

Chapter 1 INTRODUCTION

1.1 Introduction

Indian Railways (IR) is one of the largest railway networks in the world with 64600 route kilometers and 1.4 million employees under a single management. IR is the largest rail passenger carrier and fourth largest rail freight carrier in the world. More than 35 *per cent* of the freight traffic in the country moves by rail. IR is the backbone of the country's transport infrastructure integrating market and connecting communities across the length and breadth of the country.

Despite encouraging growth of freight, the market share of IR in freight sector has declined substantially from 53 to about 35 *per cent* during the last two decades. A major bottleneck identified by the Ministry of Railways in tardy growth of freight traffic has been the lack of connectivity to the major ports/industries. In order to sustain its operations as well as build adequate capacity network to meet the growing freight and passenger traffic challenges in the transport sector, IR opted for private participation to finance on-going and new projects

IR, however, did not adopt the Model Concession Agreement prescribed by the Planning Commission for execution of PPP projects in infrastructure sector. IR framed Concession Agreement on trial and error basis resulting in deficiencies in project management.

In this background, a comprehensive audit exercise was undertaken with a view to assess the performance of the IR in selection of private partners, allocation of risks and efficiency in execution of projects.

1.2 Background

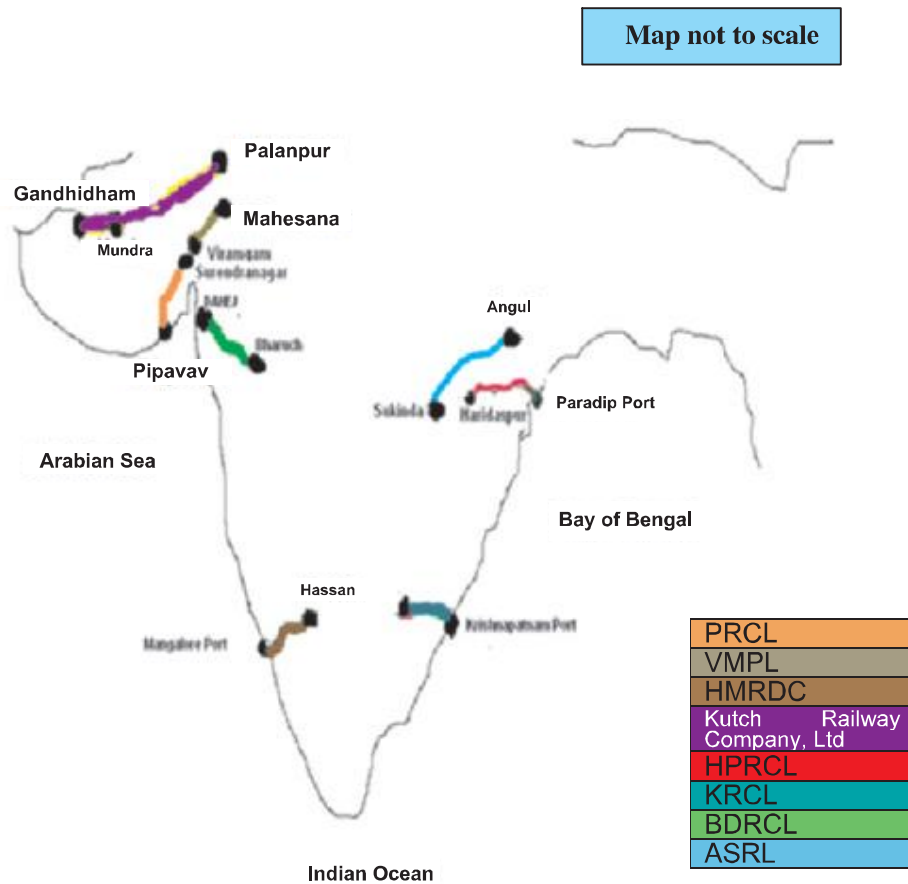
IR assessed (April 2005) the fund requirement of ₹47354 crore for expansion of railway network and up gradation of the existing infrastructure¹. In view of the inadequate fund allocation by the Ministry of Railways (MoR), the funding of these core projects was a challenging task for railways.

¹ Construction of New Line, Gauge Conversion, Doubling and Electrification projects

The 11th Five year Plan envisaged that the sustained economic growth would lead to increase stress on the existing infrastructure in general and railways in particular. IR perceived that it would not be able to generate sufficient resources to match the investment requirements of the 11th Five Year Plan (2007-12) due to resource crunch. Therefore, new area like Public Private Partnership (PPP) was explored in order to generate adequate revenues to sustain and develop the existing rail network in the country.

Public-Private Partnership² project is a contract between a Government or statutory entity and private sector company for delivering an infrastructure service on payment of user charges. PPP aims at designing, financing, operating public services with long term service provisions, appropriate risk allocations between public and private partners, contracts between public authorities and private parties. PPP besides bringing in private capital is also expected to bring in new technology and managerial expertise of private sector.

PPP Projects undertaken by IR



² Definition by Secretariat for the Committee on infrastructure, Government of India

1.3 Project Approval Process

The budgetary support from MoF was decreased from 75 *per cent* during Fourth Five Year Plan to 15 *per cent* during Eighth Five Year plan. BOLT scheme launched during 1994 could not generate adequate funds from private partners. Therefore, efforts for mobilising private investments were adopted for the first time by IR in May 2000 for Viramgam - Mahesana project followed by Surendranagar – Pipavav project during March 2001. Initially, the efforts of IR were limited to mobilising private investment for railway projects to bridge the demand and supply gap.

MoF directed (September 2002) that the infrastructure projects were to be approved by the Public Investment Board (PIB) chaired by Secretary, Department of Expenditure. The Project Appraisal division of the Planning Commission provides independent appraisal of the project which is finally approved by the Cabinet Committee on Economic Affairs (CCEA). In the case of Railway projects, instead of PIB, Expanded Board identifies and proposes the projects to be under taken on PPP module to the CCEA for approval. This Expanded Board includes representatives from the Department of Expenditure and Planning Commission as members and is chaired by the Chairman Railway Board.

Four projects taken up by IR on PPP mode through the SPVs namely PRCL, VMPL, HMRDC and Kutch Railway Company were routed through CCEA.

In January 2003, MoR formed Rail Vikas Nigam Limited (RVNL), a PSU under IR to expedite implementation of the projects under National Rail Vikas Yojna (NRVY³). In order to ensure fast track implementation of the NRVY projects, MoR sought dispensation from MoF in the existing procedure of seeking approval of the CCEA for the individual project. MoF approved (February 2003) and delegated the powers to MoR for approval of the projects subject to the condition that MoR should ensure financial viability of the project on the basis of Internal Rate of Return⁴ (IRR) equal to or more than 14 *per cent*. Subsequent to such dispensation, four projects namely HPRCL, KRCL, BDRCL and ASRL were undertaken by the IR which was not routed through CCEA. These projects were also taken up after the MoF issued guidelines (November 2005) for PPP projects. Since 2000, eight projects were undertaken across IR through private participation as shown in Table 1 below.

³ National Rail Vikas Yojna (NRVY) was conceived as a non budgetary investment initiative for creation and augmentation of capacity of rail infrastructure including the projects for strengthening of rail connectivity to ports and development of multi modal corridors to hinterland and construction of mega bridges.

⁴ Internal Rate of Return (IRR) of a project is the annualized effective compounded rate that makes the Net Present Value of all cash flows (both positive and negative) from a particular investment equal to zero.

Table 1 – PPP Projects undertaken by MoR

Sl. No.	Projects	Name of the SPVs/SPC and date of formation	Distance in Km.
1	2	3	4
1	Surendranagar-Pipavav Gauge Conversion (Western Railway)	Pipavav Rail Corporation Ltd (PRCL) (May 2000)	269
2	Virangam -Mahesana Gauge Conversion (Western Railway)	Virangam Mehesana Private Ltd (VMPL) (October 2002)	64.81
3	Hasan – Mangalore Gauge Conversion (South Western Railway)	Hassan Mangalore Rail Development Corporation (HMRDC) (July 2003)	183
4	Gandhidham – Palanpur Gauge Conversion (Western Railway)	Kutch Railway Company Ltd (January 2004)	301
5	Haridaspur –Paradip, New Line (East Coast Railway)	Haridaspur Paradip Railway Company Ltd (HPRCL) (September 2006)	82
6	Obulavaripalle- Krishnapatnam, New Line (South Central Rly)	Krishnapatnam Railway Company Ltd (KRCL) (October 2006)	114
7	Bharauch –Dahez, Gauge conversion (Western Railway)	Bharuch Dahej Rail Development Corporation (BDRCL) (June 2008)	62.36
8	Angul-Sukinda New Line (East Coast Railway)	Angul Sukinda Railway Limited (ASRL) (February 2009)	98.76

VMPL is the SPC (Special Purpose Company)

1.4 Project Financing

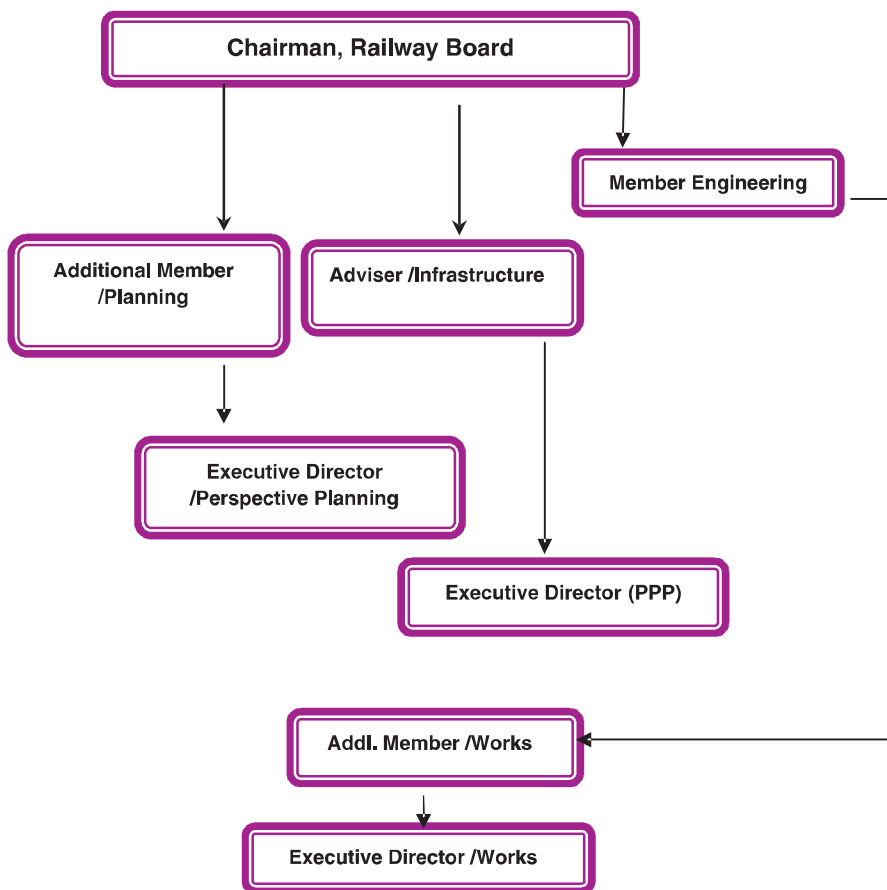
Funding pattern of the SPVs for financing the project cost in respect of eight PPP projects of IR was as follows:

<p>PRCL</p> <p>Project Cost- ₹ 294 crore</p>	<ul style="list-style-type: none"> • 50 per cent equity by Ministry of Railways • 50 per cent equity by SPV partners and/or balance by debt funding • Operations and maintenance by Western Railway at SPVs cost • SPV to receive share of earnings in accordance with the rules of inter-railway apportionment of earnings/freight tariff collected
<p>VMPL</p> <p>Project Cost- ₹ 63.39 crore</p>	<ul style="list-style-type: none"> • Project was executed by the Special Purpose Company (SPC) on BOT basis. • IR is required to pay the annual access charges of 15.94 crore for 12 years • Operations and maintenance with Western Railway • Project earnings to be retained by IR
<p>HMRDC</p> <p>Project Cost- ₹ 278.71 crore</p>	<ul style="list-style-type: none"> • 41 per cent equity by Ministry of Railways • 59 per cent equity by SPV partners and/or balance by debt funding • Operations and maintenance by South Western Railway at SPV's cost • SPV to receive share of earnings in accordance with the rules of inter-railway apportionment of earnings/freight tariff collected
<p>Kutch Rail Co.</p> <p>Project Cost- ₹ 344.63 crore</p>	<ul style="list-style-type: none"> • 50 per cent equity by Ministry of Railways • 50 per cent equity by SPV partners and/or balance by debt funding • Operations and maintenance by Western Railway at SPV's cost • SPV to receive share of earnings in accordance with the rules of inter-railway apportionment of earnings/freight tariff collected
<p>HPRCL</p> <p>Project Cost- ₹ 598 crore</p>	<ul style="list-style-type: none"> • 48 per cent equity by RVNL • 52 per cent equity by SPV partners and/or balance by debt funding • Operations and maintenance by Railway at SPV's cost • SPV to receive share of earnings in accordance with the rules of inter-railway apportionment of earnings/freight tariff collected
<p>KRCL</p> <p>Project Cost- ₹ 588 crore</p>	<ul style="list-style-type: none"> • 30 per cent equity by RVNL (PSU of IR) • 50 per cent equity by SPV partners and/or balance by debt funding • Operations and maintenance by Railway at SPV's cost • SPV to receive share of earnings in accordance with the rules of inter-railway apportionment of earnings/freight tariff collected
<p>BDRCL</p> <p>Project Cost- ₹ 395 crore</p>	<ul style="list-style-type: none"> • 28 per cent equity by RVNL (PSU of IR) • 72 per cent equity by SPV partners and/or balance by debt funding • Operations and maintenance by Railway at SPV's cost • SPV to receive share of earnings in accordance with the rules of inter-railway apportionment of earnings/freight tariff collected
<p>ASRL</p> <p>Project Cost- ₹ 818 crore</p>	<ul style="list-style-type: none"> • 45 per cent equity by RVNL (PSU of IR) • 55 per cent equity by SPV partners and/or balance by debt funding • Operations and maintenance by Railway at SPV's cost • SPV to receive share of earnings in accordance with the rules of inter-railway apportionment of earnings/freight tariff collected

Note:-Project specific SPVs mentioned above are in chronological order of their formation

1.5 Organisation Setup

Railway Board accords approval of all the policy related issues including investments in the infrastructure augmentation projects. A separate PPP cell in the Railway Board comprising of senior officers from Infrastructure, Planning and Works Directorates in Railway Board oversee the PPP projects. Member (Engineering) is the nodal authority for executing PPP projects. An organization chart of executives of Railway Board responsible for processing and implementing PPP projects is as follows:



1.6 Audit Objectives

The objectives of this Performance Audit were to obtain reasonable assurance that:-

- i. The assessment of IRR was realistic, identification and selection of private partners for formation of SPVs for equity contribution was made judiciously and in a transparent manner;

- ii. Provisions of the agreements pertaining to the Concession Period, Lease Rent and Transfer Payments were complete and clearly defined without any ambiguity; and
- iii. Project Management including execution of Traffic Guarantee Agreement was efficient.

1.7 Scope of Audit

Performance Audit examined the initiatives taken by the Ministry of Railways for promoting construction of rail links for ports and hinterland connectivity under PPP arrangements during the last decade. An in-depth study was conducted in respect of six selected projects taken up through the formation of SPV. Focus of Audit was on the following aspects:

- Decision making process leading to projects being taken up under PPP as also the process of selection of the SPV partners;
- Due diligence and comprehensiveness in preparing the relevant agreements amongst the stakeholders;
- Review of concession period, financial close, transfer of assets, monitoring etc.

1.8 Sources of Audit Criteria

The Performance Audit was carried out with reference to the guidelines and instructions issued by MoF, Planning Commission in respect of PPP projects, Plan Documents of Ministry of Railway along with the relevant instructions issued by MoR from time to time. In addition, the provisions laid down in the various agreements such as Shareholder Agreement, Concession Agreement, Construction Agreement and Traffic Guarantee Agreement of each project were considered for assessing the performance of the SPVs/IR in execution of PPP projects.

1.9 Sample Selection and Audit Methodology

Out of the eight projects undertaken by IR under PPP mode, the sample adopted by audit comprises of four completed Gauge Conversion projects i.e Pipavav – Surendranagar, Viramgam – Mahesana, Hassan –Mangalore and Gandhidham – Palanpur and two ongoing New Line projects viz Haridaspur-Paradip and Obulavaripalle - Krishnapatnam.

Audit methodology comprises of examination of the records at the Railway Board and Zonal Railways which *inter-alia* includes review of the agreements executed with the SPVs.

An Entry and Exit Conference was held in November 2011 and March 2013 respectively with the MoR. The reply received from the Zonal Railways and also from the MoR (June 2013) have been incorporated in the report.

1.10 Acknowledgement

Audit acknowledges the co-operation and assistance extended by the Senior Management, Executive Directors and the staff of Ministry of Railways (Railway Board). The input provided on various aspects and the co-operation extended by the Zonal Railways is acknowledged with thanks.