, inefficient and dangerous. Between 2007 and 2009, there were 171 railway accidents, with an average of 107 derailments per year.

The network is heavily used to transport third class intercity passengers (45% market share) comprising 90% of the SRT passenger load. That traffic is the basis for a PSO agreement between the government and the SRT.

The Government of Thailand does not actually pay the PSO but allows SRT to cover its annual operating losses by borrowing on the commercial capital market using a Government guarantee. This has progressively led to a decaying SRT balance sheet and a current estimated debt burden of $3.22 billion (Baht 100 billion). This is a key problem for SRT since debt payments must be again borrowed – thus increasing the debt.

Freight operations on SRT are not considered a priority and traffic has been slowly lost to the competing road carriers. SRT operates on average 62 freight trains per day carrying fuel, construction materials, containers and general goods. While the recent overall demand

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10 Excluding rail-based mass rapid transit (MRT) services in Bangkok operated by the Bangkok Mass Transit System Public Company Limited (i.e., the Skytrain) and Bangkok Metro Company (i.e., the blue line subway).


12 SRT data.

13 2008 is the last year for which figures could be found. The debt burden in 2008 was Baht 76 billion and the annual loss was Baht 10 billion. SRT reports the current debt at Baht 98 billion and growing.
has been increasing at 5.3% per year comprised mostly of increased container traffic, other products are either static or declining. The total mode share for rail is only 2 to 2.5%. Excess demand is not serviced because of low availability of locomotives and poor service time that pushes shippers to other more reliable modes.

71. SRT’s financial performance is terrible because revenues do not cover costs in any business area. Therefore, all traffic is losing money. SRT revenue is $0.59 per passenger and $.009 per passenger-km - less than one cent US. Freight revenue per ton-km is slightly higher at 1.2 cents US. By comparison, freight revenue in North America - from the most efficient freight railways in the world and carrying mainly bulk commodities - is around 2.5 cents per km. So SRT revenue at 1.2 cents per km is only 50% of the revenue needed to cover the cost of the most efficient freight operators in the world. SRT operating expenses are three times higher at 3.2 cents US per traffic unit. Revenue per employee is $11,414 and operating expenses per employee is $13,347. This leads to an operating ratio - operating cost divided by the revenue - of 1.17. In Viet Nam by comparison the operating ratio is 1.10 – better than SRT. These costs do not take into account interest on debt, overhead or pension costs which result in the extremely poor overall SRT performance.

72. The Thailand railway system is not serving the nation well and it is not providing the foundation transport structure on which the Thai economy and society can rely for high quality transport service. Based on the results for 2008, the SRT is losing approximately Baht 10 billion per year. The current outstanding debt burden for SRT is approximately Baht 100 billion.

73. Figures 1 to 3 illustrate the current situation.

**Figure 1:** SRT Passenger Traffic 1993-2009

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14 See <http://www.ppiaf.org/sites/ppiaf.org/files/documents/toolkits/railways_toolkit/ch1_1_4.html>

15 According to the Public Debt Management Office in 2012 this represents 35% of all public corporation debt carried by the Thailand Government. SRT debt is the largest of all the SOEs and corporations. The next highest debt is the Bangkok Metropolitan Transit Authority at Baht 73 billion.
74. The fare on the State Railway of Thailand (SRT) to travel 200 kms is less than the fare on the Bangkok Mass Transit System Public Company Limited (BTS) skytrain. During the period 1993 to 2009, SRT passenger traffic has declined overall by 41% but the number of trains operated has remained constant. The share of intercity passengers carried by SRT has also dropped over the period 1993 to 2009 from 78% to the current level of 55%.

Figure 2: SRT Freight Traffic by Commodity 2002-2009 (Mil. Ton Km)

75. During the period 2002 to 2009, SRT freight traffic increased in absolute tonnage carried but declined in total tonne kms which measures the contribution of freight traffic to the revenue of the railway. Overall tonne kms declined by around 30%. As a result railway’s share of the freight market has now fallen to between 2-2.5% from a level of 9% in 2000.

76. During that period, the only traffic that had any potential for positive financial return to the railway was freight. Unfortunately, shippers were often disappointed by service from SRT, which lacked suitable equipment – locomotives and rolling stock – to carry the traffic and moreover, argued that there was insufficient track capacity to allow for more trains carrying freight on overburdened infrastructure.
While both freight and passenger traffic have declined significantly, SRT was able to cover operating cost from operating revenue until around 2005. At that time the financial situation began to deteriorate and the loss on operations in 2010 is now about 23% of revenue. This loss is exacerbated by the other indirect costs. These include:

(i) depreciation on assets of around 22% of revenue;
(ii) pension obligations of 27% of revenue; and
(iii) debt carrying cost of 22% of revenue.

In conclusion, SRT traffic is dominated by loss making third class passengers (90.7%); the track capacity is taken up by those non remunerative trains (70%) limiting access by other customers who are willing to pay full cost for quality railway service; track and equipment condition is poor resulting from many years of deferred or ineffective maintenance and, that, combined with the lack of effective control of rail – road crossings results in an unsafe railway.

The result is an annual loss of approximately $322 million (Baht 10 billion). The combined losses now account for a debt burden of $3.22 billion (Baht 100 billion).

Without addressing the systemic cost burden carried by SRT, particularly the indirect costs, no sustainably viable railway service in Thailand is possible.

C. Potential Benefits of Reform

A number of important financial and economic benefits will gradually grow as the railway system in Thailand is re-established as a viable competing mode to the road transport industry. These benefits fall into three categories, namely:

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16 OTP. Railway Development Master Plan, 2010
(i) Direct financial benefits to shippers;
(ii) Indirect financial and economic benefits to road providers and road users; and
(iii) Indirect economic benefits to society as a whole.

1. Direct Financial Benefits to Shippers

82. The total value of imports and exports from and to Thailand in 2005 was US$228 billion (Baht 9,184 billion). Based on the work done by the United National Economic and Social Commission for Asia and the Pacific (UN-ESCAP)\(^{17}\), the inland transport component of the delivered value of imports was 5.71%. This translates into an annual transport cost of $13 billion (Baht 524 billion) if applied to both exports and imports. Reducing the inland transport cost through enhanced completion by 50% to accord with the cost in other comparable economies would thus represent about \textbf{$6.5$ billion (Baht $262$ billion) annually}. This does not take into account non export and import transport costs which may increase this saving significantly.

2. Indirect Savings to Road Providers and Road Users

83. Calculating the road user and road provider cost saving is very complicated. The length of the national road network in Thailand is shown in Table 1\(^{18}\).

<table>
<thead>
<tr>
<th>Table 1: Road Network Replacement Value in Thailand</th>
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</thead>
<tbody>
<tr>
<td><strong>Motorways</strong></td>
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<tr>
<td>Length (km)</td>
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<tr>
<td>Value(^{19}) ($000)</td>
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<tr>
<td>Total ($Mil)</td>
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</tbody>
</table>

84. At a normative annual road maintenance cost of approximately 2.5%\(^{20}\) of the $75.6 billion (Baht 2,267.91 billion) replacement value of the Thailand road network, the annual maintenance demand for the Thailand road network is approximately $1.9 billion (Baht 56.7 billion). Research has shown the approximately 75% to 80% of the road damage is caused by heavy vehicles. Cars, light trucks and buses have a relatively small impact on the road but heavy vehicles, particularly heavily overloaded vehicles have a high impact. One overloaded vehicle with double the permissible load has the impact of 18 equivalent vehicles loaded legally. The current railway plan calls for increasing the rail freight traffic to 9% of the freight moved in Thailand from the current level of 2%. This 7% would come primarily from the road mode. That transfer of load from the roads to the railways which are designed to carry heavy loads will result in an annual saving of \textbf{$100$ million (Baht $3.0$ billion)}. In addition, the annual saving to road users is an additional \textbf{$300$ million (Baht $9.0$ billion)}\(^{21}\).

\(^{17}\) Research and Information System for Developing Countries, India. Paper presented at the Economic and Social Commission for Asia and the Pacific (ESCAP) Regional Expert Group Meeting on Trade and Transport Facilitation for Export Competitiveness, Yangzhou, China, 25 and 26 September 2008.

\(^{18}\) International Road Federation – World Road Statistics 2012, page 47. Data for Thailand is 2006.

\(^{19}\) These values are estimates based on average cost for reconstruction of roads in a sample of regional countries.

\(^{20}\) The value of 2.5% normative maintenance cost is taken from: Asian Development Bank, Project Number: 5925 March 2006 ‘Road Asset Management’.

\(^{21}\) Research shows that for each dollar of road maintenance cost delayed or foregone, an additional user cost of approximately three dollars occurs. In the opposite, if the road condition can be maintained and maintenance is not required, then a saving of one dollar in maintenance cost should also lead to a three dollar saving in user cost.
3. **Indirect economic benefits to society as a whole**

85. A number of studies have examined the differential impact of the movement of freight by road as compared to movement by railway. The comparison in Figure 4 shows how both road and rail compare across a range of externalities. The total impact of road compared to rail is approximately 3 to 4 times larger.

**Figure 4: Comparison of Road and Railway External Costs**

86. While the above data is derived from Europe where electrified rail is common and much of the traffic is within urbanized areas, in the US the freight traffic is more rural and all freight is moved by diesel locomotives. The comparison of external costs in the US between road and rail is show below in Figure 5.

**Figure 5: Indices of Impact Road and Rail Freight (tonne-km) USA (rail freight = 100)**

87. As with the European data, the differential in the identified measures, strongly favored railways.

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88. The justification for improved railways in Thailand is clear. There is a significant potential saving to shippers. There is a strong potential saving in both road agency expenditure and also for the cost to road users of deteriorating road condition. And railways are much less costly in terms of overall social economic impacts.

D. International Experience Summary

89. Many countries have reformed their railways over the past 30 years. The European Union (EU), in the 1991 EU Directive 91/440, made it a legal requirement for independent companies to be able to apply for non-discriminatory track access (running powers) on an EU country’s track. This in effect required restructuring of the previously monopolistic control of the railways by national railway companies by providing for open access to improve the competitive environment and allowing gradual improvements in productivity and services. The move to require open access in turn required effective separation between infrastructure and operations.

90. Reforming the Thailand railway system can benefit from the experience of other countries who have addressed many of the same issues over the past 30 years. Some of the relevant experience dealing with issues similar to those of concern in Thailand is presented in Appendix A. A summary of the key issues and how the international railways addressed the key issues is presented in table 2.
### Table 2: International Comparison of Railway Restructuring Options

<table>
<thead>
<tr>
<th>Railway</th>
<th>Separate Infrastructure</th>
<th>Form of Infrastructure Organization</th>
<th>Transfer of Non Core Land</th>
<th>Transfer of Infrastructure Staff</th>
<th>Obligation for Pensions</th>
<th>Changes in Staff Conditions</th>
<th>Changes in Railway Performance</th>
<th>Market regulatory bodies</th>
<th>Safety regulatory bodies</th>
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</thead>
<tbody>
<tr>
<td><strong>Sweden</strong></td>
<td>1988: creation of Banverket (Swedish Rail Agency) as a government body like the National Road Agency</td>
<td>Government body</td>
<td>2001: Jernhusen created as owner and operator of stations and other buildings attached to the railway network, wholly owned by the Swedish government</td>
<td>Full transfer</td>
<td>Yes</td>
<td>Not in the short term</td>
<td>Between 2000 and 2010:</td>
<td>Transportstyrelsen shall consult with Konkurensverket (Competition authority) in matters regarding competition and shall report any unsatisfactory condition to Konkurensverket.</td>
<td>1988: Swedish Railway Inspectorate joined Banverket 2004: Swedish railway Inspectorate incorporated to Jarnvagsstyrelsen (Swedish Rail Agency) 2009: Transportstyrelsen (Swedish Transport Agency) created as a regulatory body for road and rail transports to develop and enforce the rules, to issue licences and certificates, to register change in ownership, to manage congestion and vehicles taxes</td>
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<td></td>
<td>2009: creation of Transportstyrelsen (Swedish Transport Agency) incorporating road and rail agency</td>
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<td></td>
<td>2010: Trafikverket responsible for long term planning of the transport system including road, rail, maritime and air, and responsible for the construction, operation and maintenance of the state owned road and railway infrastructure</td>
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<td><strong>France</strong></td>
<td>1997: creation of RFF (Réseau Ferré de France) as owner of the railway infrastructure, SNCF (Societe Nationale des Chemins de Fer de France) being RFF’s subcontractor for operations and maintenance of the railway infrastructure</td>
<td>EPIC (Etablissement public industriel et commercial) 100% state owned (same status as SNCF)</td>
<td>RFF was given real estate to guarantee the SNCF’s old debt which was transferred to RFF.</td>
<td>1997: No staff transferred except some persons seconded by SNCF to RFF on a voluntary basis. Later on: timetabling staff joined RFF being seconded to RFF by SNCF</td>
<td>As staff is officially seconded by SNCF to RFF, no problem for pensions</td>
<td>No</td>
<td>Between 2000 and 2010:</td>
<td>Creation of ARAF (Autorité de Régulation Ferroviaire) as the market regulatory body</td>
<td>2006: creation of EPSF (Etablissement Public de Securite Ferroviaire) as the national safety authority in charge of establishing and enforcing rules and regulations, issuing licenses and certificates and their monitoring, establishing the infrastructure and vehicle registers</td>
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<td></td>
<td>2008: creation of the direction des circulations ferroviaires</td>
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<tr>
<td>Country</td>
<td>2003-2008 Case Study</td>
<td>Notes</td>
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<tr>
<td>Czech Rep.</td>
<td>Creation of SZDC as the infrastructure owner and manager, CD (Czech railway) being SZDC's subcontractor for operations and maintenance of the railway infrastructure.</td>
<td>2002-2010: Decrease of Freight business by 20% in tonne-km. Increase of Passenger business by 5% in pass-kms.</td>
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<tr>
<td>UK</td>
<td>Creation of Railtrack, owner and manager of the railway infrastructure.</td>
<td>1993: OR (Office of the Rail Regulator) was created to assume the economic regulation of the railway sector. 1993: RSSB</td>
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</tbody>
</table>

**Table Notes:**
- **SZDC is a State Administration**
- **Non core land was first transferred to the Ministry in charge of transport, but in 2004 was transferred to SZDC.**
- **Not at the beginning.**
- **July 2008: transfer of 8000 persons from CD jsc to SZDC.**
- **No special pension scheme for railway staff even in the past.**
- **In 2008, a new not so favourable, collective agreement was negotiated with the unions.**
- **Between 2000 and 2010:**
  - Decrease of Freight business by 20% in tonne-km.
  - Increase of Passenger business by 5% in pass-kms.
- **2006: Drazni Uzad (Railway Authority) responsible for economic regulation of the railway sector, state supervision of the railway sector, licensing body.**
- **1994: RSSB**
- **2006: ORR took over the responsibilities of the safety regulator. ORR is also the National Investigation body is the Railway Inspectorate, team of civil servants within the ministry.**
<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1994</td>
<td>Creation of DB AG, 100% publicly owned company resulting from the addition of former railway administrations DB in western Germany and DR in Eastern Germany</td>
<td>- DB AG, DB ML AG, DB Netz AG are companies 100% owned by the State - 1994 creation of BundesEisenbahn Vermogen (BVG) to take over all long term liabilities of former DB and DR administration as well as surplus personnel and surplus real estate</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>Creation of DB Netz AG as the manager of the rail infrastructure</td>
<td>Yes in 2001 transfer within DG AG Group to DB Netz AG - Yes transferred to the State</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>Definition of 9 DB AG, DB ML AG, DB Netz AG are companies 100% owned by the State</td>
<td>No - 2002-2010: Freight grew by 4%/year from 81 to 107 billion tonne-km</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Long distance passenger transport grew by 1%/year from 33 to 36 billion pass-km</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Short distance passenger transport grew by 3%/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1994: Creation of Eisenbahn Bundesamt, EBA, (Federal Railway Authority) as the economic regulatory body</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2006: Transfer of competition issues related to market access to Bundesnetz Agentur, responsible also for regulation of electricity, gas, telecoms, Post sectors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>After 2000, safety and standards missions given to EBA.</td>
</tr>
<tr>
<td>Country</td>
<td>No separation between railway infrastructure and train operations.</td>
<td>No creation of an infrastructure manager</td>
<td>Disposal of excess assets, Creation of a railway real estate development unit, Sale of railway considerable real estate holdings</td>
</tr>
</tbody>
</table>
91. The key lessons to take from the various models of international railway reform are as follows:

(i) Restructuring needs to be tailored specifically to each country. It needs to take into account the transport policy objectives in the country, the culture of the country, the existing railway business, the entities and their capabilities, their history, the position of the workers and of the unions towards change and restructuring.

(ii) It is normally better to transfer all infrastructure and real estate assets to a new public company created to manage them. The mission of this new company is to manage core railway infrastructure for efficient operations and any to independently manage any separate non core assets to achieve maximum financial return. Some assets such as main stations may be considered as a separate asset and developed as combined entities.

(iii) The question of the asset inventory is critical. The asset inventory should be carried out by an independent body and an independent state entity – either a unit of the Ministry or a state owned enterprise should be responsible for managing those assets. The ministries involved should closely monitor the activities of the entity responsible.

(iv) In virtually all cases, pension obligations are left with the government. In some cases, railway staff continue to contribute to the pension but the management and distribution of the pension remains a government responsibility. The key point is that the pension cost and obligation is not carried on the financial accounts of the railways.

(v) Restructuring is done for a reason. Usually that includes improved service and improved profitability of the railway. This in turn will inevitably place pressure on the staff to perform better and more efficiently. The input of the unions is thus essential to the restructuring process and a strong program of staff development and training is also a key component.
III. DEVELOPING A RAIL TRANSPORT POLICY

92. The creation of a railway transport policy is the fundamental first step in defining where the end point of the reform process should be aimed. Lack of a common agreement on a common end point has been one of the key impediments to earlier reform efforts. Creating a railway transport policy helps guide future initiatives to reframe the enabling environment for the reform as well as the types of institutions best able to affect that reform.

A. Target for Reform

93. Before reform can be successful it is critical to know where it is directed. If there is no common view of the end point of the reform process then there is no possibility to obtain consensus from the competing factions that have effective veto power over reform, on how the reform can move forward.

94. Table 3 lists the kinds of key questions that the railway policy makers must answer to define a coherent overall rail transport policy and the response of the key agencies to those questions. The light green cells in the table represent areas where there is a common consensus. The yellow cells indicate areas where consensus is similar but with slightly different approaches preferred. The rose cells are those for which there are differences of opinion on how best to deal with that issue. The full table was discussed by all stakeholders in a workshop in Bangkok. The discussion and concerns expressed by the various agencies, particularly for those issues containing differences of opinion, were used to propose a recommended approach - indicated in the final blue row.

95. The response to the questions is remarkably consistent among key institutions. A summary of the basis of the recommended consensus is provided in Appendix B.
Table 3: The Future Picture of the Thailand Railway System

<table>
<thead>
<tr>
<th>1</th>
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<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should SRT be made debt free and with new working capital?</td>
<td>Gov’t Responsibility for railway infrastructure</td>
<td>Implement responsibility with SRT or new SOE?</td>
<td>Can transfer of land asset offset debt relief and new SRT capital?</td>
<td>Non Core Assets with SRT or in new land manage SOE?</td>
<td>Should rev from non core land be used to cover ongoing pensions?</td>
<td>Should rights and benefits of union be maintained in new railway SOE?</td>
<td>Should Thailand have an Open Access Policy?</td>
<td>Gov’t willing to subsidize ongoing infra costs?</td>
<td>Allow special JSVs to serve MRTA railway needs?</td>
<td>Create a railway regulatory body?</td>
<td>Maintain low cost passenger rail service with PSDO subsidy payments?</td>
</tr>
<tr>
<td>State Enterprise Policy Office</td>
<td>Debt free, SRT submission</td>
<td>Treat as Public Utility as per constitution</td>
<td>Create new SOE, Cabinet Res. 2007</td>
<td>Yes, agreed as per SRT long term plan</td>
<td>New SOE, Cabinet 2000 and 2009</td>
<td>Yes revenue can cover pensions</td>
<td>Yes, maintain rights. State Enterprise Relations Act</td>
<td>Create Open Access Cab. 2007</td>
<td>Subsidize but increase charges to offset costs.</td>
<td>Yes support JSVs. Cabinet Res. 2007</td>
<td>Separate body is needed.</td>
</tr>
<tr>
<td>Public Debt Management Office</td>
<td>Change to debt free but fix accounting problems</td>
<td>Government should be responsible</td>
<td>Create a new SOE</td>
<td>Government can lease or transfer assets.</td>
<td>Current BU should be upgraded to an SOE</td>
<td>Land assets can be used to cover pension or also SRT profits in future</td>
<td>Union agreements will need to be renegotiated</td>
<td>Create Open Access</td>
<td>Gov’t will subsidize in beginning but access charges can help cover costs</td>
<td>Yes, support JV’s as way of serving special needs.</td>
<td>Separate body is needed like power sector.</td>
</tr>
<tr>
<td>Office of Transport Policy</td>
<td>Change to debt free and recapitalize</td>
<td>Gov’t should be responsible</td>
<td>Create a new public entity</td>
<td>Yes, but only core assets</td>
<td>Leave with SRT to decide</td>
<td>Yes, as per SRT</td>
<td>Leave with SRT to manage</td>
<td>Create Open Access</td>
<td>Subsidize but use access changes</td>
<td>Yes support JSVs with open access</td>
<td>Separate body is needed but may be limited</td>
</tr>
<tr>
<td>State Railway of Thailand</td>
<td>Change to debt free and recapitalize but not sure the size of working capital needed</td>
<td>Infrastructure should be under Government</td>
<td>SRT needs separate BU and Accounting System</td>
<td>Needs Cabinet decision. Can be all or part. MRTA is example</td>
<td>SRT can manage this with BU</td>
<td>SRT has tried to do this but not enough revenue yet.</td>
<td>Yes, but should apply to all employees, not just labour</td>
<td>SRT only operator now. Not possible without changes to operations</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SRT Union</td>
<td>Yes but should operate as an SOE</td>
<td>Yes, treat as a public utility like roads</td>
<td>Gov’t should pay but SRT can manage and Gov’t needs to create full multimodal management company.</td>
<td>No should not transfer land.</td>
<td>Non core can remain in SRT but with new independent management company.</td>
<td>Pensions are responsibility SRT and per Act 2494 Art. 43</td>
<td>Yes or improved</td>
<td>No. Do not agree to have new companies like HSR. Better to improve SRT track.</td>
<td>Yes</td>
<td>If JSVs are needed Union should be consulted on case basis</td>
<td>No need for a separate regulator</td>
</tr>
<tr>
<td>National Economic and Social Development Board</td>
<td>Change to debt free and recapitalize</td>
<td>Gov’t should be responsible</td>
<td>Establish a new SOE with regulation.</td>
<td>Yes that is one plausible option.</td>
<td>Transfer to a new company with regulation.</td>
<td>Yes as part of overall debt restructuring.</td>
<td>Yes, for current members. New members can be different.</td>
<td>Create open access structure</td>
<td>Yes, that is consistent with Gov’t policy</td>
<td>Yes, support JSVs as part of Gov’t policy</td>
<td>Separate body is needed.</td>
</tr>
<tr>
<td>Consensus View</td>
<td>SRT should become debt free and recapitalized.</td>
<td>Government should be responsible.</td>
<td>Implementation needs to be done by a new public entity but consistent with SRT requirements.</td>
<td>Land can be transferred to another company. But SRT and unions need to have input.</td>
<td>Non core assets need to be used independently in new organization.</td>
<td>Yes non core land revenue need to be managed independently in new organization.</td>
<td>Yes rights of union members should be maintained in new organizations.</td>
<td>With good regulation an open access policy is appropriate.</td>
<td>Yes, this fits with ongoing government policy.</td>
<td>JSVs good idea if needed but must include union input</td>
<td>Yes, independent regulator is needed.</td>
</tr>
</tbody>
</table>
B. Rail Transport Policy Statement

96. A clear policy statement allows all parties to understand the objectives of the government. A policy statement can act as a check on development of laws or regulations. It provides a clear definition of the intentions of the government.

The basic consensus on the key decision areas in Table 2 helps to define a clear policy which can guide the development of the railway transport system in Thailand. Based on the response in Table 2 and particularly with comments from the two prime policy agencies, the State Enterprise Policy Office (SEPO) in the Ministry of Finance and the Office of Transport Policy (OTP) in the Ministry of Transport, the following is proposed as an overall Statement of Rail Transport Policy.

**Thailand Railway Policy Statement**

*The Government of Thailand is committed to providing the people of Thailand with an integrated transport system, whereby they can choose the means of transport that most appropriately moves people and goods in a way that is cost effective, efficient, safe and environmentally sound.*

Within the railway sector in Thailand that mission may best be achieved by:

(i) Providing the State Railway of Thailand with a sound financial base to allow it to implement the decisions of government by removing excessive cost burdens including the cost of debt, the cost of long term pension obligations and the excessive cost of infrastructure while providing working capital sufficient for normal business operations;

(ii) Creating a railway network where access is open to current and future operators including the private sector to provide users with competitive market and high quality service that best meets their specific needs;

(iii) Establishing independent government owned organization or management unit to be responsible for constructing, maintaining, managing and operating the Thailand railway infrastructure and charging railway operators an appropriate fee for the access and use of that infrastructure;

(iv) Returning ownership of the current railway operation assets including track, stations, signals, maintenance depots to the government to be operated and managed in the best interests of the people of Thailand;

(v) Ensuring that the current staff of the State Railway of Thailand who are affected by creation of new railway operation organizations are assured of a continuation of their current rights and benefits as are included in the current employment agreements;

(vi) Ensuring that services mandated by the Government and provided by a railway service delivery operator are properly compensated to provide the operator with a reasonable margin of profit on those mandated services;

(vii) Ensuring that service is safe, environmentally sound and provides users with a minimum standard of quality by creating a railway regulatory body to monitor those areas and assure that the operation of the Thai railway system is open, fair and freely competitive.

97. A fundamental policy statement is a useful tool to help focus concepts and to guide the creation of a legal, financial and institutional enabling environment for railways in Thailand.
IV. RESTRUCTURING THAILAND'S RAILWAY SYSTEM

A. Priorities for Immediate Action

98. SRT is not viable as an organization under the current conditions. All efforts to address the problems in the rail transport sector which focus on specific issues related to SRT will not succeed until the large issues – mainly financial – are addressed by the government. Until 2002, SRT was able to cover its direct operating costs from revenue. Significant improved revenue options are available. SRT cannot support the existing heavy indirect costs of debt and pensions together with the ongoing cost of infrastructure and hope to be viable.

99. The priorities for action are:

(i) Debt Relief: Remove the current SRT debt burden and recapitalize SRT with sufficient working capital to function as a normal company. As a debt free business with a viable capital base and agreed Public Service Obligation or Public Service Contract payments, SRT can become a productive and competitive enterprise. Working capital requirements should be approximately Baht 3 billion;

(ii) Separate Infrastructure and Operations: Reduce infrastructure costs by separating infrastructure ownership and management from railway commercial operation by establishing a new infrastructure organization. SRT is now unable to carry the cost of infrastructure. Other railways in Europe have shown that only about 10 to 30% of full infrastructure cost can be recovered through track access charges. The balance must be assumed by the state;

(iii) Return all land to the new infrastructure organization under MOT. Division of core and non core assets is difficult. The infrastructure organization should maximize return from all non core assets through an independent asset management company and those monies earned should be allocated to offset the cost of SRT staff pension obligations. Capitalization of the SRT Provident Fund can be done in exchange for transfer of non core land. Excess revenue over pension cost can be retained by government to partially offset infrastructure costs;

(iv) Create a separate regulatory body responsible for safety in MOT. Establish an independent economic regulator for issues like setting fair pricing, approving PSO agreements, agreeing fair track access charging and track allocation, developing environmental standards, operating service standards and enforcement. The regulator will also have legal enforcement power;

(v) Create a high level implementation committee to manage the change process;

(vi) Based on the above – prepare a new SRT Business Plan by 31 May 2013.

100. The specific details about how each of the priority steps may be implemented is discussed in more detail below.

B. Priority 1: Debt Relief

101. As noted earlier, the current SRT debt is approximately Baht 100 billion. In addition, SRT needs to invest in locomotives, rehabilitation of carriages, purchase of new freight wagons and development of maintenance and service depots either directly or in joint venture with other organizations. In 2010, the SRT operating loss is about 23% of revenue. Therefore, to allow SRT to break even will require a saving or an improvement in efficiency of about 25%. There are around 2000 staff in the civil department and another 500 in the signals department. A further 500 to 1000 are likely to be transferred to the infrastructure organization for a total of 3,000 to 3,500 out of 16,000 staff. Since staff cost is about 50% of total direct costs, reduction
of 20% of staff cost will save about 10% of direct operating expenses. Infrastructure maintenance is also a large cost item - normally about 15% of direct operating expenses. This would disappear under the proposed scenario. The saving of labor cost and the saving of infrastructure maintenance cost will provide overall saving to SRT of about 25% of direct expenses. This should be enough to allow SRT to break even in the near term.

**Working Capital or Available Cash Flow**

102. Working capital or available cash flow is normally comprised of both equity and debt. Most companies combine equity and debt to maintain a conservative balance sheet. At the end of the year, after paying for the cost of debt service and other non operating expenses, the balance remaining is the return on equity.

103. SRT has no working capital at the moment and all cash flow is negative. Daily expenses are covered partially by receipts and supplemented through continuous borrowing. It is not clear exactly how much working capital is needed to return SRT's finances to a normal operating level. Different companies have different working capital requirements at different times in their life cycle. Normally as organizations are downsizing and reducing service, demand for working capital falls. When organizations are expanding and increasing services or investing in new capacity, working capital requirements increase. However, judicious use of leasing and other capital spreading techniques can reduce cash flow demand and save capital. The study team has discussed working capital requirements with SRT and together have agreed that approximately $100 million (Baht 3 billion) will be needed for normal operations.

104. In practical terms, if the Government establishes a new company for infrastructure, it can capitalize that company to the size it chooses. Within that capital base the Government can include the debt relief of SRT together with the recapitalization funding for SRT. The infrastructure company can then buy the land assets from SRT in exchange for the debt payment and the new working capital. This allows both companies to have a real entry on their respective balance sheets. There may be some implications of this process on the profitability of SRT but the historical losses carried forward will be sufficient to offset any capital gains created by sale of the land assets.

**C. Priority 2: Separate Infrastructure and Operations**

105. Separation of infrastructure into a separate SOE was mandated by the Government of Thailand in a cabinet decision on 7th November 2000 noting that:

> "The current SRT organization will be separated into four entities as the first phase of SRT reform:

(i) An SOE responsible for building and maintaining infrastructure (including track, signaling systems and stations);

(ii) A train operation SOE covering passenger and freight services;

(iii) A rolling stock maintenance SOE; and

(iv) An asset management SOE to manage SRT’s properties to generate revenues and remit those revenues to the government."

106. This directive was never implemented. Resistance to the reform came from the labor union and from SRT management. However, the financial situation affecting SRT continued to...
deteriorate, track was not improved, derailments and accidents continued and the call for reform strengthened.

107. In 2007, MOT prepared the Bill of Transport Management Act 2007, approved by Cabinet but never enacted by Parliament. It provided for:

(i) “Basic approval of separation of roles of the central government and SRT: The Government makes railway infrastructure investment and a separate organization is responsible for investment in cars and maintenance of new track infrastructure;

(ii) Reform SRT based on MOT proposals and the Government bears responsibility for its role as the regulatory body. The central government and SRT jointly agree upon the Public Service Obligations framework.”

108. The separation of infrastructure from operations remains the policy of the Thai Government. The government accepts that the cost of both provision and maintenance of the infrastructure are beyond the financial capacity of SRT at the moment. This may change in the future and at that time a more aggressive cost recovery approach to the infrastructure may be appropriate.

109. According to the State Railway of Thailand Act B.E.2494 section 39 (7), the SRT has the authority to sell immovable property including land with approval of the cabinet. The approval of the cabinet is only legal condition for land transfer. Therefore, the SRT can transfer land of SRT to a new SOE - Infrastructure Development and Operations Company (IDOC) - whether it will be formed under a new Act or it will be formed as private or public company as discussed below. SRT could also transfer the land to the DOR under MOT once it is formed.

110. The main change for SRT would be to relieve the company of the need to provide infrastructure, including track, stations, signaling, maintenance facilities and train scheduling. Those functions would be transferred either to a new Department of Railways or to IDOC under MOT. SRT would operate trains, market service, maintain its rolling stock and pay for track through an access charge and for maintenance facilities by lease of those facilities. It would only pay for the track it uses and those maintenance facilities it needs to maintenance its equipment.

111. The core track, stations, signaling and maintenance facilities would be sold by SRT to the IDOC or returned to the MOT. The transfer of those assets would be recorded on the books of SRT as a sale and revenue received from that sale be used to pay down the accumulated debt burden of SRT. The DOR or the IDOC would develop a standard track access charge that would recognize the ability of SRT to pay for the use of the track and stations. The infrastructure entity would negotiate with SRT over the cost of access to the maintenance facilities and SRT would define which maintenance facilities would be needed and contracts would be developed for the leasing of those facilities.

112. As was the case in other countries, the cost of provision and operation of the infrastructure becomes the cost of provision of a utility, similar to the government’s provision of road assets. In Sweden and Viet Nam the level of cost recovery for railway infrastructure is approximately 10%.

113. All assets, core and non core would also be transferred to the IDOC or MOT and recorded as a sale on the SRT books. In exchange the IDOC would record an increase in its asset base equal to the sale price. The combined sale would reduce the SRT long term debt to

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24 Ibid page 4-15.
zero and in addition would recapitalize SRT to the level that is consistent with a normal company of its size.

1. Institutional Structure of Infrastructure Development and Operations Options

114. There are six options for establishment an organization to manage the infrastructure and non core land assets – one departmental and five as State Owned Enterprises (SOEs). MOT may create a new Department of Railways to act in the same way that the current Department of Highways functions in the road sector or it could create a government owned SOE to hold and manage the land assets.

115. The five SOE options are:

(i) SOE established under a specific law designed for that specific SOE such as the SRT law;
(ii) SOE by a Royal Decree under the Establishment of Government Organizations Act B.E.2496 (1953) – Cabinet Resolution;
(iii) Rename and amend SRT Act to make SRT a Holding Company;
(iv) Private SOE Under the Civil and Commercial Code;

116. The five SOE options and the establishment of the new department each have legal implications as defined in what follows.

a. Establish a Department of Railways Within MOT

117. The SRT was formed by the acquisition of the Railway Department of the Ministry of Transport (MOT) in B.E.2494 (1951). In order for the MOT to form a new DOR to manage railways and to own railway land, the MOT is required to amend the “Organization of Ministries, Sub-Ministries and Departments Act B.E.2545 (2002) section 21\textsuperscript{25}”. In order to establish a new DOR by an amended bill, the amendment will need simply to list the DOR as one of the subsidiary departments of the Ministry. Once that change takes place, the responsibility and the authority over land assets can be transferred from SRT to the DOR.

118. The advantage of this model is it would limit the resistance of the State Workers’ Union of Thailand because the properties of the SRT still belong to the State. However, the disadvantage is the time needed -about two years - to promulgate the amended bill to establish a new DOR.

\textsuperscript{25} The terminology of the relevant acts are as follows: The State Railway of Thailand Act B.E.2494 section 6 states that: “Section 6 There shall be established a railway called the “State Railway of Thailand” and have the following objectives:

(1) Acquisition of the Railway Department from the Railway Department, Ministry of Transportation.
(2) …"

The Organization of Ministries, Sub-Ministries and Departments Act B.E.2545 (2002) section 21 states that: “Section 21 The Ministry of Transportation and Communication has government agencies as follows,

(1) Minister Office
(2) Permanent Secretary Office
(3) Marine Department
(4) Land Transport Department
(5) Air Transport Department
(6) Highways Department
(7) Rural Highways Department
(8) Transport and Traffic Policy and Planning Office"
b. Establish a New SOE Under MOT

119. The first option is to establish a new SOE under MOT equivalent to SRT. This is the most elegant model but it has the drawback of requiring a new law of establishment for the new infrastructure company. The increasing complexity of the planned Thailand railway system argue either for a full Department of Railways under the Ministry of Transport or for a new SOE also directly under the MOT to act as a 100% government owned holding company. This department or holding company would have ultimate authority for the ongoing development and operation of the Thailand railway system. As a holding company, the National Railway Development Company (NRDC) would be established under the same legal structure as for SRT to ensure that any transfers of real property of staff within the jurisdiction of the NRDC would not change the overall ownership or rights of the individuals affected. NRDC would be an SOE with the right to establish subsidiary companies, either wholly owned or partially owned by the holding company through joint ventures. This follows the precedent established by the SRT Act.

120. A schematic of the New SOE model is presented in Figure 5.

Figure 5: New Government Owned SOE Under MOT

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c. SOE by Royal Decree Under MOT

121. The structure of this SOE would be identical to option ‘b’ above. The difference is the speed of implementation. Since the SOE would be set up by Cabinet Resolution, it would not need two years to create. However, because it is established by Cabinet under an existing Act, it would not result in a SOE of as high order as the option ‘b’ above. However, this option may be a useful interim step to allow the SOE to be created quickly with a formal specific establishment by Act of Parliament as a subsequent step.
i. Legal Implications

Form of Law

122. To separate its infrastructure and operation from the SRT by establishing a new SOE under MOT, the government has two options; pass a new Act or create a new SOE using a Royal Decree. The first option, an Act would be similar to when the SRT was formed by the State Railway of Thailand Act B.E.2494. The reason to use legislation to establish an SOE under MOT to separate railway infrastructure from operation, is the hierarchy of law principle. In order to use a new law to amend content of the previous law, the new law must be in the same or at a higher hierarchical level than the previous law. In this case, the previous law is the State Railway of Thailand Act B.E.2494; therefore the government is required to introduce a bill to the Parliament to set up a new SOE in order to modify the terms of the current SRT Law. The disadvantage of this option is the time it will take to move through the legislative process.

123. The second option, creating a new SOE through Royal Decree, allows the SOE to be established by subordinate legislation like the Royal Decree under the Establishment of Government Organizations Act B.E.2496 (1953) or under the Public Organization B.E.2542 (1999). The advantage of a Royal Decree is it takes less time. The Royal Decree draft can be approved by the cabinet within only one to two months. However, if the government chooses to create the new SOE under MOT by a Royal Decree, questions concerning the hierarchy of law may be raised. It could be argued that there are some problems about the delegation of powers issue of the Royal Decree to establish the SOE that is inconsistent with the State Railway of Thailand Act B.E.2494. If those problems are significant, the SOE can be founded by a new specific law passed by the legislature.

Content of Law

124. The bill should have provisions stating how the SOE can be formed including its capital, reserving funds, supervision, administration as well as accounts.

Legislative Process and Time

125. The legislative process for passing new legislation is composed of two main processes which are: i) pre-legislative stage of the law-making and ii) law-making in the legislative bodies.

126. The pre-legislative stage starts when MOT begins to draft the bill; this process may take around one to two months. When the draft of a bill is approved by the Minister of MOT, the bill will be sent to the cabinet to get approval under comments of “the state advisory body” like the Council of State. This process may take about nine to twelve months. When the Council of State has made comments about the bill and sent the bill back to “the executive branch”, the cabinet is then required to grant final approval and “hand the bill over” to the House of Representatives. So the pre-legislative stage of the law-making usually requires about one and half years.

127. Law-making in the legislative bodies starts when the House of Representatives receive the bill from the cabinet. Then the House will take around five months to consider the bill and pass to the Senate. Afterwards, the Senate is required to consider and vote for it within two
months. Finally, the process of promulgating the bill will require about one month. Therefore, the law-making in the legislative bodies will consume about eight months.

128. Consequently, the total legislative process for passing the Act will take about two years and two months.

d. Rename SRT as National Railway Development Company

129. The following diagram Figure 6 illustrates an alternative institutional model. In this model, SRT becomes a national holding company. Staff of the holding company would be about 20 to 30 persons with a mandate to simply create and manage the subsidiary companies. Three subsidiary companies would be created under the current SRT Act – one for operations and one to hold infrastructure and one to manage land assets.

130. This is close to the current BU structure but rather than BUs, this structure creates independent SOEs under the holding company. Each would have a separate and distinct Board of Directors and be managed independently. The objective of this model is to come as close to the current structure as possible while still offering the benefits of transparency and better accountability.

Figure 6: SRT Holding Company and Subsidiary SOEs

Transform SRT into a Holding Company and Create New Subsidiary Companies

i. Legal Implications

131. This option elevates the current SRT structure to the status of a “holding company” with limited staff but with subsidiary SOEs under SRT law, two for infrastructure and one for operations.

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26 The Constitution of the Kingdom of Thailand B.E.2550 (2007) determines a certain time only for the Senate in legislative process according to section 146.
132. SRT has the authority to establish private companies or public companies to run a business. Therefore, the SRT may form a new holding company for holding shares in a two new SOEs. However, if status the SRT is changed to the status of a holding company there are still some legal issues. In order to change the status of SRT to a holding company, as the status of current SRT is a State Enterprises formed by the State Railway of Thailand Act B.E.2494, the privatization of the SRT as State Enterprises into private or public companies must be done by a new Act or is required to follow the Corporatization Act B.E.2542 (1999).

133. If the SRT status is to be changed to a Holding Company through a new Act or amendment to the current SRT Act, the time implications as described above for option B will apply. If the change is to be done according to the Corporatization Act B.E.2542, there are many processes to be followed to allow the cabinet to approve a Royal Decree to dissolve the SRT. Moreover, the applying Corporatization Act B.E.2542 to transform SRT into a commercial holding company may be protested because it creates a sense that the company or part of the company may be sold to public. A previous precedent that followed this route, the Electricity Generating Authority of Thailand (EGAT) met strong resistance for that reason.

e. Registration of a New Private SOE Under Civil and Commercial Code

134. The fourth SOE option consists of registration of a 100% Government owned SOE under the Civil and Commercial Code. The effect of this registration would be very slight and would follow generally the structure of arrangement as indicated in Figure 5 above. The only difference will be that the form of registration will be under the overall umbrella of commercial law rather than under a specific law of establishment for the specific SOE. This option would also be very similar to the organization developed under option ‘c’.


135. The difference between this form of organization and the private company is the range of shareholding possible. Under this form of SOE, shares can be sold to the private sector or to the public at large. Thai Airways is this kind of company.

i. Legal Implications

136. It is possible to establish an SOE under MOT but not requiring a new law, rather it can be done by using the commercial law to set up a 100% Government owned SOE under MOT.

137. A private company under Thailand law, is formed with capital divided into equal shares, and the liability of the shareholders is limited to the amount, if any, unpaid on the shares respectively held by them.27 A public company is a company established the purpose of offering shares for sale to the public and the shareholders shall have the liability limited up to the amount to be paid on shares.28 A private company is prohibited from selling shares to the public while a public company is designed to do exactly that.29

138. To establish the SOE under the MOT as private or public companies, the MOT must follow the guideline of the State Enterprise Policy Commission.30 The MOT must submit a

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27 The Civil and Commercial Code section 1096.
28 The Public Limited Company Act B.E.2535 section 15.
29 The Civil and Commercial Code section 1102.
30 The cabinet had resolution on 4 December B.E.2550 (2007) to approve the Rules for the Establishment and Oversight of the Joint Venture and Wholly Owned Subsidiary of State-
proposal to establish the SOE to the cabinet. For submitting a proposal, the MOT is required to prepare following important information.

(i) Result of the establishment plan
   1) It’s required to establish an associated company.
   2) The effects of establishing the associated company are industries, economy, society, and environment concerning.

(ii) Operation plan
   1) Procedure and time for the associated company establishment.
   2) Details of associated company’s operations.
   3) Determination of operations to be transferred from the SRT to the associated company.
   4) Plans to transfer staff and structure of the associated company to the SRT after establishing the associated company.
   5) Executive structure and the committee.
   6) Structure of remuneration of commissioner, executive and staff.
   7) List of shareholders, registered capital stocks and sources of funding.

139. Time to prepare important information is about three months.

140. After the cabinet approves the establishment of private or public companies, the establishment SOE as private company has to follow the provisions in the Civil and Commercial Code while as public company has to follow the provisions in the Public Limited Company Act B.E.2535 (1992).

Process of Establishment Private Company under the Civil and Commercial Code

(1) Promoter at least three persons, by subscribing their names to a memorandum, promote and form a limited company, the memorandum must be deposited and registered at the Registration Office.31

(2) Promoters must provide the whole number of shares with which the company proposes to be registered must be subscribed or allotted before registration of the company.32

(3) When all shares to be paid in money have been subscribed, the promoters must without delay hold a general meeting of subscribers which shall be called the statutory meeting.33

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31 The Civil and Commercial Code section 1097 and 1099.
32 The Civil and Commercial Code section 1104.
33 The Civil and Commercial Code section 1107.
(4) After the statutory meeting is held, the promoters shall hand over the business to the directors.\(^{34}\)

(5) After collection the first share capital, the first directors must apply for the registration of the company within three months after the statutory meeting.\(^{35}\)

(6) After a company is registered, the business is formed as a private limited company.

Time to establish private company is about ten days.

**Process of Establishment Public Company under the Public Limited Company Act B.E.2535**

(1) Promoter at least 15 persons, by subscribing their names to a memorandum, promote and form a public company; the memorandum must be deposited and registered at the Registration Office.\(^{36}\)

(2) Promoters must provide the prospectus to the public.\(^{37}\) The offer of shares for sale to the public or to any person shall be in accordance with the law on securities and stock exchange.\(^{38}\)

(3) When the subscription of shares reaches the number specified in the prospectus, the promoters shall call the statutory meeting of the company.\(^{39}\)

(4) After the statutory meeting, the promoters shall transfer the business and all the document of the company to the board of directors in order to the board of directors will apply to register the company within three months as from the date of the statutory meeting.\(^{40}\)

(5) After a company is registered, the business is formed as a public limited company.

Time to establish public company is about fifteen days.

Therefore, the total time to establish private or public companies is about four months.

**Advantage and Disadvantage between Private and Public Companies**

Establishment of private company will be ensured that the company will not sell shares to the public while establishment of public company may cause some stakeholders to suspect that the public company’s shares may be sold to the public in the future.

2. **Transfer of Current SRT Staff to New SOEs**

141. The new IDOC would be staffed initially by the Civil Engineering, Signaling and Traffic Departments of the current SRT. All current employment clauses agreed by SRT with the union will be honored by the IDOC.

142. The juristic relation between state enterprise employee and SRT is contractual. However, the State promulgated the State Enterprise Labor Relations Act B.E.2543 (2000) to protect state enterprise employees. Under the State Enterprise Labor Relation Act B.E.2543, there is collective agreement between employer, state enterprise, and employee that the employer cannot make labor agreement with employee who are members of a labor union in conflict with the terms and conditions of the collective agreement. If the employer would like to

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\(^{34}\) The Civil and Commercial Code section 1110.

\(^{35}\) The Civil and Commercial Code section 1111 and 1112.

\(^{36}\) The Public Limited Company Act B.E.2535 section 16 and 19.

\(^{37}\) The Public Limited Company Act B.E.2535 section 27.

\(^{38}\) The Public Limited Company Act B.E.2535 section 24.

\(^{39}\) The Public Limited Company Act B.E.2535 section 27.

\(^{40}\) The Public Limited Company Act B.E.2535 section 37 and 39.
change the collective agreement, the employer must issue a letter notification and enter into bargaining with the labor union.

143. The legal issue under consideration is whether transferring staff of SRT to new SOEs is conflict with collective agreement. The proposed approach is to transfer current SRT staff to a new SOE(s) with guarantees that staff will receive salary and other prerogative not less than they have currently under SRT union agreement. As a result, the transfer of SRT staff to a new SOE(s) is not in conflict with the current collective agreement. However, under the Civil and Commercial Code section 577, the staff transferring requires the consent of the individual employee. Therefore, when the SRT transfers staff to a new SOEs whether it will be formed under a new Act or as private or public company, the government and SRT is required to obtain the consent of each individual employee because all SOEs that will be formed is a juristic person separated from the SRT. This approach is similar to that used in other jurisdictions where each individual staff member was given a set of multiple options from which to choose. These ranged from early retirement, to reassignment within the current SRT structure to choosing to move to the new organization.

144. An alternative to this arrangement and one that was followed in France is to subcontract the services of infrastructure maintenance and dispatch operations to the current staff of SRT. This would allow the ownership, management and operations of the infrastructure to fall under the DOR but with staff remaining as part of SRT.

D. Priority 3: Transfer of Land Assets and Assume Pension Obligations

145. Pension costs account for approximately 27% of the SRT losses. At the moment, with the current staff structure in SRT, pension obligations in constant 2010 Baht amount to about Baht 160 billion. In net present value, the obligation is approximately Baht 55 billion at a discount rate of 5%. As with infrastructure cost, SRT cannot hope to be a sustainable self financing organization if it is required to continue to carry the full pension cost. As illustrated above in the international examples, all other railways with the exception of the private railways of North America, have removed pension obligations from the operating company financial statements and placed them under the government. In the case of Thailand this transfer of responsibility, while imposing an initial charge on the government, can be offset by income from non core SRT land as shown below.

146. The current land assets owned by SRT are as summarised in Table 6.

**Table 6: SRT Owned Land**

<table>
<thead>
<tr>
<th></th>
<th>BMA</th>
<th>North</th>
<th>South</th>
<th>North-East</th>
<th>East</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track</td>
<td>7,793</td>
<td>31,823</td>
<td>81,855</td>
<td>50,253</td>
<td>14,914</td>
<td>186,639</td>
</tr>
<tr>
<td>Station</td>
<td>1,024</td>
<td>397</td>
<td>737</td>
<td>860</td>
<td>87</td>
<td>3,107</td>
</tr>
<tr>
<td>Vicinity of Station</td>
<td>1,144</td>
<td>741</td>
<td>2,241</td>
<td>1,088</td>
<td>292</td>
<td>5,508</td>
</tr>
<tr>
<td>Others</td>
<td>3,973</td>
<td>3,891</td>
<td>13,509</td>
<td>12,119</td>
<td>5,112</td>
<td>38,604</td>
</tr>
<tr>
<td>Total</td>
<td>13,937</td>
<td>36,853</td>
<td>98,343</td>
<td>64,322</td>
<td>20,406</td>
<td>233,862</td>
</tr>
</tbody>
</table>

Source: State Enterprise Plan of SRT 2002-2006

147. Based on the above totals, the return of core infrastructure land to the Ministry of Transport would total 195,254 rai or 83% of the total SRT land holdings as at 2006. The
balance is unallocated noncore land. Total developable land includes the unallocated non core land plus other land around stations or falling under the track designation. This is estimated to be 60,000 rai.

148. The income from that land is approximately balanced with the cost of pensions as shown in Figure 7.

**Figure 7: Comparison of Land Revenue and Pension Cost**

149. The non core assets would be managed by IDOC or the DOR through an independent contracted property management company or through a new subsidiary property management company established by MOT. Since part of the monies transfer to SRT would be to ensure that the Pension Provident Fund is properly capitalized, the first call on the revenue from the use of non core assets would be to compensate the Government for payment of those pension obligations. **To ensure transparency, a new property subsidiary company should either have union shareholding or the property management company could report to a Board of Directors with members elected from the union, SRT management, MOT, MOF, other government departments and civil society.**

150. As noted in paragraph 105, the government has long recognized that a separate asset management company is needed to manage the non core land assets. As noted earlier, separation of core and non core land is often impossible as a single property can function as both types of asset. This means that it is better to leave all the land assets in one organization but to set up a separate land management company with the responsibility of maximizing the return from that land. This issue is the most contentious question to be addressed in reform of the Thailand Railway Sector. The resistance is normally seen from the vested interests that have a stake in the income stream that non core land can command.

151. Within the Thailand system, this pressure against reform will always be evident. The most effective way to deal with it is to allow the various parties that have an interest in the land assets to be involved in management of those assets.

**a. Transaction Flows**

152. The transaction flows for the establishment of the new SOEs and linkage to the SRT are shown in Figure 8. The description of these flows is as follows:

(i) State Railway of Thailand will transfer core and non core land, train scheduling and dispatch, infrastructure construction, infrastructure maintenance and signals and
communication to the new IDOC state enterprise company. In exchange the SRT will receive financial compensation equal to the current SRT debt, capitalization of the SRT Pension Provident Fund plus an additional $100 million (Baht 3 billion) of working capital. The total value of the debt, pension capital and working capital plus will be recorded on the SRT balance sheet as revenue to pay down the debt and as working capital. The provident fund will be fully capitalized. The same amount will be recorded by DOR as an increase in assets or if through an SOE, on the IDOC balance sheet as an purchase of assets;

(ii) DOR or IDOC will place non core assets under separate management (competitive bid among property management companies) in order to maximize revenue. Given that the Government will have capitalized the SRT Pension Provident Fund to the level necessary to make it self sufficient, the revenue obtained from the non core assets will revert to the Government to offset that expenditure;

(iii) SRT will pay for track access and use of maintenance facilities. Those charges will be agreed with the Government based on a realistic assessment of the affordable share of infrastructure cost that can be carried by SRT. If the cost is too high, then SRT will not have any opportunity to become a profitable SOE. If the costs are kept low, then SRT may have a competitive advantage over the road mode and may be able to recover some of the traffic lost to the road mode over the past 20 years. This is clearly a policy decision and will be one of the points of discussion between the SRT and the Government and the regulatory authority to be developed. The access charges will be paid through the Government and passed to the IDOC in exchange for the provision of infrastructure and dispatching and maintenance facilities.

Figure 8: Financial Flows between SRT and New SOEs
E. Priority 4: Establish an Independent Regulatory Body

1. Rationale

153. A new regulatory environment for rail is an essential element of any change in how the sector is to be organized and how rail services are to be delivered. Within the integrated approach, it is one of the pillars the reform process. The need to change or re-focus the regulatory environment should not be seen as criticism of SRT’s performance since it essentially regulates itself within the powers it has been given.

154. Proper design of institutions that will deliver (a new environment) is essential. This applies to regulation as much as it does to service delivery. Changes in institutional responsibilities and authorities may need to be underpinned by changes to legislation. Institutional and legal options will be evaluated by the ICC over the coming year.

155. Policy making should be separated from “oversight” of the railway sector. Responsibility for railway sector policy should remain with MOT. But as the system moves to an ever more complicated structure and as issues related to safety, access and social impact and environment become ever more critical, regulation of the rail transport sector should not be left to the railway operator.

156. Within the structural changes to the railway environment proposed above, the key initiatives to be implemented that will require regulatory intervention are:

i The Government will assume responsibility for rail infrastructure and provide it as a public utility;

ii “Open access” to the infrastructure utility will be introduced to promote the development of competitive rail transport options for freight shippers and passengers;

iii Service providers will contribute to the maintenance and renewal of infrastructure through access charges;

iv A revised “PSO” payment framework will be introduced that will provide direct compensation to service providers (initially SRT) for operating uneconomic passenger rail services in the public interest;

v A new regime will be introduced to ensure that the safety of railway operations is given a high priority.

157. The implications of the planned initiatives in terms of regulatory requirements are summarized in Table 7.
Table 7: Regulatory Requirements

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Regulatory requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government to provide rail infrastructure as a public utility</td>
<td>• Establish infrastructure standards</td>
</tr>
<tr>
<td></td>
<td>• Establish processes for monitoring performance of the rail infrastructure utility manager</td>
</tr>
<tr>
<td></td>
<td>• Establish fair and transparent conditions (standards) of access</td>
</tr>
<tr>
<td></td>
<td>• Grant licenses to service providers</td>
</tr>
<tr>
<td></td>
<td>• Ensure service providers’ comply with license provisions</td>
</tr>
<tr>
<td></td>
<td>• Establish procedures to resolve disputes between infrastructure utility manager and service providers</td>
</tr>
<tr>
<td></td>
<td>• Monitor competition in the market for rail services</td>
</tr>
<tr>
<td></td>
<td>• Address complaints from cargo shippers and passengers</td>
</tr>
<tr>
<td></td>
<td>• Implement an access charge regime that is non-discriminatory and conducive to the development of intra-modal and inter-modal competition</td>
</tr>
<tr>
<td>Open Access</td>
<td></td>
</tr>
<tr>
<td>Service Providers contribute to cost of infrastructure maintenance &amp; renewal</td>
<td>• develop PSO agreements with service providers</td>
</tr>
<tr>
<td></td>
<td>• determine losses associated with providing uneconomic services</td>
</tr>
<tr>
<td></td>
<td>• administer PSO payments to service providers</td>
</tr>
<tr>
<td></td>
<td>• rationalize services to ensure good use of public funds</td>
</tr>
<tr>
<td></td>
<td>• address consumer complaints</td>
</tr>
<tr>
<td>PSO Framework</td>
<td></td>
</tr>
<tr>
<td>Rail Safety &amp; environmental compliance</td>
<td>• establish safety standards</td>
</tr>
<tr>
<td></td>
<td>• develop safety regulations</td>
</tr>
<tr>
<td></td>
<td>• ensure compliance with regulations</td>
</tr>
<tr>
<td></td>
<td>• enforce compliance where necessary</td>
</tr>
<tr>
<td></td>
<td>• investigate accidents/incidents</td>
</tr>
<tr>
<td></td>
<td>• regulate the transport of dangerous goods by rail</td>
</tr>
</tbody>
</table>

The requirements in Table 7 can be divided into two aspects – safety regulation and economic regulation. Both of these aspects are being managed in different ways by countries around the world. Some of these approaches are described in the sections that follow and in case studies.

2. Safety Regulation

In Thailand SRT has responsibility for rail safety. This “self-regulation” by the national railway operator is the norm in GMS Member states, except for Cambodia41 and Lao PDR.

There is nothing inherently wrong with self-regulation. In fact, a modified form of self-regulation is the prevalent model for rail safety model through the world. The difference is that in the EU states, in North America and in Australia for example, a department of the national Government or a national rail safety authority establishes national safety standards and regulations that railways must follow, oversees and enforces compliance and its powers to do so are set out in rail safety legislation or regulations. In Thailand, there is no national oversight body that is responsible for setting railway safety standards and ensuring compliance and there is no rail safety legislation.

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41 Cambodia’s has a concession agreement with a private rail operator. The agreement requires the operator to introduce a Safety Management System agreeable to the Government and the Government monitors that the operator complies with the system.
A Safety Management System (SMS) is central to rail safety in the countries referred to above. Railways are required to have an SMS in place and Governments (or in the case of the EU, the European Railway Agency) set guidelines or rules on what the SMS must contain. The SMS defines how safety is to be managed within a railway company and how risks are addressed and mitigated through changes to operating practices. It is more than a set of rules or an operating rulebook. It defines a safety culture and chain of responsibility that will prevail within every aspect of the railway’s operations.

The “SMS approach” also recognizes that railway entities are best equipped to manage the technical aspects of rail safety in rail operations. Railways have developed complex systems and technical standards to mitigate risks. Rather than a Government entity carrying out inspections of, for example, track and rolling stock maintenance activities, the entity reviews and approves a railway’s SMS and conducts “safety audits” and “spot inspections” to ensure that companies comply with their SMS and that safety regulations are followed.

This does not mean that the Government’s national safety bodies do not issue and enforce regulations and rules. National safety bodies have developed and issued complex and constantly evolving regulations dealing with such matters as:

(i) Transport of dangerous goods and hazardous materials;
(ii) Operation of level (grade) crossings;
(iii) Railway operating rules;
(iv) Qualification of rail safety inspectors and persons responsible for safety within a railway organization;
(v) Track work rules;
(vi) Occupational health and safety rules;
(vii) Anti-trespass regulations;
(viii) Brake inspection regulations;

The Canadian Government defines an SMS as a “systematic, explicit and comprehensive process for managing safety risks, much like an International Organization for Standardization (ISO) approach to safety.”
(ix) Environmental legislation and regulations.

164. An SMS does not replace these regulations. It ensures that the railway has proper systems in place to comply with the regulations.

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Case Study

Safety Management System Canada

In Canada rail safety is managed by Transport Canada, a department of the Federal Government. Within the framework of a Railway Safety Act, the Safety and Security Group of Transport Canada develops rail regulations and national safety standards and undertakes monitoring, inspection and enforcement.

The concept of a Safety Management System (SMS) is the cornerstone of rail safety management in Canada. The Railway Safety Act defines a safety management system as: “a formal framework for integrating safety into day-to-day railway operations and includes safety goals and performance targets, risk assessments, responsibilities and authorities, rules and procedures, and monitoring and evaluation processes.”

SMS Regulations require that responsibility and accountability for safety be retained within the management structure of the railway. Every federally licensed railway in Canada must implement an SMS and update it on a regular basis to reflect legislative changes, changes in the railway’s organizational structure and risk management practices and technological change. The Government carries out safety “audits” to ensure that a railway complies with its SMS.

A recent review of Canada’s Railway Safety Act concluded that “the regulator” must make safety management systems the key focus of its oversight activities. The regulator also needs to collaborate with the industry in developing meaningful performance indicators and to improve its capacity and approach to auditing railway companies’ safety management systems. While progress has been made by both the industry and the regulator, much remains to be done in terms of ensuring proper training in SMS and effective implementation.

An SMS does not replace the need for safety regulations and standards, inspections for compliance and enforcement. Instead, they are vital components of the overall rail safety framework.

SMS Regulations require that every SMS contain:

i. The railway company’s safety policy and annual safety performance targets and the initiatives to be taken by the railway to achieve the targets, approved by a senior company officer and communicated to railway staff;

ii. Clear authorities, responsibilities and accountabilities for safety at all levels in the railway company;

iii. A system and procedures for involving railway staff in the development and implementation of the railway company’s SMS;

iv. Systems for identifying railway safety regulations, rules, standards, and orders, and the procedures for demonstrating compliance with them;

v. A process for identifying safety issues and concerns, including those associated with human factors, third parties and significant changes to railway operations;


vii. Systems and procedures for accident and incident reporting, investigation, analysis and corrective action.

viii. Systems for ensuring that railway staff and any other persons granted access to the site, including Inspectors, have the appropriate skills and training and adequate supervision to ensure that they comply with all safety requirements.

ix. Procedures for the collection and analysis of data for assessing the safety performance of the railway company.

x. Procedures for periodic internal safety audits, reviews by management, monitoring and evaluations of the SMS;

xi. Systems and procedures for monitoring the implementation of management-approved corrective actions.

xii. Documentation describing the systems for each component of the SMS.
165. All of the elements of an SMS exist within SRT and are deeply embedded in SRT’s operations. However, SRT’s safety rules have not been codified into a SMS nor is there an overall coherent safety management plan.

166. There is no doubt that organizational restructuring will affect safety. Safety- critical activities that were previously managed by one organization will now be managed by several entities – by the infrastructure utility and by service providers. A consistent set of standards and regulations will need to be developed that will apply across the rail sector and an entity with the power to oversee and to ensure consistency needs to be established. The public needs to be assured that safety will be addressed as a priority. Failure to do this could “de-rail” the restructuring process.

167. Where should the national entity responsible for safety reside? Should safety and economic regulatory functions reside in the same entity or reside in separate organizations? In most countries responsibilities for safety and economic regulation are separated. This approach is proposed for Thailand. Economic regulation requires a degree of independence, while safety, because of its profile and importance, requires a national entity to set safety standards and to ensure compliance. Providing a safe rail (and transport) system to the public is a Government responsibility. The model shown in Figure 9, proposes that a safety authority be established within the MOT.

Figure 9: Overall Regulatory Structure

168. The **Thailand Railway Safety Authority**, will need to be given powers to set safety standards and issue regulations. It should have the responsibility for issuing safety certificates to the infrastructure manager (IDOC) and rail service providers (SRT and others) and will need to be given powers to monitoring compliance with the certificates and regulations and to enforce compliance – in the extreme to revoke a safety certificate if necessary.

169. **Legislation**, in the form of a national Railway Safety Act will be required so that the framework for managing rail safety and for issuing and enforcing regulations can be established.

170. Capacity development assistance will be needed in:

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43 The United Kingdom is a notable exception.
(i) Establishing and implementing the organization that will deliver rail safety. SRT staff has extensive technical knowledge, but lack experience in developing and applying regulations and managing safety as a specific deliverable within defined targets, as opposed to safety being a part of overall railway operations.

(ii) Establishing safety standards. Standards exist in many forms worldwide, through organizations as International Union of Railways, Association of American Railroads, American Railway Engineering and Maintenance of Way Association, and European Railway Agency, which will provide a starting point for developing technical standards. Regardless, setting safety standards will require consultation with the rail industry and with the public in Thailand. Ensuring interoperability with other railways in the GMS and the Malaysian railway system in will also be an important consideration in the design of the standards.

(iii) Certifying inspectors. This is an entirely new role that will require training and a process for establishing qualifications.

3. Economic Regulation

171. Like safety, economic regulation is critical to achieving the objectives of the restructuring process. Separation of infrastructure management from the provision of rail freight and passenger services is not open access. The goal of open access is to open the rail market to competitive forces that will contribute to a more efficient use of infrastructure and provide competitive transport options for businesses and passengers. Managing this will require some form of regulatory oversight.

172. The first problem to be addressed is that the infrastructure will be provided by a state-owned monopoly and (at least initially) the infrastructure “manager” will be a remnant of SRT. If access is to be open to SRT and to other users, charges and conditions (standards) for accessing infrastructure (buying and operating train paths) must be set independently (or if set by the infrastructure manager they will need to subject to independent review.) Access conditions must be non-discriminatory, fair and transparent. Similarly, infrastructure standards and standards of performance of the infrastructure manager must also be agreed upon and set – and letting the infrastructure manager set its own standards is unwise. Otherwise, competition for the use of infrastructure may not occur and new rail services may not develop as anticipated. To insure that there is no discrimination or favoritism, contracts between the infrastructure manager and service providers may need to be reviewed.

173. Generally access charges should allow recovery of the cost of providing and maintaining infrastructure. In the long-term an access charge regime may need to be developed. In the short run, given the level of public investment already made in SRT and to promote the development of competitive rail services, consideration should be given to allowing “free” access to qualified service providers, for an initial trial period.

174. The raises the second problem requiring economic regulatory intervention – to ensure that companies that wish to operate services on the infrastructure are qualified and capable of doing so. This normally means that some form of licensing or certification is necessary. Applicants would be subject to a “fitness test” of their operating and financial capabilities according to defined criteria. Operations must meet infrastructure access conditions and must comply with operating, equipment and safety standards. The conditions will need to set.

44 Holding a safety certificate should be a pre-condition to access, so that it is not part of the conditions to be set by the economic regulator.
175. These matters are generally addressed by a regulatory authority or agency independent of the Government.

176. The approaches used in the EU, the UK and in Australia to establish the regulatory agency to implement and manage open access are applicable to Thailand. The North American model for economic regulation is not relevant because in North America private freight railway operators own rail infrastructure and access to a company's track is handled through private contracts and industry convention. Nonetheless, it appears to work seamlessly and North American freight railways are efficient and profitable and the railways' customers have the lowest tariffs in the world.

177. The EU, UK and Australian models exhibit similar principles that can be adapted to Thailand to address the regulatory issues associated with open access provisions.

(i) Standards of performance (delays, track failures) for the infrastructure network “manager” are set and monitored;

(ii) Access to the infrastructure network is non-discriminatory. Access agreements are monitored to ensure the network manager does not impose restrictions on access provided that capacity is available or that conditions are relaxed for others;

(iii) Access charges are transparent and regularly reviewed. Infrastructure access charges generally provided for recovery of maintenance costs but not for full recovery of infrastructure investment, which requires Government support. Formulas for calculation are published. There is a lively on-going international debate by economists on how they should be set;

(iv) Infrastructure access contracts are monitored;

(v) Criteria that a service provider must meet to obtain a license are published. A service provider's equipment and operations must meet standards set by the regulator. Service providers must meet financial and insurance criteria and their SMS must comply with regulations before a license is issued;

(vi) There are provisions for dealing with disputes between service providers and infrastructure and for dealing with complaints by users about the quality of services. Service provider's operations are monitored for compliance with license provisions;

(vii) Freight tariffs charged by service providers are generally unregulated, except in the cases where a customer is “captive” to rail and there is only one rail service provider;

(viii) The performance of the entire open access framework is monitored to ensure that competition in the rail freight and passenger market is achieved;

(ix) Regulators are appeal bodies, such that decisions made on access conditions, standards, charges, licensing and enforcement actions can be appealed if a party feels that there has been discrimination or that party has been “injured” by the regulator's actions.

4. PSO Framework

178. The other aspect of economic regulation to be addressed by a regulator is the management of the PSO arrangement. A change in the approach to compensating SRT (and other potential PSO service providers in the future) for operating PSO services is needed. Firstly, the PSO arrangement needs to be transformed to provide for direct and regularized payments to service providers to cover their losses from PSO operations. This will require new agreements or perhaps an omnibus PSO contract (PSC) with SRT. Secondly, procedures for certification of losses and for the administration of payments on a timely basis will be needed. Financial and cost accounting systems will need to be set up to support accountability.

179. Aside from the administration of PSO payments, the regulator should have a role to ensure that public funds are spent appropriately. The regulator should be given powers to make
decisions on reducing the level of some PSO services and order that services be discontinued, after appropriate review and analysis and, if necessary, after holding public hearings.

5. Proposed Structure of the Entity Responsible for Economic Regulation

180. There are several key principles that the economic regulatory authority should meet.

   (i) The regulator should be independent of industry and Government;
   (ii) The regulator must have clear legal authority and the power to obtain information from system participants in order to carry out its responsibilities;
   (iii) The regulator’s activities and decisions must be transparent and open to scrutiny;
   (iv) The regulator is accountable for its actions or inactions and its decisions must be consistent and predictable;
   (v) The rules of procedure, conditions and administrative processes to be set up by regulator should be clear and not overly bureaucratic so as not to be a burden on the rail system’s participants.

181. A typical structure for the Thailand Railway Authority is shown in Figure 10.

   **Figure 10: Structure of Thailand Railway Authority**

182. The proposed organization contains a Review Board. The Board would have the authority of an administrative court. Its role would be to hear and decide on appeals related to:

   (i) The issuance of licenses;
   (ii) Access charges;
   (iii) Access conditions and standards;
   (iv) Discontinuance of PSO services;
   (v) Enforcement actions.

183. The Board could also hear appeals in regard to rail safety regulations and standards to the extent that they restrict the development of competitive rail services.

184. The Board should be small (5-7 persons) and comprised of individuals with a broad range of experience – in transport operations and finance and in the management of public and private enterprises.
185. The authority need not be a large organization. Initially the authority will need to deal only with setting standards for the infrastructure manager and service and the licensing of SRT and one or two service providers. Technical staff that will work on setting standards and carrying out compliance inspection could be transferred from SRT. However, the work on developing licensing procedures and on setting access charges is specialized. The resources required for this could be obtained through contracts with consultants or university professors.

186. Capacity development assistance will be required to assist in setting up the organization and in developing and finalizing rules of procedure and administrative processes. Special attention will need to be given to the approach to providing public information (transparency) and in establishing the public hearing process.

187. Similar to safety, legislation will be needed to form the regulatory authority and to provide it with the necessary powers to perform its functions. Thailand’s Energy Industry Act is a good model for legislation for economic regulation. The legislation established an Energy Regulatory Commission that has many roles that are similar to the proposed rail economic regulatory authority. For example it has the powers to:

(i) Set standards and requirements for licenses;
(ii) Issue licenses;
(iii) Monitor compliance with licenses;
(iv) Set tariffs;
(v) Set and enforce safety standards and regulations;
(vi) Deal with public complaints and consumer protection issues (service standards).
V. IMPLEMENTATION

A. Create a Time Bound Implementation Plan

188. Once the basic five priority areas are agreed, the next step is to establish an implementation plan and timetable. Given the various attempts to restructure the Thailand railway system in the past and the difficulty encountered in getting any traction to move the reform agenda forward, two principles are followed in defining the implementation plan. First, as much as possible, do not rely on legislation to create the enabling environment to achieve reform. Second, do it fast. So often the reforms have been sidetracked by changes in the government or erosion of commitment over time. As a result the proposed reform agenda requires the following key components:

(i) A champion;
(ii) A high caliber multi-agency implementation coordination committee (ICC) (see Appendix E);
(iii) A clear mandate, the authority to carry it out, and sufficient capital to finance the key elements such as setting up an infrastructure implementation Project Management Unit (PMU);
(iv) A reporting relationship directly to the Cabinet through the Minister Of Transport and the Minister of Finance;
(v) Done within 1 year.

1. Champion

189. Most successful significant changes in government structure have a strong champion. This was the case with the restructuring of the power sector in Thailand and it likely also applies to the railway. The Minister of Finance and the Minister of Transport are the two Cabinet members most responsible for the Thailand railway system and as a result, this reform initiative has the right champions.

2. High Caliber Implementation Coordination Committee

190. The choice of the ICC is critical. The team should be led out of the MOT but needs to use the critical departments of the MOF to achieve results. The Chairmanship of the Committee should be the Director General of the Office of Transport and Traffic Policy and Planning (OTP) of the MOT. Members of the implementation team could include:

(vi) Director General – OTP – Ministry of Transport;
(vii) Director – Public Debt Management Office;
(viii) Director – State Enterprise Policy Office;
(ix) Director – Bureau of the Budget
(x) Director Planning – State Railway of Thailand.

191. The final decision on the composition of the ICC will be made following further consultation with senior ministry staff.

3. Mandate

192. The mandate of the committee must be clear and well defined and include only the main priority areas for reform. Aspects of the implementation that focus on SRT should be left to SRT to implement. A full SRT five year business plan should be created by 31st of May 2013 to move SRT forward. The components of the mandate and the actions needed for each are listed below.
B. Create the Infrastructure SOE or DOR

193. This is one of the key steps and will inform much of the remainder of the reform process. The Ministry of Transport has indicated that the preferred option would be to establish a new Department of Railways to assume responsibility for the infrastructure and safety regulation. However, depending on the administrative difficulty in setting up that department, it may be more efficient to establish a new Infrastructure SOE. In both cases the steps are similar and are as follows:

(i) Prepare Cabinet proposal to establish a new infrastructure SOE/DOR;
(ii) Prepare constitution and register a new Infrastructure Development and Operations SOE or functionally establish the DOR within MOT and begin the process of amending the law to provide the legal foundation for the department;
(iii) prepare a staffing plan and staff the top 10 positions (Initial staffing can be consultants who are hired specifically for their expertise to be replaced later by full time permanent staff);
(iv) prepare a TOR, advertise, bid and contract for a PMU to implement the urgent railway infrastructure renewal program. It is likely that the PMU will require a combination of international and domestic Thai professionals;
(v) prepare a five year infrastructure development timetable with targets for achievement. The feasibility study developed by TEAM Consulting for SRT can serve as a base for the implementation plan but the PMU should be required to assess that plan and identify the high priority investments with the SRT Civil Engineering Department. The PMU should also take into consideration the elements included in the 2013 SRT business plan to determine the content of the infrastructure development plan and timetable. The PMU following from the direction of the Minister of Finance, should also be responsible for assuring that the investments included in the investment plan are economically sound and exhibit a high economic return based on sound and well accepted economic assessment principles;
(vi) prepare a justification package to accompany the infrastructure investment plan for review and approval by NESDB;
(vii) prepare a recommendation to Cabinet for release of the infrastructure budget to implement the infrastructure development plan.

C. Debt Relief and Recapitalization

194. The steps to effect the debt relief of SRT and recapitalization are as follows:

(i) Prepare Cabinet proposal to transfer land assets from SRT to the infrastructure SOE or the DOR as per the SRT Law;
(ii) Prepare Cabinet proposal to fund the land transfer by providing SRT with Baht 100 billion of debt relief and Baht 3 billion of working capital;
(iii) Ministry of Finance to arrange for the necessary paper work to arrange the book entries on the SRT financial statement and the statement of the new infrastructure company or the Ministry of Transport;
(iv) Complete the land transfer and financial restructuring.

D. Transfer Pension Obligations

195. The following steps are suggested to effect the transfer of pension funding obligations:

(i) Prepare Cabinet proposal to transfer to SRT sufficient monies to fully fund the SRT Staff Provident Fund as part of the sale of land assets;
(ii) Cabinet approval of the re-assignment of funding of any residual pension obligations to the Government from SRT;

(iii) Prepare a constitution to create a Property Management Company (PMC) as a subsidiary of the infrastructure SOE/DOR;

(iv) Identify in the constitution of that SOE, the composition of the Board of Directors of the PMC to include SRT management, SRT union, MOT, MOF, civil society and other affected agencies or departments as recommended by the implementation committee and approved by Cabinet;

(v) Allocate revenue from PMC to government to reimburse pension obligations transferred to the SRT provident fund and to cover cost of infrastructure.

E. Transfer Key Staff

196. The following activities are required to move the necessary staff of SRT to the new infrastructure company:

(i) Prepare a staffing plan for the infrastructure SOE/DOR;

(ii) Prepare Cabinet proposal for transfer all or some of SRT infrastructure staff to new infrastructure SOE/DOR;

(iii) Identify interim appointments to top 10 positions (these may be combination of current staff from SRT or consultants hired on a temporary basis to staff key positions);

(iv) Advertise for candidates for permanent appointment to senior staff positions (vetting, shortlisting and recommendation of top two preferred candidates for each position should be carried out by a professional recruitment firm);

(v) Appoint permanent staff;

(vi) For the immediate period, draft a sub-contract agreement with SRT to provide staff for infrastructure maintenance and train dispatching;

(vii) Begin to implement urgent infrastructure renewal program for national railways.

F. Establish Regulatory Bodies

197. The study has recommended that regulation be divided into two components, safety and economic/technical. The safety regulation should remain in the MOT either as a new assignment to an existing department or more likely, as a new department set up by the Ministry of Transport. The economic/technical safety regulator will require a new law of establishment and can follow the approximate outline of the recent law to establish the Power Sector Regulator.

G. Cabinet Actions

198. The following steps are the summary Cabinet actions needed to effect the first phase of the Thailand Railway Reform Program:

(i) Obtain support funding for Phase I for implementation team (MOF);

(ii) Agree on amount and process for debt relief and recapitalization of SRT (Cab. Approval);

(iii) If needed, prepare constitution and register new SOE for Infrastructure Development and Operation (Cab. Approval);

(iv) Prepare amendment to Organization of Ministries, Sub-Ministries and Departments Act B.E.2545 to establish the DOR within the MOT;

(v) Arrange transfer of land assets from SRT books to MOT books (Cab. Approval);

(vi) Arrange transfer of pension obligations from SRT to Government (Cab. Approval);

(vii) Prepare constitution for new Property Management SOE (Cab. Approval);
(viii) Arrange transfer of some SRT staff to MOT (Cab. Approval);
(ix) Prepare draft law for establishment of Thailand Railway Authority (Cab. Approval for new law).

H. Cost Impacts

1. Treasury Outlay

199. The following are the implications of the railway restructuring program:

Costs

(i) SRT Debt Relief Baht 100 billion
(ii) SRT Recapitalization “ 3 billion
(iii) Urgent infrastructure recovery “ 176 billion
(iv) Pension obligations “ 55 billion
(v) Infrastructure maintenance “ 121 billion

Revenue

(vi) Land revenue “ 55 billion +.

2. Implementation Technical Support

200. The main recommendation above is to establish an Implementation Coordination Committee. That committee plus the infrastructure company and SRT will all need technical support – some shorter term and some longer term. The structure of the technical support is as shown in Figure 11 and as described below.

Figure 11: Structure of Technical Support Needs

The ICC will need a technical secretariat to carry out the key priority restructuring steps. The technical secretariat should have as a minimum the following capabilities and skills:

<table>
<thead>
<tr>
<th>Team Member</th>
<th>I/L</th>
<th>Duration</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Restructuring Specialist</td>
<td>International</td>
<td>12 months</td>
<td>$200,000</td>
</tr>
<tr>
<td>(ii) Procurement Specialist</td>
<td>International</td>
<td>4 months</td>
<td>$64,000</td>
</tr>
<tr>
<td>(iii) Labor Relations Specialist</td>
<td>International</td>
<td>6 months</td>
<td>$96,000</td>
</tr>
<tr>
<td>(iv) Institutional/Organizational</td>
<td>Local</td>
<td>8 months</td>
<td>$80,000</td>
</tr>
</tbody>
</table>
3. Project Management Unit (PMU)

202. The PMU will be contracted by the ICC and will be responsible for the following activities to support the Infrastructure Development and Operations Organization under the authority of the Ministry of Transport:

- Design review;
- Procurement training, capacity building and procurement management;
- Materials and equipment supply procurement;
- Contractor evaluation, selection, recommendation;
- Construction supervision;
- Quality control/monitoring/completion certification;
- Ongoing monitoring of maintenance performance and certification of compliance.

203. It is likely that the PMU will be required in full for the first 5 years of implementation of the railway urgent rehabilitation and expansion program. Assuming that the full Baht 176 billion program is implemented inside the five year period, the cost of the PMU will be approximately 4% of the capital cost of the program.

PMU Cost for 5 years 4% of Baht 176 billion B7.04 billion $235 Million

4. SRT Reform Implementation Technical Assistance (RITA)

204. SRT will need technical/capacity building/institutional restructuring support for at least the next 5 years.

RITA 10 specialist - 20 specialist $1.5 - 3.0 M/yr for 5 years $7.5 to $15 M
VI. IMPLICATIONS OF REFORM

205. Following discussion about the recommendations in this report, the Ministry of Transport has developed a proposed organization structure to define roles and responsibilities for the reformed Thailand railway system. That structure is as illustrated in Figure 12.

Figure 12: Proposed Revised Administrative Structure for the Thailand Railway System

![Diagram]

206. The following are the implications of the above strategy on the various parties affected by the proposed changes.

1. SRT

207. As noted earlier, the problem for many years has been a continuous requirement that SRT function as a normal company but without offering the environment within which that company could actually perform. This plan does not fundamentally change SRT with exception of its mandate to operate railway services. The potential changes to SRT law, to allow services to be operated by other companies and to allocate responsibility to schedule services on railway infrastructure, can be prepared over time as an amendment to the current SRT law. The authority to schedule services on railway infrastructure can continue with SRT subcontracting to DOR for infrastructure maintenance and scheduling under DOR direction until DOR decides to carry out those activities itself.

208. SRT will become a normal capitalized state enterprise company with a sound balance sheet and the freedom to operate its business according to sound business principles. Cost for infrastructure will be modest and will be comparable to the cost for road operators. Cost for maintenance facilities will be limited to those facilities used. Pension commitments through the SRT Provident Fund can be capitalized by the Government initially and recovered by the government from the revenue generated by the non core land assets managed by a property management company with a mandate to maximize return on those assets. Under this plan,
SRT management and staff, both union and non union, will be free to function as a normal independent State Owned Enterprise.

209. Under the proposed plan SRT will focus on railway operations – both commercial and under public service obligation – and also act as a subcontractor for infrastructure maintenance and operation until such time as the DOR under MOT is able to assume those responsibilities.

2. Union

210. Selected union staff may be transferred from SRT to the MOT – Department of Railways (DOR) or to the IDOC or under the proposed plan, the union staff will remain with SRT and be contracted to the MOT for infrastructure maintenance and operations. Where staff are transferred, the DOR or IDOC will offer the same conditions of employment to the transferred staff as are currently offered under SRT. For transferred staff, no change will be evident. For newly hired staff or contractors, new conditions of employment will be offered based on the Government of Thailand Labor Law.

211. As has been found in other countries, it may be necessary to develop a series of options for union members who wish not to make the transfer to the new organizations. Those options could include reassignment to a different job within the revised SRT, early retirement for some with the right level of seniority, or termination with a buyout as per existing staff conditions. This process can be defined by the ICC.

212. Given that the above process capitalizes the SRT Pension Provident Fund according to normal actuarial accounting principles, SRT Union concern over pension obligations should disappear. Further concerns over effective management of the non core lands can be overcome by inviting unions to become shareholders in the property management company or if that service is contracted directly by the IDOC, then the union should be invited to nominate one or more representatives on the supervisory board to whom the management company will report.

3. MOT

213. The Government of Thailand through MOT needs to become more engaged in the rail transport system. This means dealing with policy and regulation, with financing and financial monitoring and with direct and clear accountability for implementing reforms and ensuring that the intended outcome of the reform plan is achieved.

214. Railway capability in MOT could be strengthened through the establishment of a Railway Department within the MOT. Under that option the land assets can be transferred to that Department without raising any issues with the SRT Union or Management and managed through an asset management company. However, establishment of a Railway Department will require amendment to the current law and as an alternative, MOT may wish to create a new SOE to undertake the important infrastructure ownership functions.

215. The regulation of safety will become an important aspect of MOT operation. That regulation may be limited to the railway or it may be extended to cover other areas of transport safety in addition to the railway. This is a specific task for MOT to consider and resolve.

216. The MOT will also become the infrastructure provider and will contract with SRT to undertake track maintenance and operations as needed.

4. MOF

217. The implications of the above options on MOF are quite significant. Given that a large portion the SRT debt burden is already carried on the Government’s books as a sovereign
guarantee, the clearing of that burden from the SRT’s books and transfer of that debt to the Government’s books is essentially just an accounting entry. If the transfer is made in exchange for an equal value transfer of land from SRT to another government entity – either the MOT or an SOE, then essentially, from an accounting perspective, the government is indifferent.

218. The expenditure of $5.9 billion (Baht 176 billion) is significant. Further, the assumption of the ongoing cost of infrastructure including a large component of maintenance will be a long term commitment to the railway sector and will need to become an annual operating budget entry by the MOF.

219. Recapitalization of SRT will require approval of that budget item by the Cabinet.

5. Thailand Railway Authority

220. A railway regulatory body is needed. The Cabinet Decision on 24th July 2007 defined a two tier policy railway policy. This followed an earlier Cabinet Decision to approve development of the Transport Management Act. That proposed Act separated national transport administration into policy, regulation and operation, clarified the role of the regulator for urban and intercity rail in addition to the other modes, introduced the public service obligation system and encouraged participation of private sector operators.

221. The recommendations included in this report outline the approximate shape of a new regulator for the railway sector – separating safety regulation as a direct MOT responsibility and economic regulation under a separate body.

6. New Companies

222. There are two kinds of companies that may result from the reform effort. One type is SOEs that can address specific aspects of the Government of Thailand railway system. This includes the immediate and ongoing commitment to upgrade the condition of the rail infrastructure across the country, a further interest in opening the door to development of higher speed and high speed trains, extension of the metropolitan commuter rail catchment area and opening access on the network to purpose created operators such as regional railways or specialized freight railways. A new Railway Department of MOT may be needed to manage those companies or as an alternative, a Railway Management Holding Company could be established by MOT as a parent organization for the specific operating and asset management companies.

223. In the future, other companies may be formed for specific purposes. Those companies may be joint ventures and may tap into private sector funding and private sector expertise. At this time, there is no specific need to establish any of those additional companies but over time there is a need to have flexibility in the system to allow them to be created as needed.
VII. APPENDIX A: INTERNATIONAL RAILWAY SYSTEM REFORM

A. Motivation for Reform

1. European Union

224. The longstanding European Union concern over monopolistic control of services within the EU combined with a general dissatisfaction with EU member state railway performance led to the 1991 EU Directive 91/440 made it a legal requirement for independent companies to be able to apply for non-discriminatory track access (running powers) on a European Union country’s track. This in effect required restructuring of the previously monopolistic control of the railways by national railway companies by providing for open access to improve the competitive environment and allowing gradual improvements in productivity and services. The move to require open access in turn required effective separation between infrastructure and operations. In practice, in order to achieve that objective other large issues needed to be addressed, including:

(i) Old debt, all or part, was assumed by governments, and removed from the railways books. This dramatically improved the financial sustainability of railway operation and follows an EU directive requirement;

(ii) Pensions liabilities were also taken off balance sheets of railway companies. In most cases, the corresponding liabilities were guaranteed by the Member States, and payment of the pensions were transferred to the normal social system with possibly the creation of a special entity within the normal system. The transfer did not mean change to align railway pension schemes and general schemes, but allowed small changes;

(iii) Real estate was in most cases separated from railway entities in charge and used to guarantee the debt when the debt was transferred.

225. Restructuring in all EU member states is an on going process. Models implemented at the beginning of the restructuring have changed with time and will continue to change as conditions evolve.

2. Sweden

226. Modern railway reform began in Sweden in 1988. The justification for embarking on a restructuring of the Swedish railway was partly financial – ongoing operating losses were a drain on the national treasury – and partly socio economic – concern that the railway network needed to follow the “road model” and offer services to the community of users spread throughout Sweden. The Swedish initiative predated the restructuring of the rail system in the UK by about five years. A summary of the Swedish model and the key motivating factors affecting the implementation of that model are found in a useful paper, extracts of which are inserted below.45

“The 1988 Transport Act had an even greater impact on the rail sector. The main objectives were to create a ‘road model’ for the organisation and funding of the rail system, and to ensure rail’s survival as an effective competitor by upgrading neglected infrastructure. The key institutional and financial changes were as follows:

(i) A sharp distinction between on the one hand, the new National Rail Administration, Banverket, which would be responsible for rail infrastructure, and be guided by socio-

45 Scottish Affairs, No 5, Autumn 1993, Rail Privatisation, The Swedish Experiment, David Spaven.
economic considerations (like its counterpart, the National Road Administration), and on the other hand SJ, which would be turned into a train operator and marketing organisation with strictly commercial objectives.

(ii) Parity between road and rail (incorporating social and environmental costs) in the treatment of road taxes and rail track charges, and for investment decision-making.

(iii) Opening up the rail system to new influences - in particular the Count Transport Authorities, who wanted more say in rail planning as part of their responsibility for integrated public transport, and the private sector, who could be expected to introduce innovative operating and marketing practices.”

... Under the new set-up, Banverket is responsible for maintenance of rail track, signalling, stations and control of train operations. Train operators are charged for use of the track in accordance with a published scale of fees decided by the Government, and non-negotiable for users.

...A 10-year investment programme ... assigns £2.8 billion (Baht 130 billion) to the national rail network, to cover a wide variety of schemes the length and breadth of the country - notably for upgrading to 125 mph operation, double tracking and major new line construction. New investment is justified by cost-benefit analysis, and the environmental benefits of switching traffic from road to rail played a major part in the current programme.

... With the requirement for SJ to survive as a commercial enterprise, the state railway has achieved a major turnaround in business performance. In 1992 SJ was handling the same volume of traffic as in 1988 - but with a third fewer staff - and it now heads the productivity league table for European railways.

Punctuality of long-distance train services has improved radically - in 1992, 82% arrived within 5 minutes of schedule, compared to just 66% in 1985. For tendered passenger services, SJ has cut its costs by 20%-30% in response to the arrival of BK, thereby retaining 17 of the 19 contracts to run groups of local and regional trains, against stiff competition from the private sector. Under the Swedish model of limited deregulation, complete abolition of the state railway is not on the agenda - the practical outcome, as expected, has been to inject extra business efficiency into the SJ performance without splintering the national network.

227. It is striking how many of the key considerations that motivated the move to restructuring were similar in 1988 Sweden to the 2012 situation in Thailand. Costs and losses were becoming unsustainable. Service quality and punctuality were poor. And the Swedish railway operator remained a monopoly with no competition or service delivery pressure. Infrastructure spending decisions had for some time been skewed toward roads with little balance in socio economic analysis of the comparative benefits of investing in different modes.

228. The Swedish railway restructuring process was also forced to deal with many of the issues noted in the end point survey summarised in table 2 above. These include separation of infrastructure and operations, allocation of land assets and treatment and transfer of staff.

3. France

229. In 1996, French Railway Societe National des Chemin de Fer de France (SNCF), a fully integrated State monopoly railways with 200,000 staff, had built more than 1,000 km of high speed railway line with no direct financial support from the State, the State only providing a sovereign guarantee for SNCF debt. However, that SNCF debt had reached about Francs 200 billions ($36 billion). The level of the debt was so huge that all turnover from freight business (at that time 55 billions tonne km) was not enough to pay for the interests on the debt.
230. Following from the EU Directive 91/440 of 1991 which required separation between infrastructure and operations in 1997, the French government decided to restructure the railway sector creating a public entity RFF (Réseau Ferré de France) as owner of the national railway network. RFF received more than 75% of the SNCF debt, since it was incurred as part of the cost of the development of new railway infrastructure. The level of the transferred debt from SNCF to RFF was the basis upon which to determine the equal value of assets to be transferred to RFF as these two figures had to match. Moreover, RFF was in charge of network operations and allocating/charging railway paths on the national railway network, with about 200 staff;

231. A system in which SNCF was a client for RFF buying the access on the infrastructure, but was also a service provider for RFF, continuing to provide maintenance services, timetabling services, network operations on the basis of a contract with RFF. This model was created to satisfy the unions as SNCF was almost kept as it was, but with a much lighter debt.

232. SNCF and RFF are both SOEs under the MOT, but are fully independent. The power in relation with the staff, but also in relation with expertise, remains with SNCF. Because of their independence, the two entities may have conflicts of interest regarding especially the strategy and the priorities. The only way to arbitrate is at the MOT level, which is not sustainable.

233. The provision of leaving RFF responsible for the maintenance and operation of the infrastructure but contracting that work to SNCF means that there is little incentive for improving productivity or for creating new models for maintenance and operations. SNCF because it controls the means of production can block any move to improved efficiency. No significant change in efficiency has been seen in the past 10 years.

234. Conflicts between SNCF and RFF continue related to sharing real estate, infrastructure charging levels, investment choices, closing of line for works and so on.

235. The RFF’s debt load is still increasing and quickly becoming unsustainable:

(i) The total 2010 debt of RFF is **Euro 31.8 billions** (Baht 1,183 billion), debt inherited partly from SNCF and subsequent debt added directly by RFF;

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**Case Study**

**Regional Railway In Canada**

Keewatin Railway Company (KRC) is a company owned by three communities in Northern Manitoba, Canada. KRC owns a 200 km branch line railway that connects directly to both the CN Rail system and to the Hudson Bay Railway, which serves Canada’s most northern port of Churchill.

KRC operates both freight and passenger services. Rail freight service is provided to customers upon their request. The passenger train service is operated 3 times weekly in each direction through a PSO arrangement with VIA Rail, Canada’s national rail passenger carrier. VIA pays KRC a fixed annual amount for operating the service. The payment amount is adjusted annually to take into account changes in the cost of operating the service. Payments are made monthly and audited annually by VIA. Under the PSO arrangement, KRC provides the locomotives, train crews, ticketing services, coach cleaning and maintains its track to a passenger rail operating standard. VIA owns the passenger coaches and pays the cost of scheduled maintenance overhauls of the coaches.

KRC also receives grants from the Federal Government to partially offset the high cost of track maintenance due to the line’s geographic location. The Federal Government has also made contributions towards the purchase of locomotives by KRC.
(ii) Revenues from the paths are Euro 4.2 billions, but current maintenance and network operations costs paid to SNCF are Euro 3.0 billion, depreciation is about Euro 1 billion and financial costs are Euro 1.2 billions leading to an annual loss of about **Euro 1 billion**;

(iii) RFF is still investing on new High Speed Line projects, even when they are PPPs projects. Total RFF investment in 2010 was Euro 3.2 billions of which Euro 1.5 billion is investment to rehabilitate and modernise existing track;

236. Regional Authorities are putting pressure on RFF to renew regional infrastructure to allow regional passenger services development. In the past 15 years, regional authorities invested in new rolling stock to cope with the market expectations and to face a strong increase in regional passenger traffic. They consider infrastructure is now the problem to be solved, and they ask for rehabilitation of the regional infrastructure. In France, regional authorities including the one responsible for public services in Paris area pay 1/3 of the infrastructure charges paid to RFF, while the regional trains account for 47% of total train km on the RFF network.

237. Similar regional development of railways has occurred in other countries. The text box outlines a typical case study of a regional railway in Canada.

4. Czech Republic Railway

238. Česke Drahy (CD) state organisation, was created in 1993 as the national transport company, being the successor of the former Czechoslovak Railways administration. Up to 2002, Czech Railways was an integrated company, responsible for passenger and freight services, but also for traffic management, reconstruction and maintenance of the railway infrastructure.

239. In January 1999, the Government of the Czech Republic decided on transformation of CD taking into consideration the EU requirement for separation between railway operations and infrastructure management. In February 2002, the Chamber of deputies approved Act 77/2002 for future implementation of the transformation. Ministry in charge of transport was responsible for preparation and monitoring of the progress of the transformation.

240. Česke Drahy ceased to exist on December 31, 2002. On 1st of January 2003, two successor entities were funded:

(i) Česke Drahy ČD, to operate transport services, including transport in the public interest; and

(ii) SZDC , State administration to manage State railway assets, playing the role of the owner of the assets and providing traffic management services as well as infrastructure maintenance and modernisation. Until 2008, services were provided by ČD as under a delegation contract from SZDC.

B. Separation of Infrastructure and Operations

1. Sweden

   a. Core Assets

241. The basis for this first restructuring step was the recognition by the Swedish government of the economic, social and environmental roles of the railway system. The infrastructure /operations separation was seen as a mean to ensure that under a government entity, the same type as the one for roads, the society’s needs would be the basis for decisions leading to a modernisation of the railway infrastructure and to a much fairer national transport framework, with a more level playing field between rail and road.
242. In July 1996, the functions of track capacity allocation and train operations control on the network were transferred from SJ to Banverket. The same year, the freight market was opened to competition.

243. In 1998, Parliament reduced track access charges, primarily in order to balance the competitive pressure from road freight transport. Sweden’s operators have since then paid about 10 percent of track maintenance costs per year, still one of the lowest rates in Europe. The balance of the rail infrastructure cost is funded under the national budget.

244. In 2000, SJ was restructured with the creation of:

(i) **SJ AB** as a state owned limited responsibility company to develop long distance and interregional passenger businesses;

(ii) **Green Cargo** as the state owned limited responsibility company to develop Freight business;

(iii) **Jernhusen**, as the real estate company, where were placed stations, terminals and most of the buildings used for rolling stock maintenance becoming the government’s caretaker of real estate in the vicinity of railways;

(iv) **EuroMaint** and **Swemaint** as maintenance companies, respectively for Passenger and Freight businesses.

245. In 2003, the state had to intervene by means of transferring a substantial amount of money (SEK 1.8 billion) to SJ AB in order to avoid bankruptcy. The motive was that the original restructuring of SJ had not been properly financed.

246. Deregulation of the railway sector occurred within a Government’s policy framework focusing on **social and environmental benefits of public transport**, and allowing the involvement of local authorities, both for infrastructure and services. Benefits for the economy were not forgotten as the separation between non-commercial and commercial services allows more dynamism and creativity for entities operating only in the commercial area. For example, Intermodal transport to/from the ports developed strongly since the restructuring.

**b. Non Core Assets**

247. **Jernhusen** the SOE responsible for real estate assets was created in 2001 and received assets/real estate from the railways, mainly:

(i) Stations;

(ii) Depots and maintenance workshops;

(iii) Freight terminals.

248. The company mission is to maximise revenues from this real estate. The commercial market value of their assets is about $1.65 billion. In total the company rents 677,000 sq.m of space with annual revenue of $165 million (Baht 5.1 billion).

249. In the stations, they develop commercial activities such as shops, restaurants, hotels, parking. For the depots and workshops, they have leasing contracts with train operating companies and maintenance entities. They are also developers within the framework of projects with cities.

“**Jernhusen financial information should be open, transparent and relevant. Jernhusen is 100 percent owned by the Swedish state, and therefore follows the state’s ownership policy and guidelines for state-owned companies. The guidelines say that the financial**
reporting to be designed according to the rules applicable to companies listed on the OMX Nordic Exchange. This means that Jernhusen follow IFRS, the Annual Accounts Act and the Swedish Code of Corporate Governance.\textsuperscript{46}

250. Because the real estate is owned by the people of Sweden and the revenue stream from that real estate returns to the government as general revenue, through the shareholding in Jernhusen, the monies received in part offset some of the non recovered cost of providing the infrastructure to be used by the various railway companies.

2. France

251. The law creating RFF stated that in exchange for debt cancellation, SNCF would transfer to RFF real estate for an estimated value of FF147.9 billion (Baht 5,500 billion). This real estate comprised

(i) Assets basic elements of the rail infrastructure (substructure, rails, superstructure ...);
(ii) Assets not used for operations of transport services.

252. The same Law clearly excluded from the transfer the assets allocated to operations of transport services (stations, warehouses, marshaling yards..), administrative buildings and social housing.

253. The Law assumed that a clear inventory of the assets existed with indication of their use to operations of transport services. This inventory did not exist. The transfer led to many conflicts between RFF and SNCF and problems are not fully resolved 15 years later.

3. Czech Republic

254. The liabilities and claims of the former Ceske Drahy were passsed to SZDC. The transferred liabilities were approximately 350 millions euros.

255. The competencies to manage the Ceske Drahy state organisation, non core railway assets were transferred to the MOT. These assets were earmarked as one of the potential financial resources to cover the liabilities transferred to SZDC. It was planned the MOT would sell the assets to pay part of the liabilities of the railway. The list of these non core railway assets was part of an annex to the Transformation Act with a total value estimated at Euro 100 million.

256. The non core railway assets are managed under an asset management plan adopted by the Commission set up by MOT. The income from sales of non core railway assets is allocated to SZDC through the MOF. Non core railway assets are sold on the basis of tenders announced by SZDC. All the revenues are earmarked to settle the old debt of the former Czech Railways, state organization (before 2003).

257. The transfer of assets from old Ceske Drahy to the Ministry of Transport was poorly organised and implemented:

(i) the transfer was performed only formally on the basis of a list of assets that had not been verified by an inventory;
(ii) the assets were not accepted physically, but only by transfer to the accounts of the MOT on the basis of a delivery protocol;
(iii) proper inventory was only done at the end of 2003. In practice the inventory was carried out by a department of CD previously responsible for managing these assets.

\textsuperscript{46} See <http://www.jernhusen.se/Om-Jernhusen/Finansiell-info/>
This inventory requirement was delegated from the MOT to SZDC who in turn delegated responsibility to CD who knew where the assets were located.

(iv) budgetary rules in the Czech Republic did not allow the MOT to sell the non core railway assets;
(v) the Transformation Act was amended in 2004 to authorize SZDC to manage the non core railway assets;
(vi) SZDC discovered that some non core railway assets had not been maintained or had been destroyed and had little value;
(vii) two buildings on the inventory list had already been sold prior to 2003;
(viii) some assets on the list were allocated to be sold by the National Property Fund and were no longer available;
(ix) the subsequent sale of non core assets with not successful and did not raise significant funds.

C. Consideration of Pension Obligations

258. Railways were built in the 19th century and from the beginning, social questions were important, particularly through pressure from the railway unions. Specific pension schemes were agreed from the beginning of the 20th century based on payments made by active staff and railway companies to support retired staff. The funds so collected were managed by specific entities within the railway companies. A common characteristic of these pension schemes is they are all in financial difficulty because the number of retired railway staff is often double of the number of active railway staff and as pressure to cut costs and increase efficiency are increasingly the result of contracting out or concessioning services, the number of full time railway staff has in most cases, fallen dramatically.

1. France

259. In France each railway company created a pension for employees from 1850 onward. In 1909, a national law was passed to unify those pension plans and the principles incorporated in that law remain as the basis for current pensions. When SNCF was created in 1938, the Pension Law obliged SNCF to take over all pension liabilities of the old railway companies and a single SNCF Pension Office with financial autonomy, was created within SNCF.

260. In 1945, when the social benefits were extended to any worker in France, a General Office for Social Security was created, but all special offices were left aside. SNCF was still responsible for railway pensions, and required to pay them directly from its own budget via its own Pension Office. However, SNCF received State funding to balance the number of pensioners compared to active staff.

261. In 2007, SNCF was required to introduce International Financial Reporting Standards (IFRS) norms for reporting its financial accounts. To be compliant with these norms, SNCF should have set aside more than Euro 100 billion (Baht 3,720 billion) to cover the forward liabilities of its pension scheme. This was considered unsustainable.
262. The choice was made to transform the SNCF Pension Office into a special subsidiary office of the National General Office for social security. This special office continued to address SNCF pension liabilities, but as part of the General office for Social Security, it was not required to show that forward liabilities were full funded. This special office still receives SNCF employer and staff contributions, plus various payments and contributions from the French State to balance the financial accounts, and it continues to pay the pensions.

263. The liabilities for pensions are no longer included on SNCF financial statements and are no longer an SNCF debt liability. Looking forward, this revised situation may make it more likely that the current terms of the SNCF pension will be changed to match the national pension which has less favourable terms.

2. Italy

264. The Railway Pension Fund was created in Italy in 1908. It was cancelled in 1999 and its liabilities and receivables were transferred to a Special Fund within the Institute for Social Security.

265. From 2000, employees who were previously under the Railway Pension Fund and all current employees in 2000 were transferred to the new Special Fund. Staff who joined after 2000 are now covered under the national Social Security provisions. The new Special Fund has assumed all responsibilities previously under the Railway Pension Fund.

3. United Kingdom

266. When British Rail was privatized in 1993, the question of the railway pensions for members of the British Rail Pension Scheme (BRPS) was an important consideration. A new Rail Pension Scheme (RPS) was created under Parliament. Because a number of companies now operate independently in the UK an industry-wide umbrella scheme with a number of different sections - protected persons with specific rights, new active members with different rights - are part of this new plan.

267. Employees and members of the BRPS at midnight on 4 November 1993 were “protected persons”. They had a legal right to pension provision for their future employment which would be no less favorable than the relevant pension rights which he had under the BRPS. This protection is retained unless and until they voluntarily leave their employer, withdraw from the RPS or agree to waive their protected status.

268. Pensioners and preserved pensioner members of the previous BRPS were transferred into a separate section of the RPS – the 1994 Pensioners Section. Active members of the scheme were transferred into a shared cost arrangement.

269. In 2003, when Network Rail (NR) assumed responsibility for infrastructure from Railtrak. NR decided not to offer members of RPS to new staff and as an alternative, to introduce a Defined Contribution (DC) scheme. After strikes, the company agreed to reopen the final salary scheme to new members with five years’ service.

270. A valuation of the RPS in 2004 showed it to have a deficit of £0.4 billion, compared to a surplus of £1.8 billion at the time of the last valuation of the BRPS in 1993 prior to privatization. Concern about rising costs led rail unions and employers to establish an independent Railway Pensions Commission. Its first report, published in 2007, concluded that...
Defined Benefit pension provision across major parts of the railway industry was sustainable over the long term if it was made more affordable. Its final report, published in 2008, made recommendations for change.

271. All railway companies in the UK are now members of the RPS and as such pensions are not a liability of any of the railway sector companies. Pensions remain available to all railway staff under the industry wide umbrella.

D. Transfer of Railway Staff among Railway Organizations

1. Sweden

272. The restructuring program in Sweden resulted in increased labor efficiency resulting from a drop in the numbers of employees in SJ and BV but also resulting from higher traffic levels particularly in terms of freight traffic. After restructuring Sweden became one of the best performing railways in Europe in terms of traffic carried per employee and cost per tonne km of freight moved. The following quotes from a World Bank study on restructuring outlines the basic conditions for labor in Sweden and more specifically in the railway sector:

“The labor-management relations of SJ and BV are covered by the same general legislation that applies to other sectors of the economy. In 1993, 99.6 percent of BV’s employees were union members. These workers are represented by three unions: the academics’ union, which represents 7 percent of BV’s work force; the other white-collar employees’ union, which represents 3 percent; and the rail workers’ union, which represents the remaining 90 percent. In the same year, 94 percent of SJ’s employees were union members. Of these, the academics’ union represented 11 percent; another 13 percent were represented by the other white-collar union; and 76 percent were represented by the rail workers’ union.

Since 1988 employment contracts have become less restrictive. Since the railway was restructured, line haul trainmen have begun to do shunting work and conductors have begun to provide catering services on passenger trains.”

273. A standard feature of most railway restructuring is to redefine roles within the railway. The older labor models restricted staff to only one job. But the modern approach is to increase flexibility to allow staff to do two or three different jobs. This both increases productivity but also allows for more interesting work. In some cases, teams work as a unit, similar to the approach used in the automotive manufacturing industry.

274. Union input is essential to the restructuring process. All restructuring is a learning process – for management and for unions. But the commitment of the union to an improved future for the railway is central to achieving a successful transformation. This is also a strong point made in the World Bank paper and was very much a factor in the Swedish restructuring.

“A representative of each union sits on the Boards of both SJ and BV. Mandatory union representation on the boards of all enterprises is provided under the Act on Union Representation (1974). Union representatives are non-voting members on BV’s Board and voting members on SJ’s Board. The motivation behind this difference is that public organizations are instructed to take into account all of the possible consequences of a decision (including the interests of the employees), while private firms are concerned only

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47 CFS Discussion Paper Series, Number 111, Best Methods of Railway Restructuring and Privatization, Ron Kopicki Louis S. Thompson,
with their own profits. Allowing unions to vote on public sector boards could bias an otherwise balanced social perspective in public interest decisions. Board membership for union representatives provides workers with insight into the issues and strategic challenges that confront the companies. These insights may be particularly beneficial during periods of strategic adjustment.

The Act on Co-determination in Working Life (1977) mandates that employees receive timely information on all company decisions that have a material effect on their wellbeing. The act also requires employers to defer the cost of third party analysis of proposals offered by unions. As a result of these institutional arrangements, employees have greater involvement in decision making in the Swedish corporate world than in many other countries.

The psychological importance of having employees involved in the change process rather than becoming victims of change should not be understated. Union participation may also benefit employers in that it promotes local initiative and makes use of practical insights that could otherwise be lost.

While unions did not actively promote specific organizational solutions, neither did they actively resist these solutions. The rationale was as follows: First, unions felt that the railway sector needed new resources in order to become a modern industry and that the dual (SJ and BV) organizational structure that was chosen would make it easier for politicians to carry out this responsibility. Second, unions felt that it was beneficial to acknowledge the fact that railways work in an increasingly competitive environment, and to promote the transition to a viable (albeit untested) system.

Over the past 30-year period SJ has experienced only one major strike (in 1971), in keeping with the general labor market atmosphere in Sweden which is characterized by cooperation between management and employees.

During the 1988 restructuring the unions were actively involved in the restructuring process through committees and working groups. As a result, they did not oppose the subsequent staff downsizing of SJ. Instead, employees considered themselves part of the process.48

2. Czech Republic

275. České Dráhy (ČD) or Czech Railways is the main railway operator in the Czech Republic. Railway Infrastructure Administration (SZDC) is the national railway infrastructure manager in the Czech Republic responsible for infrastructure investment and operations including train control. Its main customers include passenger train operator ČD and its cargo subsidiary ČD Cargo. SZDC was founded with the restructuring of ČD from 1 January 2002, but until 2008 much of the operations, maintenance and renewals was contracted back to ČD.

276. Staff transfers from the investment department of ČD to SZDC began shortly after the establishment of SZDC because EU support funding for railway infrastructure could not be provided to a joint stock company like ČD but could be provided through a state organization like SZDC. The second important step in July 2008 was the formal transfer to SZDC from ČD of all missions and tasks related to infrastructure operation and maintenance. All 10,000 staff working on these missions and tasks were required to transfer or not.

277. The government set the principles of transfer of staff as follows:

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48 Ibid page 179
(i) Transfer of whole units and not individuals case by case was preferred;
(ii) generally staff who did not transfer were not replaced, thereby reducing the number of staff:
(iii) Transfer was voluntary;
(iv) Current salaries and benefits were not guaranteed.

278. The unions accepted the principle because some of the tasks and jobs in SZDC (considering their volume and working conditions) would not to be carried out in the same way as had been previously done at ČD. This resulted in a new specific collective agreement 2009-2013 between SZDC and the Union which outlined the new positions, tasks and jobs with new conditions. Union staff was offered those new conditions to either accept or not.

279. ČD employees who had a few years left before retirement were offered early retirement with a financial compensation and the possibility to keep free travel benefits for them and family. For staff not at an age suitable for early retirement, the level of salary proposed in SZDC was often lower than in ČD depending on the new position.

280. For staff who had worked longer than a set minimum number of years with ČD before being transferred to SZDC, railway benefits were maintained after the transfer, especially free travel benefits for the employee and family. New employees of SZDC do not have railway benefits such as free travel.

281. Since proposed in SZDC were generally lower than salaries in ČD, and the new base would be in effect until retirement pensions would be calculated from a lower base than the previous equivalent salary in ČD.

282. As a result of this transfer and the decision of some staff to reject the negotiated terms, in 2010, SZDC decreased staff from 9,700 to 8,800
VIII. APPENDIX B: CONSENSUS AGREEMENT ON POLICY ISSUES

1. SRT Debt Structure

There was strong common consensus that SRT needs to be relieved of its debt burden and further, that SRT needs to be recapitalized to allow it to function as a normal SOE. However, that change in the financial status of SRT comes with a price. SRT cannot continue to exist as it has in the past. Defending old outdated notions of how it can carry on business as before, with the Government simply taking away the debt, is not a viable option. So with that debt relief comes responsibility to step away from the old SRT and create a new SRT focused on customers, rationalization of service and increased productivity.

Recommendation: Change SRT to a debt free and recapitalized SOE.

2. Railway Infrastructure

There was again, a strong consensus that the railway infrastructure should become a government responsibility. Every organization agreed that the Government should pay for the infrastructure and charge back to the operating companies whatever seems reasonable for use of that infrastructure.

However differences occurred in how best to manage that infrastructure. All central agencies and the Ministry of Transport supported establishing a separate independent unit to manage the infrastructure – development, construction, maintenance and operation. This approach is similar to that which is used generally across many countries of the European Union and particularly some of the successful restructured railways like Sweden which have similar social concerns to Thailand. The disagreement with this approach came from SRT and the SRT Union who believed that a separate Business Unit in SRT could manage that role.

The SRT position is problematic from a number of perspectives. First, capacity within SRT to take on that role does not exist. There is no Business Unit being developed in SRT to assume that role and none is planned. As an open access system, SRT cannot be responsible for allocation of track "slots" to other potential users independently.

In defense of the SRT position, others have argued that separating infrastructure from operations means that there is a risk of misallocation of funding to infrastructure that does not represent the needs of the operator. Some track may not be needed while other track may need to be expanded for business reasons. This is a valid argument and any independent infrastructure SOE will need to take this concern into consideration.

There was also a strong consensus that the transfer of land assets could be used as a counter payment to cover the cost of debt relief and recapitalization. All agencies including SRT agreed with that position with only the SRT Union in disagreement. However, since the transfer of land would only be within the MOT family, it will remain where it has always been and there is no concern about the land being used in a way that is inconsistent with the wishes of the Government.

Recommendation: Establish a new SOE to assume responsibility for infrastructure. Infrastructure will include track, signals, stations, yards and maintenance facilities. To ensure that SRT considerations are taken into account by that SOE, set up a Board of Directors or Management Committee on which SRT would have one member to ensure that the commercial and operations considerations are incorporated into the investment and management decisions of the infrastructure SOE.
3. Non Core Land Assets

289. The response to this issue also split mainly along central agency lines and SRT. Central agencies were consistent in their recommendation that the non core land be transferred to a new SOE with SRT input. The SRT union was of the opinion that to ensure transparency, the non core land should be managed by an independent professional body.

290. In most discussions involving land assets the discussion divides railway owned land into core and non core land. Core land is that which is directly or indirectly used for the purpose of providing railway services and includes track, signals, stations, yards, repair facilities, and land for which some railway use is expected in the short to medium term future. Non core land is surplus to railway requirements and can be used for other purposes. However, the division of land into core and non core is very difficult to do and land may serve as both core and non core at the same time. This is most easily seen at stations. A large station may primarily serve the railway and its passengers. But in a high rise station, other activities like commercial, office or even residential may also be possible and desirable. So separation of that “infrastructure” into core and non core is often not advisable. Other countries have often found that leaving the land under one organization with management separated between core and non core activities is the best option.

291. Together with the authority over the land comes the requirement to pay the pensions to current and future SRT staff. This is a key consideration because the development of land, particularly inside the metropolitan area of Bangkok, is a very lucrative activity. The parties that are involved in that development are many and the decisions over mobilization of capital, design of the proposed development, movement of current users of the land, payment of compensation, terms of revenue sharing or leasing costs, etc. are all time consuming and activities best left to a fully dedicated property development and management company. This is not the activity best done by the senior staff of a railway company.

Recommendation: Transfer non core land with core land to the new infrastructure SOE. Create an independent property management subsidiary of the infrastructure SOE. Allocate revenue from that unit to reimburse the Government for capitalization of the SRT Provident Fund with any surplus to be allocated against the cost of infrastructure. Establish a board of directors for that subsidiary which contains SRT, the SRT union, MOF, MOT, civil society and other departments or members as agreed.

4. Union Rights and Benefits

292. There was uniform agreement that the rights of current union members should be maintained but where new joint venture or private companies form in the future it may be necessary to renegotiate union agreements.

5. Open Access Policy

293. It was generally but non unanimously agreed that open access is the preferred policy. Caveats were the need to ensure safety in operations and that access to infrastructure was fair and transparent, which would require a good regulatory regime to be established first. The union also argued that while open access could be considered, the first objective was to spend money on improving the current infrastructure rather than on setting up new railway companies.

Recommendation: With good regulation open access is a good policy and should be encouraged.
6. Government Subsidize Infrastructure Costs

There was general consensus that government should continue to subsidize railway infrastructure cost as it does for roads. This will become a permanent government obligation as it is in many other countries and will become a regular annual budget item for the Ministry of Finance.

**Recommendation:** Government should consider railway infrastructure cost in the same way as it has considered road infrastructure costs.

7. Joint Ventures

There was general consensus that establishment of joint ventures companies to serve specific developing markets was a good idea with the caveat from the SRT union that they should be consulted in the decision to set up a new joint venture.

**Recommendation:** Establish JVs as needed with input from SRT Union.

8. Railway Regulator

There was general agreement that an independent regulator was needed. This will require a law of establishment and in the current political environment – may take some time. The recommendation of the study is to separate safety regulation from economic regulation and place safety regulation under the Ministry of Transport. Since the most important issue is safety, and since SRT is self regulated, it would seem easier to assume safety regulation within a safety directorate of the Ministry of Transport which may be accomplished without passing a new law. The MOT is considering using an SOE as the new interim safety regulator. The establishment of the economic regulator could then be set in motion and completed when Parliament’s agenda allowed.

**Recommendation:** Move forward with the establishment of a railway safety directorate in the Ministry of Transport. Concurrently, draft a railway regulator law to set up an economic and technical regulatory body.

9. PSO Subsidies

The agencies agreed that the government should support low cost passenger service by providing a public service obligation subsidy. However, various opinions questioned how that subsidy should be operated. One view was that it be temporary until a more effective way was found to support the poor which did not skew the choice of mode of transport. Another view held that while a subsidy would be appropriate at the present, over time it should be reduced and more of the cost of rail transport be recovered normally through fares. A third point raised argued that while a PSO payment would be acceptable, this should also be conditional on a quality of service measure.

**Recommendation:** Continue to pay PSO subsidies but key payments to a quality of service indicator or convert the payments to a public service contract which sets the payment per passenger and which provides an incentive to attract more passengers and provide better quality service. The independent regulator can assure that the PSO payments are fair and equitable.

10. Passenger Service and Business Separation

The discussion of how best to focus the forward attention of SRT on passenger or freight is divided into short and longer term. In the shorter term, the consensus was to continue with the current approach to focus on passengers, but in the longer term, particularly with open access, the market will help SRT realign its business model. Clearly the future for revenue producing business is in freight transport and particularly heavy commodities and containers.
The cost of container shipment within Thailand is higher than all the neighboring countries and this leaves scope for development of a strong and responsive business for SRT.

**Recommendation:** Continue current focus on passengers in the short term, but begin to develop a longer term strategy and equipment to better serve the freight market in the future. Separation of passenger and freight businesses may be appropriate as the market develops further and the needs of the two businesses begin to diverge with separate operations and customer needs. SRT can decide when and how to make that separation.

11. **High Speed Rail Development**

High speed rail (HSR) has been a long standing dream in Thailand for a decade. Many overtures have been made to the government by private investors to establish HSR lines radiating from Bangkok to other key centres. Recently these options have been supplemented by other options which consider HSR as a way of moving products from Thailand to PRC – particularly to the landlocked provinces of Yunnan and onward to Sichuan and the inner western region of PRC. However, to date none of the concepts has been viable financially. A significant infusion of Thai Government capital is normally needed to provide the basis for the HSR line development. During the discussion the SRT union made the point that better quality infrastructure would allow the current railway to significantly increase its speed – up to about 150 km/hr and while not in the same speed league as a fully separated HSR line, it would nonetheless significantly reduce travel time for critical trains. Given the current demands on the government finances to simply recover the existing rail system to a stable and sustainable standard, it is unlikely that major funds will also be available to support further development of HSR in the short term.

**Recommendation:** HSR may be an attractive option for railway development in the future. For the moment, it is best to leave the development as a PPP option and treat proposals from the private sector or others to develop HRS on a one by one basis. The Government should limit its exposure to HSR costs in the short and medium term but in the longer term, HSR may become a viable extension of the current network for either or both passengers and freight.
### IX. APPENDIX C: DESIGN AND MONITORING FRAMEWORK

<table>
<thead>
<tr>
<th>Design Summary</th>
<th>Performance Targets and Indicators</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
</tr>
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<tbody>
<tr>
<td>Impact</td>
<td>Railway system in Thailand is operating efficiently</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>By 2017 International logistic competitiveness ranking among Asian peers improves annually from 2012 base. (Rank 38 - 2012, China 26, Malaysia 29)</td>
<td>OTP and MOT statistics</td>
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<td></td>
<td>Percentage of export transport cost attributable to domestic transport cost reduced from 60% 2005 to 55%. (28% China, 34% Malaysia)</td>
<td>World Bank International Logistics Index</td>
<td></td>
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<tr>
<td></td>
<td>Increased market share of goods transported in Thailand (2.5% 2010)</td>
<td>World Economic Forum annual competitiveness ranking</td>
<td>Assumptions</td>
</tr>
<tr>
<td></td>
<td>Punctuality of passenger transport in Thailand improved by 20% from 2012 Baseline.</td>
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</tr>
<tr>
<td>Outcome</td>
<td>An outline restructuring program is endorsed by the Government</td>
<td>Proceedings and declarations from the Government</td>
<td></td>
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<tr>
<td></td>
<td>By 2013 A formal agreement of the Government to move the reform agenda forward is achieved.</td>
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**Assumptions**
- High level support to ensure that the reforms progress as planned.
- The restructuring plan is actually implemented.

**Risks**
- Misuse of budget means that physical and institutional changes are not achieved as planned.
- Institutional and staff inertia in SRT limit the impact of non physical changes.
- The timetable for reform is not quick enough to achieve results and overcome inertia.

**Assumption**
- The government has a clear policy on the role and responsibilities of SRT as a key component of the transport system.
The key agencies including the labor unions have considered the future structural options and identified the ones that are viable.

**Risks**
Confusion among the agencies over the longer term target.

### Outputs

<table>
<thead>
<tr>
<th>By 2013</th>
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<tr>
<td>The detailed policy matrix and comprehensive reform plan is endorsed at meeting 19th December 2012 and the policy matrix is approved by the Government. (Final Report SSTA)</td>
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<tr>
<td>An implementation coordination committee (ICC) is established to develop and monitor the program for railway reform.</td>
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</table>

1. A Policy Matrix on the restructuring plan is agreed by Government.

2. A practical implementation plan for the reform is prepared and implemented by the ICC

<table>
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<tr>
<th>Assumptions</th>
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<tr>
<td>Agreement can be reached on the objectives, KPI targets, timelines, costs, source of funding and institutional accountability.</td>
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<tr>
<td>The detailed policy matrix and reform agenda is endorsed by Government and the steps required to implement that plan are approved and supported by the responsible agencies.</td>
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### Risks
Vested interests work behind the scenes to limit the process of reform and protect their current advantages.

Legal requirements for new legislation delays implementation and the reform loses momentum.
<table>
<thead>
<tr>
<th>Activities with Milestones</th>
<th>Indicative Inputs</th>
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<tbody>
<tr>
<td><strong>Activity 1: Establish and Fund Reform Implementation Committee</strong></td>
<td>ADB $500 million</td>
</tr>
<tr>
<td>1.1. Prepare Cabinet submission to set up ICC (Mar2013)</td>
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<td>1.2. Review and consideration by Cabinet (April 2013)</td>
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<tr>
<td>1.3. Establish ICC to include OTP, PDMO, SEPO, BoB, SRT (May 2013)</td>
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<td>1.4. Provide implementation funding for committee operations for one year (May 2013)</td>
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</tr>
<tr>
<td>1.5. Provide committee with written authority from Cabinet to implement the reform program. (April 2013)</td>
<td></td>
</tr>
<tr>
<td><strong>Activity 2: Refinancing Railway Operations and Create New SRT Business Plan</strong></td>
<td></td>
</tr>
<tr>
<td>2.1. Transfer SRT debt of Baht 100 billion to New Entity (June 2013)</td>
<td></td>
</tr>
<tr>
<td>2.2. Provide SRT with Baht 3 billion of working capital (June 2013)</td>
<td></td>
</tr>
<tr>
<td>2.3. Review and approve New SRT 5 yr business and investment plan and 10 yr indicative business and marketing plan (June 2013)</td>
<td></td>
</tr>
<tr>
<td>2.4. Approve SRT investment and marketing plan (July 2013)</td>
<td></td>
</tr>
<tr>
<td><strong>Activity 3: Separation of Infrastructure and Operations</strong></td>
<td></td>
</tr>
<tr>
<td>3.1. Establish legal framework for infrastructure SOE (Mar 2013)</td>
<td></td>
</tr>
<tr>
<td>3.2. Create draft Constitution for Infrastructure SOE including BOD and reporting relationships (April 2013)</td>
<td></td>
</tr>
<tr>
<td>3.3. Register Infrastructure Development and Operations SOE (IDO SOE) (April 2013)</td>
<td></td>
</tr>
<tr>
<td>3.4. Agreed rail infrastructure development cash flow plan (July 2013)</td>
<td></td>
</tr>
<tr>
<td>3.5. Funding in place to support plan and agreed dispersal plan (Aug 2013)</td>
<td></td>
</tr>
<tr>
<td>3.6. Prepare PMU TOR (April 2013)</td>
<td></td>
</tr>
<tr>
<td>3.7. Select and Contract Project Management Unit (Aug 2013)</td>
<td></td>
</tr>
<tr>
<td>3.8. Prepare, review and approve infrastructure implementation plan (Nov 2013)</td>
<td></td>
</tr>
<tr>
<td>3.9. Contract for construction and maintenance of priority links (Mar 2014)</td>
<td></td>
</tr>
<tr>
<td>3.10. Create infrastructure operations plan for staffing and implementation (Dec 2013)</td>
<td></td>
</tr>
<tr>
<td>3.11. Transfer selected SRT Operations staff from SRT to IDO SOE (Jan 2014)</td>
<td></td>
</tr>
<tr>
<td>3.12. Begin infrastructure operations (Feb 2014)</td>
<td></td>
</tr>
<tr>
<td><strong>Activity 4: Transfer All Land to Infrastructure Development and Operations SOE</strong></td>
<td></td>
</tr>
<tr>
<td>4.1. Transfer all SRT land to IDO SOE in exchange for debt relief and recapitalization (Aug 2013)</td>
<td></td>
</tr>
<tr>
<td>4.2. Establish legal framework for IDO SOE subsidiary infrastructure SOE to manage non core land (Aug 2013)</td>
<td></td>
</tr>
<tr>
<td>4.3. Create draft Constitution for Management SOE including BOD and reporting relationships and dividend payments to MOT (Sept 2013)</td>
<td></td>
</tr>
<tr>
<td>4.4. Register Infrastructure Management SOE (Sept 2013)</td>
<td></td>
</tr>
<tr>
<td>4.5. Advertise, procure and contract real estate management company (Oct 2013)</td>
<td></td>
</tr>
</tbody>
</table>
4.6. Establish legal framework for SRT Provident Fund capitalization  (July 2013)

**Activity 5: Create a New Railway Regulatory Body**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.</td>
<td>Define roles &amp; functions of railway regulatory authority</td>
<td>Aug 2013</td>
</tr>
<tr>
<td>5.2.</td>
<td>Establish framework for creation of a railway regulatory authority within MOT</td>
<td>Oct 2013</td>
</tr>
<tr>
<td>5.3.</td>
<td>Establish powers of regulatory authority</td>
<td>Jan 2014</td>
</tr>
<tr>
<td>5.4.</td>
<td>Establish framework for issuing regulations and decisions and for their enforcement</td>
<td>Jan 2014</td>
</tr>
<tr>
<td>5.5.</td>
<td>Transfer safety inspection staff from SRT (Part)</td>
<td>Dec 2014</td>
</tr>
<tr>
<td>5.6.</td>
<td>Develop standards for safety inspection and certify</td>
<td>Feb 2014</td>
</tr>
<tr>
<td>5.7.</td>
<td>Advertise and procure economic regulatory services and staff</td>
<td>May 2014</td>
</tr>
<tr>
<td>5.8.</td>
<td>Define and approve national rail safety standards and mechanisms for ensuring compliance</td>
<td>May 2014</td>
</tr>
<tr>
<td>5.9.</td>
<td>Establish systems for implementing safety standards</td>
<td>July 2014</td>
</tr>
<tr>
<td>5.10.</td>
<td>Define and approve infrastructure service (performance) standards</td>
<td>April 2014</td>
</tr>
<tr>
<td>5.11.</td>
<td>Define and approve infrastructure access conditions (standards) and prices</td>
<td>July 2014</td>
</tr>
<tr>
<td>5.12.</td>
<td>Define and approve license issue and administration process</td>
<td>July 2014</td>
</tr>
<tr>
<td>5.13.</td>
<td>Define PSO framework payment administration process</td>
<td>Aug 2014</td>
</tr>
</tbody>
</table>
Figure C1: Implementation Schedule for Activities
## X. APPENDIX D: POLICY MATRIX

<table>
<thead>
<tr>
<th>Reform Aim</th>
<th>No.</th>
<th>Proposed Policy Actions</th>
<th>Proposed Indicative Actions</th>
<th>GOI Focal Point</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Railway Reform DPL (by December 31st, 2012)</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Railway Reform DPL (by December 31st, 2014)</td>
<td></td>
</tr>
<tr>
<td><strong>Activity 1: Establish and Fund Reform Implementation Committee</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Interdepartmental Reform Implementation Committee (RIC) with Authority from Cabinet to Implement the Railway Reform Agenda</td>
<td>1</td>
<td>1.1 Establish committee including OTP, PDMO, SEPO, BB, SRT</td>
<td></td>
<td>1. Cabinet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2 Provide implementation funding for committee operations for one year</td>
<td></td>
<td>2. Cabinet, BoB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3 Provide committee with written authority from Cabinet to implement the reform program.</td>
<td></td>
<td>3. Cabinet</td>
</tr>
<tr>
<td><strong>Activity 2: Refinancing Railway Operations and Create New SRT Business Plan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove debt burden from State Railway of Thailand</td>
<td>2</td>
<td>2.1 Transfer debt to other SOE.</td>
<td></td>
<td>1. Cabinet, MOF, MOT</td>
</tr>
<tr>
<td>Refinance State Railway of Thailand</td>
<td>3</td>
<td>3.1 Provide SRT with Baht 3 billion of working capital.</td>
<td></td>
<td>2. Cabinet, MOF, MOT</td>
</tr>
<tr>
<td>Create and approve new business plan of State Railway of Thailand</td>
<td>4</td>
<td>4.1 Review and approve New SRT business and investment plan for 5 years and indicative business and marketing plan for 10 years.</td>
<td></td>
<td>3. MOT, RIC</td>
</tr>
<tr>
<td>Implement Phase 1 of SRT Business Plan</td>
<td>5</td>
<td>5.1 Approve SRT investment and marketing plan.</td>
<td></td>
<td>SRT BOD, MOT, RIC.</td>
</tr>
<tr>
<td><strong>Activity 3: Separation of Infrastructure and Operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Infrastructure Development and Operations SOE (IDO)</td>
<td>6</td>
<td>6.1 Establish legal framework for infrastructure SOE.</td>
<td></td>
<td>1. SEPO, IRC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.2 Create Articles of Establishment for Infrastructure SOE including BOD and reporting relationships</td>
<td></td>
<td>2. SEPO, IRC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.3 Register Infrastructure SOE</td>
<td></td>
<td>3. SEPO, IRC</td>
</tr>
<tr>
<td>Establish Responsibility for infrastructure Finance</td>
<td>7</td>
<td>7.1 Agreed rail infrastructure development cash flow plan.</td>
<td></td>
<td>1. NESDB/OTP/MOT planning department with Cabinet approval.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.2 Funding in place to support plan and agreed dispersal plan.</td>
<td></td>
<td>2. Bureau of Budget/PDMO</td>
</tr>
</tbody>
</table>
| Establish Responsibility for Infrastructure Delivery | 8 | 8.1. Select and Contract Project Management Unit  
8.2 Prepare, review and approve infrastructure implementation plan | 1. RIC, MOT  
2. NESDB, MOT, IRC  
3. MOT, IRC |
| Establish Responsibility for and Implement Infrastructure Operations | 9 | 9.1 Create infrastructure operations plan for staffing and implementation  
9.2 Transfer SRT Operations staff from SRT to IDO SOE  
9.3 Begin infrastructure operations | 1. IRC  
2. IDO SOE, SRT, MOT, Dept. of Labor  
3. IDO SOE |
| Activity 4: Transfer All Land to Infrastructure Development and Operations SOE | | | |
| Transfer all railway land to IDO SOE | 10. | 10.1 Transfer all SRT infrastructure land to IDO SOE in exchange for debt relief and recapitalization  
10.2 Establish legal framework for IDO SOE subsidiary infrastructure SOE to manage non core land.  
10.3 Create Constitution for Management SOE including BOD and reporting relationships and dividend payments to Treasury.  
10.4 Register Infrastructure Management SOE  
10.5 Advertise, procure and contract management of non core land to real estate management company | 1. IDO SOE, SRT, MOT  
2. SEPO, RIC  
3. SEPO, IDO SOE, RIC  
4. SEPO, IDO SOE, RIC  
5. IDO SOE |
| Transfer responsibility for SRT Pension obligations to Provident Fund | 11. | 11.1 Establish legal framework for transfer of pension obligations from SRT to Provident Fund.  
11.2 Establish Provident Fund. Capitalize provident fund with transfer of money from IDO SOE (non core land value)  
11.3 Commence payment of | 1. SRT, RIC  
2. MOT, |
<table>
<thead>
<tr>
<th>Activity 5: Create a New Railway Regulatory Body</th>
<th>SRT pensions through Provident Fund.</th>
</tr>
</thead>
</table>
| Establish entity within MOT with responsibility for railway safety and economic regulation | 12.1 Define roles & functions of railway regulatory authority  
12.2 Establish framework for creation of an railway regulatory authority within MOT |
| MOT, SRT | MOT |
| | MOT |
| | MOT |
| | MOT |
| | MOT |
| | MOT, SRT |
| | MOT |
| | MOT |
| | IDO SOE, SRT |
| | MOT, IDO SOE |
| | MOT, IDO SOE, SRT, Others |
| | MOT, IDO SOE, SRT |
| | MOT, SRT |
|   |   | 12.12 Define and approve license issue and administration process  
|   |   | 12.13 Define PSO framework payment administration process |
XI. APPENDIX E: DRAFT CABINET SUBMISSION TO ESTABLISH THE IMPLEMENTATION COORDINATION COMMITTEE

(Draft)

Letter for submission to the Cabinet to approve the draft of Regulation of the Office of the Prime Minister on the Implementation Coordination Committee for Reforming Thailand Railway System

No .. /....

The Minister of Transport
Ratchadamnoen Avenue
10100

... February 2013

Title: The draft of Regulation of the Office of the Prime Minister on the Implementation Coordination Committee for Reforming Thailand Railway System B.E. ....

To: Secretariat of the Cabinet

Attachment: The draft of Regulation of the Office of the Prime Minister on the Implementation Coordination Committee for Reforming Thailand Railway System B.E. ....

The Minister of Transport would like to submit the establishment the Implementation Coordination Committee for Reforming Thailand Railway System to the Cabinet. This matter has to submit to the Cabinet according to the Royal Degree on Proposal and Cabinet Meeting B.E.2548 (2000) section 4 (1) and the State Administration Act B.E.2534 (1991) section 11 paragraph one (8) and paragraph two.

This matter has detail as follows.

1. Background

...

2. Reason for submission matter to the Cabinet

Lack of an integrated transport system is now affecting the competitive position of Thailand compared to its neighbors. Thailand remains the critical rail and road transport hub in South East Asia. Heavy investment in road assets over the past 30 years together with more efficient and cost effective road transport operators have resulted in a strong primary and secondary highway network and customer responsive operations throughout Thailand.
Unfortunately, the comparable investment in either hardware or software for railways has not taken place. As a result railway’s share of the freight market has now fallen to between 2 -2.5% from a level of 9% in 2000. The internal transport cost of moving goods to ports at 60% of the overall shipment cost is twice the comparable percentage cost for both PRC and Malaysia. The average domestic cost of container movement in Thailand is $1,000 and for PRC, Indonesia and Malaysia, the average is $500. The Thai economy is paying a significant cost premium for a lack of available competitive transport options.

The State Railway of Thailand is not viable as an organization under the current conditions. All efforts to address the problems in the rail transport sector which focus on specific issues related to SRT will not succeed until the large issues – mainly financial – are addressed by the government.

The priorities for action are:

1) **Debt Relief:** Remove the current SRT debt burden and recapitalize SRT with sufficient working capital to function as a normal company.

2) **Separate Infrastructure and Operations:** Reduce infrastructure costs by separating infrastructure ownership and management from railway commercial operation by establishing a new infrastructure organization. SRT is now unable to carry the cost of infrastructure. Other railways in Europe have shown that only about 10 to 30% of full infrastructure cost can be recovered through track access charges. The balance must be assumed by the state;

3) **Return all land to the new infrastructure organization under MOT.** Division of core and non core assets is difficult. The infrastructure company should maximise return from all non core assets through an independent asset management company and those monies earned should be allocated to pay SRT staff pension obligations and removed as an SRT responsibility.

4) **Create a separate regulatory body responsible for licensing, safety, environmental, operating and service standards.** If requested, the regulator may approve track access and facility lease charges. The regulator will also enforce conditions of licenses, safety, environmental and operational compliance;

5) **Create a high level implementation coordination committee to manage the change process;**


The fifth of the above priorities, establishment of a high caliber implementation coordination committee, the Implementation Coordination Committee for Reforming Thailand Railway System, will require informed and technically competent members to implement priority steps.

3. **Urgency of the matter**

The first objective of the railway reform initiative is to establish the Implementation Coordination Committee for Reforming Thailand Railway System to transfer debt of the SRT to a new entity within March 2556 (2013). This will make the effective reforming Thailand railway stem within one year. Therefore, it is necessary that the Cabinet will establish the Implementation Coordination Committee for Reforming Thailand Railway System within February 2556 (2013).

4. **Main point, fact and matters of law**

Promulgation the draft of Regulation of the Office of the Prime Minister on the Implementation Coordination Committee for Reforming Thailand Railway System B.E. ..., in order to establish the Implementation Coordination Committee for Reforming Thailand Railway System including determination scope of authority and duties.
The Implementation Coordination Committee for Reforming Thailand Railway System consists of five members;

(i) Director of the Transport and Traffic Policy and Planning Office, Ministry of Transport;
(ii) Director of the Public Debt Management Office, Ministry of Finance;
(iii) Director of the State Enterprise Policy Office, Ministry of Finance;
(iv) Director of the Bureau of the Budget, Ministry of Finance;
(v) Chief Policy and Planning Bureau, State Railway of Thailand.

The Implementation Coordination Committee for Reforming Thailand Railway System has important authority and duties as follows;

1) Remove the current SRT debt burden and recapitalize SRT with sufficient working capital to function as a normal company.
2) Separate infrastructure and operations of the SRT.
3) Return land of SRT to the new infrastructure organization under MOT.
4) Create a separate regulatory body responsible for licensing, safety, environmental, operating and service standards.

3) The other operations in detail of reforming Thailand railway stem are duties of SRT.
4) Matter of law that the Cabinet considers is the State Administration Act B.E.2534 (1991) section 11 paragraph one (8) and paragraph two that give authority to the Prime Minister to issue a Regulation of the Office of the Prime Minister to establish a committee in order to make fast and efficient administration. This Regulation must be approved by the Cabinet.

5. Proposal

The Cabinet considers approving the draft of Regulation of the Office of the Prime Minister on the Implementation Coordination Committee for Reforming Thailand Railway System B.E. ....

Please be sure to consider submitting to the Cabinet.

Yours truly,

(Mr.Chadchart Sittipunt)
Minister of Transport

(Draft)
The Regulation of the Office of the Prime Minister on the Implementation Coordination Committee for Reforming Thailand Railway System
B.E. ....

To make fast and efficient reforming Thailand railway system

By virtue of the provision of section 11 paragraph one (8) of the State Administration Act B.E. 2534 (1991), the Prime Minister, with the approval of the Council of Ministers, hereby issues regulation as follows:

Article 1. This Regulation is called the “Regulation of the Office of the Prime Minister on the Implementation Coordination Committee for Reforming Thailand Railway System B.E. ....”

Article 2. This Regulation shall come into force as from the day following the date of its publication in the Government Gazette.

Article 3. In this Regulation:

“Committee” means the Implementation Coordination Committee for Reforming Thailand Railway System;
“Member” means member of the Implementation Coordination Committee for Reforming Thailand Railway System.

Article 4. There shall be the Implementation Coordination Committee for Reforming Thailand Railway System which consists of the followings:
1) Director of the Transport and Traffic Policy and Planning Office, Ministry of Transport, as Chairman;
2) Director of the Public Debt Management Office, Ministry of Finance, as Member;
3) Director of the State Enterprise Policy Office, Ministry of Finance, as Commissioner;
4) Director of the Bureau of the Budget, Ministry of Finance, as Member;
5) Chief Policy and Planning Bureau, State Railway of Thailand, as Member and Secretary.

Article 5. At the meeting of the Committee, the presence of not less than one-half of the total number of members is required to constitute a quorum. At the meeting, if the Chairman does not attend or is not present, the members present shall elect one among themselves to preside over the meeting.

The decision of the meeting shall be made by a majority of votes. Each member shall have one vote; in case of an equality of votes, the person presiding over the meeting shall have an additional vote as casting vote.

Article 6. The Committee shall have the following powers and duties about coordination reforming Thailand railway:
1) To remove the current SRT debt burden and recapitalize State Railway of Thailand with sufficient working capital to function as a normal company;
2) To separate infrastructure and operations of the State Railway of Thailand;
3) To return land of State Railway of Thailand to the new infrastructure organization under Ministry of Transport;

4) To create a separate regulatory body responsible for licensing, safety, environmental, operating and service standards.

5) To perform other duties as entrusted by the Prime Minister or the Council of Ministers.

Article 7. The Policy and Planning Bureau, State Railway of Thailand, shall act as secretary office of the Committee and coordination reforming Thailand railway including perform other duties as entrusted by the Committee.

Article 8. Government organization and administrative agency shall coordinate and support in performing Thailand railway.

Article 9. The Prime Minister shall have charge and control of the execution of this Regulation.

Give on .. February 2556 (2013)

(Yingluck Shinawatra)
Prime Minister
บทสรุปผู้บริหาร
ก. การพัฒนาของประเทศไทย

1. ปัจจุบันประเทศไทยถูกจัดว่าเป็นประเทศที่มีรายได้ปานกลาง และในอีกสิบปีข้างหน้าประเทศไทยวางแผนที่จะก้าวเข้าสู่การเป็นประเทศที่พัฒนาแล้ว ในกรณีที่จะบรรลุเป้าหมายของการเปลี่ยนแปลงนี้ เศรษฐกิจจะต้องมีการขยายตัวในเชิงอุตสาหกรรม และเพื่อการค้าระหว่างประเทศและระหว่างภูมิภาคอย่างต่อเนื่อง สำหรับสินค้าประเภทต่างๆ การค้าที่มีมากขึ้นนี้จำเป็นต้องอาศัยโครงสร้างพื้นฐาน การคัดเลือกสื่อสาร การคมนาคมขนส่งและการเงิน รวมถึงทรัพยากรบุคคลในการใช้ประโยชน์จากโอกาสการพัฒนาทางเศรษฐกิจ ซึ่งเป็นผลจากการบรูณาการที่เพิ่มขึ้นของประเทศไทยในระดับภูมิภาคและระดับโลก

2. ประเทศไทยถือว่าตั้งอยู่ในตำแหน่งภูมิศาสตร์ที่ได้เปรียบ เป็นศูนย์กลางซึ่งอยู่ทางตอนบนของเอเชียตะวันออกเฉียงใต้ แท้จริงแล้วการเคลื่อนย้ายทางการค้าที่สำคัญระหว่างประเทศที่มีมูลค่าสูงในภูมิภาคนี้ไม่ว่าจะเป็นการขนส่งระหว่างประเทศในระดับภูมิภาค จีน มาเลเซีย สิงคโปร์ และไทยส่วนต่อท่าทางการขนส่งสินค้าประเภทต่างๆ การขนส่งสินค้าที่มีมากขึ้นนี้จำเป็นต้องมีการที่จะมีการเปลี่ยนแปลงโครงสร้างทางการค้าตามที่บริษัทฯผู้ประกอบการที่มีศักยภาพในการที่จะเป็นฐานการเปลี่ยนระบบการขนส่งสินค้าที่มีมากขึ้น เกิดขึ้นไว้FINE การปฏิรูปโครงสร้างพื้นฐานและการค้าที่มีความสำคัญของการพัฒนาโครงสร้างพื้นฐานในไทย

3. ในขณะที่เศรษฐกิจของสาธารณรัฐประชาชนจีนกำลังขยายตัวอย่างต่อเนื่อง ควบคู่ไปกับเศรษฐกิจที่เติบโตอย่างต่อเนื่องในภูมิภาค ประเทศไทยถือได้ว่ามีศักยภาพในการที่จะเป็นฐานการเปลี่ยนระบบการค้าสินค้าภูมิภาค และส่วนภูมิภาคทั่วโลก เกิดขึ้นด้วยการขยายศักยภาพทางการค้าในประเทศไทยในหลายรูปแบบที่สามารถตอบสนองได้อย่างรวดเร็วต่อความต้องการของศิษย์พุทธเจ้าที่กำลังพัฒนา

ข. การพัฒนาระบบขนส่งของไทย

4. ระบบขนส่งทางรางซึ่งถือเป็นรูปแบบการเดินทางหลักที่สำคัญของประเทศไทย มีแนวโน้มที่การพัฒนาจะหยุดนิ่ง และลดลงอย่างรวดเร็ว ซึ่งเป็นผลจากสภาวะการพัฒนาทางการค้าที่มีความสูงในภูมิภาค แต่การลงทุนต่อฟื้นฟูการขนส่งทางรางในหลายรูปแบบที่สามารถตอบสนองได้อย่างรวดเร็วต่อความต้องการของเศรษฐกิจที่กำลังพัฒนา

5. ระบบการขนส่งที่ขาดการบูรณาการกำลังส่งผลกระทบต่อความสามารถในการแข่งขันของไทยเมื่อเทียบกับประเทศเพื่อนบ้าน แม้ว่าประเทศไทยยังคงเป็นศูนย์กลางการขนส่งทางบก และทางรางของภูมิภาคเอเชียตะวันออกเฉียงใต้ แต่การลงทุนอย่างมีประสิทธิภาพในระบบขนส่งทางถนนและทางราง 30 ปีที่ผ่านมา ประกอบกับการพัฒนาทางย่านการค้าและระบบการขนส่งสินค้าทางบก ส่งผลให้เกิดความแข็งแกร่งของโครงข่ายทางหลวงสายหลัก ทางหลวงสายรอง และการดำเนินการทางถนนที่ตอบสนองต่อความต้องการของผู้บริโภค อย่างไรก็ตาม เนื่องจากไม่มีการลงทุนในรูปแบบเดียวกันทั้งโครงสร้างพื้นฐาน และระบบ
ดำเนินการในการขนส่งระบบราง จึงทำให้สัดส่วนการขนส่งสินค้าทางรางลดลงอยู่ที่ประมาณร้อยละ 2-2.5 จากกรีฑาและ 9 ในปี 2543 นอกจากนี้การขนส่งสินค้าภายนอกชั้นุดที่ 60 ของค่าขนส่งสินค้าทางทั้งหมดยังสูงเป็นอย่างมากเทียบกับการขนส่งทางเรือและอากาศยาน โดยผลลัพธ์ด้านการขนส่งสูคลองแพรกของประเทศไทยอยู่ที่ 1,000 เหรียญสหรัฐฯ ในขณะที่สัดส่วนการขนส่งทางเรือที่ถูกคิดเป็น 500 เหรียญสหรัฐฯ ซึ่งจะเห็นได้ว่าภาคเศรษฐกิจของไทยกำลังเจรจาด้านทุนที่สูงมากเนื่องจากการขาดทางเลือกของการขนส่งสินค้าที่สามารถแข่งขันได้

6. ดูกลกลุ่มของการรถไฟแห่งประเทศไทย (รฟท.) คือการขนส่งผู้โดยสาร ซึ่งร้อยละ 90 เป็นการโดยสารแบบขึ้นสามสถานีที่ได้รับการขนส่งรายได้จากภาครัฐ โดยบริษัทที่มีความต้องการทั้งหมดแล้วในขณะที่มีการปรับเปลี่ยนต่อ 20 ปีที่ผ่านมา รวมทั้งการขนส่งรายได้ในส่วนของผู้โดยสารนั้นจะเป็นผลประกอบการจ่ายเพียง 70 ของขั้นตอนที่ให้บริการจ่ายดอกเบี้ยต่อกลุ่มผู้โดยสารทั้งหมดแต่ในขณะที่ปริมาณการขนส่งทางที่สูงค่าและผู้โดยสารนั้นลดลงอย่างมาก รฟท.ยังคงสามารถบริหารรายได้เพื่อให้นมกลุ่มด้านทุนการให้บริการได้จนกระทั่งปี 2548 หลังจากนั้นสินทรัพย์การขนส่งของรฟท.เกี่ยวกับรายได้และภาระผูกพันทางการเงินจากการดำเนินงานในปี 2553 เท่ากับประมาณ 23 ของรายได้ ทั้งนี้ต้นทุนอีกซึ่งส่งผลกระทบให้เกิดภาวะขาดทุนเนื่องล่าง

1. ค่าเสื่อมราคาของสินทรัพย์ ซึ่งคิดเป็นประมาณการที่ร้อยละ 22 ของรายได้
2. การเบี้ยผ่อนของเงินยืมเหตุบ้านน้้า ซึ่งคิดเป็นร้อยละ 27 ของรายได้
3. หนี้สะสมยกยอดมาคิดเป็นร้อยละ 22 ของรายได้

7. ผลลัพธ์ที่ตามมาคือผลขาดทุนต่อปีที่ประมาณ 322 ล้านเหรียญสหรัฐฯ (1 หมื่นล้านบาท) ซึ่งผลขาดทุนรวมและต้นทุนการลงทุนอื่นๆ ณ ปัจจุบันคิดรวมเป็นการหนี้สินทั้งหมดของรฟท.ที่ประมาณ 3.2 พันล้านเหรียญสหรัฐฯ (1 แสนล้านบาท)

8. การให้บริการทางรถไม่ในประเทศไทยอย่างยิ่งยังกันไม่ได้หาประสบจากการแก้ปัญหาด้านที่วางที่ทางรฟท.ต้องแยกข้อเรียกเป็นระบบ โดยเฉพาะอย่างยิ่งในส่วนของต้นทุนทางยอม

ค. ประโยชน์ที่คาดว่าจะได้รับจากการปฏิรูป

9. ประโยชน์ต่างๆที่สำคัญทางด้านการเงินและเศรษฐกิจสำคัญจะค่อยๆเกิดขึ้นจากการขนส่งระบบรางในประเทศไทยโดยมีการปรับปรุงขึ้นใหม่ในรูปแบบการขนส่งที่เป็นไปได้ที่สามารถแข่งขันกับผู้ประกอบการขนส่งทางถนน ซึ่งประโยชน์หลักๆนั้นจะแสดงได้เห็นได้ใน 3 รูปแบบ กล่าวคือ

1) ประโยชน์ด้านการเงินทางตรงสำหรับผู้ขนส่ง
2. ประโยชน์ด้านเศรษฐกิจและจากการขนส่งอ้อมสำหรับผู้จัดให้มีถนน รวมถึงผู้ใช้ถนน
3. ประโยชน์ด้านเศรษฐกิจทางอ้อมแก่สังคมโดยภาพรวม

1. ประโยชน์ด้านการขนส่งทางตรงสำหรับผู้ขนส่ง

10. มูลค่ารวมของการนำเข้าและส่งออกของประเทศไทยในปี 2548 คือ 2.28 แสนล้านเหรียญสหรัฐฯ 9.18 ล้านล้านบาท และจากการผลักการศึกษาของคณะกรรมาธิการเศรษฐกิจและสภาการศึกษา (UN-ESCAP) พบว่าสัดส่วนการขนส่งของสินค้าในประเทศสำหรับการนำเข้ามีค่าใกล้เคียงประมาณ 5.71 หรือคิดเป็นต้นทุนการขนส่งในแต่ละปีประมาณ 1.3 หมื่นล้านเหรียญสหรัฐฯ (524 ล้านล้านบาท) หากคิดรวมทั้งการนำเข้าและส่งออก อย่างไรก็ตามต้นทุนการขนส่งในประเทศสามารถลดลงได้ถึงร้อยละ 50 มูลค่าต้นทุนการขนส่งจะเหลือเพียง 6.5 หมื่นล้านเหรียญสหรัฐฯ (262 ล้านล้านบาท) ต่อปี ซึ่งตัวเลขดังกล่าวยังไม่รวมถึงต้นทุนอื่นๆที่ไม่ใช้การนำเข้า และส่งออก

2. ประโยชน์ด้านเศรษฐกิจและการขนส่งอ้อมสำหรับผู้จัดให้มีถนน รวมถึงผู้ใช้ถนน

11. โดยทั่วไปต้นทุนการบำรุงรักษาน้ำหนักในแต่ละปี มีมูลค่าประมาณร้อยละ 2.5 ของมูลค่าของรายได้ของถนนที่มีรถจราจรในประเทศไทยที่มีมูลค่าเท่ากับ 7.5 หมื่นล้านเหรียญสหรัฐฯ ในแต่ละปีมีมูลค่าประมาณ 1.9 หมื่นล้านเหรียญสหรัฐฯ (5.6 หมื่นล้านบาท) จากผลการวิจัยพบว่าประมาณร้อยละ 75 - 80 ของความเสียหายของถนนมีสาเหตุจากบรรทุกขนาดใหญ่ ขณะที่รถจราจร รถบรรทุกขนาดเล็ก และรถโดยสารส่งผลน้อยมาก โดยเฉพาะอย่างยิ่งรถบรรทุกขนาดใหญ่ ซึ่งบรรทุกเกินขนาดจะส่งผลกระทบต่อถนนมากกว่า สภาพการขาดทุนผ่อนทานและรถบรรทุกขนาดนี้จะส่งผลกระทบต่อถนนพร้อมกันเป็นสองทางจากกฎหมายกำหนดนั้น สามารถลดผลกระทบต่อถนนที่อยู่ท่ามกลางรถบรรทุกที่ 18 ล้อที่บรรทุกตามกฎหมายกำหนด ภายใต้แผนการจราจเจได้มีการวางแผนที่จะเพิ่มปริมาณการขนส่งทางรางผู้ใช้เป็นร้อยละ 9 ของการขนส่งสินค้าทั้งหมดในประเทศไทย จากปัจจุบันเป็นร้อยละ 7.5 ซึ่งสัดส่วนรองลงมาเป็นร้อยละ 2 ซึ่งสัดส่วนรองลงมา 7.5 ที่เพิ่มเติมในความคาดหมายว่าจะมาจากผู้ใช้บริการทางรางที่เปลี่ยนมาใช้บริการทางการขนส่งทางราง และจากการเปลี่ยนมาใช้บริการทางการขนส่งโดยระบบรถไฟขนาดหนึ่งทางถนนมีทางรางที่นั้นจะส่งผลให้ประหยัดต้นทุนการบำรุงรักษารถจราจรต่อปีได้ถึง 100 ล้านเหรียญสหรัฐฯ (3 หมื่นล้านบาท) นอกจากนี้ยังสามารถประหยัดให้ผู้ใช้บริการ

1 Research and Information System for Developing Countries, India เอกสารถูกจัดทำในงานประชุมผู้เชี่ยวชาญระดับภูมิภาคของคณะกรรมาธิการเศรษฐกิจและสภาการศึกษา (ESCAP) ในหัวข้อ Trade and Transport Facilitation for Export Competitiveness เมื่อวันที่ 25-26 กันยายน 2551
2 ค้นหาข้อมูลจาก Road Asset Management, Asian Development Bank โครงการเลขที่ 5925 เดือนเมษายน พ.ศ. 2549
ทางถนนได้เพิ่มขึ้นอีกประมาณ 300 ลานเหรียญสหรัฐฯ หรือประมาณ 9 พันล้านบาทต่อปี

3). ประโยชน์ด้านเศรษฐกิจทางอ้อมแก่สังคมโดยภาพรวม

12. ตัวเลขจากผลการศึกษาหลายฉบับได้แสดงให้เห็นถึงความแตกต่างของผลกระทบที่เกิดขึ้นจากการขนส่งสินค้าทางถนนเมื่อเปรียบเทียบกับทางราง การเปรียบในแผนภาพ E1แสดงให้เห็น การเปรียบเทียบร่วมระหว่างผลของการขนส่งสินค้าทางถนนและทางรางต่อปัจจัยภายในอีกทั้ง ซึ่งผลกระทบจากการขนส่งทางถนนนี้ส่งผลกระทบมากกว่าการขนส่งทางรางถึง 3 - 4 เท่าโดยโดยคิดจากปัจจัยภายนอกรวมทั้งหมด

แผนภาพ E1: การเปรียบเทียบต้นทุนจากปัจจัยภายนอกระหว่างการขนส่งสินค้าทางถนนและทางราง3

13. ข้อพิสูจน์ในการปรับปรุงระบบรถไฟในประเทศไทยนั้นเป็นที่ค่อนข้างเด่นชัดกล่าวคือ การปรับปรุงระบบรถไฟในประเทศไทยนั้นจะทำให้เกิดการประหยัดที่เป็นไปได้แก่ผู้ขนส่งรวมทั้งสามารถลดค่าใช้จ่ายได้อย่างมากในการบริหารจัดการถนนให้กับหน่วยงานที่เกี่ยวข้อง และลดการดันทุนของผู้ใช้ถนนอีกทั้งจากการที่ถนนมีสภาพทรุดโทรมอีกทั้งการขนส่งทางรถไฟนั้นสามารถประหยัดต้นทุนได้มากในแง่ของภาพรวมของผลกระทบทางเศรษฐกิจและสังคม

บทสรุปของประสบการณ์จากต่างประเทศ

14. หลายประเทศได้มีการปฏิรูประบบรถไฟของตนเองมาตั้งแต่ยังเป็นปี 2534 หลังจากนั้นได้มีการเปลี่ยนแปลงที่สำคัญให้กับบริษัทที่มีความเป็นอิสระสามารถมีมติเพื่อเข้าใช้ระบบรางในประเทศกลุ่มประเทศอื่นๆ ร่วมกันได้ ซึ่งส่งผลต่อการเปลี่ยนแปลงคือการปฏิรูประบบการบริหารจัดการแบบพื้นฐานของหน่วยงาน หรือบริษัทของแต่ละประเทศในกลุ่มประเทศที่มีการเปิดสกัดการเข้าร่วมเดินรถ เพื่อพัฒนาให้เกิดการแข่งขัน และก่อให้เกิดการพัฒนาอย่างเป็นขั้นเป็นตอนในกระบวนการผลิต และการให้บริการ ซึ่งการนั้นไปสู่การปฏิรูปให้มีการเข้ามามีการในระบบรางในทางกลับกัน คือความต้องการในการแบ่งแยกอย่างมีประสิทธิภาพระหว่างโครงสร้างพื้นฐานและการเดินรถ

15. การปฏิรูประบบรถไฟไทยสามารถได้รับประโยชน์จากประสบการณ์การปฏิรูปของต่างประเทศขึ้นแสดงอยู่ใน Appendix A โดยมีบทสรุปของประเด็นหลัก และการที่รถไฟในต่างประเทศได้แก้ไขปัญหาได้อย่างไร ซึ่งทั้งหมดได้ถูกแสดงไว้ในตาราง 2 ของรายงานนี้

16. บทเรียนหลักที่ได้จากการปฏิรูประบบรถไฟในหลายรูปแบบของต่างประเทศมีดังนี้

1) การปฏิรูปจำเป็นต้องมีลักษณะรูปแบบที่เฉพาะในแต่ละประเทศ สิ่งที่จำเป็นต้องดำเนินการมีตั้งแต่การวางแผนการเปลี่ยนแปลงของนโยบายด้านการคมนาคมของประเทศ วัฒนธรรม รูปแบบของธุรกิจรถไฟที่มีอยู่ หน่วยงาน และความสามารถขององค์กร ประวัติศาสตร์ สภาพของพนักงาน และของสภาพ ที่จะมีผลจากการปรับเปลี่ยนโครงสร้าง

2) โดยทั่วไปแล้วจะเป็นการตัดสินใจที่จะย้ายโอนโครงสร้างพื้นฐาน และทรัพย์สินที่ดินให้ยุโรปได้บริหารจัดการของบริษัทที่จัดตั้งขึ้นใหม่ การเกิดขึ้นของบริษัทที่จัดตั้งขึ้นใหม่คือการบริหารโครงสร้างพื้นฐานเหล็กของรถไฟเพื่อการเดินรถที่มีประสิทธิภาพ และเพื่อการบริหารทรัพย์สินที่ดีขึ้นพิษณุโลกยังเป็น อีกที่ให้บริการด้านทางการเงินส่งผล อาจมีการแยกทรัพย์สินบางอย่างเพื่อร่วมให้ยุโรปได้บริหารของหน่วยงานใดหน่วยงานหนึ่ง เช่น สถาบันหลัก

3) ประเด็นเรื่องทรัพย์สินคงคลังก็เป็นเรื่องที่สำคัญ การบริหารสินทรัพย์คงคลังควรเป็นหน้าที่ของหน่วยงานอื่นๆ หรือหน่วยงานอื่นๆจะให้บริหารอาจเป็นได้ทั้งหน่วยงานภายในในกระทรวง หรือรัฐวิสาหกิจ แต่กระทรวงที่เกี่ยวข้องจะมีการควบคุมอย่างใกล้ชิดในทุกกิจกรรมที่ได้ดำเนินการ

4) โดยทั่วไปแล้วไม่ว่าในกรณีใดๆการเปลี่ยนแปลงภายในจะมีการควบคุมอยู่ในhiếuพื้นฐานของรัฐบาล ในบางกรณีหน่วยงานของการรถไฟยังคงต้อง
จ่ายสมทบเงินป่วยภัยต่อเนื่อง แต่การบริหาร และจ่ายคืนควรอยู่ภายใต้ความรับผิดชอบของรัฐบาล ประเด็นหลักในเรื่องนี้คือต้นทุนของภาระกิจในเรื่องป่วยภัยไม่ควรถูกยกยอดรวมในระบบบัญชีของการรถไฟ

5) การปฏิรูปต้องทำอย่างมีเหตุผล โดยทั่วไปรวมถึงการปรับปรุงการให้บริการ และความสามารถในการสร้างผลกำไรได้ดีขึ้นให้กับการรถไฟ แต่ในทางกลับกันสิ่งเหล่านี้จะสร้างความกดดันอย่างหลีกเลี่ยงไม่ได้ให้กับพนักงาน ดังนั้นข้อมูลที่ได้จากทางสหภาพจริงจังเป็นสิ่งจำเป็นสำหรับกระบวนการการปฏิรูป และแข่งขันเดียวกัน องค์ประกอบหลักที่สำคัญอีกเกณฑ์ในการปฏิรูปคือการอบรม และพัฒนาศักยภาพของพนักงานให้ดีขึ้นด้วย

จ. การพัฒนานโยบายระบบราง

17. การสร้างนโยบายการขนส่งทางรางต้องเป็นรายการขั้นแรกในการกำหนดจุดสุดท้ายของการปฏิรูปที่ควรจะเป็น การขาดความเห็นร่วมกันในจุดเป้าหมายสุดท้าย ถือเป็นหนึ่งในอุปสรรคที่ขัดขวางความสามารถในการปฏิรูป เพราะในช่วงก่อนหน้านี้ การสร้างนโยบายขนส่งทางรางจะขยับขึ้นทางในอนาคตใน การสร้างสภาพแวดล้อมที่เหมาะสมกับการปฏิรูป และกำหนดประเภทของหน่วยงานหรือสถาบันที่สามารถดำเนินการกับการปฏิรูปได้ดีที่สุด

เป้าหมายการปฏิรูป

18. กำหนดการปฏิรูปจะสามารถประสบความสำเร็จได้ มันจำเป็นที่จะต้องรู้เหตุการที่ต้องการดำเนินการไปให้ชัดเจนก่อน ถ้าไม่มีความเห็นร่วมกันในจุดเป้าหมายสุดท้ายของการปฏิรูป มันก็เป็นไปไม่ได้ที่จะรับความเห็นด้วยจากผู้มีส่วนร่วมที่มีอำนาจในการปฏิรูปหรือทำให้การปฏิรูปสามารถเกิดขึ้นได้

19. ตาราง E1 แสดงรายการคำสำคัญหลักที่ผู้วางนโยบายระบบรางต้องตอบ เพื่อกำหนดนโยบายการขนส่งทางรางที่สอดคล้องกัน รวมถึงคำตอบของหน่วยงานที่เกี่ยวข้องต่างๆ ของสิ่งเหล่านี้แสดงถึงความพึงพอใจที่ตรงกันจากหน่วยงานที่เกี่ยวข้อง ของสิ่งเหล่านี้แสดงถึงความพึงพอใจที่ตรงกันแต่มีข้อเสนอที่แตกต่างกัน ของสิ่งเหล่านี้แสดงถึงความพึงพอใจที่แตกต่างกันในการจัดการกับประเด็นนั้นๆ ทั้งนี้บางครั้งการเกิดขึ้นได้ก็มีการพิจารณาในรายละเอียดโดยหน่วยงานที่เกี่ยวข้องทั้งหมดในการประชุมเชิงปฏิบัติการในกรุงเทพฯ ช่วงเดือนพฤศจิกายน 2555 การหารือและประเด็นที่ถูกยกโดยหน่วยงานต่างๆ โดยเฉพาะประเด็นที่มีความเป็นปัญหาเฉพาะต่างกันได้ถูกนำมาใช้เพื่อเสนอข้อเสนอแนะซึ่งได้มีการระบุไว้ในแถวสุดท้ายของตาราง
ข้อมูลในตารางนี้ได้มาจากการประชุมเชิงปฏิบัติการวันที่...หมุนเวียนเพื่อการรับผิดชอบของ...รัฐบาลตามรัฐธรรมนูญ...โครงสร้างพื้นฐาน...รัฐบาลควรเป็นผู้โดยสารชั้น...รฟทปี...ตามมติครม.การลงทุนร่วมกัน...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ง...ในปัจจุบันยังไม่มีการปรับ...การบริการของทั้ท...
20. คำตอบในคำถามตามตารางข้างต้นของหน่วยงานหลักที่เกี่ยวข้องนี้มีความสอดคล้องกันอย่างน่าสังเกต ดังนั้นการหารือในข้อเสนอแนะแต่ละข้อจะแสดงอยู่ในสังเขป B ของรายงานนี้

อ. นโยบายของการขนส่งทางราง

21. นโยบายที่ข้อเจตนานี้ต้องสำหรับสังคมให้ทุกภาคส่วนเข้าใจได้ดีกว่าตุปลาประสงค์ของรัฐบาล ทั้งนี้นโยบายสามารถขยายในการตรวจสอบถึงการพัฒนาของกฎหมายและระเบียบต่างๆ รวมทั้งนโยบายอย่างก็ให้เกิดข้อกำหนดที่ชัดเจนของความตั้งใจของภาครัฐ

22. ความเห็นเบื้องต้นที่สอดคล้องกันของหน่วยงานหลักในการตัดสินใจที่แสดงในตาราง E1 ข้อมูลบนนโยบายที่ข้อเจตนานี้สามารถขึ้นแนวทางในการพัฒนาข้อมูลการขนส่งทางรางไทยได้ จากความคิดเห็นในตาราง E1 โดยเฉพาะอย่างยิ่งความคิดเห็นที่ได้จากสองหน่วยงานหลักที่เกี่ยวข้องในด้านนโยบายอย่าง สำนักงานคณะกรรมการนโยบายการรัฐวิสาหกิจ (สคร.) สังกัดกระทรวงการคลัง และสำนักนโยบายและแผนการขนส่งและจราจร (สนข.) สังกัดกระทรวงคมนาคม สามารถสรุปเป็นนโยบายการขนส่งทางรางได้ดังต่อไปนี้

นโยบายของการขนส่ง

รัฐบาลไทยมีหน้าที่จะต้องจัดเตรียมระบบขนส่งที่มีประสิทธิภาพที่สามารถรองรับการให้บริการที่มีประสิทธิภาพ สามารถสรุปได้ การขนส่งทางรางในประเทศไทย ภาระกิจจะสามารถบรรลุเป็นผลสำเร็จได้โดย

1. การจัดเตรียมให้ รฟท. มีการเงินที่ดีเพื่อจะดำเนินธุรกิจได้ตามการคิดค้นใจของภาครัฐ โดยการลดการขาดทุนส่วนหนึ่ง ซึ่งรวมถึงการแผนจัดการ ภาระหนี้จากภาระหนี้อบายความรุนแรง และต้นทุนทางโครงสร้างพื้นฐาน และการจัดเตรียมทรัพย์สินเพียงพอสำหรับการดำเนินธุรกิจที่มีผลต่อการขนส่ง

2. การสร้างโครงข่ายทาง Nữที่สามารถยืดให้กับผู้ให้บริการที่มีอยู่ในปัจจุบันและในอนาคตรวมถึงภาคเอกชนที่ให้บริการกับผู้ใช้บริการโดยตลาดที่มีการแข่งขัน และมีการให้บริการที่มีคุณภาพสูงที่ตรงกับความต้องการของผู้ใช้บริการ

3. จัดตั้งหน่วยธุรกิจ โดยหน่วยงานบริหารพิเศษ เพื่อรับผิดชอบในเรื่องการโครงสร้าง การบริหารจัดการ และการบริหารจัดการโครงสร้างพื้นฐานทางรางในประเทศไทย และเรียกเก็บค่าธรรมเนียมการใช้ราง หรือโครงสร้างพื้นฐานจากผู้ให้บริการอย่างเหมาะสม

4. กำหนดสิทธิ์ความเป็นเจ้าของทรัพย์สินซึ่งใช้ในการดำเนินการให้บริการในปัจจุบันรวมถึง ราง สถานี ระบบควบคุมสัญญาณ และศูนย์บริการให้บริการบนรางเพื่อเป็นผู้บริหารจัดการเพื่อให้เกิดประโยชน์สูงสุดแก่ประชาชน

5. สร้างความเข้าใจว่าหน่วยงานของรัฐที่มีอยู่ในปัจจุบันที่ได้รับผลกระทบจากโครงสร้างใหม่ของการดำเนินการของรัฐที่มีอยู่ได้สิทธิ์ และประโยชน์อย่างต่อเนื่อง รวมทั้งมีการรวบรวมข้อมูลไว้ในการบริหารจ้างที่มีอยู่

6. สร้างความเข้าใจว่าการให้บริการที่ถูกกำหนดโดยภาครัฐและดำเนินการโดยผู้ประกอบการรถไฟได้มีการชอบด้วยกับผู้ประกอบการอย่างเหมาะสม

7. สร้างความเข้าใจว่าการให้บริการที่มีความปลอดภัย เป็นมิติสุดสุดที่ผล และจัดให้มีการบริการที่มีมาตรฐาน มีคุณภาพ โดยมีการจัดตั้งหน่วยงานกำกับดูแลเพื่อให้เกิดความมั่นใจว่าระบบขนส่งทางรางของไทยเป็นระบบที่มีความน่าเชื่อถือ และมีการแข่งขันอย่างเสรี
นโยบายพื้นฐานถือเป็นเครื่องมือที่มีประโยชน์ที่จะช่วยเน้นในเรื่องรูปแบบ และเป็นแนวทางในการสร้างสภาพแวดล้อมที่เหมาะสม ทั้งในด้านกฎหมาย การเงิน และรูปแบบการดำเนินงานในประเทศไทย

23. สิ่งที่ต้องดำเนินการ

24. ภายใต้สภาพปัจจุบันของรฟท. ไม่สามารถที่จะเป็นองค์กรที่ยั่งยืนได้ ความพยายามในทางการแก้ไขปัญหาการขนส่งทางรางในประเด็นที่เกี่ยวข้องกับรฟท. นั้นจะไม่สามารถประสบผลสำเร็จได้ หากประเด็นหลักของการเงินยังไม่ได้รับการแก้ไขจากภาครัฐ รฟท.สามารถใช้รายได้ที่มีอยู่เพื่อให้ครอบคลุมต้นทุนหลักของการให้บริการได้จนถึงปี 2548 ทั้งนี้เนื่องจากการปรับปรุงรายได้ให้ดีขึ้นนั้นมีอยู่ แต่ รฟท. ไม่สามารถตอบรับต้นทุนของการใช้จ่ายทางอื่นๆที่คาดการณ์บางหน้าปานกลาง รวมถึงต้นทุนทางโครงสร้างทางรางได้

25. สิ่งที่ต้องดำเนินการคือ

1. ปลดภาระหนี้สิน: รัฐบาลต้องรับภาระหนี้สินที่ รฟท. มีอยู่ ณ ปัจจุบันและจัดสรรเงินทุนหมุนเวียนเพื่อพิสูจน์ในการดำเนินการทางธุรกิจในรูปแบบของบริษัททั่วไปให้กับ รฟท. การที่ปลดหนี้และมีเงินทุนในการดำเนินการทางธุรกิจรวมทั้งมีข้อตกลงในการจ่ายเงินขาดทุนให้บริการส่วนที่เป็นสาธารณะประโยชน์ (PSO) จะทำให้ รฟท.สามารถกล้าลงเป็นหน่วยงานที่มีผลประกอบการ และสามารถแข่งขันได้ เงินทุนหมุนเวียนสำหรับดำเนินการทางธุรกิจควรอยู่ที่ประมาณ 100 ล้านเหรียญสหรัฐฯ (3 พันล้านบาท)

2. แยกส่วนของการสร้างพื้นฐานออกจากสำนักงานดำเนินการ: การลดต้นทุนทางโครงสร้างพื้นฐานให้เข้าสู่การแบ่งแยกความเป็นเจ้าของ และการบริหารจัดการในโครงสร้างพื้นฐานนอกจากการดำเนินการเชิงพาณิชย์ โดยการจัดตั้งหน่วยงานจัดการโครงสร้างพื้นฐานใหม่โดยไม่อยู่ในรูปแบบของกรม หรือรัฐวิสาหกิจภายใต้สังกัดกระทรวงคมนาคม (IDOC) ปัจจุบัน รฟท. ไม่สามารถแบกภาระต้นทุนโครงสร้างพื้นฐานได้ ทั้งๆที่หน่วยงานรถไฟฟ้าที่ยังไม่ได้แสดงให้เห็นว่าการคิดค่าธรรมเนียมการใช้ทางสามารถครอบคลุมต้นทุนของโครงสร้างพื้นฐานได้เพียงร้อยละ 10 - 30 ของค่าต้นทุนทั้งหมด ขณะที่ส่วนที่เหลือนั้นคาดว่าจะมีการช่วยเหลือจากอิสระ

3. โอนที่ดินทั้งหมดให้แก่หน่วยงานจัดการโครงสร้างพื้นฐานใหม่ภายใต้สังกัดกระทรวงคมนาคม การแบ่งแยกทรัพย์สินหลัก และทรัพย์สินรองนั้นเป็นเรื่องยากแต่หน่วยงานจัดการโครงสร้างพื้นฐานควรรับผิดชอบในการจัดการทรัพย์สินของโดยผ่านการดำเนินการของบริษัทจัดการสินทรัพย์ที่เป็นอิสระ ซึ่งจะทำให้การดำเนินการนี้ถูกจัดสรรไปที่หักล้างกับการหลักผ่านทางด้านการเงินบ้านถูก ของรฟท. การเสนอทุนให้สำหรับกองทุนสำรองเลี้ยงชีพของ รฟท. สามารถทำได้
โดยการแลกกลับการโอนทรัพย์สินของ และรายได้ส่วนเกินจากต้นทุนคำานวณ ปานกลางจะสามารถคงไว้ได้หรือบัญโภหนี้กลับจากต้นทุนโครงสร้างพื้นฐาน

4. จัดตั้งหน่วยงานกำกับดูแลภายใต้สังกัดกระทรวงคมนาคมเพื่อรับผิดชอบในเรื่อง ความปลอดภัย การกำกับดูแลการออกใบอนุญาต สิ่งแวดล้อม รวมทั้งมาตรฐานการให้บริการ และขอรับคืน หากมีการร้องจาก หน่วยงานกำกับดูแลหน่วยงานอื่นถ้ามี อ่านในเรื่องการยอมรับการเข้าร่วม และใช้สิทธิ์อำนาจความสะดวกอื่นๆ หน่วยงาน กำกับดูแลหน่วยมีอ่านในเรื่องการบังคับใช้กฎหมายที่เกี่ยวข้องด้วย

5. จัดตั้งคณะกรรมการดำเนินการระดับสูงเพื่อบริหารขั้นตอนการบูรณาการ

ช. กรอบระยะเวลาเพื่อดำเนินการ

26. เมื่อทราบขั้นตอนหลักที่ต้องดำเนินการเป็นยังเดินรถตามที่กล่าวข้างต้นได้รับความเห็นชอบแล้ว ขั้นตอนต่อไปคือการวางแผนการดำเนินการและการกำหนดระยะเวลาที่ต้อง จำกัดความพยายามหลากหลายในการที่จะปรับโครงสร้างระบบรถไฟไทยใน อดีต และอุปสรรคต่างๆที่ทำให้การปฏิรูปนั้นไม่สามารถเดินหน้าต่อได้มีหลักที่ต้องปฏิบัติของข้อที่เป็นแนวทางสำหรับการจัดทำแผนดำเนินการ นั่นคือ 1)ไม่ควรพึ่งพาการใช้อำนาจทางกฎหมายในการรับผิดชอบเพื่อการปฏิรูป และ 2) ต้องดำเนินการรวดเร็ว โดยมอบอำนาจให้การปฏิรูปนั้นถูกฝ่ามือจะจากการเปลี่ยนแปลงรัฐบาล หรือการที่ขัดขวางในรัฐบาลชุดก่อนหน้านั้นได้ถูกยกเลิกไป เพราะเหตุนี้องค์ประกอบหลักที่จำเป็นสำหรับการปฏิรูปควรประกอบด้วย

1. ผู้สนับสนุนหลัก
2. คณะกรรมการประสานการดำเนินการ ซึ่งประกอบไปด้วยเจ้าหน้าที่ระดับสูงจากหน่วยงานที่เกี่ยวข้อง (ICC)
3. คำสั่งการที่ขัดเจ้นในการมอบอำนาจให้ ICC ดำเนินการ รวมถึงเจ้าหน้าที่เพื่อพาวในการใช้อำนาจ เช่น การจัดตั้งหน่วยงานบริหารการจัดการโครงสร้างพื้นฐาน (PMU)
4. สายการรายงานตรงจาก ICC ไปยังคณะรัฐมนตรีโดยผ่านทางรัฐมนตรีว่าการกระทรวงคมนาคม และรัฐมนตรีว่าการกระทรวงการคลัง
5. การดำเนินการข้างต้นควรทำภายใน 1 ปี

1. ผู้สนับสนุนหลัก

27. ส่วนมากการเปลี่ยนแปลงที่สำคัญที่สามารถทำได้สำเร็จในการโครงสร้างหน่วยงาน ภาคธุรกิจจะมีผู้สนับสนุนหลักที่แข็งแกร่ง ด้วยงบประมาณ การปรับโครงสร้างของภาคพลังงานในประเทศไทย ซึ่งหลักการดังกล่าวนี้ควรถูกนำเสนอเป็นประโยชน์ใช้กับการขนส่งทางรางอย่างไร ทั้งนี้รัฐมนตรีว่าการกระทรวงคมนาคม และรัฐมนตรีว่าการ
กระทรวงการคลังเป็นสมาชิกในคณะรัฐมนตรีที่รับผิดชอบหลักเกี่ยวกับระบบรถไฟในประเทศไทย และด้วยเหตุนี้การเริ่มต้นการปฏิรูประบบรถไฟไทยโดยมีผู้สนับสนุนหลักทั้งสองท่านนี้จึงถือว่าเป็นการถูกต้อง

2. คณะกรรมการประสานการดำเนินการ (ICC)

การจัดตั้งทีม ICC ถือเป็นเรื่องสำคัญ ICC ควรอยู่ภายใต้กระทรวงคมนาคม แต่ทั้งนี้ หน่วยงานสำคัญอื่นเช่น กระทรวงการคลัง และ รฟท.ควรมีส่วนร่วมในการดำเนินการด้วย โดยมีผู้อำนวยการสำนักงานนโยบายและแผนการขนส่งและจราจร (สนช.) สังกัดกระทรวงคมนาคมต่างด้าวเป็นประธานของ ICC และสมาชิกอื่นๆ ของ ICC นั้นควรประกอบด้วย
1. ผู้อำนวยการ สนช. – กระทรวงคมนาคม
2. ผู้อำนวยการ สำนักงานบริหารหนี้สาธารณะ
3. ผู้อำนวยการ สำนักงานคณะกรรมการนโยบายรัฐวิสาหกิจ
4. ผู้อำนวยการ สำนักงบประมาณ
5. ผู้อำนวยการฝ่ายนโยบายและแผน การรถไฟแห่งประเทศไทย

ข้อสรุปในรายละเอียดของสมาชิกของ ICC ควรมีการหารือกับเจ้าหน้าที่ระดับสูงจากกระทรวงที่เกี่ยวข้องต่อไป

3. อำนาจหน้าที่

อำนาจหน้าที่ของ ICC ควรมีความชัดเจนและถูกกำหนดไว้อย่างดี และควรมีการจัดตั้งทีมที่ต้องดำเนินการหลักในลำดับต้นเท่านั้น สำนักการดำเนินการที่มุ่งเน้นที่ รฟท.ควรให้ รฟท.เป็นผู้ดำเนินการของ แผนสร้าง 5 ปี ของ รฟท.ควรมีการจัดทำให้เสร็จภายในวันที่ 31 พฤษภาคม 2556

4. สิ่งที่คณะรัฐมนตรีควรดำเนินการ

ขั้นตอนต่อไปนี้ คือ ข้อสรุปเกี่ยวกับสิ่งที่คณะรัฐมนตรีควรดำเนินการเพื่อสนับสนุนการปฏิรูปรถไฟไทยในช่วงแรก

1. การให้ทุนเพื่อสนับสนุนขั้นตอนแรกในเรื่อง ICC (กระทรวงการคลัง)
2. การลงมติเห็นชอบในเรื่องจำนวนและขั้นตอนในการปลดภาระหนี้สิน และเงินทุนหมุนเวียนในการดำเนินการของ รฟท. (การอนุมัติตามคณะรัฐมนตรี)
3. การจัดเตรียมกฎหมายเพื่อการจัดตั้งและจัดทะเบียนรัฐวิสาหกิจใหม่ เพื่อดูแลและบริหารโครงสร้างพื้นฐาน (การอนุมัติตามคณะรัฐมนตรี)
4. จัดให้มีการโอนทรัพย์สินที่ดินจากบัญชีของรฟท.ไปสู่บัญชีของรัฐวิสาหกิจใหม่ (การอนุมัติตามคณะรัฐมนตรี)
5. จัดให้มีการโอนกำหนดหนังสือบ้านถูกถูกทาง รหัสไปสู่รัฐบาล (การอนุมัติตามคณะรัฐมนตรี)
6. การจัดเตรียมกฎหมายเพื่อการจัดตั้งรัฐวิสาหกิจใหม่ที่ทำหน้าที่บริหารจัดการทรัพย์สินที่ดิน (การอนุมัติตามคณะรัฐมนตรี)
7. จัดให้มีการโอนย้ายเจ้าหน้าที่ของรฟท.ไปรัฐวิสาหกิจใหม่ที่ดูแลบริหารโครงสร้างพื้นฐาน (การอนุมัติตามคณะรัฐมนตรี)
8. จัดเตรียมร่างกฎหมายเพื่อการจัดตั้งหน่วยงานรถไฟไทย (การอนุมัติตามคณะรัฐมนตรีสำหรับกฎหมายใหม่)

5. ต้นทุนการดำเนินการ

31. สิ่งต่อไปนี้คือสิ่งที่เกี่ยวข้องกับการปฏิรูประบบรถไฟ

1. ต้นทุนในการปรับโครงสร้าง

<table>
<thead>
<tr>
<th>ต้นทุน</th>
<th>ล้านบาท</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. การลดภาระหนี้สินของ รฟท.</td>
<td>100,000</td>
</tr>
<tr>
<td>2. เงินทุนหมุนเวียนเพื่อการดำเนินกิจการของ รฟท.</td>
<td>3,000</td>
</tr>
<tr>
<td>3. การปรับปรุงโครงสร้างพื้นฐานอย่างเร่งด่วน</td>
<td>176,000</td>
</tr>
<tr>
<td>4. การบูรณาการ</td>
<td>55,000</td>
</tr>
<tr>
<td>5. การปรับปรุงโครงสร้างพื้นฐาน</td>
<td>121,000</td>
</tr>
<tr>
<td>รวม</td>
<td>55,000+</td>
</tr>
</tbody>
</table>

2. การสนับสนุนการดำเนินการ

32. ตามที่ได้มีการแนะนำข้างต้นในการจัดตั้ง ICC โดย ICC นี้จำเป็นจะต้องมีคณะที่ปรึกษาเพื่อแนะนำการดำเนินการตามขั้นตอนการปฏิรูปที่ได้ระบุไว้ในหน้าที่ 25 ทั้งนี้คณะที่ปรึกษาด้านเทคนิคควรมีความสามารถและความชำนาญในการดำเนินงานต่างๆอย่างน้อยดังนี้

<table>
<thead>
<tr>
<th>สมาชิกของหน่วยงาน</th>
<th>สัญชาติ</th>
<th>ระยะเวลา (เดือน)</th>
<th>ต้นทุน (เหรียญสหรัฐฯ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ผู้เชี่ยวชาญด้านการปรับโครงสร้าง</td>
<td>ชาวต่างประเทศ</td>
<td>12</td>
<td>200,000</td>
</tr>
</tbody>
</table>
2. ผู้เชี่ยวชาญด้านการจัดซื้อจัดจ้าง ชาวต่างประเทศ 4 64,000
3. ผู้เชี่ยวชาญด้านแรงงานสัมพันธ์ ชาวต่างประเทศ 6 96,000
4. ผู้เชี่ยวชาญด้านการจัดการสถาบันและองค์กร คนไทย 8 80,000
5. ผู้เชี่ยวชาญด้านกฎหมาย (2 ตำแหน่ง) คนไทย 24 360,000
6. เจ้าหน้าที่ธุรการ คนไทย 12 75,000
รวมค่าจ้าง 875,000

7. ค่าใช้จ่ายอื่นๆ
   เบี้ยเลี้ยง 140,000
   ตั๋วเครื่องบิน 20,000
   การเดินทางในประเทศ 11,000
   รายงานและอุปกรณ์เครื่องใช้ 5,000
   การจัดประชุม/สัมมนา 40,000
รวมค่าใช้จ่าย 216,000
รวมค่าดำเนินการสนับสนุนทางวิชาการ 1,091,000

3. หน่วยงานบริหารโครงการ (PMU)

33. ICC จะเป็นผู้จ้างหน่วยงานบริหารโครงการ (PMU) เพื่อดำเนินกิจการต่างๆ ดังต่อไปนี้ภายใต้อานาจของกระทรวงคมนาคม

1. ทบทวนการออกแบบ
2. อบรมการจัดซื้อจัดจ้าง พัฒนาขีดความสามารถและการบริหารการจัดซื้อจัดจ้าง
3. จัดซื้อวัสดุและอุปกรณ์
4. ประเมิน คัดเลือก และแนะนำผู้รับจ้าง
5. ให้คำแนะนำด้านการก่อสร้าง
6. ตรวจสอบและควบคุมคุณภาพพร้อมทั้งจัดทำใบรับรอง
7. ควบคุมดูแลและประสานการบริหารกิจการต่างๆอย่างต่อเนื่องพร้อมทั้งออกใบรับรอง

34. มีความเป็นไปได้ว่า PMU นั้นมีความจำเป็นในช่วง 5 - 10 ปีแรกของการพัฒนาและขยายกิจการรถไฟอย่างเร่งด่วน สมมุติว่าเงินจำนวน 1.76แสนล้านบาท จะถูกใช้ในการดำเนินการของกระทรวงในระยะเวลา 5 ปี แล้วต้นทุนในการจัดตั้ง PMU คิดเป็นร้อยละ 4 ของมูลค่าต้นทุนโครงการ
ต้นทุนการจัดตั้ง PMU ระยะเวลา 5 ปี คิดเป็นร้อยละ 4 ของมูลค่า 1.76 แสนล้านบาท คิดเป็นมูลค่า 7,040 ล้านบาท หรือ 235 ล้านเหรียญสหรัฐฯ

4. ความช่วยเหลือทางวิชาการสำหรับการดำเนินการปฏิรูป รฟท. (RITA)

35. รฟท.จะต้องได้รับความช่วยเหลือในด้านวิชาการ ด้านการพัฒนาขีดความสามารถ และด้านการปรับโครงสร้างองค์กรอีกอย่างน้อยภายใน 5 ปีข้างหน้า

โปรแกรมการดำเนินงานของ RITA

ผู้เชี่ยวชาญประมาณ 10 - 20 คน คิดเป็นรายจ่ายประมาณ 1.5 - 3 ล้านเหรียญสหรัฐฯต่อปี หรือประมาณ 7.5 - 15 ล้านบาทสำหรับ 5 ปี

ผล. รูปแบบของการปฏิรูป

36. ตามที่ได้มีการหารือเกี่ยวกับข้อเสนอแนะในรายงานฉบับนี้ กระทรวงคมนาคมได้มีการนำเสนอโครงสร้างองค์กรที่กำหนดบทบาท หน้าที่ และความรับผิดชอบของหน่วยงานสำหรับการปฏิรูประบบรถไฟไทย โดยโครงสร้างดังกล่าวได้แสดงไว้ตามแผนภาพ E2

แผนภาพ E2: โครงสร้างการบริหารจัดการสำหรับการปฏิรูประบบรถไฟไทยที่มีการทางานและนำเสนอ
37. ในส่วนต่อไปกล่าวถึงของกลยุทธ์ข้างต้นนี้ต่อหน่วยงานต่างๆที่อาจได้รับผลกระทบจากการเปลี่ยนแปลงที่นำเสนอ

1. รฟท.

38. ตามที่ได้กล่าวมาแล้วว่า ปัญหาที่เกิดขึ้นมาในช่วงหลายปีมาตีความต้องการที่จะให้ รฟท.ดำเนินการจัดการการเป็นบริษัททั่วไป แต่ไม่มีการจัดสรรสภาพแวดล้อมภายในที่ทำให้รฟท.สามารถดำเนินงานได้อย่างห้างรฉี แผนที่นำเสนอได้ต่อการเปลี่ยนแปลงฐานะของ รฟท.แต่เป็นการเปลี่ยนกฎหมายของ รฟท.เพื่ออนุญาตให้บริษัทอื่นสามารถเข้ามาดำเนินการให้บริการ และเพื่อแบ่งความรับผิดชอบในการจัดตารางการให้บริการช่วงดังกล่าวนี้ ซึ่งสิ่งเหล่านี้สามารถที่จะเสริมสร้างให้กับกฎหมายของ รฟท.ฉบับปัจจุบัน ที่นี่เราเห็นในการจัดตารางการให้บริการช่วงดังกล่าวนำเสนอให้ที่มีการดำเนินการต่อเนื่องไปโดย รฟท.ซึ่งสูญเสียรายได้ต่อจากการเปลี่ยนแปลง ในการดูแลรักษาโครงสร้างพื้นฐาน และตารางการเดินรถ แต่อยู่ภายใต้การกำกับดูแลของกรมรถไฟ จนกระทั่งบริษัทที่สำคัญจะดำเนินการโดยตนเอง

39. รฟท.จะกลับกลายเป็นบริษัทรัฐวิสาหกิจทั่วไปที่มีมิติการเงินที่ตี และมีความอิสระในการดำเนินธุรกิจตามหลักของธุรกิจที่ตี ขณะที่ต่างหน่วยของโครงสร้างพื้นฐานควรจะมีแผนผังและสามารถที่จะเทียบได้กับตัวทุนของผู้ประกอบการรายบุคคล ที่ตั้งที่ในตัวการจัดสร้างขึ้นโดย гражรัฐ และต้องมีการสร้างจากฐานะรายรายได้จาก การบริหารที่ดีเชิงพาณิชย์ (Non core) โดยบริษัทรัฐวิสาหกิจการรถไฟแห่งประเทศไทย ซึ่งมีหน้าที่ในการทำให้เกิดประโยชน์สูงสุดจากกลไกการเงินนี้ ภายใต้แผนที่นำเสนอ ผู้บริหารและเจ้าหน้าที่ที่ รฟท.ที่ตั้งเป็นสมาชิก หรือไม่เป็นสมาชิกของสภา รฟท.จะมีอิสระในการทำหน้าที่ตามรูปแบบของรัฐวิสาหกิจที่เป็นอิสระ

40. ภายใต้แผนที่นำเสนอ รฟท.จะเน้นไปในเรื่องการดำเนินการรถไฟพื้นในเชิงธุรกิจ และขยายไป PSO ขณะเดียวกัน รฟท.จะรับหน้าที่เป็นผู้รับเหมาช่วงในการดูแลรักษาและดำเนินการของโครงสร้างทางรางในช่วงเวลาหนึ่ง จนกระทั่งกรมรถไฟตัดสินใจที่จะรับผิดชอบโดยตรงในส่วนดังกล่าว

2. สภาพแวดล้อมรัฐวิสาหกิจการรถไฟแห่งประเทศไทย (สภาพแวดล้อม)

41. พนักงานที่เป็นสมาชิกผู้แทน ที่ได้รับการคัดเลือกสามารถที่จะย้ายจาก รฟท.ไปสู่กรมรถไฟหรือสังกัดกระทรวงคมนาคม หรือ IDOC ตามแผนที่นำเสนอ หรือจะย้ายออกบุคคล รฟท.และมีการคืนสิทธิ์กับกระทรวงคมนาคมในการดำเนินการ และบริหารคลังโครงสร้างพื้นฐาน ทั้งนี้พนักงานที่ย้ายไปที่กรมรถไฟหรือ IDOC ควร
ได้รับข้อเสนอในด้านการจ้างงานเช่นเดียวกับที่ให้กับพนักงานของ รฟท. ในปัจจุบันทั้งนี้พนักงานที่ย้ายไปไม่เคยจะมีการเปลี่ยนแปลงในเรื่องใดๆ แต่สำหรับพนักงานใหม่ หรือผู้เริ่มสัญญาบริจ้าง เรื่องของการจ้างงานควรต้องยุ่นที่พื้นฐานของกฎหมายแรงงานของรัฐบาลไทย

42. จากที่ปรากฏในประเทศอื่นๆ อาจเป็นสิ่งจำเป็นที่จะต้องมีการจัดเตรียมทางเลือกให้กับสมาชิกของสภาพท. ที่ไม่ต้องการย้ายไปสู่หน่วยงานใหม่ ทางเลือกนี้อาจรวมถึงการมอบหมายงานที่แตกต่างจากเดิมภายใต้รฟท. รูปแบบใหม่ การเกษียณงานแก่คนด้วยสิทธิที่มีอยู่ภายในกฎหมาย หรือการเลิกจ้างโดยการจ่ายเงินตามเงื่อนไขของพนักงานที่มีอยู่ ซึ่งขั้นตอนนี้สามารถกำหนดได้โดย ICC

43. จากขั้นตอนที่กล่าวข้างต้น ในการเพิ่มทุนให้กับทุนสาระของที่พื้นที่ถึงวิถีชีพของ รัฐ. ตามหลักการทางบัญชีที่แท้จริงแล้ว ความกังวลของทางสภาพความ ในเรื่องการผลิตทุนเป็นเน้นต่างจากที่ควรจะมีไป ขณะที่ข้อกังวลในเรื่องประสิทธิภาพการบริหารจัดการในส่วนของทรัพย์สินทางอย่างที่ดินนั้นสามารถแก้ไขได้โดยการมีส่วนร่วมการจ้างให้ สมาคมฯ เช่นเป็นผู้ถือหุ้นในบริษัทจัดการทรัพย์สินทางที่ดิน หรือในกรณีที่บริษัทจัดการได้มีการจ้างให้โดยตรงกับ IDOC ทางสภาพความจะถูกจ่ายให้แต่ละตัวผู้แทนหรือคนรับผิดชอบในการจัดการทรัพย์สินทางที่ดินนั้นจะต้องรายงานผลการประกอบการให้โดยตรง

3. กระทรวงคมนาคม

44. รัฐบาลผ่านทางกระทรวงคมนาคม จำเป็นที่จะต้องเข้ามามีส่วนร่วมในระบบการขนส่งทางราง อาทิเช่นการจัดการด้านนโยบายและกฎหมายการเงิน และการตรวจตรวจสอบการเงิน รวมถึงการกำกับหน้าที่รับผิดชอบที่ขัดแจ้งและโดยตรงในการดำเนินการเพื่อการปฏิรูป เพื่อให้เกิดความมั่นใจว่าผลลัพธ์ที่ตั้งใจไว้ในแผนการปฏิรูปจะสามารถทำให้ประสบความสำเร็จได้

45. ข้อความสำหรับในด้านการเงินภายใต้กระทรวงคมนาคมสามารถทำให้มั่นใจขึ้นได้โดยการจัดตั้งกรมรถไฟขึ้นมาภายใต้กระทรวงคมนาคม ภายใต้ทางเลือกนี้ ทรัพย์สินที่ดินจะสามารถถูกย้ายให้แก่กรมรถไฟโดยประกาศในประเด็นเกี่ยวกับทางสภาพ และผ่านบริษัทของ รฟท. และบริหารจัดการโดยบริษัทจัดการทรัพย์สิน อย่างไรก็ตามการจัดตั้งกรมรถไฟขึ้นเป็นหนึ่งในตัวมั่นใจสำหรับกลุ่มผู้จับจ่าย หรืออีกทางเลือกหนึ่งคือ กระทรวงคมนาคมจัดตั้งธุรกิจสำคัญขึ้นเพื่อให้มีกรรมสิทธิ์เหนือโครงสร้างพื้นฐานที่สำคัญในช่วงระยะยาวเหล่านี้

46. กฎระเบียบในเรื่องความปลอดภัยจะกลายเป็นอีกประเด็นที่สำคัญของการดำเนินการของกระทรวงคมนาคม ซึ่งกฎระเบียบนี้อาจจะจำกัดเฉพาะเพียงการขนส่งทางราง หรือขยายขอบเขตส่วนของความปลอดภัยอื่น นอกจากนี้จากการขนส่งทางราง ซึ่ง
สิ่งนี้ถือเป็นการก้าวแรกของกระทรวงคมนาคมที่ต้องพิจารณาและหาทางแก้ไขต่อไป

47. กระทรวงคมนาคมจะกลายเป็นผู้จัดให้มีโครงสร้างพื้นฐาน และจะเป็นผู้สัญญาณกับรฟท.ในการให้ รฟท.เป็นผู้ดำเนินการและดูแลรักษาระบบรางตามที่ต้องการ

4. กระทรวงการคลัง

48. จากทางเลือกการปฏิรูปที่ก้าวมาข้างต้น บทบาทของกระทรวงการคลังนี้มีความสำคัญมาก หนี้สินจำนวนมหาศาลของ รฟท.ได้ถูกโอนเข้าสู่บัญชีของรัฐบาลในรูปแบบของการค้ำประกัน ดังนั้นการปลดภาระหนี้สินในระบบบัญชีของ รฟท.ไปสู่ระบบบัญชีของรัฐบาลจึงถือเป็นหน้าที่ของรัฐบาลที่ต้องพิจารณา หาทางแก้ไขต่อไป ถ้าหากการโอนหนี้สินนี้ทำโดยการแลกเปลี่ยนด้วยการโอนกรรมสิทธิ์ที่ดินของรัฐ.ในมูลค่าเท่ากับหนี้สินไปสู่หน่วยงานอื่นของรัฐบาลไม่ว่าจะเป็นกระทรวงคมนาคมหรือรัฐวิสาหกิจอื่น ในมุมมองทางบัญชีก็ไม่มีความแตกต่างในแง่ของบัญชีของรัฐบาล

49. รายจ่ายจำนวน 5.9 พันล้านเหรียญสหรัฐฯ (1.7 แสนล้านบาท) ถือเป็นเรื่องที่สำคัญยิ่งไปกว่านั้นสมบัติฐานเรื่องค่าทุนของโครงสร้างพื้นฐานที่มีอยู่อย่างต่อเนื่องซึ่งรวมถึงค่าบำรุงรักษาเป็นส่วนใหญ่ จะถือเป็นการลงทุนระยะยาวของการทำกำไร และจำเป็นต้องถูกบรรจุเข้าเป็นงบประมาณรายจ่ายประจำปีโดยกระทรวงการคลัง

50. การจัดสรรเงินทุนให้กับ รฟท.จำเป็นต้องได้รับการอนุมัติเป็นรายงบประมาณโดยคณะรัฐมนตรี

5. หน่วยงานกำกับรถไฟแห่งประเทศไทย

51. หน่วยงานกำกับดูแลการรถไฟถือเป็นสิ่งจำเป็น ตามเหตุผลในราชบัญญัติรัฐธรรมนูญฉบับวันที่ 24 กรกฎาคม 2550 ได้มีการกำหนดนโยบายของรถไฟไว้ 2 ระดับ ซึ่งสิ้นเปลืองจากการติดสินใจของคณะรัฐมนตรีก่อนหน้านี้ ในการอนุมัติการจัดทำพระราชบัญญัติ (พรบ.) การบริหารจัดการภาคขนส่ง ซึ่ง พรบ.ฉบับที่เสนอ ได้มีการแบ่งแยกการจัดการด้านคมนาคมขนส่งออกเป็น ด้านนโยบาย ด้านกฎระเบียบ และการดำเนินการร่วมกันให้เกิดความชัดเจนในบทบาทของหน่วยงานกำกับดูแลการขนส่งทางรางทั้งในเขตเมืองและระหว่างเมืองเพิ่มเติมขึ้นจากก่อนหน้านี้ การแยกภารกิจของ หน่วยงานกำกับรถไฟเพื่อการขนส่งทางรางทั้งในเขตเมืองและระหว่างเมือง

52. ข้อเสนอแนะที่ร่วมมือในรายงานฉบับนี้ได้เริ่มต้นสร้างความรู้สึกให้กับผู้ดำเนินการภาคเอกชนมากขึ้น
6. บริษัทจัดตั้งใหม่

53. ความพยายามในการปฏิรูปจะนำไปสู่การจัดตั้งบริษัทใหม่สองประเภท ประกอบด้วย คือ รัฐวิสาหกิจซึ่งสามารถดำเนินการในฐานะของภาครัฐในระบบรถไฟไทย ซึ่งรวมถึง มีหน้าที่ในการกระทำโครงการสร้างพื้นฐานทางรางทั่วประเทศ การเปิดให้มีการพัฒนารถไฟความเร็วสูง การขยายพื้นที่เพื่อรองรับรถไฟในเขตเมือง และการเปิดโอกาสให้มีการเข้าร่วมในโครงข่ายทั้งในการให้บริการเดินรถไฟส่วนภูมิภาค หรือ การเดินรถเพื่อการขนส่งสินค้าพิเศษ ทั้งนี้ กรมรถไฟไทยอาจมีความจำเป็นที่จะต้องดูแลบริหารจัดการรัฐวิสาหกิจเหล่านี้ อีกทางเลือกหนึ่งคือ บริษัทโฮลดิ้งในการบริหารจัดการรถไฟ ซึ่งถูกจัดตั้งโดยกระทรวงคมนาคมในฐานะเป็นบริษัทแม่ ของบริษัทที่ดูแลจัดการด้านทรัพย์สิน และบริษัทเดินรถ

54. ในอนาคตอาจมีการก่อตั้งบริษัทต่างๆขึ้นเพื่อวัตถุประสงค์เฉพาะ เช่น บริษัทเหล่านี้อาจอยู่ในรูปแบบของการร่วมทุน (Joint Venture) และอาจเป็นการดึงเงินทุน หรือความเชี่ยวชาญจากภาคเอกชน อย่างไรก็ตาม ในขณะนี้ ยังไม่มีความจำเป็นที่จะต้องจัดตั้งบริษัทต่างๆเพิ่มเติม หากแต่ในช่วงระยะยาวหน้า การจะเปิดให้มีความยืดหยุ่นในระบบที่จะอนุญาตให้มีการจัดตั้งบริษัทเหล่านี้ได้ตามความต้องการ