Report of the
Comptroller and Auditor General
of India

on

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PUBLIC PRIVATE PARTNERSHIP PROJECTS IN INDIAN RAILWAYS

for the year ended march 2013

Laid in Lok Sabha / Rajya Sabha_________________

Union Government (Railways)
No. 3 of 2013-14
(Performance Audit)

CONTENTS

PREFACE

This Report of the Comptroller and Auditor General of India contains the results of the Performance Audit on Public Private Partnership Projects by Indian Railways to augment rail network. The audit covered the period from 2007 to 2013.

The Report emanates from the scrutiny of files and documents pertaining to the Ministry of Railways and the Zonal Railways. Agreements executed with the Special Purpose Vehicles were also examined.

The Report has been prepared for submission to the President under Article 151 (1) of the Constitution of India.

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List of abbreviations used in the report

BIL	Brahamani Industries Limited
BOT	Build, Operate and Transfer
BOLT	Build, Operate, Lease and Transfer
CE	Chief Engineer
CPRB	Construction Progress Review Board
COD	Commercial Operation Date
DFT	Deemed Freight Traffic
DPCL	Dhamra Port Company Limited
DRV	Depreciated Replacement Value
EOI	Expression of Interest
FDI	Foreign Direct Investment
ECoR	East Coast Railway
SCR	South Central Railway
SWR	South Western Railway
WR	Western Railway
GM	General Manager
IRR	Internal Rate of Return
NPV	Net Present Value
CCEA	Cabinet Committee on Economic Affairs
IR	Indian Railways
IRFC	Indian Railways Finance Corporation
PRCL	Pipavav Rail Corporation Limited (Ltd.)
VMPL	Viramgam Mahesana Private Ltd.
HMRDC	Hassan Mangalore Rail Development Corporation Ltd
HPRCL	Haridaspur Paradip Rail Corporation Ltd.
KRCL	Krishnapatnam Rail Corporation Ltd.

ASRL	Angul Sukinda Rail Ltd.
BDRCL	Bharuch Dahej Rail Corporation Ltd.
GPPL	Gujarat Pipavav Port Limited
K-RIDE	Karnataka- Rail Infrastructure Development Company
SPV/SPC	Special purpose Vehicle/Special Purpose Company
MG	Meter Gauge
MoR	Ministry of Railways
MoF	Ministry of Finance
MCA	Model Concession Agreement
MoU	Memorandum of Understanding
NMDC	National Mineral Development Corporation Ltd.
NRVY	National Rail Vikas Yojna
O&M	Operation and Maintenance
POL	Petroleum Oil and Lubricant
PPP	Public Private Partnership
PSU	Public Sector Undertaking
PIB	Public Investment Board
RVNL	Rail Vikas Nigam Limited
TGA	Traffic Guarantee Agreement
VGF	Viability Gap Funding

EXECUTIVE SUMMARY

1 Background

Indian Railways (IR) is a prime mover in the transport sector of the nation. It is one of the largest railway systems in the world under a single management and is the single largest mover of freight in the country. Despite improvement in growth rate of freight, the market share of IR in freight transport has declined substantially from 53 to about 35 *per cent* in the last two decades. Creation of adequate capacity network was, therefore, essential to meet the challenges in growth of freight traffic.

The critical input identified by IR was the significant investment required for execution of projects to enhance capacity of railway's network. Shortfall in internal generation of resources coupled with inadequate budgetary support led IR to heavily rely on private sector investments. Public Private Partnership mode (PPP), Joint Venture Model, BOT[1] model were some of the policies through which IR sought private investment.

IR executed eight PPP projects consisting of five Gauge Conversion and three New Line projects since 2000 through Special Purpose Vehicles (SPVs) and one Special Purpose Company (SPC) in collaboration with private partners. Audit study includes a sample of four Gauge Conversion projects such as PRCL, VMPL, HMRDC and Kutch Railway Company Ltd and two ongoing New Line projects namely HPRCL and KRCL

2 Highlights of the Report

This Performance Audit Report highlights the procedure adopted for selection of private partners, clarity, transparency and completeness of contractual documents such as Shareholders Agreement, Concession Agreement and Traffic Guarantee Agreement etc. executed with SPVs including financial prudence of IR while processing each project.

Audit observed that all PPP projects undertaken by the MoR were considered economically viable except HMRDC and KRCL where the IRR was less than the benchmark prescribed by the MoF. Assessment of IRR was not realistic in all the cases. Projects with high IRR (PRCL) witnessed loss due to shortfall against the

[1] Built, Operate and Transfer- Applicable for sanctioned projects where it is not possible to identify stakeholders. The projects are awarded on design, build, finance, maintain and transfer.

projected traffic. Earning of Railway from the VMPL project was about 60 *per cent* less than annual cash outflow though IRR was estimated as 22 *per cent.*

IR did not formulate any Model Concession Agreement nor did it prefer to follow the one prescribed by the Planning Commission for PPP projects in infrastructure sector.

Grant of concession period to concessionaires was arbitrary ranging from 12 years to 32 years. Adequate justification was not available on record for levying a nominal lease rent. Overhead charges were deferred without linking it to the IRR and actual profitability of projects. Concerns regarding inadequacy of contractual provisions as expressed by authorities at the field levels in case of Kutch Railway Company Limited were not addressed by the competent authorities at the Railway Board level. Due to weak monitoring of the progress of the projects, adequate remedial measures were not initiated at the project implementation stage in case of HPRCL and KRCL.

This report comprises of five chapters including introduction, audit objectives, scope of audit, methodology etc. as detailed in Chapter 1. Chapter 2 of the report highlights the deficiencies in selection of equity partners including completeness of the Shareholders Agreement after the formation of SPV/SPC. While Chapter 3 deals with the review of the terms and conditions incorporated in different agreements, issues such as recovery of Operation and Maintenance cost of the projects, Traffic Guarantee Agreement with SPVs, effective monitoring of the projects has been discussed in Chapter 4. Chapter 5 highlights the overall conclusion of the Performance Audit along with recommendations.

2.1 Major Audit Findings

2.1.1 Selection of Private Partners

i. All the projects were considered economically viable except HMRDC and KRCL where the IRR[2] was estimated as 10.5 and 11.8 *per cent* respectively as against the minimum benchmark of 14 *per cent* prescribed by the MoF.

(Para 2.1)

ii. The Shareholder Agreement was incomplete in case of PRCL at the initial stage itself as three new partners were included subsequent to signing of the Agreement. **(Para 2.3.1)**

[2] 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.

iii. Approval of MoF was not obtained for taking up VMPL project through BOT mode on payment of access charges. Annual earning of the project was ₹ 6.45 crore against the annual access charge payment of ₹15.94 crore. The project sustained loss despite estimated IRR of 22 *per cent*.

(Para 2.3.2)

iv. In HMRDC, the shareholders Agreement included ₹141 crore as subordinate debt of MoR recoverable from HMRDC. In absence of a provision in the agreement for repayment of debt and interest liability thereon, 56 *per cent* of this debt is yet to be repaid by HMRDC (March 2013).

(Para 2.3.3)

v. Kutch Railway Company Limited was a profitable project with IRR estimated as 17.81 *per cent.* Traffic Guarantee Agreement was, however, not executed as the equity partners did not agree to execute the same.

(Para 2.3.4)

vi. RVNL was mandated to implement the projects on fast track basis on behalf of IR. In case of HPRCL, there was a delay of 15 months in formation of SPV from the date of signing of the MoU. Inordinate delay of 53 months was also observed in case of KRCL between selection of partners and approval of project by the MoR. **(Para 2.4.1 and 2.4.2)**

2.1.2 Concession Agreements

i. MoR did not formulate any Model Concession Agreement for PPP projects. On the contrary, MoR finalized each agreement separately based on its experience in PRCL, the first PPP project and the same was adopted as benchmark while finalising subsequent Concession Agreements with HMRDC and Kutch Railway Company. **[Para 3.1 (i)]**

ii. There was significant delay in signing of the Concession Agreement. The time gap between formation of SPV and subsequent signing of concession agreement was in the range of 270 to 540 days. **[Para 3.1 (ii)]**

iii. Concession period was not linked with the IRR of the projects. The Concession Period adopted was in the range of 12 to 33 years. The reasons for adoption of different concession period were not available on record. Further, the date of commencement of concession period was not mentioned in the Concession Agreement in case of HPRCL and KRCL.

[(Para 3.1 (iii and iv)]

iv. Concession Agreement with Kutch Railway Company Limited lacked provisions for review and modification of the terms and conditions of the agreement to safeguard against unforeseen eventualities to protect the financial interest of the IR.

(Para 3.1 1)

2.1.3 Lease Rent

i. Despite being pointed out by the Western Railway, the correctness of the valuation of the assets leased to PRCL was not confirmed by the MoR. This resulted in short recovery of lease rent amounting to ₹ 3.60 crore per annum since June 2001 due to erroneous adoption of cost of the assets as ` 44.18 crore instead of ₹ 44.18 crore. **(Para 3.2.1.1)**

ii. Lease Agreement was incomplete as the area of land leased to the SPVs was not mentioned in all the agreements. SPVs (VMPL, HMRDC and Kutch Railway Company Ltd) were permitted to commercially exploit the land leased to them at a nominal rent and the reasons thereof were not available on record. **(Para 3.2.1.2)**

iii. While executing the Lease Agreement with Kutch Rail Company Limited, the extant Railway Board's instructions (February 2005) of recovery of lease rent at the rate of 6 *per* cent of the market value of the land was not followed. This resulted in loss of ₹ 4 crores per annum since November 2005.

[Para 3.2.1.2 (iv)]

iv. The Lease Agreement with HPRCL provided for the recovery of lease rent as per extant instructions of Railway Board in this regard. An amount of ₹2.34 crore due as lease rent was not recovered from HPRCL for the period December 2007 to March 2013.

(Para 3.2.2.1)

2.1.4 Transfer of Assets

Uniform policy was not adopted for payments to be made by IR to the SPVs at the time of transfer of the project assets on completion of the Concession Period. While the amount of transfer payment in case of PRCL and HMRDC was equal to Depreciated Replacement Value of the assets, the transfer amount was equal to the book value of the assets in case of Kutch Rail Company Limited, HPRCL and KRCL. **(Para 3.3)**

2.1.5 *Financial Close*

Financial Close implies fulfillment of all the conditions precedent to availability of the funds for the concerned PPP projects. This was not achieved in case of HPRCL and KRCL even after six years of signing the Concession Agreements. The project cost in case of HPRCL and KRCL escalated by about 100 *per cent.* The revised project cost is yet to be approved by the SPV Board. **(Para 3.4)**

2.1.6 *Project Execution*

i. Kutch Railway Company Ltd recovered the entire cost of the project within six years of its operation. MoR approved doubling of the line to derive the additional benefit. Western Railway (General Manager), however, requested for termination of this agreement as continuation of the existing agreement would severely undermine the earnings of WR. MoR did not initiate any action as they considered it prudent to augment line capacity by utilizing funds provided by SPV in view of the resource crunch of IR.

(Para 4.1)

ii. The project cost in case of HPRCL and KRCL escalated by about 100 *per cent* due to delay in land acquisition, increase in the cost of construction of major bridges, permanent way material etc. A private line (DPCL) was constructed under identical circumstances, parallel to the proposed new line of HPRCL. Operation of this private line is likely to have an adverse impact on the earning of the HPRCL in the long run.

(Para 4.2.1 and 4.2.2)

2.1.7 *Operation and Maintenance*

Deferring of recovery of overhead charges was not linked to the earnings of the SPVs and the deferred charges were slated to be recovered after a period of 10 years in case of PRCL and Kutch Railway Company Ltd with IRR more than the prescribed benchmark of MoF.

CCEA note provided for deferring of recovery of overhead charges for five years in case of HMRDC. MoR, however, deferred recovery of overhead charges over a period of 10 years of operation. Reasons to justify deferring of recovery of overhead charge for 10 years instead of five years were not available on records. **(Para 4.3)**

2.1.8 Traffic Guarantee Agreement

Viability of a project is based on IRR of the project which, in turn, is assessed considering the freight earnings that the project is likely to fetch during the concession period. A minimum Traffic Guarantee Agreement is, therefore, essential to ensure that the project is viable and sufficient earnings are generated to cover the cost of project.

i. This crucial agreement was not executed in case of VMPL, Kutch Railway Company, HMRDC and KRCL;

ii. PRCL achieved the target for minimum guaranteed traffic during the eighth year of operation of the project. There was, however, no provision in the agreement for revision of the quantum of minimum guaranteed traffic once the targeted traffic volume is achieved by the SPV; and

iii. The penal provisions for shortfall in offering minimum guaranteed traffic in case of PRCL were complex to quantify in absolute financial terms. **(Para 4.4 and 4.4.1)**

2.1.9 Monitoring

Though monthly progress reports were being prepared by SPVs, there were, however, no records confirming the fact that the progress of the projects was being monitored by the Construction Progress Review Board. The role of MoR for monitoring the performance of projects were not laid down in any of the Concession Agreements. **(Para 4.5)**

3 Recommendations

I. IR needs to frame a Model Concession Agreement for execution of its projects with in the stipulated time frame adopting uniform approach to all PPP projects in IR. The provisions of the agreement need to be complete and clearly defined with requisite safeguards to address any unforeseen event during the concession period. Provisions of the Agreement should also conform to the extant instructions issued from time to time by the MoR and other statutory authorities of Government of India;

II. IR needs to resort to calling of Expression of Interest for selection of all equity partners other than the principal stakeholder. IR should ensure securing minimum traffic guarantee from the principal stakeholder;

III. Adequacy and accuracy of data/information including assumptions needs to be exhaustively analysed for calculating IRR in order to judge the economic viability of the project;

IV. IR needs to streamline the approval process, formation of SPVs and signing of requisite agreements in a time bound manner to avoid delay in completion of projects;

V. Definite time line needs to be framed for achieving 'Financial Close' by the SPVs to discourage subsequent modification of the scope of the project and enhancement of project cost. Adequate care needs to be taken for realistic assessment of the project cost to reduce debt financing; and

VI. IR needs to strengthen its monitoring mechanism for effective monitoring of all PPP projects both at the Zonal Railway as well as Railway Board level.

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

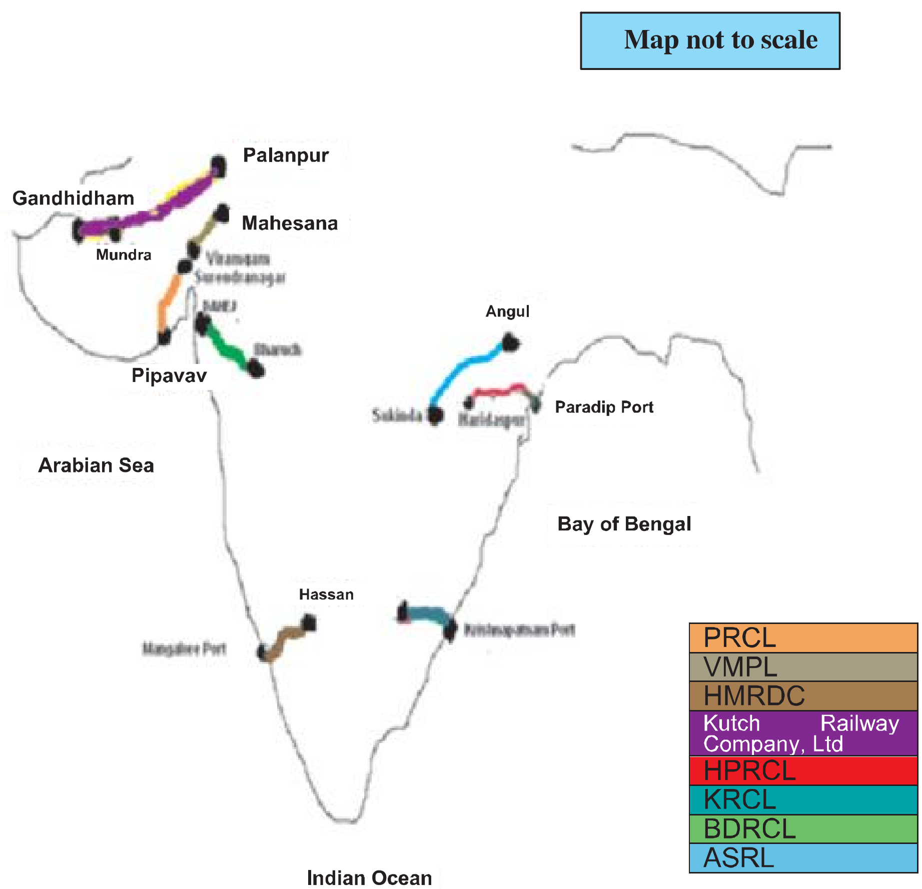
IR assessed (April 2005) the fund requirement of ₹47354 crore for expansion of railway network and up gradation of the existing infrastructure[1]. In view of the inadequate fund allocation by the Ministry of Railways (MoR), the funding of these core projects was a challenging task for railways.

[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 Partnership[2] 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 (NRVY[3]). 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 Return[4] (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	Viramgam -Mahesana Gauge Conversion (Western Railway)	Viramgam 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

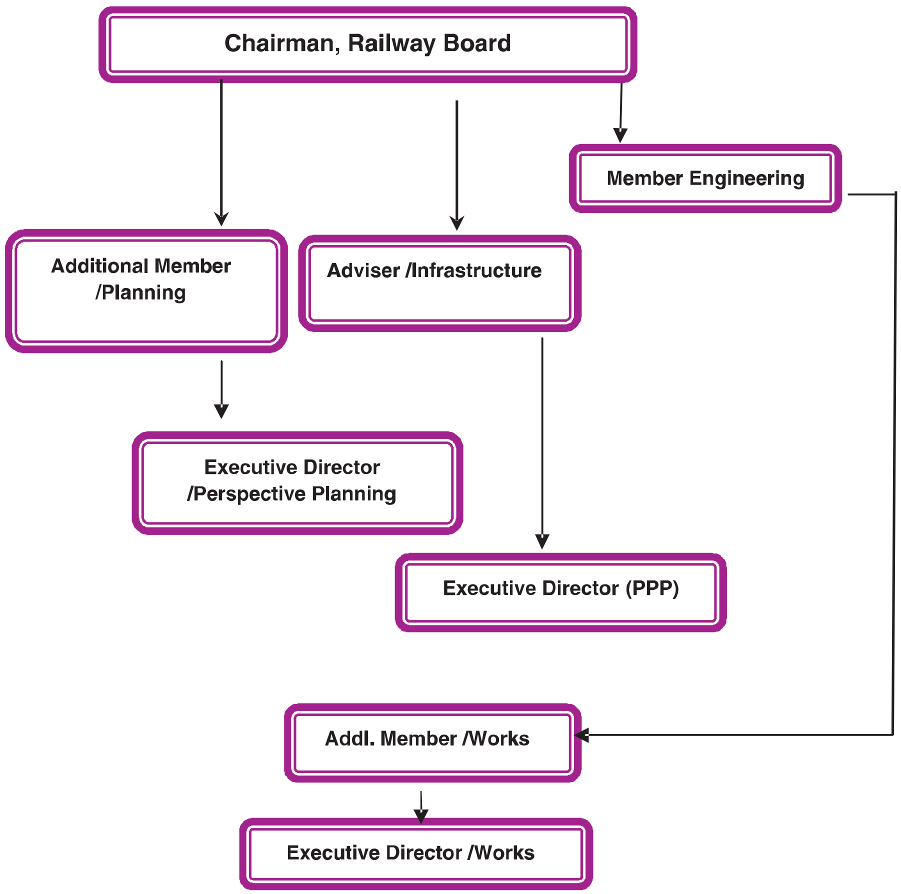
Funding pattern of the SPVs for financing the project cost in respect of eight PPP projects of IR was as follows:

PRCL Project Cost- ₹ 294 crore	• 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 rulesof inter-railway apportionment of earnings/freight tariff collected
VMPL Project Cost- ₹ 63.39 crore	• 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
HMRDC Project Cost- ₹ 278.71 crore	• 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 rulesof inter-railway apportionment of earnings/freight tariff collected
Kutch Rail Co. Project Cost- ₹ 344.63 crore	• 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 rulesof inter-railway apportionment of earnings/freight tariff collected
HPRCL Project Cost- ₹ 598 crore	• 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 rulesof inter-railway apportionment of earnings/freight tariff collected
KRCL Project Cost- ₹ 588 crore	• 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 rulesof inter-railway apportionment of earnings/freight tariff collected
BDRCL Project Cost- ₹ 395 crore	• 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 rulesof inter-railway apportionment of earnings/freight tariff collected
ASRL Project Cost- ₹ 818 crore	• 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 rulesof 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.

Chapter 2 Selection of Private Partners

Audit objective 1

To obtain reasonable assurance that the assessment of IRR was realistic, identification and selection of private partners for equity share participation was judicious and transparent.

Sound investment decisions are fundamental as they significantly affect the financial health of an organization in the long run. The economic viability of an infrastructure projects is decided on the basis of Internal Rate of Return[5] (IRR) of the project. The higher the IRR, the more viable is to undertake the project. While working out the IRR, factors such as estimated cost of the project, future estimated earning from the project, period of construction and cost of operations etc. are taken into consideration. In IR, IRR is generally calculated by Rail India Technical and Economic Services (RITES). The minimum IRR prescribed by the Ministry of Finance (MoF) for qualifying a project as viable was 14 *per cent.*

This chapter highlights the deficiencies noticed in selection of private equity partners including assessment of IRR and completeness of the Shareholders Agreement.

2.1 Viability of Projects

The IRR of the four projects[6] were in the range of 14.71 *per cent* to 23 *per cent*, above the prescribed benchmark of MoF. IRR was, however, less than the benchmark in case of HMRDC (10.5 *per cent)* and KRCL (11.8 *per cent)*.

2.2 Agreement with SPVs

MoR /RVNL executed the following agreements with the SPVs for effective execution of PPP projects:

[5] 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.

[6] PRCL-14.71 *per cent*, VMPL-22 *per cent*, KutchRailway-17.81 *per cent* and HPRCL- 23 *per cent*

i. Shareholder Agreement;
ii. Concession Agreement which includes Lease Agreement;
iii. Construction Agreement;
iv. Operation & Maintenance Agreement; and
v. Traffic Guarantee Agreement

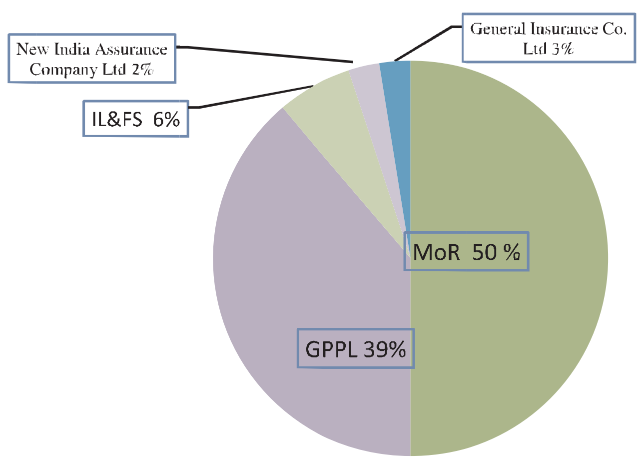
Audit Observations

2.3 Gauge Conversion Projects

2.3.1 Pipavav Railway Corporation Limited

A Memorandum of Understanding (MoU) was signed in January 2000 between MoR and Gujarat Pipavav Port Ltd (GPPL) for conversion of Metre Gauge (MG) line between Surendranagar and the Pipavav Port into Broad Gauge (BG). IRR of the project was estimated at 14.61 *per cent*. Pipavav Railway Corporation Limited, a Special Purpose Vehicle (SPV) was formed (May 2000) with the following equity participation:

Figure 1-Shareholding Pattern of PRCL



Scrutiny in Audit revealed that

The Shareholder Agreement did not specify the associates of GPPL for 11 *per cent* equity share. Three associates[7] of GPPL were included subsequent to the signing

[7] IL&FS,New India Assurance Company Limited and General Insurance Company Limited

the Shareholder Agreement. Therefore, the Shareholder Agreement was incomplete at the initial signing stage itself.

i. RITES in May 2000 had estimated that the traffic would increase from 2.62 million tonnes to 10.34 million tonnes in 2008, an increase of nearly 400 *per cent* over a period of eight years. The IRR was accordingly assessed as 14.61 *per cent*. The projected growth of traffic was, however, never materialized and the project has been suffering losses since 2003.

MoR admitted (June 2013) that three associates of GPPL which accounts for 11 *per cent* equity share of PRCL were included subsequent to signing of the Shareholders Agreement. Further, MoR in their reply also accepted that the traffic projections could not materialise due to delay in development of the port.

2.3.2 Viramgam Mahesana Project Limited

The Gauge Conversion project between Viramgam and Mahesana (64.81 Km) was conceived to cater to the Defence requirements along with transportation of petroleum products from Kandla port to the oil refineries located towards north western parts of the country. The project was initially identified for execution under BOLT scheme (1995-96). The project could not materialise due to financial constraints. The project was again taken up in March 2001 for execution under BOT model on payment of access charge[8] as an alternate mean of funding the project. Viramgam Mahesana Project Limited (VMPL), a Special Purpose Company (SPC) was formed in October 2002 for implementing the project under Build, Operate and Transfer (BOT) scheme. MoR estimated (February 2001) the project cost at ` 63.39 crore with IRR as 22 *per cent.*

Scrutiny in Audit revealed that:

i. The project was initially approved by the CCEA for implementation under BOLT scheme. In March 2001, MoR modified (March 2001) the modus operandi for execution under BOT scheme by creating a SPC. This revised approach was not got approved from the CCEA;

ii. Despite the estimated high IRR of 22 *per cent* of the project, no funds were allocated by MoR for the project during 2003- 05;

[8] Access charges are the payment made by the Railways to the concessionaire after COD for use of the project asset and facilities.

iii. Annual earning from the project was only ₹6.45 crore as against an annual access charge payment of ₹15.94 crore to the SPC. The project suffered loss despite its IRR of 22 *per cent* as estimated by MoR;

iv. As per the agreement, MoR was required to pay access charges to the concessionaire at the rate of ₹15.94 crore per annum for a period of 12 years commencing from the date of financial close of the project. This resulted in additional expenditure of ₹127.88 crores[9] over a period of 12 years.

MoR replied (June 2013) that in view of financial constraints, IR experimented with the BOT model on payment of access charge as an alternate means for funding Railway Projects.

Reply of the MoR is not acceptable as it was observed that though IR spent ₹15382 crore on capital projects during 2003-05, no funds were allotted for this project with IRR estimated as high as 22 *per cent.* Moreover, approval of CCEA was not obtained for adopting revised mode of implementation of the project from BOLT to BOT scheme, which resulted in additional expenditure of ₹127.88 crore.

2.3.3 Hassan Mangalore Rail Development Corporation Limited

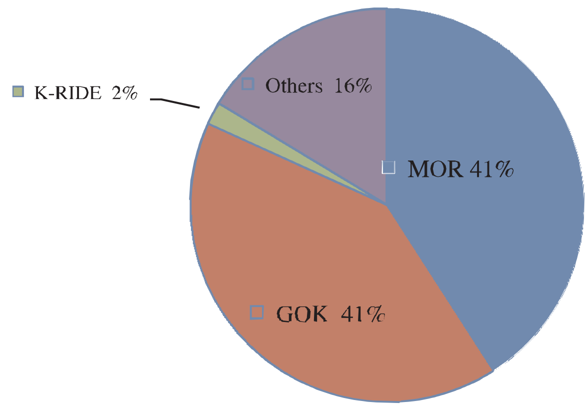
Gauge Conversion of Arsikere-Hasan-Mangalore (230 Km) was taken up by the IR in 1994-95. The section between Arsikere and Hassan (47 Km) was commissioned in March 2002 at a cost of ₹141 crore. For conversion of the remaining section Hassan-Mangalore (183Km), CCEA approved (April 2003) formation of a new company called Rail Infrastructure Development Company (Karnataka) Ltd (K-RIDE). The estimated cost of the project was ₹278.71 crore with IRR estimated as 10.5 *per cent*. An SPV called Hassan Mangalore Rail Development Company Limited (HMRDC) was formed in July 2003.

The Share capital of ₹110 crore of the SPV included 41 *per cent* share each of MoR and Karnataka Government, two *per cent* share of K-RIDE and the balance 16 *per cent* from the strategic partners[10]. The Shareholder Agreement provided for treating the expenditure of ₹141 crore, already incurred by IR for gauge conversion of Arsikere – Hassan section prior to formation of SPV as subordinate debt to HMRDC. Shareholding pattern of HMRDC is shown in the pie diagram as follows:

[9] Difference between the payment of `191.27 crore as access charges for 12 years and the Project Cost of `63 crore

[10] New Mangalore Port Trust, Mineral Enterprises Pvt Ltd, Kudremukh Iron Ore Company Ltd and National Mineral Development Corporation Ltd.

Fig.2 –Shareholding pattern of HMRDC



Scrutiny in Audit revealed that

i. Shareholder Agreement did not provide for any modalities for annual repayment of subordinate debt of ₹141 crore to MoR by HMRDC. HMRDC paid only ₹62 crores up to March 2013 (44 *per cent)* towards repayment of subordinate debt of October 2003;

ii. Necessary provision was not incorporated in the agreement towards interest payment on the subordinate debt; and

iii. IRR of the project was estimated as 10.5 *per cent,* which was below the benchmark prescribed by MoF. The SPV, however, earned an overall profit during 2006-12. This indicated that the assessment of IRR was faulty.

MoR stated (March 2013) that as stipulated in the Cabinet Note, net operating cash flow of the company after servicing of senior debt was to be distributed among the subordinated debt and equity shareholder in proposition to the investment made by them in HMRDC. MoR further stated that no dividend was declared by HMRDC since 2006-07. MoR admitted that no agreement could be signed with HMRDC on subordinate debt due to disagreement among the shareholders. MoR also asserted that after the Company liquidated its senior debt by March 2010, the Company repaid ₹62 crore between June 2010 and March 2013 towards subordinate debt.

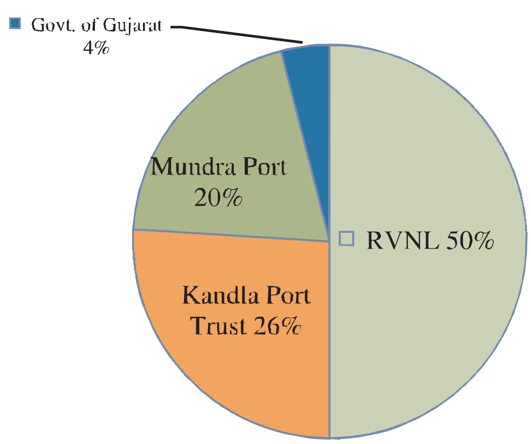
Reply of the MoR is, however, not acceptable as the Company registered an overall profit of ₹135.72 crore during 2006-12. Despite surplus earnings during 2007-11, interest on subordinate debt was not paid on the consideration that no dividend was declared since 2006-07. Failure of the MoR to enter in to an agreement with HMRDC in respect of repayment of subordinate debt resulted in blockade of capital at the time when IR was facing severe resource crunch.

Moreover, IR had been paying dividend to the General Revenues[11] on the subordinate debt provided to HMRDC. During the period (2004-12), IR paid ₹73.47 crore towards dividend on the subordinate debt.

2.3.4 Kutch Railway Company Limited

Gandhidham – Palanpur Gauge Conversion Project (301 kms) was taken up in 2002 under National Rail Vikas Yojana (NRVY). The main objective of this line was to provide shortest route for the north bound traffic from Kandla Port and Mundra Port. The estimated cost of the project was ₹344.63 crores and the IRR was 17.88 *per cent*. A SPV named Kutch Railway Company was formed in January 2004 with a share capital of ₹200 crore comprising four *per cent* by the Gujarat Government, 26 *per cent* by Kandla Port Trust, 20 *per cent* by Mundra Port and balance 50 *per cent* by Rail Vikas Nigam Limited (RVNL), a PSU of MoR.

Fig.3 Shareholding pattern of Kutch Railway Company Ltd.



Scrutiny in Audit revealed that;

i. The project was initially approved (October 2000) by the CCEA for implementation under BOLT scheme. MoR modified the modus operandi for execution under BOT scheme by creating a SPV in May 2004. The approval of the revised approach was not obtained from the CCEA;

ii. Expression of Interest (EOI) was not invited by MoR for identifying stakeholders as Kandla Port Trust and Gujarat Adani Limited (Mundra Port)

[11] Railway expenditure is financed from capital provided by General Revenues. On the capital invested out of general revenues in the railway undertaking, the general revenues would receive a fixed dividend at 4 *per cent* per annum for a period of five years except on the capital invested in un- remunerative strategic lines.

expressed their interest in the project. Despite the interest expressed by the stake holders, MoR failed to secure minimum traffic guarantee;

iii. Gandhidham- Palanpur section is the shortest route for the North bound traffic. The other alternative route is via Ahmedabad-Palanpur which is longer by 133.62 Km. Test check in Audit revealed that WR diverted two rakes per day via longer route during 2010-11 despite 42 *per cent* utilization of the shortest route, Gandhidham- Palanpur section. This resulted in loss to the IR towards extra haulage of traffic through longer route.

MoR in their reply stated (June 2013) that the efforts were made to secure traffic guarantee without success as the equity partners did not agree to execute traffic guarantee.

Reply of the MoR is, however, not acceptable as IR should have ensured the minimum traffic guarantee from the investors keeping in view the high IRR (17.81 *per cent*) of the project and also expressed interest of the stakeholders. Further, approval of CCEA was not obtained for adopting revised mode of implementation of the project from BOLT to BOT scheme.

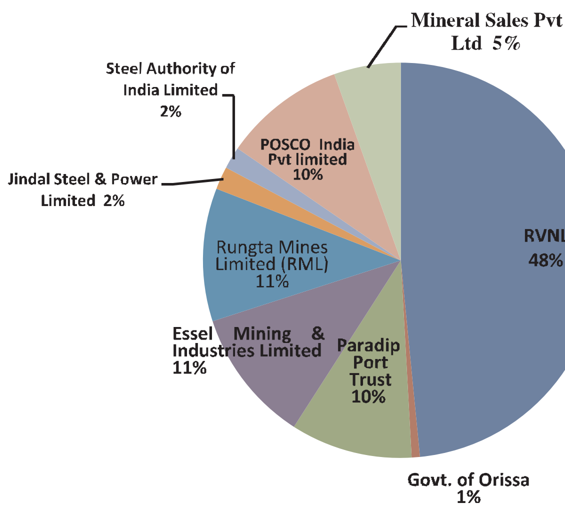
2.4 New Line Projects

2.4.1 Haridaspur Paradip Railway Company Limited

Paradip Port is a major port in the State of Orissa which provides traffic connectivity in the States of Orissa and Jharkhand. The port transports mainly iron ore, coal, fertiliser and petrolium oil and lubricants (POL) products. Initially, the Cuttack-Paradip line was the only rail link available to access the Paradip port. Subsequently, the line capacity of the section reached its saturation stage resulting in regular shortage of rakes, delays in the movement etc. MOR planned a new 82 km long rail link between Haridaspur (on Howrah-Chennai Trunk line) and Paradip Port to overcome these capacity bottlenecks.

The IRR of the Haridaspur- Paradip new line project was estimated at 23 *per cent*. The project was estimated to cost ₹379.80 crores in 2004 which was revised to ₹598 in 2006. The project was transferred (2005) to RVNL for speedy execution. An SPV called Haridaspur Paradip Railway Company Limited (HPRCL) was formed in September 2006. RVNL invited an Expression of Interest (EOI) in January 2006 to finalise the partners for HPRCL. The shareholders agreement for ₹275 crore equity contribution was signed with nine partners. The shareholding pattern was as follows:

Fig.4 Shareholding pattern of HPRCL



Scrutiny in Audit revealed that;

i. Memorandum of Understanding (MoU) was signed between RVNL and Government of Orissa, Paradip Port Trust in May 2005. HPRCL was, however, formed in September 2006. Thus, there was inordinate delay of about 15 months between signing of MoU and formation of HPRCL.

ii. Share holders Agreement signed in October 2006 provided that POSCO would cease to be a party to the said agreement if the license for mining was not granted within a period of three years from October 2006. License for mining was neither granted to POSCO nor any effort made for replacing POSCO as of June 2013.

MoR stated in their reply (June 2013) that the equity contribution from the prospective stake holders could only be firmed up after the finalization of EOI. MoR added that POSCO is the largest potential FDI in India and the grant for mining lease for POSCO for iron ore was recommended by Government of Odisha. MoR further added that the matter of granting license is sub-judice and pending in the Hon'ble Supreme Court of India.

MoR's reply is, however, not acceptable as the reason cited for the delay of 15 months in formation of SPV from the date of signing of the MoU was not justified on the ground that RVNL was mandated to implement project on fast track basis. Further, despite failure on the part of POSCO to obtain mining license within the stipulated period of three years, MoR continued granting extensions instead of exploring other interested private partners.

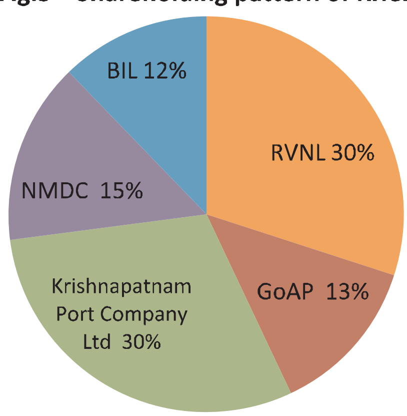
2.4.2 Krishnapatnam Rail Company Limited

New Line between Obulavaripalle - Krishnapatnam (114 Km) was one of the 53 projects considered under NRVY. This connectivity to the port was considered essential for import/export of commodities to and from by the Krishnapatnam Port. Coal constitutes about 75-80 *per cent* of the imports and iron ore constitutes 90 *per cent* of the total export at the Krishnapatnam port. This project was entrusted to RVNL in April 2003. The project cost was estimated as ₹587.50 crore with an IRR of 11.8 *per cent*.

Krishnapatnam Railway Company Limited (KRCL), a SPV was formed in October 2006 for implementing the project. This project was to be funded through equity of ₹270 crore with Viability Gap Funding (VGF) of ₹50 crore, and the balance ₹267 crore through debt financing.

Expression of Interest was invited (February 2006) from strategic investors for 27 per cent shareholding in the SPV. NMDC and Brahmani Industries Limited agreed to participate for 15 and 12 per cent shareholding in April 2006 and February 2008 respectively. The shareholding pattern of KRCL is shown in the pie diagram below.

Fig.5 Shareholding pattern of KRCL



Scrutiny in Audit revealed the following:

i. The project was transferred to RVNL in April 2003 and final location survey was completed in June 2005, after 26 months since the transfer of project. Railway Board sanctioned the project (March 2006) after nine months. The delay was mainly on account of the decision on the ruling gradient of the new line;

ii. Shareholders agreement was signed in October 2006 with 73 *per cent* of the equity share holder. The identification of partners for the balance 27 *per cent* equity was finalised in February 2008 after 18 months of signing of the Shareholder Agreement in October 2006; and

iii. IRR of the project (11.8 *per cent*) was far below the bench mark of 14 *per cent* prescribed by the MoF for viability of the project.

MoR stated (June 2013) that the time taken for detailed technical survey and bankability studies could not be taken as delay. MoR further added that preparation of final location survey took a considerable time as the proposed new line passes through the hilly terrain and dense forest area.

The reply of the MoR is not acceptable in view of the fact that RVNL took unduly long period of 26 months in completing final location survey of the project, which defeats the mandate of formation of RVNL for fast track implementation of the projects. Further, Shareholders Agreement was signed before identification of stakeholders.

Thus, the Shareholder Agreements with PRCL and KRCL were incomplete as the same was executed before finalization of the stakeholders. The modalities for recovery of subordinate debt were not specified in the Shareholder Agreement with HMRDC. Projected IRR for PRCL and VMPL was not realistic as the projects have been suffering loss since commencement of operation. Modus operandi of implementation of VMPL and Kutch Railway Company Ltd was changed from BOLT to BOT without the approval of CCEA. Despite profitability of Kutch Railway project and expressed interest of the stakeholders, IR failed to secure minimum traffic guarantee. IR also could not optimally utilize the shortest route resulting in loss towards extra haulage of traffic through longer route. There was inordinate delay in signing of MoU

Chapter 3 Concession Agreement

Audit Objective 2

To obtain reasonable assurance that the provisions of the agreements pertaining to the concession period, lease rent and transfer payments were complete and clearly defined without any ambiguity.

Concession Agreement is an agreement between MoR and the SPV through which latter acquires the right to Develop, Finance, Design, Construct, Operate and Maintain the railway line, enjoys the rights and benefits etc during the Concession Period. The agreement grants several rights to SPV which inter-alia include:

- Right to receive from MoR, its share of revenue in accordance to the rule of inter-railway apportionment of earnings, of the tariff collected from the freight traffic originating, terminating and moving on the project after deducting operation and maintenance cost;
- Right to commercially exploit the project assets;
- Quantum of transfer payments that are due on completion of the concession period or in the event of termination of the project on account of default by either party; and
- Terms and conditions in respect of leasing of the existing assets, additional assets acquired during the implementation of the project including lease rent to be recovered from the SPV for entire duration of the concession period.

This chapter contains the issues noticed during the review of Concession Agreements including duration of the Concession Period, Lease Agreements and Transfer of Assets.

3.1 Concession Agreement

Concession Agreement is a major document which defines the nature of concession provided to concessionaires. Audit reviewed the Concession Agreements executed by the MoR or RVNL in respect of six projects undertaken by the IR. The details regarding duration of concession period along with the time taken for formation of SPV are indicated in Table 2:

Table 2 –Statement showing the time taken for signing of the Concession Agreement and duration of Concession Period

SPV	Date of formation of SPVs	Date of signing the Concession Agreements	Time taken[12]	Concession period (in Years)
PRCL	May 2000	June 2001	390 days	33
VMPL (SPC)	October 2002	May 2003	180 days	12
HMRDC	July 2003	March 2004	270 days	32
Kutch Railway Co.	January 2004	November 2005	540 days	32
HPRCL	September 2006	December 2007	450 days	30 or less
KRCL	October 2006	November 2007	407 days	30 or less

From the Table above, it is observed that the Concession Period granted to the concessionaires ranged between 30 - 33 years except in case of VMPL where the concession period was for 12 years. Scrutiny in Audit during 2011-13 revealed the following;

i. IR did not adopt any Model Concession Agreement in line with the one prescribed by the Planning Commission for PPP projects in infrastructure sector. MoR opted to develop individual Concession Agreement model on trial and error basis broadly with its experience in case of PRCL. Concession Agreement of PRCL was used as a benchmark for finalising agreement with HMRDC and Kutch Railway Company Limited;

ii. MoR took considerable time for processing and scrutinizing each Concession Agreement resulting in delay in signing of the Concession Agreements. The time gap between formation of SPV and signing of Concession Agreement was in the range of 270 to 540 days.

iii. IRR of the Kutch Railway project and HMRDC was 17.88 *per cent* and 10.5 *per cent* respectively. The concession period granted to Kutch Railway Company Ltd and HMRDC was, however, 32 years. Thus, for two projects with different IRR, identical concession period of 32 years was adopted without adequate justification; and

iv. Date of commencement of the concession period was not mentioned in the Concession Agreement signed with the HPRCL and KRCL. As per the Model Concession Agreement formulated by the Planning Commission for PPP in

[12] Time taken in signing the Concession Agreement has been calculated from the month/year of formation of the respective SPV.

National Highways, Concession Period commences from the date of signing of the Concession Agreement.

MoR while accepting the delay in processing and finalizing the concession agreement stated (June 2013) that IR reviewed the provisions of the agreement executed with the SPVs based on experience of previous SPVs which took some time in finalizing Concession Agreement. MoR also stated that the concession period initially decided (32 years) was not linked to traffic materialization and in subsequent SPVs, a clause was included to adopt 30 years as concession period or till the time the NPV payback (at a discount rate of 14 *per cent*) equal to the equity investment was arrived at, whichever was earlier in case of the future agreements by IR.

The reply of the MoR is not acceptable as the financial prudence inter-alia requires systematic approach of benchmarks with reference to IRR, traffic trends etc. before fixing the duration of the concession period. The basis for adoption of 32-33 years as concession period was not available on record. Moreover, the provisions of the Concession Agreement were static and rigid leaving no scope for any flexibility to equate with the future trend of traffic movement. MoR in their reply admitted that the concession period fixed in the initial agreements in respect of PRCL, HMRDC and Kutch Railway Company Ltd were not linked to traffic materialization. The lacuna in their approach was addressed subsequently by inserting a clause to cap the concession period with upper limit of 30 years of operation from the COD. However, the fact remains that the date of commencement of concession period was not defined as it was to start from COD. This date was also left undefined as the time period for construction was not agreed upon. Thus, the Concession Agreement with SPVs was not complete and lacked clarity.

3.1.1 Kutch Railway Company Limited

Gandhidham – Palanpur gauge conversion project (301 kms) taken up by Kutch Rail Company Limited was completed within the prescribed time frame. It started its operation in December 2006 and recovered the cost of the project within six years. In November 2008, MoR approved doubling of the line in order to derive additional benefits from this project. General Manager (GM), Western Railway, however, made a reference (December 2010) to the Chairman, Railway Board (**Annexure I**) to review the concession agreement as the continuation of the existing agreement severely undermining the earnings of WR as also its Operating Ratio. MoR, however, did not initiate any action on the suggestion of the WR.

On being pointed out by Audit (December 2012), MoR stated (June 2013) that the SPV's share of gross apportioned earning was only about 12 *per cent* of the total originating earning of the IR and it was prudent for Railway to augment line capacity by utilizing funds provided by such SPVs in view of the resource crunch of IR.

The reply of MoR is, however, not acceptable as the concerns raised by GM (WR) were not addressed by IR and the Concession Agreement lacked provisions for review and modification of the terms and conditions of the agreement to safeguard against unforeseen eventualities to protect the financial interest of the IR.

3.2 Lease Rent

The Concession Agreement includes Lease Agreement as a schedule for payment of lease rent on existing assets of the Railways transferred on lease to the SPV. The Concession Agreement provides for handing over / leasing of existing assets[13] available at the project site to the SPV for the entire duration of the concession period. The lessee acquires the existing assets on lease from lesser on payment of annual lease rent to the lessee.

As per Railway Board's letter No. 2001/LML/13/53 dated 04-10-2001 leasing of land to Government Departments on long term basis for a period of 35 years attracts a one-time lump sum payment equivalent to 99 *per cent* of the market value of the land on the date of lease along with an annual license fee of `1000. This order was subsequently revised by MoR vide letter No. 2005/LML/18/8 dated 10-2-2005 which provides for recovery of the amount from lessee at six *per cent* of the market value of the land leased. The deficiencies noticed in the Lease Agreement with the SPVs in respect of completeness of the clauses of the agreement, area of land leased to the SPVs, enforcement of extant orders of IR for leasing of land and recovery of lease rent from the SPVs are discussed below:

3.2.1 Gauge Conversion Projects

3.2.1.1 PRCL

Lease Agreement of the PRCL provides that the annual lease rent is recoverable as percentage of the book value of the assets leased to PRCL. This percentage shall be equal to State Bank of India Prime Lending Rate on the date of execution of the agreement. Chief Engineer (CE), Western Railway (WR) vide his letter No.

[13] Existing assets means (a) original land of the Railway for the project and (b) fresh land acquired by Railway for the project.

W580/12/51Pt III Vol. I (W 5) dated 11-10-2001 (**Annexure II**) to Additional Member /Planning, Railway Board stated that cost of the assets leased to PRCL was ₹44.18 crore instead of ₹14.06 crore as stated in the agreement. The observation of Finance Wing of the WR is reproduced in verbatim;

"The book value of the assets in the matter has been taken as Rs. 44.18 crores by the two member committee on WR. The basis of the Board advising the same as only Rs.14.06 is not clear. Further, no accounts/finance concurrence has been taken for the same. It appears that only the capital at charge portion has been taken which is not backed by the Competent Authority orders"

In view of the above, CE/WR requested MoR to review the position. Scrutiny of records in audit did not reveal any evidence of review in this regard. This resulted in short recovery of lease rent amounting to ₹3.60 crore per annum with effect from June 2001 onwards.

3.2.1.2 VMPL, HMRDC and Kutch Railway Company Limited

As per clause 4.2 of the Lease Agreement with VMPL, HMRDC and Kutch Railway Company, an amount of ₹1000 per annum was recoverable as the lease rent from the SPVs. Audit observed that:

i. In case of PRCL, the lease rent was fixed as a percentage of the book value of assets. MoR in their reply stated that the agreement executed with PRCL was treated as the bench mark for all future agreements entered with VMPL, HMRDC and Kutch Railway Company Ltd. MoR, however, adopted a different standard for fixation and recovery of lease rent from VMPL, HMRDC and Kutch Railway Company Limited violating Railway Board's guidelines of October 2001 and February 2005;

ii. SPVs were also granted the right for commercial exploitation of the land leased to them with effect from commencement of operations on payment of nominal lease rent of only ₹1000 per annum;

iii. In the case of HMRDC, the area of land leased was not clearly mentioned in the Lease Agreement signed in March 2004. Audit calculated[14] that an amount of ₹8.31 crore **(Annexure- III)** as lump sum onetime payment of lease rent was to be recovered from HMRDC on the basis of 310 acres of land acquired for the broad gauge line project.

[14] Calculated at the average market value of land as advised by Revenue Authorities between Hassan and Kankanadi.

iv. The Lease Agreement with Kutch Rail Company Limited was signed in November 2005. Therefore, the MoR's guidelines (February 2005) should have been taken into consideration while incorporating provision in the Lease Agreement for fixing lease rent. The Lease Agreement with Kutch Rail Company Limited, however, provided for recovery of lease rent at the rate of ₹1000 per annum. Moreover, the area of the land leased to Kutch Rail Company Limited was not mentioned in the Lease Agreement.

Western Railway, therefore, raised (March 2008) a demand of ₹4 crore per annum as lease rent due from Kutch Railway Company calculated on the basis of Railway Board's instructions (November 2005). The demanded amount could not be recovered from the SPV in view of the expressed provision of payment of lease rent at the rate of ₹1000 per annum.

3.2.2 New Line Projects

3.2.2.1 HPRCL and KRCL

Clause 4.1 of the Lease Agreement with HPRCL and KRCL provided for recovery of annual lease rent for land as follows:

i.	Original land leased -	As per extant policy of MoR as revised from time to time
ii.	New land acquired -	At the rate of ₹1 per annum

Scrutiny of the Lease Agreement in the case of HPRCL and KRCL revealed the following:

i. The area of land leased to the HPRCL and KRCL was not mentioned in the Lease Agreement;

ii. In case of HPRCL, 924.433 acres of land was leased prior to the date of signing the agreement and only 235.739 acres was acquired after signing of Concession Agreement. Therefore, as per the MoR's guidelines (February 2005), the lease rent due from HPRCL was ₹2.34 crore for the period December 2007[15] to March 2013. This amount was not recovered up to June 2013; and

iii. The land acquisition in case of KRCL was to be completed within six months from the commencement of the project (March 2006) as per project implementation schedule submitted by RVNL to MoR. However, even after lapse of five years from the commencement of the project, only 1116 acres

[15] Month of signing of concession agreement

(44 *per cent*) of land was acquired by March 2011. No further progress in this regard was seen. Against the initial provision of ₹41.85 crore towards the cost of land, an amount of ₹79.50 crore has already been spent.

MoR in reply (June 2013) accepted the audit contention and stated that as suggested by Audit, the matter would be again scrutinized by legal experts to remove ambiguity, if any.

Thus, the Lease Agreements in respect of HMRDC, Kutch Railway Company Ltd, HPRCL and KRCL were incomplete as the crucial information like the area of land leased to the SPV was not mentioned in the agreement. The Lease Agreements provided only nominal lease rent to be recovered from the SPV though the SPVs were permitted to commercially exploit the land. Reasons for permitting commercial exploitation of land to the SPV on nominal lease rent were, however, not available on record.

3.3 Transfer of Assets

The Concession Agreement defines the transfer[16] payments to be made at the time of the normal transfer or in the event of a default by other parties. This agreement specifies transfer payments in case of transfer of assets on completion of the project as mention in Table 3 below.

Table 3 – Statement showing amount payable by Railways in case of normal transfer

SPV	Payment in case of Normal transfer
PRCL	The assets created by PRCL within the project area shall revert back to MoR for the consideration equivalent to the DRV of these assets. The assets leased to PRCL by MoR shall revert back to MoR without any financial consideration
VMPL	Not Applicable as no assets were transferred to the SPV
HMRDC	HMRDC shall be entitled to receive an amount equal to DRV. The existing assets leased to HMRDC by MoR shall revert back to MoR without any financial consideration
Kutch Railway Company Limited	Kutch Railway shall be entitled an amount equal to Book Value. The existing assets leased to KRC by MoR shall revert back to MoR without any financial consideration
KRCL	MoR shall pay to the SPV an amount equal to Book Value. The original existing assets leased to SPV by MoR shall revert back to MoR. The fresh land acquired by MoR and leased to SPV shall also revert back to MoR on payment of an amount equal to the cost of acquisition.
HPRCL	MoR shall pay to HPRCL an amount equal to Book Value. The existing assets leased to HPRCL by MoR shall revert back to MoR and MoR shall pay HPRCL an amount equal to the cost of land, which was financed by KRCL at the time of acquisition of land without any interest.

[16] Normal transfer means the transfer of project as well assets on completion of the concession period, whereas transfer in the event of default means transfer of project in the event of default either by the SPV or by the Railways.

Thus, a uniform policy was not adopted for making payments to SPVs at the time of transfer of the project assets on completion of the concession period. In the case of PRCL and HMRDC, the transfer payment was an amount equal to Depreciated Replacement Value[17](DRV) of the assets as per the agreement. Increase in cost of replacement of assets due to inflation would result in significantly higher expenditure of MoR while taking over the assets after expiry of concession period. This clause was subsequently modified in the case of Kutch Railway Company Ltd, HPRCL and KRCL wherein an amount equal to the book value of the assets was to be paid by Railways as transfer payment.

Transfer payments conditions as specified in the Concession Agreement in the event of termination of agreement due to default by either partners are indicated in Table 4 below:

Table 4 - Statement showing amount payable by Railways on transfer in the event of default by SPV or by Railways

SPV	Payment in case of termination in the event of default	
	SPV's default	**Railway's default**
PRCL	MoR shall acquire all the moveable and immoveable assets of PRCL existing in the Project area at 50 *per cent* of the book value of such assets	PRCL may require the MoR to purchase all the moveable and immoveable assets in the project area for consideration equivalent to • DRV of such assets plus 30 *per cent* of DRV if default occurs within 15 years of COD • DRV of such assets plus 20 *per cent* if default occurs after 15 years but within 25 years of COD • DRV of such assets if default occurs after 25 years of COD
VMPL	An amount equal to the market value of the project assets and facilities created by the concessionaire	An amount equal to the market value of the project assets and facilities created by the concessionaire
Kutch Rail Company Limited, HMRDC, HPRCL and KRCL	MoR shall pay an amount equal to 50 *per cent* of the book value of assets.	MoR shall pay the following as transfer payment: • 130 *per cent* of DRV if default occurs within 15 years of COD • 120 *per cent* if default occurs after 15 years but within 25 years of COD • 110 *per cent* of DRV if default occurs after 25 years of COD

[17] DRV is defined in the agreement as depreciated replacement value of new assets and is the aggregate cost of replacing each asset on Termination Date minus aggregate depreciation on straight line method.

From the Table above, it is clear that in all cases except VMPL in the event of termination due to Railway's default, compensation was to be calculated on the depreciated replacement value of new assets. On the contrary, SPVs were losing only 50 *per cent* of the book value of the assets created by them. Thus, this would result in MoR paying a higher amount as transfer value in the event of termination of the Concession Agreement due to Railway's default. This indicates that the provisions in the agreement were grossly in favour of the SPVs.

MoR in their reply (June 2013) stated that the book value of the assets would be much less after the end of the concession period. MoR further stated that the life of assets is normally taken as 30 years and therefore, the depreciated value in such a case would be nearly zero.

The reply of MoR is not acceptable as MoR has not taken into account inflation and resultant price increase in the replacement value of the assets to be taken over by the MOR at the end of the concession period. Further the improvement element also takes in to account the current value of the renewed assets to the current market value. Therefore, the DRV cannot be zero as assumed by MoR.

3.4 Financial Close

'Financial Close' is a crucial decision for prudent financial management by the SPV for implementing the project economically. Financial close date is the date on which all the funding documents viz loan agreement, guarantees, notes, debentures, bonds and other security agreements provided by the lender are effective. 'Financial Close' implies fulfillment of all the conditions precedent to availability of the funds for the concerned PPP projects under the Financial Document arrangements entered between the concessionaire and the lender. The Model Concession Agreement for PPP projects in National Highways provides for well defined 'Financial Close' provisions with such time lines as agreed between the Concessionaires and the Concessioning Authority.

Audit observed that there was, however, no provision in the Concession Agreements regarding 'Financial Close' except in case of VMPL. 'Financial Close' was not achieved in case of HPRCL and KRCL even after six years of signing of the Concession Agreements. Absence of provision for 'Financial Close' in the Concession Agreements resulted in open ended project cost with undefined interest liability on debt funding.

3.4.1 HPRCL

The project cost of ₹598 crore (2007) was planned to be funded through ₹275 crore as equity contribution and the balance ₹323 crore through debt from financial institution, banks and investors. Subsequently, the project cost increased to ₹1186 crore in 2011 resulting in increase in debt funding to the tune of ₹911 crore.

3.4.2 KRCL

KRCL was constituted in 2006 for implementing the project at an estimated cost of ₹588 crore. The project was to be funded through the share capital of ₹270 crore along with the debt funding of ₹318 crore. The project cost was revised to ₹1203 crore (September 2011) with the increase in debt funding to ₹933 crore.

In absence of provision regarding 'Financial Close' in the Concession Agreement, not only the project cost increased by about 100 *per cent*, the interest liability on debt funding also increased by about two times of the initial proposed debt amount. The increase in project cost is yet to be approved by the SPVs.

While admitting the fact that the Financial Close was not achieved , MoR stated (June 2013) that the problem of land acquisition, environment and forest clearance were the reasons for not achieving the financial close in case of HPRCL and KRCL. MoR also stated that the SPVs had saved substantial financial cost by not borrowing money when it could not have been spent.

Contention of MoR is, however, not acceptable as the reason cited by MoR for not achieving the financial close in case of HPRCL should have been addressed at the planning stage itself before commencement of the project. Further, the contention of the Ministry regarding savings for not borrowing money was not based on logical reasoning as the liability towards debt funding would be inevitable to match increase in project cost.

To sum up, absence of a Model Concession Agreement led to adoption of varying approaches towards fixation of concession period, lease rent and liability of Railways at the time of transfer of assets by the SPVs. Considerable delay was observed between formation of SPVs and signing of the Concession Agreement. IRR and traffic potentiality of the projects was not given due consideration while fixing concession period. Lease rent on account of land leased to the SPVs was fixed without due cognizance to the existing instructions of the Railway Board in this regard. In absence of 'Financial Close' provision in the Concession Agreements, the project cost remained open ended with increased cost of debt. This indicates that the provisions laid down in the agreement were incomplete and not clearly defined.

Chapter 4 Project Execution and Maintenance

Audit Objective 3

To obtain reasonable assurance that the project management including execution of Traffic Guarantee Agreement was efficient.

Successful implementation of a project through concessionaires depends upon the clear formulation of terms and conditions of the execution of project with reference to the objectives that the Concessioning Authority intended to achieve.

RVNL was mandated to implement railway infrastructure projects on fast track basis in a timely and cost effective manner with its superior project management practices. A Memorandum of Understanding (MoU) was signed (October 2003) between MoR and RVNL. The MoU allowed RVNL to create project specific SPV or any other financial structure considered suitable for a particular project. The SPV envisaged equity participation of RVNL and strategic partners. The funds required for the projects were to be raised through market borrowings.

This Chapter broadly covers the issues relating to implementation of the project, performance of the SPV in timely execution of projects, allocation of risks between the concessionaires and the executing authorities including lacunae in project monitoring.

Audit findings pertaining to Gauge Conversion and New Lines projects are discussed below:

4.1 Gauge Conversion Projects

Gandhidham – Palanpur gauge conversion project (301 kms) was taken up by Kutch Rail Company Limited. The project was completed within the prescribed time frame and started its operation in December 2006. The entire cost of the project was recovered within six years as the project was considered profitable with assessed IRR of 17.88 *per cent*. Considering the quantum of generation of revenue from the project MoR approved (November 2008) doubling of the line in order to derive additional benefits from this project. General Manager, WR, however, did not agree to continue the existing agreement as it would adversely affect the earnings of WR. General Manager, WR made a reference to the Chairman, Railway Board vide his letter No. FA/T/Kutch/KRCL dated 20th December 2010 (**Annexure I**).The suggestions of GM, WR is reproduced in verbatim:

i. Take the legal and financial opinion on the provisions of the Concession Agreement for termination of the said agreement under clause 8.2 for taking over the assets of the company.

ii. Seek a revision of the Concession Agreement which would put a 'CAP' on the return on equity. This could also be translated into a ceiling on the revenue share which needs to be remitted by Western Railway to KRCL. Railway Board has already laid a stipulation in their policy of SPVs vide circular No. 2008/PL/9/16 dated 20th July 2010 that the assets created by SPVs would revert back to MoR once the company attains a return on capital of 14 *per cent* per annum.

MoR, however, did not initiate any action on the suggestion of the WR.

4.2 New Line Projects

4.2.1 HPRCL

The Construction Agreement between RVNL and HPRCL was signed in August 2009. As per the agreement, RVNL would complete the project within a mutually agreed date. The Concession Agreement was signed (December 2007) by the SPV.

Audit scrutiny revealed that:

i. Target date for completion of the project was not mentioned in the agreement. MoR allowed RVNL to proceed with the construction work even before signing of the Concession Agreement;

ii. Though 70 *per cent* land required for the project was already available by 2006, construction of the line, however, could not be completed even after six years of signing of the Concession Agreement. Progress of the project was only 17 *per cent* till March 2013;

iii. The original estimated (2006) project cost of ₹598 crore was revised to 1186 crore (98 *per cent* increase). Reasons for substantial increase in estimated cost could not be established as the revised cost was not approved by the SPV.

iv. A private company named Dhamra Port Company limited' (DPCL) constructed a 62.5 km new rail line from Bhadrak to Dhamra within four years (2007-11). This line is parallel to the proposed new line to be constructed by HPRCL. DPCL is transporting coal, iron ore etc. HPRCL project was also conceived for transporting these commodities. Therefore, the existing private line would definitely affect the performance of HPRCL's project in future.

MoR in their reply (June 2013) stated that the work in case of HPRCL could not progress due to local agitation and failure of the contractor resulting in termination of the contract. MoR also added that the delay in the implementation of the project was not under the control of the SPV or RVNL or the MoR.

The reply of MoR is not acceptable as DPCL work was completed under identical socio-economic conditions as the HPRCL. DPCL acquired the required land for its project during the contemporary period of HPRCL. Therefore, the slow progress of HPRCL project was indicative of ineffective project management.

4.2.2 KRCL

The Construction Agreement was signed between RVNL and KRCL in September 2011. As per Clause 7.3.1 of the agreement, RVNL shall complete the work within the mutually agreed date. The mutually agreed Commercial Operations Date (COD) was decided as 31/12/ 2014. Though the Phase I of the project (Krishnapatnam - Venkatachalam ,23 kms) was completed in July 2009, Phase II (Venkatachalam – Obulavaripalle, 91 kms) is still under progress with only 39 *per cent* of the project completed up to March 2013 as only 44 *per cent* of required land could be acquired.

Scrutiny of records revealed that the COD was fixed in September 2011 nearly five years after initiation of construction work in 2006. However, no target dates for completion of a particular section on this project line were specified. It was observed that the estimated cost of the project escalated by 105 *per cent* from ₹587.50 crore to ₹1203 crore (February 2011) mainly on account of increase in the cost of major bridges, permanent way works including materials etc. Delays on account of land acquisition also resulted in escalation of cost of project. The impact of delays in land acquisition could not be quantified by audit as the revised cost was yet (June 2013) to be approved by the SPV.

4.3 Operation and Maintenance

Operation and Maintenance (O&M) Agreement is executed with the SPV for nominating the concerned Zonal Railway Administration for operation and maintenance of the project. While the operations would inter-alia include all activities associated with freight train movements, loading /unloading of freight, storage and security of the consignment etc. The maintenance generally refers to standard maintenance procedures as adopted by the Indian Railways for smooth running of the project. The SPV is required to pay O&M cost to the Zonal Railway Administration. While no Operation and Maintenance Agreement was executed in case of HPRCL, the same was not required in case of VMPL as the project was executed on BOT mode. Provision laid down in the Operation and Maintenance Agreement for deferring overhead charges in case of other four projects is mentioned verbatim in Table 5 below:

Table 5 – Provisions for deferring recovery of overhead charges

SPV	Overhead Charges
PRCL	Western Railway shall defer the recovery of overhead on O&M cost for the first 5 years of operation of the line and the same will be fully recovered in five years from 11th year onwards.
HMRDC	South Western Railway shall defer the recovery of overhead charges on O&M cost for the first 10 years of operation of the line and the same shall be fully recovered in a period of 20 years commencing from the 11th year of operations.
Kutch Railway Company Ltd.	Western Railway shall defer the recovery of overhead charges on O&M cost for the first 10 years of operation of the line and the same shall be fully recovered in a period of 20 years commencing from the 11th year of operations.
KRCL	South Central Railway will defer the recovery of overhead cost on O&M cost for the first 5 years of operation of line and same will be fully recovered in a period of 10 years commencing from the 6th year of operations.

Scrutiny of the provisions laid down in the agreement for deferring overhead charges revealed the following:

i. Uniform approach was not adopted for recovery of overhead charges from the SPVs. In case of PRCL and KRCL, recovery of overhead charges were deferred for 5 years and the same was deferred for 10 years in case of HMRDC and Kutch Railway;

ii. In case of PRCL and KRCL, recovery of overhead charges was spread over a period of 10 years and the same was to be recovered from HMRDC and Kutch Railway over a period of 20 years;

iii. In case of HMRDC, CCEA approved deferring of recovery of overhead charges for five years. The provision laid down in the agreement, however, specified deferring of recovery of overhead charges for ten years. The circumstances leading to the decision of deferment for 10 years instead of five years as approved by CCEA was not available on record; and

iv. PRCL and Kutch Railway Company with higher IRR of 14.61 and 17.88 *per cent* respectively recovered the project cost during first six years of their operations. Despite profitability of these projects, the recovery of overhead charges was, however, deferred for 10 years.

The reply (June 2013) of MoR was silent for not adopting uniform approach for deferring and recovery of overhead charges from the SPVs. In case of HMRDC, MoR stated that CCEA approved deferring overhead charges for the first five years, which would be recovered between 11^{th} to 15^{th} years. MoR further stated that the Business Plan of HMRDC annexed with the Cabinet Note provided for deferment of overhead charges for 10 years.

The reply of the MoR is, however, not acceptable as the CCEA approved (April 2003) deferment of recovery of overhead charges for only five years in case of PRCL. This benchmark of CCEA was not adopted uniformly while executing agreement with other SPVs. Deferring overhead charges for additional five years in case of HMRDC was in violation of CCEA's approval.

4.4 Traffic Guarantee Agreement

Traffic Guarantee Agreement is an agreement executed with the SPV for ensuring minimum traffic and revenue thereof. MoF prescribed that the projects with IRR more than 14 *per cent* qualifies for viability of projects. The critical element that determines the IRR of a project is the estimated traffic likely to be generated on implementation of the project. Traffic Guarantee Agreement, therefore, assumes significance in achieving the intended objectives of PPP projects.

Scrutiny of Traffic Guarantee Agreements revealed the following:

i. Out of six projects examined, Traffic Guarantee Agreement was executed only in the case of PRCL and HPRCL. Reasons for non-execution of Traffic Guarantee Agreement with the VMPL, HMRDC, Kutch Railway Company and KRCL were not placed on record; and

ii. Agreement in case of PRCL and HPRCL was incomplete as it did not provide for revision of minimum quantum of guaranteed traffic once the targeted traffic volume was achieved. Agreement did not provide for safeguard of Railway's interest to take care of unforeseen growth of traffic as was observed in case of PRCL where no further revision of the minimum traffic guarantee could be carried out despite the target set[18] for traffic volume were achieved during the eighth year of operation of the project.

4.4.1 Penal Provisions

Penal provisions are incorporated in the Traffic Guarantee Agreement to ensure materialization of projected yield from the project. The provision specifies the financial liability of Railways as well as the SPVs in the event of shortfall in achieving

[18] Traffic guaranteed for PRCL for the first, second year and balance thirty one years from third year onwards was one, two and three million tonne respectively

the desired traffic. The penal provisions laid down in Traffic Guarantee Agreement executed so in case of PRCL and HPRCL is indicated in the Table 6:

Table 6 – Penalty clause in the Traffic Guarantee Agreement

PRCL	HPRCL
A. In the event of offeror's default The compensation payable by GPPL shall be equal to the Rate per tonne kilometre multiplied by 264 kms (total length of the railway project) multiplied by shortfall quantity minus the Variable Costs pertaining to the shortfall quantity. **B. <u>In the event of Railway's default</u>** Amount equal to the Rate per tonne kilometre multiplied by Deemed Freight Traffic (DFT[19]) multiplied by 264 kms minus the Variable Costs pertaining to the shortfall quantity.	**<u>Penalty in the event of default by either party</u>** • Up to 10 *per cent* of Annual Scheduled Quantity (Asq) - No penalty; • Shortfall between 10 and 20 *per cent* of the Asq – 25 *per cent of* freight charges on the shortfall quantity exceeding 10 *per cent* of Asq; • Shortfall above 20 *per cent* of the Asq – (i) 40 *per cent of* freight charges on the shortfall quantity exceeding 20 *per cent* of Asq; (ii) 25 *per cent of* freight charges on the shortfall quantity between 10 and 20 *per cent* of Asq.

Audit observed that the penal provisions in case of PRCL were complex as the determination of DFT and variable cost on shortfall quantity are vulnerable to dispute on account of assumptive factors that are taken into consideration for quantifying the penalty in absolute financial terms. In case of HPRCL, the project being at construction stage, rationality of the penal provisions could not be verified in Audit.

MoR stated (June 2013) that the traffic guarantees were not easily available and obtained through hard negotiations. Contention of the MoR is not acceptable as the basic objective of IR to opt for private participation in railways' infrastructure projects was not only to augment its network but also to enhance its share on the growth of traffic and revenue earnings thereof. The approach of IR in making investment jointly with other stakeholders without ensuring return on investment particularly in case of profitable projects such as HMRDC, Kutch Railway Company and KRCL (Phase I) lacked adequate justification.

4.5 Monitoring

Monitoring of the project is essential to ensure that the project is completed within the prescribed target date. As per the provisions contained in the Concession Agreement, each SPVs/SPC was required to furnish to MoR an Annual Report on its performance under the agreement. In addition, the Construction Agreements

[19] DFT- If any indents of the party (PRCL) are withdrawn after pending as free indents for 240 hours before supply of wagons, the quantity of freight tonnage that would have accrued to the party had indents for 240 hours been supplied is the Deemed Freight Traffic.

provided for formation of a Construction Progress Review Board (CPRB) consisting of four members representing the main stakeholder/partners of the SPVs. As per the agreement, Zonal Railways[20] /RVNL[21] shall prepare and submit a monthly progress and financial report to the SPV with a copy to CPRB regarding physical and financial progress of works. CPRB was expected to review the progress of project on monthly basis in the form of monthly reports and also to issue necessary instruction or to take corrective action for timely completion of the project.

Scrutiny of records relating to monitoring of progress of projects revealed that though the annual progress reports were furnished to MoR, there was no document/record to confirm that the CPRB monitored the progress of the projects regularly on monthly basis or proposed any remedial follow up action as and when required. The role of MoR for monitoring the performance of projects was not specified in the Concession Agreement executed with the SPVs/SPC. Thus, ineffective monitoring mechanism resulted in time and cost overruns particularly in respect of the two New Line projects namely HPRCL and KRCL.

Matter was brought to the notice of the MoR in December 2012. The reply of MoR on the issue was not received (June 2013).

Thus, in absence of targets, progress of the project was only 17 and 39 per cent respectively, which resulted in cost escalation in case of HPRCL and KRCL. Uniform approach was not adopted while fixing periods for deferring overhead charges and in case of HMRDC, approval of CCEA for deferring of overhead charges was violated. Despite projected profitability of the projects such as PRCL and Kutch Railway Company Limited, the recovery of overhead charges was deferred for longer duration. Traffic Guarantee Agreement was not executed in four projects despite expressed interest of the stakeholders. Traffic Guarantee Agreement executed with PRCL and HPRCL did not provide for safeguard of Railway's interest in the event of unforeseen growth of traffic in future. Penal provisions for shortfall in achieving minimum guaranteed traffic were complex. Lack of effective monitoring was observed in case of HPRCL and KRCL where RVNL was the executing agency.

[20] PRCL (WR),VMPL(WR), HMRDC (SWR) and Kutch Railway Company Limited(WR)

[21] KRCL and HPRCL

Chapter 5 Conclusions and Recommendations

5.1 Conclusions

Indian Railways (IR) is the third largest network in the world transporting about 40 *per cent* of the freight traffic in the country. IR, however, experienced continuous and precipitous erosion in the share of railway freight traffic. The market share of IR in freight sector has declined substantially though the freight traffic of IR witnessed encouraging growth during the last two decades. Significant investments were required for augmenting the existing capacity conforming to the sustained growth of traffic. Realizing the resource gap between the requirement and availability of funds, IR initially started market borrowing through Indian Railway Finance Corporation (IRFC). Subsequently, IR launched schemes to supplement investment in partnership with private players for specific projects to develop port linkages. PPP is one of such initiatives to develop infrastructure in Railways.

The study of the approaches of the IR towards PPP initiative reflects that the IR resorted to PPP primarily to bridge the resource gap for financing its projects and also to develop the existing infrastructure. Resource constraint played a vital role rather than these routes being a more efficient and cost effective service delivery mechanism. IR initiated eight PPP projects comprising five gauge conversion and construction of three new lines since 2000. All the projects were considered economically viable except HMRDC and KRCL where the estimated IRR was less than the benchmark of 14 *per cent* prescribed by the MoF.

Shareholder Agreements with PRCL and KRCL were incomplete as the same were executed before finalization of the stakeholders and the modalities of recovery of subordinate debt were not specified in the Shareholder Agreement. Assessment of IRR was not realistic in all cases as was observed in case of PRCL and VMPL where the projects suffered losses since commencement of operation. Mode of implementation of VMPL and Kutch Railway projects was modified without the approval of CCEA. Modified approach adopted for implementing VMPL project resulted in additional financial burden of ₹127.88 crores to the SPC as access charges over a period of 12 years.

IR failed to secure minimum traffic guarantee in respect of Kutch Railway Company Limited though the project was conceived at the expressed interest of the stakeholders. Further, under-utilisation (42 *per cent)* of the shortest route (Gandhidham-Palanpur) resulted in avoidable loss on account of haulage charges due to diversion of traffic through 133Km longer route.

IR did not formulate any Model Concession Agreement for execution of the projects within the stipulated time frame, nor did it adopt the model prescribed by the Planning Commission for PPP projects in infrastructure sector. Absence of Model Concession Agreement led to adoption of varying approaches towards fixation of concession period, lease rent and liability of IR at the time of transfer of assets by the SPVs. Incorporation of incorrect book value of assets in the lease agreement of PRCL led IR to sustain loss of ₹3.60 crore per annum towards lease rent. IRR and traffic potentiality of the projects was not given due consideration while fixing concession period. Extant instructions of Railway Board were also not given cognizance in deciding lease rent for the area of land leased to the SPVs. IR could not freeze the project cost and debt liability in absence of 'Financial Close' clause in the Concession Agreements.

Progress of the HPRCL project was only 17 *per cent* resulting in escalation of project cost by 100 *per cent*. Delay was also observed in KRCL project (Phase II) where 39 *per cent* progress was recorded.

Prescribed period for deferring overhead charges was not uniform for all the projects and the reasons for adopting different duration was not available on record. Duration for recovery of overhead charges was not fixed with reference to the projected profitability of the projects such as PRCL and Kutch Railway Company Limited. CCEA's approval for deferring overhead charges in case of HMRDC was ignored. The agreement provided for deferring overhead charges for ten year instead of five years as approved by the CCEA.

Traffic Guarantee Agreement was not executed in respect of VMPL, HMRDC, Kutch Railway Company Limited and KRCL despite the expressed interest of the stakeholders. Traffic Guarantee Agreement executed with PRCL and HPRCL did not provide for revision of provisions in the event of unforeseen growth of traffic in future. Penal provisions for shortfall in achieving minimum guaranteed traffic were complex. Provisions laid down in the agreement executed with the SPVs were rigid with little scope for any revisions. Lack of effective monitoring was observed in case of HPRCL and KRCL where RVNL was the executing agency.

5.2 Recommendations

I. *IR needs to frame a Model Concession Agreement for execution of its projects with in the stipulated time frame adopting uniform approach to all PPP projects in IR. The provisions of the agreement need to be complete and clearly defined with requisite safeguards to address any unforeseen event during the concession period. Provisions of the Agreement should also conform to the extant instructions issued from time to time by the MoR and other statutory authorities of Government of India;*

II. *IR needs to resort to calling of Expression of Interest for selection of all equity partners other than principal stakeholder. IR should ensure securing minimum traffic guarantee from the principal stakeholder;*

III. *Adequacy and accuracy of data/information including assumptions needs to be exhaustively analysed for assessing IRR in order to judge the economic viability of the project ;*

IV. *IR needs to streamline the project approval process, formation of SPVs and signing of requisite agreements in a time bound manner to avoid delay in completion of projects;*

V. *Definite time line needs to be framed for achieving 'Financial Close' by the SPVs to discourage subsequent modification of the scope of the project and enhancement of project cost. Adequate care needs to be taken for realistic assessment of the project cost to reduce debt financing; and*

VI. *IR needs to strengthen its monitoring mechanism for effective monitoring of all PPP projects both at the Zonal Railway as well as Railway Board level.*

Vijaya Moorthy

(VIJAYA MOORTHY)

New Delhi **Deputy Comptroller and Auditor General**

Dated: 24 February 2014

Countersigned

(SHASHI KANT SHARMA)

New Delhi **Comptroller and Auditor General of India**

Dated: 28 February 2014

ANNEXURE - I

R. N. Verma
GENERAL MANAGER

WESTERN RAILWAY
CHURCHGATE, MUMBAI - 400 020

D.O.No.FA/7/Kutch/KRCL

20th December, 2010.

Dear Shri Sehai,

Sub: Apportioned freight traffic earning of Western Railway – Concession Agreement with KRCL.

Please refer to my D.O letter no.HQRS/Action Plan dt. 17.12.10 wherein I had given the full analysis of the apportioned earnings and the operating ratio of this Railway. I had indicated that I will bring out an analysis on the concession agreement of KRCL and the modifications needed in the concession agreement.

I have had a detailed analysis conducted and the same is enclosed for your appreciation with a request that suitable directions may be given to the concerned directorate to consider this analytical report for further necessary action.

In a nutshell, I would like to summerise that this Railway requests the Board to consider taking action on the following aspects of KRCL agreement:-

i) Take the legal and financial opinion on the provisions of the Concession Agreement for termination of the said agreement under Clause 8.2 for taking over the assets of the Company.

ii) Issue a presidential directive to the RVNL to liquidate the company since they are the lead stake holders and promoters of KRCL.

iii) Seek a revision of the Concession Agreement which would put a "CAP" on the <u>return on equity</u>. This could also be translated into a ceiling on the revenue share which needs to be remitted by W.R. to KRCL. Railway Board has already laid down a stipulation in their policy of SPVs vide circular no.2008/PL/9/16 dt.20/07/2010 that the assets created by SPVs would revert back to MOR once the Company reaches a return on capital of 14%p.a.

iv) Presidential directive should be issued by MOR to RVNL for payment of deferred O&M Cost considering the profit of the company. The deferment was to provide financial cash flows in the initial stages. This logic definitely does not hold true anymore so far as KRCL is concerned.

Any proposal of doubling of the KRCL segment needs to be viewed in the above light. It would be appropriate to seek a review of the Concession Agreement on account of the reasons given in the detailed note annexed to this letter.

I am sure you will appreciate that when a Zonal Railway runs a line, it has to make some profit but in the case of KRCL line, W. Railway is getting only the O&M cost and surrendering the apportioned earnings totally and even for GIM-SIO line, the apportioned earnings now go to KRCL as all the loaded traffic from GIM move via KRCL line, it being nominated as up line.

I would further like to stress here that continuation of the existing agreement is going to severely undermine the earnings of W.R. as also its Operating Ratio. Even accepting that the increase in through-put for MOR as a whole arising out of KRCL operations would be beneficial, there cannot be any doubt that the profitability of KRCL would continue to increase significantly at expense of Indian Railways in general and Western Railway in particular with the final transfer of these profits to MOR being very meagre in comparison. I am sure that this windfall gain to KRCL was never intended and therefore needs to be appreciated by the Board for corrective action.

It is my earnest submission that this matter may be examined threadbare with utmost urgency since it has significant long term financial implications for Western Railway in particular and Indian Railways in general.

With best wishes,

Encl: Annexure

Yours sincerely,

(R.N. VERMA)

Shri Vivek Sahai
Chairman,
Railway Board,
New Delhi.

ANNEXURE II

Western Railway

No.W 580/12/51 Part III Vol.I(W5)

Headquarter Office,
Churchgate,Mumbai-400 020
Dt:11.10.2001

Additional Member (Planning),
Railway Board,
New Delhi 110001.

Sub:- Lease rental to be collected from PRCL.
Ref:- ED(PP),Rly.Bd's letter No.94/W-I/NL/W/G/ASBY/Survey dt.14.8.2001.

ED(PP) vide above quoted letter has communicated approval of the Hon'ble Minister of Railways as a part of the concession agreement with the newly formed PRCL for leasing out the existing assets and newly acquired land to PRCL. As per article 4.2 the rates to be charged as follows:-

"The annual lease rental shall be percentage of the book value of the leased assessment which has been assessed at Rs.14.06 crores for the existing assessment and Rs.2.4 Crores for the land freshly acquired totaling to Rs.16.46 crores. These percentage shall be equal to the State Bank of India's prime lease rate on the date of execution of this deed."

In this connection it is advised that the basis for the book value of Rs.14.06 crores has not been advised by Railway Board and the same appears to be on lower side. As per cabinet note para 4.2.3, which was received vide your D.O.No.94/W-I/NL/W/G/ASBY/Survey/J dt.12.3.2001, directs that the existing assessment will be valued in terms of their historical book value (gross block) which will be derived on a proportionate basis from the total value of the MG assessment of Western Railway for want of any better method.

On perusal of the cost of the existing assets of Rs.14.06 crores as communicated by ED(PP)/RB vide above quoted letter, it is felt that the cost is on much lower side and the cost will be of the order of Rs.44.18 crores, which can be calculated from the data communicated by GM vide letter of even no. dt.10.4.2001. However the calculations are enclosed for ready reference which may be examined.

FA&CAO(F&B) while examining the contents of the above letter has remarked verbatim as under :-

"The book value of the assets in the matter has been taken as Rs.44.18 crores by the two member committee on W.Rly. The basis of the Board advising the same as only Rs.14.06 is not clear. Further, no accounts/finance concurrence has been taken for the same. It appears that only the capital at charge portion has been taken which is not backed by the Competent Authority's orders."

Since the book value is on the lower side as such the Board is requested to kindly review the position and advise the necessary corrections to the cost keeping in view above.

Encl: As above

M.S.Ekbote
(M.S.Ekbote)
Chief Engineer.

1) FA&CAO(F&B) } for information.
2) CAO(C)CCG }

Annexure III

Calculation showing the one time lump sum payment due as lease rent from HMRDC in terms of MoR's orders of October 2001

A. Width of BG formation=6.85 Mtrs

B. Length of the line=183 Kms or 183000 Mtrs.

C. Therefore the area of land required =6.85 X 183000-1253550 Sq. Mtrs.

D. Average Cost of land based on the rates as advised by Revenue Authorities for the year 2005 =₹` 74 per Sq.Mtr[1]

E. Cost of land in 2004=Cost of land in 2005 reduced by 10 per cent =₹ 67 per Sq. Mtr

F. Thus, total cost of the land leased =1253550 X 67=₹ 83987850

G. 99 per cent of the cost of land =₹ 83147971 say ₹ 8.31 crore

Thus, one time lumpsum payment required to be recovered as lease rent from HMRDC=₹ 8.31 crore

Note:-
As per Railway Board's letter No. 2001/LML/13/53 dated 04-10-2001 leasing of land to Government Departments on long term basis for a period of 35 years attracts a onetime lump sum payment equivalent to 99 per cent of the market value of the land on the date of lease along with an annual license fee at a nominal amount of ₹ 1000 for land leased to Government Departments or Undertakings.

[1] Calculated at the average market value of land as advised by Revenue Authorities between Hassan and Kankanadi