



## Lessons from PPPs of Indian Railways and Way Forward

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### Abstract

*The Indian Railways (IR) have grand plans. They would like to leapfrog to a higher growth trajectory during 2010-20. Towards this, they would like to see a total investment of Rs 14,00,000 crores (cr), as stated in the Vision 2020, brought out by the Ministry of Railways (MoR) in December 2009. With whatever level of optimistic projections for the internal resources and borrowings for the coming decade, clearly, PPPs would have to be a significant source. This makes it imperative for the IR to create a policy framework that would attract PPPs, especially in the context that the PPPs in IR have not taken off as projected.*

*This paper reviews PPP projects that the IR has evolved over the past 25 years. These include operating partnership projects of IR including with the state government, PPPs in the pipeline, and discontinued partnership projects in IR.*

*The paper brings out issues that have implications for PPPs in IR. The significant ones are focus on infrastructure creation PPPs rather than service PPPs, partner selection more contextually based than through open competitive bidding, more than acceptable time lags between conceptualization and project execution, issues in extending the project scope, non mutuality in contractual arrangements, and conflict of interest due to multiple roles of IR.*

*Based on these issues, the paper derives certain key lessons and provides a way forward.*

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## Lessons from PPPs of Indian Railways and Way Forward

### Financing Indian Railways

1. The Indian Railways (IR) have grand plans. They would like to leapfrog to a higher growth trajectory during 2010-20. Towards this, they would like to see a total investment of Rs 14,00,000 crores (cr), as stated in the Vision 2020, brought out by the Ministry of Railways (MoR) in December 2009 [MoR, 2009 (a) Exhibit 1]. Though it is not explicitly stated in the document, we assume that this is based on *current prices*, which is how all the IR figures are presented and even added.

The budgeted investments have just reached Rs 41,000 cr for 2010-11. Under a practical scenario (A), assuming (i) a quadrupling over the 10 year period (like it happened in the previous decade), and (ii) a linear increase to Rs 164,000 cr in 2019-20 would amount to a total investment of about Rs 10,00,000 cr *at current prices*. Under the envisioned scenario (B), to achieve a total investment of Rs 14,00,000 cr, the investment in the terminal year should reach nearly Rs 2,40,000 cr, ie a six fold increase. This would imply an average annual increase in investment of at least Rs 22,000 cr. *The total investments in scenarios A and B at the 2006-07 prices, assuming a 5% annual inflation rate, would be Rs 6,50,000 cr and Rs 8,75,000 cr respectively.*

2. This number has to be viewed in the context of the projections made by the Planning Commission (PC) for the infrastructure sector during the XII Plan (2012-17), which is Rs 41,00,000 cr *at 2006-07 prices* [PC, 2010]. Assuming that we can double this for the 10 year period (2010-20), the total infrastructure investment would be Rs 82,00,000 cr. Based on the actuals of the X Plan (2002-07) and the revised estimates for the XI Plan (2007-12), the investment for the head 'Railways (incl MRTS)' as a share of total infrastructure investment has been at around 10%. Considering a marginal step up in the share, while at the same time excluding the Mass Rapid Transit System (MRTS) outside the IR, the IR investments could continue to remain at a net of 10%. This would be Rs 8,20,000 cr *at 2006-07 prices* during 2010-20.

It appears that the scenario of the Vision 2020 document is achievable, provided the financing is as envisioned to include internal resources, budgetary support, and borrowings and Public Private Partnerships (PPP).

### PPPs: An Imperative for IR

3. The MoR expects a budgetary support of Rs 5,00,000 cr towards the total decadal investment of Rs 14,00,000 cr. Of the remaining Rs 9,00,000 cr, it remains to be seen how much will be through internal resources, 'prudent' borrowings and PPPs. The X Plan actuals had a total investment of Rs 85,000 cr, of which budgetary support contributed Rs 38,000 cr, and internal resources contributed Rs 30,000 cr (Exhibit 1). Of the remaining Rs 17,000 cr, nearly Rs 16,700 cr had come in through market borrowings through the Indian Railways Finance Corporation (IRFC) and the balance Rs 300 cr

through PPPs [MoR, 2008]. *With whatever level of optimistic projections for the internal resources and borrowings for the coming decade, clearly, PPPs would have to be a significant source. This makes it imperative for the IR to create a policy framework that would attract PPPs.*

4. The Vision 2020 document said the following on PPPs:

“To achieve the mammoth task Railway has set itself, it has to concentrate on its core activity of creation of railway infrastructure and operations and forge partnerships with private sector to do the rest. The challenge of project execution and efficient provision of service can not be accomplished without involving private sector in a big way. However, the activities and projects to be opened for private participation have to be carefully selected and structured for their amenability to market-based incentives and smooth execution. Several areas currently identified for execution through PPP such as redevelopment/development of world-class stations, high-speed corridors, setting up of Multi-modal Logistics Parks, Kisan Vision projects, expansion and management of the extensive network of Optical Fibre Cables (OFCs) and big infrastructure projects like new lines and Dedicated Freight Corridors, rolling-stock manufacturing units, Multi-functional Complexes at stations and port connectivity projects would need to be developed and awarded on a mission mode. To be able to do so, Railways would have set up dedicated project organizations who would work with model documents and streamlined procedure within the framework determined by Government of India.”

5. The justification for this comes primarily from the resource mobilization argument. To quote the Vision 2020 document,

“A high-growth strategy would require massive investments in capacity creation, network expansion and upgradation. Annexure-II (of the Vision document) shows a list of capacity enhancement and railway modernization works and a very rough assessment of the investment programme needed to support the achievement of the goals of the Vision. Tentatively, it has been estimated that around Rs 14,00,000 cr over the next 10 years (ie up to the year 2020). Of this, most of the investment for world-class stations and high speed corridors could be mobilized through Public-Private Partnerships. A sizeable part of the investment required for port connectivity projects, setting up of electric/diesel locomotive manufacturing units and new coach manufacturing units could also be mobilized through private sector participation by SPV or Joint Venture (JV) route. Metropolitan Transport Projects and some of the new line projects could be taken up with partnerships with the state governments. Public Private Partnerships could also be used in setting up of private freight terminals, logistics parks, wagon investment schemes and licensing of freight service operators who would bring in specialized rolling stock and new terminals. Railways can also borrow within prudent limits through IRFC.”

6. While the resource mobilization argument for PPPs is important, it is equally important to keep in view the customer oriented value that PPPs can bring in, due to their entrepreneurial and managerial energy. This is best demonstrated in the Indian telecom sector, whose recent phenomenal growth has been driven by the private sector under a PPP framework. Given the slow growth rates until the 90's with long waiting lines for connections, the sector was opened up with new policy frameworks in 1999. The target overall teledensity that was envisaged then for December 31, 2010 was 15%, with rural teledensity at 4%. The achievements have far outstripped the targets. As of January 31, 2010, the overall teledensity was 49.5%, with rural teledensity at 21.2% [DoT, 2010]. India is the fastest growing telecom sector in the world, and the second largest wireless telecom network after China. To top all this, the Indian telecom sector offers the lowest tariff in the world. India is set to become a global telecom manufacturing hub. Indian service providers have started moving into global markets.

*All this in the telecom sector can be attributed to a proactive PPP policy that shifted the focus from delivery in the government domain to the private domain with competition, and a clear unbundling of roles of licensing, regulation, and operations.*

### **PPPs in IR: Yet to Take Off**

7. The PC has estimated the public and private investments across all infrastructure sectors for the X and XI Plan (Exhibit 2). For the head 'Railways (incl MRTS)', out of the actual total investments of Rs 102,091 cr in the X Plan, public investment was estimated at 101,422 cr and private investment at Rs 669 cr. It has to be noted that the borrowings from the IRFC of nearly Rs 16,700 cr is included under public investment. Of the Rs 669 cr private investment, the PPP component for IR is about Rs 300 cr, as already stated in para 3 of this document, and the balance is from the MRTS.
8. For the XI Plan, original projections for the total infrastructure sector had estimated the private investment share to be about 30%. As a part of the mid-term appraisal, the PC has estimated the investment in the first two years of the plan ie 2007-08 and 2008-09 and revised the projections for the entire plan period. As per the revised projections, private investment share in infrastructure has increased to 36%. This has been a result of increased private participation in the significant sectors of electricity and telecom. In the case of 'Railways (incl MRTS)', however, the projections show a different trend. As per the original estimates, the private investment share was about 19%. The revised projections indicate only 4% investments coming from the private sector. This is a sharp decrease from the original 19% estimate. While PPPs in the MRTS sector have not lived up to their expectations, *the more significant implication is that the PPPs in IR have not taken off as projected.*

### **PPPs in IR: A Brief History**

9. Historically, since 1853, railways in India developed through private enterprise. However, there was a PPP element to them with government providing free land and a guaranteed rate of interest between 4.5 to 5.0% [Jain, 2007]. Over the years, driven by the importance of railways to the colonial administration, the stakeholding of the government went up in terms of 'ownership,' oversight of contractual elements, reduced interest guarantee, and increased revenue share. A large number of PPP models came into play. In 1921, the Acworth Committee recommended that the state should take direct responsibility of development and management of railway system. Consequent to this, but for a few railway lines, all the private railway systems were 'nationalized,' as and when the contracts expired. This was the government run railway system that we inherited on Independence, after which, in the 1950s, there was reorganization into eight large zones for operational reasons. With a couple of subsequent reorganizations, the IR today constitutes 16 railway zones, seven independent manufacturing units, five associated units and 13 corporations.
10. Since Independence, all railway projects, manufacturing and operations were solely developed and managed by the MoR through internal resources and budgetary support. Private parties were involved significantly in construction, wagon manufacturing, stores

and component supplies, and catering, through a tendering process. Freight end users could have their own sidings for captive use, and engage handling contractors for loading and unloading even at railway terminals. An insignificant number of private railway lines and 'out agents' at certain important towns outside the railway network continued, but in a reducing manner.

11. The first involvement in a project from outside the IR happened when, in 1986, City Industrial and Development Corporation (CIDCO) of the Maharashtra Government got involved in contributing financially (two third of the project cost) for providing rail connectivity to Navi Mumbai. CIDCO had the right of commercialization of non railway operating parts of the station area and the air space, and had to bear the relevant maintenance cost. A surcharge of Rs 1 was per ticket was levied for additional revenue to CIDCO (Exhibit 3). This was an example of a public-public partnership.
12. Following this, the Konkan Railway Corporation (KRC) was formed as a joint venture (JV) company between MoR and the state governments of Maharashtra, Goa, Karnataka and Kerala, to Build, Operate and Transfer (BOT) a 738 kms coastal rail connectivity project between south of Mumbai and Mangalore. The project was completed at a cost of Rs 3,375 cr, of which, Rs 800 cr was the equity. While KRC established new benchmarks for operational efficiency, it accrued significant accumulated losses, primarily due to interest costs. In 2008, the MoR helped KRC restructure a lot of its debt as equity, thereby reducing the interest costs. It also removed the 10 year 'Transfer' clause, making KRC a Build-Own-Operate (BOO) from a BOT.
13. These projects gave a kick start to state government involvement in rail connectivity projects. Within such projects, port connectivity attracted the involvement of ports and neighbouring major industry.
14. As seen from Exhibit 1, the historical total of investments in IR upto March 31, 2010 has been Rs 3,08,000 cr, of which internal resources contributed 41%, budgetary support 38%, and the remaining 21% had come in through market borrowings (The absolute number is not meaningful since it is an addition of amount invested over various years. The investment share from different sources is a little more meaningful). The PPP source under market borrowings has contributed very little to date.

### **PPP Focus: Infrastructure Creation vs Service**

15. A summarised review of 24 (nearly exhaustive) PPP projects that the IR has evolved over the years until recently is provided in Exhibit 3. 10 PPPs in the pipeline are briefly described in Exhibit 4. An overall perspective indicates that IR is more comfortable with infrastructure creation PPPs rather than service PPPs. This is reflected in the larger number of and more financially significant rail connectivity, wagon procurement, locomotive manufacturing, world class railway stations, multimodal logistics parks and high speed corridor projects. Out of the 24 PPPs described in Exhibit 3, only six focus on service PPPs. Apart from the traditional catering (and more recently train and reservation enquiry, and (limited) train booking), the service PPPs have extended into

luxury tourist trains, cleaning of coaches at major stations and depots, parcel, and more significantly container trains.

16. Going by the international experience and the phasing in other sectors (airlines being privatized before airports PPPs, road based services being traditionally in the private domain before road BOT PPPs), one would believe that services would first get the PPP framework before the infrastructure creation getting it. The explicit argument used by the IR is that, given the complexity of rail operations and potential for better resource utilization, the comparative advantage in managing services would be with IR.
17. This argument is limited since services have many levels. At the simplest, we can categorise it into three: maintenance, operations and customer services [Raghuram, 2001]. Operations are closest to the infrastructure like train haulage, train control etc. The benefits of dealing with complexity and better resource utilization would be limited to this area, if at all. The customer services which deal with value added customer interfacing and maintenance like input services are workable in the PPP space. In fact, the customer responsiveness and market savviness that the PPPs bring in for customer services can increase revenues far beyond what a large system like IR can do. Similarly, a competitive procurement can bring down the costs of maintenance, and improve quality.
18. Our diagnosis of the situation is that the IR is comfortable with some of the infrastructure creation moving into PPP space since they have been used to it with the traditional outsourcing by using contractors for construction, and public and private manufacturers for wagon procurement. On the other hand, there is a tremendous sense of discomfort of customer interfacing services moving into PPP space, since they involve revenue generation and control on end user pricing. Regarding maintenance services moving into PPP space, the discomfort is due to the need for specifying and overseeing the critical elements of such input services, especially from the safety perspective.

### **PPP Projects: Issues and Lessons**

19. *The partner selection for many of the PPPs including the rail connectivity projects has been more contextually (strategically?) based than through open competitive bidding.* There are pros and cons in this. While a 'strategic' partner is expected to bring in more than just financial stakeholding (like ports and user industries in the case of port connectivity projects, tourism development corporations in case of luxury trains), they may not be interested in developing a professional expertise in rail based SPVs. Their experience then gets limited to the specific SPV, and further may not offer the best value for money. The example of the Deccan Odyssey, where the strategic partner was Maharashtra State Tourism Development Corporation (MSTDC), did not do as well as when Thomas Cook came into the picture as a subcontractor to the MSTDC, and even changing the itinerary to a more acceptable one for attracting clientele. Also, 'strategic' partners may never be comfortable with contracts and seek favourable amendments, since there was no competitive element in studying the contractual implications and the risks thereof. The Pipavav Railway Corporation Limited (PRCL) is a case in point (Exhibit 5).

Since many of the PPPs affected by our hypothesis are young, only time will tell whether the approach has been okay. However, the evidence in other sectors like road very clearly points to using the open competitive bidding route rather than working with strategic partners.

20. PPP projects have suffered from *delays, with more than acceptable time lags between conceptualization and project execution*. The most important reason for such delays has been in evolving workable Request for Quotation (RFQ), Request for Proposal (RFP) and contractual agreements, and in taking along a variety of stakeholders, driven by changing stances of the MoR. Examples of this are the world class station at New Delhi, locomotive factories at Madhepura and Marhowra in Bihar. Exhibit 4 gives a brief description of these PPPs and others, which are in the pipeline. In the case of New Delhi railway station, the bid was scrapped twice, first due to the issue of cross ownership among bidders and the second time due to denial of permissions from other stakeholders including New Delhi Municipal Corporation, Municipal Corporation of Delhi, Delhi Development Authority and Delhi Traffic police.
21. The *changing stances* is also reflected in some of the discontinued partnership concepts in IR (Exhibit 6) like wagon procurement related PPPs (Own Your Wagon Scheme (OYWS), Wagon Investment Scheme (WIS)), construction related PPPs, and Build Own Lease Transfer (BOLT) scheme. Exhibit 7 provides a comparison of the wagon related PPPs including the OYWS, WIS, and the more recently launched (and currently valid) Liberalized Wagon Investment Scheme (LWIS), and Wagon Leasing Scheme (WLS). (Exhibit 3 gives a brief overview of the LWIS and WLS). The comparison brings out the varying stance of IR on issues such as whether (i) the wagon additionality through PPPs should be for the standard workhorse type wagons or technology break through wagons including for special purpose and high capacity, and (ii) the benefits should be lease charges, freight concession and/or service guarantees. The positive perspective is that the IR is willing to be flexible in modifying the schemes, as it learns from the (lack of) response to each one of them. This ofcourse is based on the premise that each scheme is being evolved with due stakeholder consultation and homework driven by a strategic perspective.
22. The PPP experience has been that the *transactions with the IR have not always been smooth*. The most telling example here is the container train operations, where incumbent resistance, entry and growth barriers and non level playing field have consistently affected the players (Exhibit 8). The issues are often at a level where the very intent of the MoR is in question as to whether they really want PPPs in this domain.
23. This is also illustrated in *denial and delays in extending the project scope* which could provide great value to the end user and the SPV. This is based on the perspective that the significant returns which would accrue to the private player might as well directly accrue to IR, thus defeating the very purpose of the PPP. Examples are extending the scope of gauge conversion to the Kutch Railway Corporation Limited (KRCL), which was at first conceptually accepted, but later on retracted as a project that Rail Vikas Nigam Limited (RVNL) could do on its own. We quote from a case study on KRCL [IIMB, 2010]:



“On basis of its good performance in executing Kutch link project, having successfully restricted cost and time overruns, KRCL was being approached by private bodies as well as Railways for partnering in broad-gauge conversion projects in other parts of the country. Specifically, KRCL was being considered for executing:

- 223-km broad gauge line project between Bhiladi and Samadari
- Conversion of a 100-km rail link between Bhuj and Naliya from narrow gauge to broad gauge – approached by Sanghi Cement
- Broad gauge conversion of 100 km link between Bhildi and Mehsana

However, none of these projects were eventually done by KRC; they were executed by IR on its own. The rationale for this seems to be that IR does not want to share revenues with SPVs for lines that have potentially good traffic/business.

As remarked by the ex-CMD, KRCL, “Railways backtracked on their policy and suggested that those lines that make good business should not be given to SPVs for conversion, because it amounts to sharing of revenues.”

Similarly, long length sidings or branch lines off the KRC which can yield high returns have been put on hold since the IR has yet to come to terms with its implications on other PPPs. In the meantime, the potential end users in the region of the KRC alignment are losing out, since they do not have access to rail connectivity, and have to resort to avoidable road movement. It should also be noted that the KRC is a public public partnership.

The lack of responsive and flexible approach to project scoping is affecting the stakeholders.

24. One domain in which there has been increased activity in the recent years is luxury tourist trains (Exhibit 3). A new policy was announced by the MoR in 2008, as given in Exhibit 10. While the idea of renewed interest is welcome, *the policy statement comes through as being a one sided government circular rather than for a commercial partnership* that we wish to nurture.

The IR specifies that all maintenance and terminal activities will be undertaken by them rather than give the option of alternate ways of doing this. The charges for this would be determined by the IR. There is a revenue share provision based on train occupancy which is in discrete intervals. This could create incentives for misrepresentation, especially at the limits of each interval. It could very well have been made a continuous revenue share (say 10%) as a proportion of the occupancy. Similarly, haulage charges (a significant portion of the costs) would be determined by IR and payment due in advance. Records would have to be maintained appropriately for verification by IR, though there is no mention of what records and service levels IR would adhere to. Some of the difficulties due to this policy are elaborated in Exhibit 3 under luxury tourist trains.

On similar lines, the new policies for the LWIS and WLS state that dispute resolution will be through an arbitrator to be set up by the General Manager of the concerned zonal railway (Exhibit 7). *This is a clear conflict of interest*, since IR is one of the parties in the contract.

## PPPs: Way Forward

25. Partly in response to administrative delays and the need to develop an expertise based professional approach, the IR has setup umbrella SPVs for PPPs in specific domains and/or geographical regions (Exhibit 9). For example, Container Corporation of India Ltd (CONCOR), which was originally setup to promote rail based container traffic, has in the recent years developed JVs and gotten into port based container terminal management, cold storage etc. The Indian Railway Catering and Tourism Corporation Ltd (IRCTC) has licensed other organizations for a variety of reservation, enquiry and tourism related services. Rail Infrastructure Development Company of Karnataka (KRIDE) and RVNL were created for rail connectivity projects. They brought in the administrative platform of one time approvals from the ministry on certain dimensions and thus eliminated the need to go back for approvals for each project. The Rail Land Development Authority (RLDA) can enable SPVs to commercially develop vacant railway land. They are also expected to facilitate PPPs for world class stations and multi modal logistics parks (MMLP).

It would be too early to comment on the performance of this structure of umbrella SPVs. It would be fair to say that many projects have been conceptualized as PPPs because of these SPVs. However, there have been delays in project execution, many of the causes of which are currently outside the specific control of these SPVs. As a way forward, it would help *review the performance of the umbrella SPVs*.

26. The most important dimension that needs to be addressed for a smooth way forward is to have a shared vision as to why IR need PPPs. The logic for this should be more than just resource mobilization. It needs to *focus on the complementing need of entrepreneurial and managerial energies that private parties can bring in* to make rail based transport value adding for the end user. Once this is clear, then the attributes of the commercialization that is required for PPPs to succeed would fall into place. Exhibit 11 provides some of these attributes, based on earlier work by the author. These include, for each PPP, equity leverage, goal clarity, risk sharing, decision making autonomy, partner's interest (and competence), project structuring quality, transaction costs, and transparency for contestability.

Along the same lines, the private partners cannot be viewed as 'agents' but as 'dynamic organizations' who would like to grow. This is precisely what IR should want from the PPPs (including the public public partnerships) to make this a success.

27. To minimize the scope of misinterpretation, there is a need to *develop well written contracts* that act as a precise policy and regulatory framework between the IR and private parties. Three such model documents for container train operation, redevelopment of railway station, and procurement-cum-maintenance of locomotives have been prepared in the recent past by the PC. Also, the contracts should be ready well before making any legal commitment with private parties. In the case of container trains operations, the concession agreement was ready only after one year of awarding the licence.

28. On a purely legal context, it is useful to *question whether the Indian Railways Act 1989 and the Industrial Policy Resolution (IPR) 1991 are a limitation?* Relevant excerpts from the IR Act are provided in Exhibit 12. The net takeaway is that it is not. Some have quoted that the IPR 1991 is a limitation [Jain 2007] (Exhibit 13). However, it would appear that in today's context, this document ought not to really carry a constraining influence, and even if it did, it should be modifiable. Prior to the liberalization in 1991, the IPR statements were very critical and hence were modified every few years as per government policy. After 1991, the IPR has not been modified.
29. Given the current internal structure and orientation (strong cadre culture, hierarchy orientation and top management structure) of the IR, it would be very daunting for private players to develop PPPs with the MoR. Apart from the specter of dealing with a large 'machinery' like IR, the popular perception is that there are issues of one sided contracts, interpretations of unclear implications going in favor of the railways and the conflict of interest due to IR playing the role of licensor, operator and regulator.

On a positive note, there has been reinforcement at the political level on the issue of PPPs. However, the IR would need to *develop a more flexible approach* based on not just a political language of PPP, but *creating an organization that listens to, learns from and is responsive to a variety of stakeholders including customers, other affected and involved entities, and partners in PPPs.*

30. A good start is in *top management restructuring.* The Vision 2020 document states the following on organizational restructuring:

“Organizational restructuring is, of course, fraught with challenges of its own and needs to be carefully attempted. One possible approach to address this issue could be to reconfigure the organization by separating infrastructure from operations and reorganization on business lines i.e. passenger, freight and parcel and other auxiliary services so that each service could be managed and measured on a profit-centre basis. Areas, other than core operations, where appropriate, could be corporatized to impart business focus and managerial autonomy for such tasks.”

While one would agree with this, it is important to *begin immediately with a separation in the IR's roles of licensor, operator and regulator.* The separation of infrastructure and operations can then follow.

In parallel with this, what anyway is proposed eventually, the *Railway Board Members' roles should be redefined towards strategizing for key market segments* rather than as the current cadre based functional supremo. Corporatization (for business focus and managerial autonomy) need not be limited to non core operations. In fact, the very essence of PPPs (corporatized through SPVs) in core activities is to bring in the business focus and managerial autonomy.

## Exhibit 1: Financing of IR

Rs cr

	X Five Year Plan (2002-07) (Actual)	2007-08	2008-09	2009-10 (RE)	Historical Total upto March 31, 2010	2010-11 (BE)	XI Five Year Plan (2007-12) (Projected)	Vision for 2010-20
<b>Market Borrowings</b>	17,006	5,364	7,284	9,800	64,733	10,151	79,654	9,00,000
•IRFC				9,150		9,120		
•PPP				100		1,031*		
•RVNL				370				
•WIS/LWIS/WLS				180				
<b>Internal Resources</b>	29,539	14,948	18,941	12,285	127,088	14,523	90,000	
•DRF, DF & OLWR				8,906				
•Capital fund				3,379				
<b>Gross Budgetary Support</b>	38,163	8,668	10,110	18,199	116,493	16,752	63,635	5,00,000
•Budgetary Support				14,841		15,875#		
•Additional Budgetary Support for National Projects				1,900				
•Railway Safety Fund				1,458				
•Diesel Cess						877		
<b>Total</b>	<b>84,708</b>	<b>28,980</b>	<b>36,336</b>	<b>40,285</b>	<b>308,314</b>	<b>41,426</b>	<b>233,289</b>	<b>14,00,000</b>

\*Rs 1,031cr includes PPP, RVNL and LWIS/WLS.

#Rs 15,875 cr includes budgetary support, additional budgetary support and railway safety fund

BE: Budget Estimates; RE: Revised Estimates; DRF: Depreciation Reserve Fund; DF: Development Fund; OLWR: Open Line Works - Revenue

[MoR, 2008; MoR, 2009a]

## Exhibit 2: Infrastructure Sectorwise Investments

Sector	X Plan (Actual)		XI Plan (Original Projections)		XI Plan (Revised Projections)	
	Rs cr	%	Rs cr	%	Rs cr	%
<b>Electricity (incl NCE)</b>	<b>340,237</b>		<b>666,525</b>		<b>658,630</b>	
Public	203,403	59.78	481,013	72.17	371,085	56.34
Private	136,834	40.22	185,512	27.83	287,546	43.66
<b>Telecom</b>	<b>101,889</b>		<b>258,439</b>		<b>345,134</b>	
Public	48,213	47.32	80,753	31.25	61,503	17.82
Private	53,676	52.68	177,686	68.75	283,631	82.18
<b>Roads and Bridges</b>	<b>127,107</b>		<b>314,152</b>		<b>278,658</b>	
Public	117,884	92.74	207,360	66.01	232,771	83.53
Private	9,223	7.26	106,792	33.99	45,887	16.47
<b>Railways (incl MRTS)</b>	<b>102,091</b>		<b>261,808</b>		<b>200,802</b>	
Public	101,422	99.34	211,454	80.77	192,486	95.86
Private	669	0.66	50,354	19.23	8,316	4.14
<b>Irrigation, Water Supply and Sanitation</b>	<b>166,851</b>		<b>397,031</b>		<b>136,323</b>	
Public	165,833	99.39	391,610	98.63	135,839	99.64
Private	1,018	0.61	5,421	1.37	484	0.36
<b>Oil and Gas Pipelines</b>	<b>32,367</b>		<b>16,855</b>		<b>127,306</b>	
Public	31,367	96.91	10,327	61.27	74,545	58.56
Private	1,000	3.09	6,528	38.73	52,761	41.44
<b>Ports</b>	<b>22,997</b>		<b>87,995</b>		<b>40,647</b>	
Public	4,670	20.31	33,516	38.09	8,130	20.00
Private	18,327	79.69	54,479	61.91	32,517	80.00
<b>Airports</b>	<b>6,893</b>		<b>30,968</b>		<b>36,138</b>	
Public	4,523	65.62	9,338	30.15	12,983	35.93
Private	2,370	34.38	21,630	69.85	23,155	64.07
<b>Storage</b>	<b>5,643</b>		<b>22,378</b>		<b>8,966</b>	
Public	3,539	62.71	11,189	50.00	351	3.91
Private	2104	37.29	11,189	50.00	8,615	96.09
<b>Total Infrastructure</b>	<b>906,074</b>		<b>2,056,150</b>		<b>2,054,205</b>	
Public	680,854	75.14	1,436,559	69.87	1,311,293	63.83
Private	225,220	24.86	619,591	30.13	742,912	36.17

[PC, 2010]

### Exhibit 3: Partnership Projects of IR

#### 1. CIDCO IR (1986)

[Jain, 2008a; <http://www.indianexpress.com/news/no-metro-in-navi-mumbai-cr-to-continue-with/516999/>]

- Partnership between IR and the City and Industrial Development Corporation (CIDCO) in Mumbai for providing rail connectivity to Navi Mumbai in August 1986.
- Cost of construction of the railway line, station building, operational and commercial area was shared in 2:1 ratio between CIDCO and IR. Ownership of the line and land remained with IR.
- CIDCO had the right to commercialize the air space and other parts of the station area. During operation, non-operational maintenance costs were to be borne by CIDCO.
- IR levied a surcharge of Rs 1 per ticket for the journeys touching any part of the rail network so developed. Money so collected was transferred to CIDCO.
- Rolling stock was provided by the Central Railway.
- O&M responsibilities were fulfilled by the Central Railway.
- Operational losses were to be borne by the Central Railway
- The Mankhurd to Belapur new line (27 kms) was built using this model for the first time in 1993.
- CIDCO and IR (Central Railways) had got approval for a second partnership project of Rs 494 cr, a suburban railway line from Belapur-Seawoods-Uran in Mumbai, in 1996. CIDCO was supposed to pay Rs 331 cr and Central Railway Rs 163 cr. The project got stalled on environmental grounds and the matter was pending in the High Court. The project got the necessary approvals in 2008. The project cost has gone up to Rs 1480 cr due to delays.

#### 2. Konkan Railway Corporation Limited (KRC) (1990)

[Raghuram, 2002; [http://pib.nic.in/release/rel\\_print\\_page1.asp?relid=61760](http://pib.nic.in/release/rel_print_page1.asp?relid=61760)]

- The first joint venture company of IR formed in public-public partnership, where IR and four state governments are partners.
- To construct a new 738 km coastal railway line for bridging the Konkan Gap by providing railway connection between Roha (150 kms south of Mumbai) and Thokur (about 22 kms north of Mangalore).
- KRC was structured as a build-operate-transfer (BOT) project, with a concession period of 10 years from start of operations.
- Estimated project cost was Rs 1400 cr, debt equity ratio was 2.5:1 with 51% equity from MoR.
- The project was completed at a cost of Rs 3,375 cr (Rs 2,425 cr of investment and Rs 950 cr as capitalized interest) and commenced operations since 26 January 1998.
- Out of Rs 3,375 cr, Rs 800 cr was equity capital. Equity was shared between MoR (51%), Government of Maharashtra (22%), Government of Karnataka (15%), Government of Goa (6%), and Government of Kerala (6%).
- The only organisation outside IR which owns, operates and maintains its own assets.
- The operating and maintenance expenses were in excess of Rs one cr per day. KRC's financial situation deteriorated as the earlier projections of business growth did not materialize.
- In spite of establishing new benchmarks for operational efficiency, the KRC had accumulated losses of Rs 2353 cr till 2003-04, primarily due to interest costs.
- In 2008, the MoR helped KRC restructure a lot of its debt as equity, thereby reducing the interest costs. It also removed the 10 year 'Transfer' clause, making KRC a BOO from a BOT.

- In 2009-10, the net loss of KRC was brought down to Rs 10 cr from Rs 79 cr in 2008-09. During the same period, the total earnings were Rs 742 cr and the operating surplus was Rs 224 cr. The operating ratio improved to 77.8 % during 2009-10 as compared to 83.8 % in 2008-09.
- A proposal is being prepared for a bypass line connecting Verna with Cansaulim to allow empty rakes to come directly to the port.

### 3. Mumbai Rail Vikas Corporation Limited (MRVC) (1999)

[<http://203.176.113.182/MRVC/intr.html>; IIP, 2009]

- MRVC, a joint venture SPV with MoR (51%) and Government of Maharashtra (49%), was incorporated on July 12, 1999, to implement the Railway work of Mumbai Urban Transport Project (MUTP). The Corporation will execute the projects so far identified and will also be involved in the planning and development of Mumbai Suburban Rail system.
- The requirement of funds for the total project including resettlement and rehabilitation will be provided as follows:
  - Budgetary support from Government of Maharashtra and IR.
  - Revenue from commercial development of Railway land airspace.
  - Borrowings to be decided with mutual consent of Government of Maharashtra and IR.
  - Surcharge to be levied on commuters from a date to be mutually agreed upon between Government of Maharashtra and IR.
- Phase I of the MUTP, costing Rs 3125 cr, is funded through debt equity ratio of 1:1. Debt component is being provided by the World Bank. Construction is done by the Western and Central zonal railways, which are also the operators of the services. The ongoing works under phase 1 are expected to be completed by December 2010.
- Phase II of MUTP, costing Rs 4509 cr, was approved in February 2003. Four projects are being identified. The work is likely to be completed by June 2014.
- In 2008-09, total turnover of MRVC stood at Rs 36 cr, a growth of 10.4% over the previous year. The net profit fell down by 22.0% from previous fiscal (23 cr), to Rs 17.6 cr.
- MRVC has prepared a concept note for the Phase III of the MUTP. MRVC proposes to add corridors to the already existing ones and also increase the length of local trains from 12 coaches, to 15-18 coaches. The proposals for the third phase of MUTP are in the preliminary stages.

### 4. Pipavav Railway Corporation Limited (PRCL) (2000)

[Raghuram et al, 2010]

- First joint venture project on Build Own Operate Transfer (BOOT) basis. MoU signed on 20th January, 2000
- Conversion of 250 km from MG to BG from Surendranagar to Rajula City and construction of 14 km rail line to provide BG connectivity to Pipavav port.
- Estimated project cost was Rs 270 cr, with debt to equity ratio being 1:2.
- The project was completed at a cost of Rs 373 cr (Rs 173 cr debt and Rs 200 cr equity). Equity was shared between MoR (50%) and Gujarat Pipavav Port Ltd (GPPL) (50%).
- Concession was granted for 33 years. EPC contractor: WR., O&M contractor: WR
- The demand risk and the project construction risk were to be borne by the SPV.
- MoR leased all the existing assets such as land, station buildings etc on the meter gauge section to PRCL at historical cost

- A tripartite traffic and transportation guarantee agreement between PRCL, WR and GPPL. GPPL guaranteed PRCL a minimum of 1 mt, 2 mt and 3 mt cargo in first, second and third onwards years of operations. WR guaranteed PRCL for the timely evacuation of cargo by providing adequate number of rolling stock within a specified time frame.
- GPPL had to pay penalty to PRCL as they could not achieve the minimum guaranteed traffic.
- Revenue collection by MoR through WR, apportionment to PRCL after deducting operational expenses
- Delay in finalising contracts at various stages. Construction Agreement took one year to get finalized.
- In 2008-09, the line carried a total traffic of 1.93 mt, with bulk cargo accounting for 56% and containers accounting for another 44% of the total. During the same period, the company reported a net loss of Rs 16 cr on an operating income of Rs 69 cr.

##### 5. Viramgam Mahesana Project Limited (VMPL) (2002)

[<http://www.thehindubusinessline.com/2003/08/04/stories/2003080400060600.htm>]

- First BOT (Annuity) project of IR for gauge conversion of 65 km from MG to BG between Viramgam-Mahesana. (This project was earlier awarded on Build Operate Lease Transfer (BOLT) basis in 1996 but did not succeed)
- The contract was awarded to consortium led by DS Construction Ltd through a competitive bidding process on December 27, 2002. Bid criteria was the lowest semi annual access charges quoted by the bidder.
- The project was executed by Viramgam-Mahesana Project Ltd – a special purpose vehicle promoted by DS Constructions Ltd.
- The project would reduce the corridor length between Kandla port and Delhi by about 70 km.
- The anticipated traffic on the railway line was about 10 freight trains and two passenger trains each way.
- The project cost was Rs 90 cr (Rs 63 cr debt and Rs 27 cr equity). Equity was shared by DS construction (45%), Tania constructions Company Ltd (44%) and Vogue Construction and Consultancy Services Ltd (11%).
- The concession period was 12 years.
- Railways through a 'Tripartite Agreement' secured the investments of lenders.
- The complete supervision of the work was through an 'Independent Engineer (IE)'.
- The project had achieved financial closure well before its deadline of September 2003, with a single financier, UTI Bank, picking up the entire debt component of Rs 63 cr.
- As per the agreement, the Guaranteed Access Charge (GAC) would be paid by IR to the promoter on a half-yearly basis after commencement of operation. Twenty-four equal instalments for 12 years at the rate of about Rs 7.9 cr per instalment would be paid to the concessionaire till the end of the concession period.

##### 6. Hassan Mangalore Rail Development Company (HMRDC) (2003)

[Thomas and Ravi, 2008; <http://www.icra.in/files/PDF/Pressreleases/March%2009,%202009%20HMRDC.pdf>]

- Second joint venture project of IR on BOOT basis.
- Conversion of the 183 km MG line between Hassan and Mangalore into a BG line to provide BG connectivity to New Mangalore port. A 55 km stretch comes under the ghat section.



- Project cost was Rs 327 cr. This was financed through the equity of Rs 112 cr, debt of Rs 70 cr from banks and financial institutions, and subordinate debt Rs 145 cr from IR).
- Equity was shared between the Government of Karnataka (40%), MoR (40%), New Mangalore Port Trust (9%), Mineral Enterprises Ltd (9%), K-RIDE (2%).
- Concession was awarded for 32 Year. EPC contractor: SWR., O&M contractor: SWR
- Project was to be completed by December 2004, but shortage of sleepers, delays caused by landslips, and associated construction delays pushed the commercial operations date to May 05, 2006
- During the first 11 months of operation, only 1.6 mt freight moved, as against the forecast of about 6 mt.
- Revenue collection by MoR, apportionment to HMRDC after deducting operational expenses
- HMRDC has no say in the key aspects of placement of rakes, availability of wagons, and their movement. Customers have to make regular wagon indent and wait.
- Once rakes are loaded, their movement is completely under the operational purview of IR. Inter-divisional and inter-zonal issues, availability of motive power, availability of crew, and even train routing is not under the control of any one nodal office. Due to line being in a ghat section, operational issues get further compounded and due to this, only 1-2 trains are being moved each way, as against the possibility of moving 4-6 trains.
- In 2007-08, HMRDC carried 4.6 mt of freight. The major cargo was iron ore for export originating from Chitradurga – Tumkur and Hospet – Bellary sectors, accounting for 3 mt of the total. During the same period, the company earned a profit after tax of Rs 30 cr on an operating income of Rs 134 cr as against a net loss of Rs 14 cr on an operating income of Rs 37 cr in 2006-07.

## 7. Kutch Railway Corporation Limited (KRCL) (2004)

[Sharma, 2008; Gujarat Infrastructure, 2009]

- The first special purpose vehicle (SPV) established by RVNL. MoU was signed on 4th January, 2004
- A 301 km long gauge conversion project between Gandhidham and Palanpur to provide shorter BG connectivity to Kandla and Mundra ports.
- Project cost was Rs 500 cr (debt was Rs 300 cr (on non-recourse basis at interest of 7.5%) and equity was Rs 200 cr (full equity was contributed right in the beginning))
- Equity was shares between RVNL (50%), Kandla Port Trust (26%), Gujarat Adani Port Ltd (20%) and Government of Gujarat (4%).
- Concession was awarded for 32 years. EPC contractor: WR., O&M contractor: WR
- MoR leased all the assets of the project line and authorized KRCL to finance, construct, operate, maintain and manage the section. KRCL was given the right to receive its share of tariff from freight traffic and haulage from container traffic, but not passenger trains that would also ply on the line.
- Commercial exploitation in the form of managing advertisements space on station platforms, rental fees from commercial establishments such as book-shops, catering stalls, etc was permitted. However, this did not materialize.
- No performance guarantees from IR.
- Execution was in two phases. First phase involving 248 km between Palanpur – Samakhiali was opened for traffic on 24th March 2006 and the balanced 53 kms between Samakhiali - Gandhidham was commissioned in November 2006.

- Project was completed ahead of schedule and commenced operations in 2007 and with a saving of Rs 50 cr in project cost. Substantial savings were achieved due to reduced interest payments during the construction period.
- KRCL continues to outperform. In the first year, 8.5 mt freight traffic, generating revenue of approximately Rs 100 cr. Manpower requirements were rationalized. Staff reduced to 1000 from 1600 deployed in the MG system.
- At this pace of growth in traffic, it is expected that the line will reach the saturation level in the next five years. A proposal has therefore been mooted to double the line by the RVNL and take up the preliminary studies.
- In 2007-08, KRCL handled 17.0 mt of cargo traffic, posting a growth of 81% over the previous year.
- Along with Kandla port, KRCL is planning to finance a project involving the provision of railway sidings from Gandhidham to Tuna (10 km) at a cost of Rs 15 cr.

#### 8. **Bharuch Dahej Railway Company Limited (BDRCL) (2005)**

[<http://bdrail.in>]

- Gauge conversion of the narrow gauge line of 62 km to broad gauge from Bharuch to Dahej via Samni to provide BG connectivity to Dahej port. MoU was signed on 13th January, 2005
- This section was closed to rail traffic on 28/06/2005. Prior to closure of this section, two pairs of passenger services were running between Bharuch – Samni and one pair of service was run between Samni – Dahej daily.
- Project cost was Rs 285 cr, with debt to equity ratio being 70:30.
- Equity of Rs 85 cr was shared between RVNL (26.5%), Gujarat Maritime Board (10.5%), Adani Petronet (Dahej) Port Pvt.Ltd (10.5%), Dahez SEZ Ltd (10.5%), Gujarat Narmada Valley Fertilizers Company Ltd (10.5%), Hindalco Industries Ltd (Unit: Birla Copper) (10.5%), Jindal Rail Infrastructure Ltd (10.5%). Shareholders are strategic investors in the Project.
- Project expected to be commissioned by end of 2010.
- Provision shall be made for junction arrangements with the Western Dedicated Freight Corridor. As the line is categorized as a feeder route to the Dedicated Freight Corridor, the line is designed to take a heavier axle load of 25 tonnes involving use of heavier rails. The developments taking place in Dahej are likely to transform the area into a major industrial complex in the next few years.

#### 9. **Haridaspur Paradip Railway Company Limited (HPRCL) (2005)**

[<http://www.blonnet.com/2006/10/12/stories/2006101204000900.htm>;

[http://steelguru.com/news/index/MTM3Mzky/Haridaspur\\_to\\_Paradip\\_Railway\\_link\\_project\\_lands\\_in\\_limbo.html](http://steelguru.com/news/index/MTM3Mzky/Haridaspur_to_Paradip_Railway_link_project_lands_in_limbo.html)]

- A new line project of 82 kms to provide shorter rail connectivity to Paradip port for movement of iron-ore for exports and also for the steel plants at Paradip. MoU was signed on 24<sup>th</sup> May, 2005
- The project cost is Rs 598 cr (originally estimated at Rs 442 cr, with debt to equity ratio being 54:46. Equity of Rs 275 cr is shared between RVNL (48.4%), Rungta Mines Ltd (10.9%), ESSEL Mining and Industries Ltd (10.9%), Paradip Port Trust (10.0%), Jindal Steel and Power (1.8%), POSCO India Ltd, (10.0%) MSPL Ltd, (5.5%), SAIL (1.8%) and Government of Orissa (0.7%). Shareholders are strategic investors in the Project.
- The structuring provides for traffic guaranties by users of the line with take or pay agreement.

- Project suffered delays due to land acquisition problems. Total land required for the rail link was 1,780 acres. Of this, 1,380 acres is private covering 86 villages in Jagatsinghpur, Kendrapara and Jajpur districts.
- The then Railway Minister, Mr Nitish Kumar, had laid the foundation stone for the project at Marsaghai of Kendrapara district in April 1999 and had promised to complete the project by 2004.

#### 10. Krishnapatnam Railway Company Limited (2005)

[<http://www.blonnet.com/2005/12/28/stories/2005122801960700.htm>]

- A new railway line project of 111 kms from Obulavaripalle to Krishnapatnam on South Central Railway for providing port connectivity to the iron ore belt at Hospet/Bellary. MoU was signed on 24<sup>th</sup> November, 2005
- The 113-km long rail link would have several tunnels with a total length of 8.5 km out of which one tunnel itself would be seven km long.
- The project cost is Rs 588 cr. Project would be funded through a debt equity ratio of 1:1 and a viability gap funding of Rs 50 cr.
- The equity of Rs 267 cr would be shared between RVNL (30%), Krishnapatnam Port Company Ltd (30%), NMDC Ltd (27%), and Government of Andhra Pradesh (13%). Shareholders are strategic investors in the Project.
- This rail corridor is being built in two phases. The First phase of 19 km railway line connecting the port to the Chennai – Kolkata main line is already operational and will have 9 railway sidings inside the port area, out of which 4 will be dedicated for iron ore cargo with wagon tippers, 3 will be dedicated for coal cargo with mechanized wagon loaders, stacker reclaimers and 2 will be dedicated for general cargo.
- Phase two will consist of 91 kms of new broad gauge rail line between Obulavaripalle and Krishnapatnam Port. This rail line will reduce the distance between the port and the regions of eastern Karnataka and south Andhra Pradesh by 75 kms. Phase two will also consist of further 11 port sidings inside the port area.

#### 11. Angul Sukinda Railway Limited (ASRL)

[<http://www.business-standard.com/economy/storypage.php?tab=r&autono=262675&subLeft=1&leftnm=3>]

- A 100 kms new railway line project
- A vital link between the coal mines in the Talcher area and the iron ore mines at Banspani.
- Project cost is Rs 523 cr
- Equity of Rs 250 cr is shared between RVNL, Jindal Steel and Power Ltd and Bhushan Steel Ltd
- The land required for construction of the rail line is estimated at 1,530 acres.

#### 12. Dighi Port Railway Corporation (DPRC)

[<http://www.thehindubusinessline.com/2010/02/01/stories/2010020153141900.htm>]

- KRC and Balaji Infra Projects Ltd (BIPL) have signed an MoU for developing a 45 km rail-link connecting Dighi port near Chiplun in Maharashtra to the main Konkan rail route (connecting Dighi port to the main Konkan railheads at Indapur and Mangaon).
- This MoU is the first of its kind to be executed between KRCL and a port in Maharashtra. BIPL has undertaken the development of Dighi port through an SPV called Dighi Port Railway

Corporation. Project would entail an investment of about Rs 500 cr and the development shall span approximately over two years.

- Under the MoU, KRC shall acquire land for the railway siding and also develop them. They shall also operate and maintain the same and provide the necessary back-up services and rolling stock for carrying out the operations.
- The entire cost of this development shall be borne by BIPL through a mix of equity and debt.

### 13. Surat Hazira Railway Company

[<http://www.thehindubusinessline.com/2006/03/04/stories/2006030400340700.htm>;  
<http://www.orissadiary.com/ShowBusinessNews.asp?id=3179>]

- A 35 km port connectivity project between Surat and Hazira port in Gujarat
- The estimated cost of the project is around Rs180 cr, which will be funded 50% by RVNL and the balance 50% by Essar Group, Hazira port, Gujarat government's industrial promotion agency and Kribhco together.

### 14. Panskura Kharagpur (Third) Railway Line (2009)

[<http://www.projectsmonitor.com/ORDCONTRACT/lt-wins-infra-contracts>]

- BOT project
- Rs 186 cr order for constructing the 45 km line in West Bengal
- L&T bags the award through competitive bidding

### 15. Private Railways

[Jain, 2007; <http://myiris.com/newsCentre/storyShow.php?fileR=20100614115104707&dir=2010/06/14&secID=fromnewsroom>]

The private sector involvement under this model covers design, construction, financing, maintenance and operation. The operation, if desired by the developer, can be done by the IR under contract. The following projects have been implemented or under implementation.

#### *Adipur – Mundra (2002)*

A 60 kms long new line project providing rail connectivity to the private port of Mundra. The project cost is Rs 120 cr. The project concession was given to Gujarat Adani Port Ltd (GAPL). Construction and maintenance including financing is done by the private developer. Operation is being done by IR under a contract. Apportioned revenue for the portion of the line net of cost of operation is given to the port railway by IR. IR receives 2% of the gross revenue as its fee from the port railway.

GAPL has announced that it has laid foundation stone for doubling the existing Mundra-Adipur private railway line to meet the growing demand of the port. This additional line will be parallel to the existing one. The new line will have four crossing stations and 99 bridges. It will be capable to handle 25 tonnes axle load wagons at 100 KMPH. The line will be commissioned in two phases. The first phase of 30 Km will be commissioned by June 2011 and rest by the end of 2011-12.

IR has already doubled their track between Samakhiali-Adipur. With the doubling of Adipur - Mundra by Adani Group and Samakhiali-Palanpur by the Kutch Railway Company, the entire route from Mundra Port to Northern India will be double line, with capacity to handle close to

60 mt cargo annually. With this, Mundra Port shall become the second Port after JNPT on the West Coast, which shall be connected by double line rail corridor. MoR has already initiated construction of double line high speed dedicated freight corridor between Delhi - Mumbai which shall pass through Palanpur in the state of Gujarat. This corridor will have connectivity with Mundra port through Palanpur-Samakhiali (Gandhidham)-Adipur-Mundra rail line.

#### *Bhadrak – Dhamra*

A 60 kms long new line project providing rail connectivity to the Private Port of Dhamra. The project cost is Rs 500 cr. The project concession is given to Dhamra Port Company Ltd (DPCL). All the activities including operation of trains will be done by the private developer.

#### *Vallarpadam – Idapalli*

A 8.5 km long new line project providing rail connectivity to the newly developed private container hub of Vallarpadam. The project cost is Rs 240 cr. The financing and construction will be done by the private developer.

## **16. Container Train Operators (CTOs) (2006)**

[MoR, 2006 (b)]

- On 5th January, 2006, MoR announced a policy wherein it allowed private and public sector operators to run container trains on IR network. At the time of this announcement, the container train operations on IR network were only being carried out by the CONCOR.
- The scheme was open to all Indian companies, including subsidiaries of foreign companies registered in India, having a minimum annual turnover of Rs 1 billion (US\$ 20 million approx). The validity for permission was for 20 years, further extendable to another 10 years, if the container train operator (CTO) performed well.
- The entire network of IR was classified and grouped into four categories based on existing and anticipated traffic volumes of ports. A one time registration fee of Rs 500 million (US\$ 10 million approx) (for category I license) or Rs 100 million (US\$ 2 million approx) (for category II, III, and IV license) was payable to MoR.
- The rolling stock had to be procured by the operators based on IR approved design, and it would have to be inspected by IR as per the rules in force. Locomotives were to be supplied by the IR.
- Operators were required to either have a rail-linked Inland container Depot (ICD) or give an assurance within a period of six months of getting approval that he would construct his own ICD within three year or he would arrange to furnish a lease agreement with an existing ICD owner.
- Operator could carry all goods subject to conditions specified in the goods tariff, red tariff and under provision of IR Act and any other instructions issued on the subject by MoR from time to time.
- The operators were given full freedom for setting tariff from their customers. Operators had to pay haulage charges to IR for using its infrastructure. IR reserved the right to change these charges in future.
- Trains were to be dispatched on a non-discriminatory 'first come first served' basis. IR did not provide any transit times guarantees.

- The process of registration as well as train operations was uniformly applicable to all including CONCOR. The scheme was to be open for one month in a year for registration.

### **17. Liberalized Wagon Investment Scheme (LWIS) (2008)**

[MoR, 2010]

- LWIS allows investment by private investors in Special Purpose Wagons (SPW) and High Capacity Wagons (HCW). For the purpose of LWIS, SPW are wagons designed for rail transportation of a specific commodity or group of commodities to operate on specific routes or close circuits approved by IR. HCW are wagons with payload which is atleast 2 tonnes higher than the pay load of existing similar wagons on IR. End users (viz., producers, manufacturers and consumers of goods) are permitted to procure wagons under LWIS.
- Under LWIS, transport of coal and coke, ores and minerals including iron ore are not allowed. Each rake procured by investor will have an associated loading and unloading point(s) over specific route(s) or close circuit(s) as approved by IR. SPW and HCW procured under this scheme will not be merged in wagon pool of IR. For SPW, investor will necessarily need to have a private siding or terminal at either end of the approved close circuit.
- In case of HCW with payload of 2 tonnes or more than pay load of existing similar wagons freight concession of 12% for 20 years on each loading will be granted. An additional freight concession of 0.5% will be granted for each additional tonne of payload. In case of SPW operating in approved close circuits a freight concession of 15% for 20 years on each loading is available. Maintenance of wagons will be undertaken by IR on payment as per agreements to be executed with the investor

### **18. Wagon Leasing Scheme (WLS) (2008)**

[MoR, 2010]

- Under this scheme, high capacity wagons (HCW) with a payload of at least 2 tonne more than the prevalent 25 tonne and 22.9 tonne axle load wagons or special purpose wagons (SPWs) for specific commodities can be owned and leased out by private companies.
- Companies with a net worth of at least Rs 250 cr and with a minimum experience of 5 years will be eligible for the scheme and will have to pay a one-time registration fee of Rs 5 cr to MoR. It will be prevalent for a period for 20 years, following which it can be extended by another 10 years based on the performance of the leasing company.
- The wagon leasing contracts will be a bi-partite agreement between the wagon owner and the end user. The wagon leasers will pay a maintenance fee to MoR.
- Wagon leasing firms will also get freight discounts between 12 and 15%. HCWs with a payload of 2 tonne or more will get a freight discount of 12% and 0.5% for every additional tonne for 20 years based on the current freight rate. Similarly SPW rakes will attract a 15% discount.

### **19. Terminal Development Scheme (TDS) (2008)**

[MoR, 2010]

- This scheme envisages development of new railway terminal through investment from private sector. End users, PSUs or their authorized agencies are permitted to develop terminals under TDS. Two types of terminals are covered under the scheme:

- Terminal for bulk commodities - for cement, fly ash and fertilizer transported in loose condition in privately owned special purpose wagons.
- Terminals for finished product - for iron and steel, bagged cement and bagged fertilizer in railway wagons.
- Under TDS, state-of-the-art private terminals are to be developed under the extant siding policy primarily on private land where no bidding or traffic guarantee is required. Railway may allot surplus railway land for 30 years lease extendable by 10 years, on the basis of competitive bidding and commitment for minimum guaranteed volume of traffic.
- For Terminals for bulk commodities, the terminal developer shall be granted freight concession of 15% for a period of 20 years on each loading of a new rake of SPW procured under LWIS. In addition, there will be waiver of busy season surcharge and terminal charge. For Terminals for finished products, there will be waiver of busy season surcharge for a period of 20 years and terminal charge.

## 20. Luxury Tourist Trains

- Palace On Wheels (January 26, 1982)
  - An agreement between IR and Rajasthan Tourism Development Corporation (RTDC)
  - Sharing of rolling stock investment on a 50:50 basis
  - Sharing of costs according to functional responsibility (RTDC - marketing and commercial, IR - operation and maintenance)
  - Sharing of revenues on a 67:33 split (IR:RTDC)
- The Fairy Queen (July 18, 1997)
- The Deccan Odyssey (January 16, 2004)
  - An agreement between MoR and Maharashtra Tourism Development Corporation (MTDC)
  - Subcontract to Thomas Cook (for front end) and Taj Hotel
- Golden Chariot (March 12, 2008)
  - An agreement between MoR and Karnataka State Tourism Development Corporation (KSTDC)
  - IR's haulage charge works out to be Rs 29 lakh for 16 bogeys, Rs 31.5 lakh for 18 bogeys and Rs 34.5 lakh for 21 bogeys

“There are more problems for luxury train Golden Chariot. It has to pay Rs 10 lakh more per week to MoR, despite incurring losses. With 35% occupancy, the project is yet to break even, for which a minimum of 50% occupancy is required.

The government on Saturday gave a representation to MoR, through minister of state K H Muniyappa, to reconsider increase in haulage charge as it would be difficult to pay. Infrastructure minister G Janardhana Reddy held a meeting with Muniyappa.

Ever since the trains operation in February 2008, the state has been paying Rs 18 lakh haulage charge per week. The railway board has revised this to Rs 28 lakh per week. Karnataka State Tourism Development Corporation officials said it'll be difficult to pay the new charge, given that the train is still a few years from breaking even.

IR demands that charges have to be paid in full even if there are less number of bogies. The minimum number of bogies is 16. KSTDC also gave a representation to reduce this to 12, and make it more cost-effective to run the train in off-season. Muniyappa promised to take up the issue.

The MoR and the central tourism ministry have a 25% stake each in the Golden Chariot, while the state government has a 50% stake. When the MoU was signed in 2002, it was decided to share profits for five years. But the railway board changed the policy in 2007, scrapped the profit-sharing formula and fixed haulage charges. Due to low occupancy, there was a 21% relaxation in this for a year.

The state has requested the ministry to either revert to the profit-sharing model, reduce the haulage charge or charge it only for the number of rakes that are hired.” [Times of India Bangalore, 1<sup>st</sup> March, 2010]

- Royal Rajasthan on Wheels
  - An agreement between MoR and RTDC
  - RTDC has to pay haulage charges of about Rs 30 lakhs per trip to IR as per the new policy formulated by IR for tourist trains.
- Maharaja’s Express [[http://news.webindia123.com/news/ar\\_showdetails.asp?id=911160554&cat=&n\\_date=20091116](http://news.webindia123.com/news/ar_showdetails.asp?id=911160554&cat=&n_date=20091116)]
  - To be run by Royal Indian Rail Tours (RIRTL), a 50:50 between Cox and Kings (India) Ltd and IRCTC
  - First pan India tourist luxury train, services to be started in 2010
  - The project entails an investment of Rs 45 cr. The train, featuring 23 carriages will run between Mumbai and Kolkata and traverse through Gujarat, Rajasthan, Delhi. In the next step, it will cover Agra, Khajuraho, Bandhavgarh, Varanasi and Gaya. The travel and hospitality company is planning to raise up to Rs 610.39 cr through an initial public offer.
- Tourist train by Oberoi
  - [[http://news.webindia123.com/news/ar\\_showdetails.asp?id=1001200649&cat=&n\\_date=20100120](http://news.webindia123.com/news/ar_showdetails.asp?id=1001200649&cat=&n_date=20100120)]
    - In January 2010, the Punjab Government has given its approval to the Oberoi Hotels Group to be partners with the state in the luxury train project which had been approved by the MoR. The Oberoi Group was the single bidder for the luxury tourists train project. For this project, the group would pay Rs 90 lakhs per annum to the state.

## 21. Catering

[Raghuram, 2007;

[http://www.indianrailways.gov.in/indianrailways/directorate/traffic\\_comm/COMM-CIR-2K10/CC\\_35\\_10.pdf](http://www.indianrailways.gov.in/indianrailways/directorate/traffic_comm/COMM-CIR-2K10/CC_35_10.pdf)]

IRCTC, a subsidiary of IR, was in charge of catering services on trains and railway stations across India. Depending on the distance covered by the train and average passenger load factor, the railways either equips trains with their own pantry cars or provides meals at select stations en route.

A catering policy was introduced in June 2004 and further amended twice in 2005 covering stalls, refreshment rooms and onboard services. An important feature of this policy was allotment of minor catering units at important stations through open two packet competitive bidding system, while at less important stations and stalls reserved for weaker sections of society, the earlier system based on 'calling of applications' was retained.



With this policy, as an example, an annual catering contract for an important train like Howrah-Kalka mail was awarded for Rs 83.6 lakhs, when earlier it fetched Rs 5 lakhs. After open competitive bidding, earnings have increased from Rs 13 cr to over Rs 100 cr due to mobile catering. On stationary catering, due to the open competitive bidding, as an example, the license fee at Bandra and Nagpur went up from Rs 78,000 and Rs 32,000 to Rs 16 lakhs and Rs 34 lakhs respectively. The pace of open bidding for stationary units has been slowed down since some of the incumbents have gone to courts to contest IR's move [MD, IRCTC].

Railway Minister in her budget speech of 2010-11 said, "Since we have received several complaints, we have decided to provide catering departmentally in selected trains. The Catering Policy is under revision and will be finalized as early as possible."

Vision 2020 says, "Quality of catering would be improved by adopting sound and proven business practices, setting up a chain of modern base-kitchens and branded restaurants at stations and encouraging innovation and local cuisines in on-board catering."

A new catering policy has been announced in July 2010. As per this policy, IR will progressively take over management of all mobile catering services including base kitchens and mobile catering through departmental catering in a phased manner. All existing major and minor catering units will be awarded and managed by the zonal railways, except food plaza, food courts, fast food units. All such contracts, presently being managed by IRCTC, on expiry of the contract period will be awarded by the zonal railways. IRCTC will not renew any contract required to be handed over to zonal railways on expiry of the contract. IRCTC will be primarily responsible for running of food plazas, food courts, and fast food units within the ambit of this policy. At the time of this policy, IRCTC was responsible for serving food in about 300 trains including Rajdhani, Durgam and Shatabdi.

## 22. Parcel Operations

[MoR, 2009a and MoR, 2010]

IR has introduced the scheme for leasing of parcel space in the Brake Vans (SLRs), Assistant Guard's Cabin (AGC) and Parcel Vans (VPHs) of passenger carrying trains. Under this scheme, parcel space is leased out to private operators by inviting bids through open tenders.

To encourage leasing to the maximum possible extent, reserve price for leasing of parcel space in Brake Vans/Parcel Vans/Assistant Guard's Cabin has been kept attractive and realistic. Based on the same concept, Parcel Express trains with minimum composition of 15 Parcel Vans + 1 Brake Van are also leased out to the private operators.

Vision 2020, "Parcel services will be managed as a separate business and run from dedicated terminals with separate parcel trains rather than from station platforms. On major routes, this service will be run as efficiently and professionally as air cargo services. The revenue from parcel services would be targeted for at least a five fold increase in ten years from the present level of around Rs 1600 cr per annum."

### 23. Budget Hotels

[<http://www.zoomdevelopers.com/images/News/news2.pdf>]

IRCTC announced in 2006 to set up around 100 budget rail hotels across the country. 20 such concessions have already been awarded. Of these, 11 were won by the Zoom Developers-Royal Orchid consortium, five by Essel Group and four had gone to Signet Group. The hotels will be set up under the name of Rail Ratna in five cities - Chandigarh, Sealdah (West Bengal), Madurai (Tamil Nadu), Vijayawada and Secunderabad (Andhra Pradesh) in the first phase. The IRCTC land will be leased out to the hospitality sector on behalf of the railways and finalize the bids for 30 years to construct, operate and maintain the hotel as per the terms and conditions specified in the bid document.

### 24. Cleaning of Coaches

[<http://www.pib.nic.in/release/release.asp?relid=55072&kwd=>]

Intensive mechanized cleaning of coaches in the coaching depots has been outsourced through professional agencies in 42 coaching depots on IR.

Limited mechanized cleaning attention to identified trains during their scheduled stoppage enroute has also been outsourced at nominated 27 “Clean Train Stations” on IR.

Existing Railway Staff deployed for cleaning activities in coaches have not been/shall not be affected at all by the measures as above. These initiatives are primarily to enhance the levels of cleanliness and hygiene in trains.

[Compiled by the authors]

## Exhibit 4: PPPs in the Pipeline

### 1. Rolling Stock Manufacturing

#### a. Electric Locomotive Factory at Madhepura, Bihar

A decision was taken in February 2007 to set up a greenfield locomotive factory at Madhepura with an investment of Rs 18,000 cr. The project was to be taken up on PPP where a JV would be formed with an international manufacturer. The selection of the international partner was to be done through an international competitive bidding. MoR was to hold 26% equity stakes in the JV and the rest 74% equity stakes were to be brought in by the JV partner. The bidding was a two stage process comprising of technical and financial bids.

In May 2008, bids were invited from the interested players. Five companies namely Alstom (France), Bombardier (Germany), Siemens (Germany), a consortium comprising China-based CSR Zhuzhou Electric Loco Works and Monnet International, and a Japanese consortium comprising Mitsubishi, Kawasaki and Toshiba had submitted application for the technical bids. MoR short listed three bidders – Alstom, Bombardier and Siemens. In September 2008, second round of bidding took place where draft RFP was issued to the three short listed bidders. However, none of the bidders applied for the financial bid.

Following this, MoR decided to set up the unit as Railway's production unit. The cabinet approved this decision on 23th February 2009. Further, in December 2009, the MR accorded approval to revert back to JV mode which was approved by the cabinet. In March 2010, a fresh RFQ has been issued to interested applicants.

#### b. Diesel Locomotive Factory at Marhowra, Bihar

A greenfield diesel locomotive factory at Marhowra was approved in February 2007 with a cost of Rs Rs 2052 cr. This project was decided to be taken up on PPP, on the same lines as for the electric locomotive factory at Madhepura, through an international competitive bidding in a two stage process.

Two players, GE India and US based EMD were short listed after the technical bids. Only GE submitted the financial bid offering to be a 51% partner. MoR did not want to take any decision based on the single bid and decided to set up the unit as Railway's production unit. The cabinet approved this decision on 23th February 2009. Further, in December 2009, the MR accorded approval to revert back to JV mode which was approved by the cabinet. In March 2010, a fresh RFQ has been issued to interested applicants.

#### c. Rail Coach Factory at Rae Bareilly, UP

Railways announced in November 2006 to set up a rail coach factory at Rae Bareilly with an investment of Rs 1685 cr. This project was decided to be taken up on PPP, on the same lines as for greenfield locomotive factories, through an international competitive bidding in a two stage process. UPA Chairperson laid the foundation stone in February 2007. In August 2008, six bids were received including Reliance Infrastructure - China South Railway, L&T - China North Railway, Texmaco - Kawasaki-Mitsubishi, Jessops - Siemens, CAF of Spain, and Bombardier.

A total of 1230 acres of land was required of which government land was 467 acres and remaining was of Panchayat and private land. The private land belonged to nine villagers. There were issues in land acquisition as the villagers had filed a public interest litigation.

## 2. World Class Railway Stations

A total of 50 railway stations have been identified for developing into world class stations till 2020. Of these, 12 stations will be taken in the first phase ie till 2011-12. Anand Vihar and Bijwasan in Delhi are among the first greenfield world class railway stations to be completed in phase I.

However, Rs 12,000 cr New Delhi station modernisation project has not gone as envisaged. The ambitious project has been delayed for various reasons including cross ownership which caused discomfort for the bidders. The ambitious project has also run into obstacles with the New Delhi Municipal Corporation (NDMC), Delhi Development Authority (DDA) and the Delhi Traffic Police suggesting that the Railway authorities restrict their plan to simply constructing a modern station and ignore plans for additional passenger facilities or real estate development. It has been pointed out that commercial development of railway land in the vicinity of the station compound traffic woes. Eight companies including L&T Transco, DLF and GVK Developmental Projects and Mumbai-based Trif Infrastructure had cleared the first round of qualification for the project after the railways changed the qualifying criteria.

## 3. Multi Modal Logistics Parks (MMLPs)

[<http://www.indianrailways.gov.in/tenders/ppp/EOI-MMLPs-060109.pdf>

<http://www.constructionupdate.com/products/infrastructuretoday/2009/May2009/006.html>]

A MMLP is defined as a rail based intermodal traffic handling facility complex comprising container terminals, bulk / break-bulk cargo terminals, warehouses, banking and office space and facilities for mechanized handling, inter-modal transfers, sorting/grading, cold chain, aggregation/disaggregation, etc, to handle freight.

The IR has planned a few mega MMLPs at select locations along the Dedicated Freight Corridors (DFC) to reduce the overall logistics cost in the supply chain for the customers, duly leveraging the modern, efficient, high-capacity rail connectivity of the DFCs capable of meeting time-sensitive freight transportation requirement.

To develop these MMPLs through PPP, the MoR has invited Expression of Interests (EOI) in February 2009 seeking essential information regarding proposed locations, land area required and type/segment of logistics business to be developed from large logistics service providers, real estate developers, third party logistics players, warehousing investors, container operators and financial institutions.

The bids invited by the IR received an enthusiastic response from leading logistics players like Sical Logistics, World Windows Infrastructure, Container Corp of India, DHL Logistics, Mahindra Logistics, Transport Corporation of India, GATI and Adani Logistics.

#### 4. High Speed Corridors

[MoR, 2009a]

Minister of Railways in her budget speech in February 2010 said, “construction of high speed passenger rail corridors is another transformational initiative that railways will embark upon in the coming years. IR propose to invest in developing high speed corridors of 250 to 350 kmph speed. Already six corridors have been identified. These projects would require large investments and will be executed through PPP mode.”

Identified six corridors, as per Vision 2020 document, are:

- i. Delhi-Chandigarh-Amritsar;
- ii. Pune-Mumbai-Ahmedabad;
- iii. Hyderabad-Dornakal-Vijayawada-Chennai;
- iv. Howrah-Haldia;
- v. Chennai-Bangalore-Coimbatore-Ernakulam;
- vi. Delhi-Agra-Lucknow-Varanasi-Patna

It is envisaged that by 2020, at least four corridors of 2000 kms would be developed and planning for 8 other corridors would be in different stages of progress.

#### 5. High Speed Rail Link to Bengaluru Airport

[<http://www.thehindubusinessline.com/2010/04/27/stories/2010042752101800.htm>]

The 34 km high speed rail link to Bengaluru International Airport (BIA) is the Rs 6,900 cr project, which is coming up with the viability gap funding (VGF) from the central government. The Karnataka government would contribute Rs 532 cr. Five consortiums (Reliance Infrastructure, CSR Nanjing Rolling Stock Company Ltd, Pioneer Infratech Pvt Ltd - Siemens Project Ventures, Lanco Infratech Pvt Ltd - OHL Concessions S.L, and L&T Transco Ltd - ITD-ITD Cem-Soma Enterprises) have been asked to submit the bids out of the 27 companies who had shown interest for this project. Bids will be opened on August 12, 2010 and the letter of award would be issued on September 17, 2010.

#### 6. Non-core Activities

[MoR, 2009a]

Non core activities relate to assets and services that are not considered essential to train operations. Vision 2020 states on this “commercial utilization of vacant railway land, not required for operational use, can generate sustainable streams of revenue to finance the growth of railways. This will be done in a professional, transparent and accountable manner. Some of such land may also be utilized for setting up of schools, medical colleges, nursing colleges, etc. where wards of railway employees will have priority in admission. Some of such land may also be utilized for setting up of schools, medical colleges, nursing colleges, etc. where wards of railway employees will have priority in admission.”

#### 7. Special Freight Train Operator (SFTO) Scheme (2010)

[[http://www.domain-b.com/companies/companies\\_I/Indian\\_Railways/20100610\\_freight\\_tra.html](http://www.domain-b.com/companies/companies_I/Indian_Railways/20100610_freight_tra.html)]

On the lines of container train operators, for commodities requiring specialized wagons, MoR has introduced SFTO scheme in June 2010. The scheme aims to increase the share of railways in the movement of non conventional traffic like bulk cement, bulk fertilisers, fly ash, selected chemicals

and petrochemical, bulk alumina, steel products requiring SPW, vegetable oil, molasses and caustic soda that require the deployment of special purpose wagons. There are five categories based on commodity types.

The policy provides for a concession period of 20 years, extendable till expiry of life of wagon. The maintenance of wagons during this period will be provided by IR at its own cost except for the cost of special components, which will be paid by the owner of these wagons. The policy envisages train operators charging tariff from end users, while also functioning as the consignor and consignee.

Those investing in the SFTO scheme will be eligible for a rebate of 12% on the base freight for 20 years or recovery of their cost, whichever is earlier. In the case of high capacity wagons with a throughput that exceeds 10% of the existing throughput, an additional rebate of 2% for each increase of 10% will be offered for the additional tonnage for 20 years or till they recover their cost. Investors will be required to make a minimum investment of three rakes.

According to MoR, investors in this scheme will benefit from flexible loading and unloading points based on market demand, and will be free to induct rakes taken on lease. Moreover, they will not be permitted to load any commodity on the return leg of the wagons and be eligible for a freight rebate of 10%. Investors will also be free to bring in wagons of new designs with a higher carrying capacity that would entitle them to higher rebates.

The selection of SFTO will be made after inviting competitive bids which will be in two parts i.e. technical and financial bid.

## **8. Private Freight Terminal (PFT) Scheme (2010)**

[[http://www.indianrailways.gov.in/indianrailways/directorate/traffic\\_comm/Draft\\_Policy/PFT\\_090410.pdf](http://www.indianrailways.gov.in/indianrailways/directorate/traffic_comm/Draft_Policy/PFT_090410.pdf)]

To enable rapid development of network of freight handling terminals with the participation of private sector, MoR has introduced PFT scheme in June 2010. PFTs (green or brownfield) shall be set up only on private land. However, for rail connectivity, railway land can be offered as per extant rule. They can handle all traffic except outward coal, coke and iron ore. PFTs would provide various logistics related services like warehousing facilities, value addition services like palletization, labeling, processing of goods with adequate inter modal facility and convenience centre etc. The scheme is open to registered CTOs. Setting up of a terminal exclusively for container traffic by CTOs will be governed by the concession agreement signed between CTO and IR. However, if container terminal is converted to a PFT, it will be governed by this policy.

An application fee of Rs 1 cr and security deposit of an equal amount would be charged to ensure timely commissioning of PFT, which can provide value added logistics related services and charge for the same.

The period of agreement would be for 20 years and could be extended by period of 10 years. Further extension would be permitted on the basis of extant policy at the time of such extension, sources said.

IR's share would be equivalent to 50% of terminal charge or Rs 10 per tonne, whichever is higher, with a suspension of two years for brown field and five years for green field PFT.

## 9. Development of Automobile and Ancillary Hub (2010)

[[http://indianrailways.gov.in/indianrailways/directorate/traffic\\_comm/Draft\\_Policy/policy\\_automobile\\_hub-090410.pdf](http://indianrailways.gov.in/indianrailways/directorate/traffic_comm/Draft_Policy/policy_automobile_hub-090410.pdf)]

To increase the modal share of railways in transportation of automobiles, which is one of the fastest growing industries in India, MoR has come up with a policy on development of automobile and ancillary hub. With the induction of high capacity auto carriers, having higher throughput as planned by the IR and as proposed under Automobile Freight Train Operator (AFTO), more number of rakes will be inducted with competitive freight structure.

Under this policy, any registered company in India ie manufacture of automobile or logistics company or Society for Indian Automobile Manufacturer (SIAM) or registered freight train operator having annual turnover of Rs 20 cr during last financial year, can apply. Railway land will be provided for such hubs on license basis initially for a period of 7 years extendable every year thereafter on the basis of review carried out by the zonal railways based on the performance. The license fee shall be payable as per extant policy. The licensee would be allowed a maximum of one year from the date of handing over the land as gestation period to complete construction of the hub in all respects and make the same operational. Automobile and ancillary hubs shall be a common user facility for general use of the automobile industry, without any exclusive right.

According to MoR, development of automobile and ancillary hubs will provide an opportunity to automobile manufacturers to carry their traffic by rail in bulk and do secondary distribution to consuming centers in the immediate catchments areas from such hubs. Similarly they can also do aggregation of automobile at such hubs so as to offer full rake load to IR.

## 10. New R3i Policy (2010)

[[http://www.indianrailways.gov.in/indianrailways/directorate/planning/downloads/R3i\\_circular\\_new.pdf](http://www.indianrailways.gov.in/indianrailways/directorate/planning/downloads/R3i_circular_new.pdf)]

This policy is aimed at attracting private sector participation in rail connectivity projects so that additional rail transport capacity can be created. This policy shall not be applicable to lines intending to provide connectivity to coal mines and iron ore mines directly or indirectly. Only those new line proposals which are 20 kms or more in length (excluding the length of siding which may take off from this line) shall be eligible under this policy. The policy allows four models:

### (a) Cost sharing freight rebate model

The percentage contribution of the applicant should be minimum 50% of the project cost. Land will be acquired by the railways at applicant's cost. The ownership of land and line will remain with railways. A freight rebate of 10%-12% on incremental outward traffic (incremental traffic being reckoned as the traffic which is over and above the level of traffic moved by rail at the time of the sanction of the project). The freight rebate will be valid till the party recovers the advance contribution made by it or for a period of 10 years from the date of commissioning of the line, whichever is earlier. Construction of the line will be undertaken by the railways. O&M shall be undertaken by the railways at its own cost.

### (b) Full contribution apportioned earning model

The applicants would make the 100% contribution towards the project cost. Land will be acquired by the railways at applicant's cost. The ownership of land and line will remain with railways. Applicant will construct and maintain the line for 25 years. For a period of 25 years from the date of

commissioning of the line, the applicant would be entitled to receive the apportioned earnings from the line less the O&M costs incurred by the railways on the line. Railways would levy a fee of 2% on the gross apportioned earnings of the applicant's share for the first ten years from the date of commissioning and 4% thereafter till the completion of the concession period of 25 years.

(c) The SPV model

This model will be applicable to both (i) lines likely to be embedded in the existing railway network as well as and (ii) lines taking off from the mainline and terminating into a dead end terminal be it a port, steel plant etc.

An SPV shall be formed between railways and the applicant and railways share in equity will generally be 26%. Land will be acquired by the SPV at its cost but ownership of land will vest with IR. The original cost of acquisition of land will be returned to the SPV at the end of the concession period without any escalation what so ever.

SPV shall be granted a concession to construct, operate and maintain the line and in consideration there of, it shall be granted a share in the revenue generated on the project line. (i) For Port connectivity projects: first 10 years of operation, 100% freight apportionment less O&M charges, and for next twenty years, 98% freight apportionment less O&M charges. (ii) For embedded line projects: (a) for project related traffic: first 10 years of operation, 95% freight apportionment less O&M charges, and next twenty years, 90% apportionment less O&M charges), (b) for other than project related traffic/diverted traffic: 80% apportionment less O&M charges for 30 years. in both the cases the concession shall lapse as soon as the NPV on the project equity reaches zero at a discounted rate of 14%.

Construction could be done by the SPV itself through competitive bidding or by railways or RVNL for SPV at the cost of SPV and at the option of SPV. O&M shall be undertaken for the SPV by the railways for which SPV shall reimburse the costs.

(d) The private line model

Applicable when a private line is built by the applicant on privately acquired non-railway land and connectivity is sought to the railway's network. Applicant will construct and maintain the line for a period of 30 years. Railways would enter into an O&M agreement with the applicant for a period of 30 years. Apportioned revenue less O&M expenditure incurred by Railways would be paid to the applicant. Railways would levy a fee at the following rate on the gross apportioned earnings: (i) 0 -5 years – Nil, (ii) 5-10 years - 2%, (iii) 10-20 years - 3%, and (iv) 20-30 years - 4%. The fee shall be reviewed mutually at the end of 10 year and 20 year period. At the end of the 30 years period, the Railways will have the right to take over the line at zero cost. Railways would pay the cost of the land to the party.

While applicants may choose and indicate preference for one of the models, MoR reserves the right to decide which model shall be applicable and that decision shall be final.

[Compiled by the authors]



## Exhibit 5: Set of Concerns by PRCL

PRCL started operations from March 2003. They could **not** meet the traffic guarantee in the early years of operation, primarily due to GPPL offering low traffic. Some time in late 2005, after a couple of years of operation, the Managing Director of PRCL made the following suggestions for the Concession Agreement and the Shareholders Agreement:

### Concession Agreement

- SPV company should be given the right to commercial exploitation of project assets including land, buildings, etc. (Clause 4.2)
- SPV company should be given power to quote freight rates on its line. (Clause 4.2)
- MOR should charge lease rent in respect of assets leased to SPV at par with the lease rent charged from other SPV like HMRDC and KRCL. (Clause 4.4)
- SPV company should be given the right to mortgage the project assets developed by it on the project as security with the lenders for raising debt for the project. (Clause 4.3)
- SPV company should be given power to appoint its own agency for construction, operation and maintenance of the railway line. (Clause 4.3)
- SPV company should be paid access charges for running passenger trains and trains of other parties on its line. (Clause 4.4)

### Shareholders Agreement

- Shareholders should bring their equity contribution in full before the raising of debt by the company or at least give bank guarantee for the balance equity. (Clause 8.1)
- In case the full equity contribution is not brought by the shareholders, the company should issue partly paid up shares and make cash calls to the shareholders in three stages (Clause 8.3):
  - 25% of the face value of the share should be called immediately after formation of the company as application money
  - 25% of the face value of share should be called at the time of allotment of the shares.
  - 50% of the face value of the share should be called as per funds requirements of the project as call money.
- In case of default in payment of cash calls, the company should be allowed to forfeit the shares and reissue them to new persons.
- Interest on the delayed payment of cash calls should be equal to prime lending rate of State Bank of India. (Clause 9.2)
- Traffic guarantee should not be a condition for either shareholder. (Clause 21.4)
- Traffic projections for the project should be realistic and it should not be inflated just to raise debt from the lenders which later on become difficult to realize.
- In case the company is not able to generate sufficient revenue in the initial years of commercial operations to service the debt, the shareholders should ensure adequate cash inflows for the company. This should be incorporated in the SHA.

- SPV should be headed by a person designated as MD/CEO who should be a member of the Board and should have voting powers like other Directors. (Refer clause 6.6)
- MD will work under the control of Board of Directors represented by all the shareholders. (Clause 6.6.3)
- The Directors nominated by the shareholder should not interfere in the day to day functioning of the company. (Clause 6.3)
- MD should be given adequate power to run the company professionally. (Clause 5.3)
- Expenses incurred by a shareholder on the project may be capitalized after it is review by an independent accounting firm and not necessarily the auditor appointed by the other shareholder. (Clauses 4.4 and 4.5)
- Expenses related to traveling and lodging incurred by Directors in attending Board meetings committee should be borne by the company. (Clause 6.2.3)
- Debt for the project should be raised by the company and not by the private shareholders. (Clause 8.7)
- The company should be allowed to go for IPO to raise funds from the market after first year of commercial operation date. (Clause 12.6.7)
- Arrangements for viability gap funding –
  - by Government?
  - by Shareholders?
- SHA should provide for infusion of additional equity of gap funding by both shareholders in case of delay in viability.
- Staffing pattern of new line be decided by the company and not by IR. Allow free run of automation and mechanical maintenance. If necessary by private professional agencies other than IR.

[PRCL, 2005]

## Exhibit 6: Discontinued Partnership Concepts in IR

### 1. Own Your Wagon Scheme (OYWS) (1992)

[[http://www.cag.gov.in/reports/railways/2002\\_book2/chapter1.htm](http://www.cag.gov.in/reports/railways/2002_book2/chapter1.htm)]

The MoR (Railway Board) launched 'Own Your Wagon Scheme' (OYWS) in the year 1992 as a participative marketing strategy to enhance the rail transport capacity to meet the needs of various sections of the economy by encouraging private parties to own their wagons and thereby help and supplement the resources of railways for acquisition of Rolling Stock. The scheme invited investments from bulk users and financing/ leasing companies on the basis of ownership of wagons in units of trainloads.

The salient features of the scheme were as follows:

- The IR will pay to the owners 14.5% (subsequently revised to 16%) lease charges (per annum) for the first 10 years and 1% lease charges (per annum) for subsequent 10 years.
- The investors can procure the wagons either through the railways or directly from the approved wagon builders on payment of design loan, inspection and administrative charges as applicable.
- The users/ owners will also have the benefits of guaranteed clearance of a mutually agreed specified quantum/ tonnage of the specific commodity/ product during a specified period.

The benefits admissible to different categories were as under:

#### *Category 'A': Pure lease*

- Lease charges for the primary period of 10 years at the rate of 14.5% (subsequently revised to 16%) per annum on current cost (original procurement price) of the wagons leased to the railways. For the secondary period of 10 years at the rate of 1% per annum of the current cost of the wagons. Should the wagons be found fit for further service after expiry of the 20 years period, the lease would continue on mutually agreed terms.
- Freight at normal tariff rates.

#### *Category 'B': Lease cum guaranteed clearance with General Service wagons*

- Lease charges as above.
- Guaranteed clearance of mutually agreed specified quantum/ tonnage of the specific commodity/ product during a specified period subject to certain conditions.
- Freight at normal tariff rates

#### *Category 'C': Guaranteed Clearance with Special Wagons*

- Lease charges will not be payable to the owners of special wagons moving in dedicated circuits and involving empty running in one direction.
- Lump-sum freight rate mutually negotiated would be quoted for the identified dedicated movement taking into account the cost of haulage in the loaded and empty direction, terminal marshalling and other costs, subject to revision every year along with the Annual Railway Budget exercise.

Under the scheme the investor can procure the wagons either through the railways or directly from the approved wagon builders. If it is procured through railways, party will pay railways 3% of the cost of wagons as service charges, which will cover design loan, inspection and administrative charges. If,

however, the party procures the wagons directly from approved manufacturers he will have to pay only 1.5% towards design loan and inspection charges.

The scheme also provided that IR would pay lease charges to the leasing companies in advance on quarterly basis. The calculation of lease charges will be based on the last tendered price of similar wagons procured by IR during relevant period or actual procurement price paid by the party whichever is less. Contrary to the above provision, the Railway Board, based on the representations of Oil Industry accepted the actual procurement price, details of which are given below, even though it was higher than the last tendered price for similar wagons procured by IR for the purpose of calculation of lease charges. The main reason for accepting the actual procurement price was the additional payment made by the party for procurement of free supply items like steel, wheel sets and roller bearings on account of excise duty etc.

## 2. Build Own Lease Transfer (BOLT) (1994)

[Jain, 2007]

In 1994-95, BOLT scheme was launched to attract private investment in railways. Response to this scheme was poor. Of the 14 projects bid through this route, 12 were cancelled due to unacceptability high lease charges. Two concessions for projects namely, Viramgam-Mehsana Gauge Conversion and Mudkhed - Adilabad gauge conversion were awarded, but did not succeed as developers could not achieve financial closure. The concessions were terminated midway. Major reasons for the failure were as under:

- (i) The concession agreement was not a bankable document. It did not recognize the role of a lender and did not address their concerns.
- (ii) Bidders saw a lot of risk as prior availability of land, design, drawings etc. was not ensured.
- (iii) Risks were not allocated optionally and fairly.

This scheme has been rehashed by IR to remove its shortcomings and it has been re-launched as BOT (annuity scheme)

## 3. Wagon Investment Scheme (WIS) (2005)

[<http://www.thehindubusinessline.com/2005/04/13/stories/2005041300770700.htm>]

The essence of the scheme is that it focuses on assured supply of guaranteed number of rakes every month to a customer based on the number of rakes procured by him. Also freight concessions will be allowed to him. The wagons under the scheme can be procured by individuals, corporate bodies or association or groups of companies such as integrated steel plants of SAIL or a group of cement companies in a cluster.

The customers who do not have own sidings can also participate in the scheme. The scheme also provides for supply of bonus rakes whose number will increase for those customers opting for Engine-On-Load system.

As for the mode of procurement, the customers can procure the wagons directly from the builders approved by the MoR subject to current IR Standard design and specifications and inspection by the nominated agency of the railways namely RDSO. All critical components will be procured from RDSO approved sources and to current IRS specifications.

The wagons can also be procured through wagon builder in a foreign country subject to IR Standard designs and specifications and subject to inspection by the nominated agency of the railways. The foreign exchange or its equivalent, if any, for imported components would be provided for customers participating in the scheme.

The customer can procure any number of wagons in a unit of rake loads without any ceiling subject to a minimum of one rake and four percent additional wagons as maintenance spare. Procurement of wagons in piecemeal shall not be permitted.

To begin with, two types of wagons, namely, BCN (covered) wagons and open (Box N) wagons can be procured under the scheme. In both the categories, 10% freight rebate will be admissible - 15 years for covered wagons and 10 years for the open type. The customers will be eligible for guaranteed supply of four rakes a month for covered wagons and six rakes a month for open wagons. In addition, a guaranteed supply of two bonus rakes will be made available without freight concession or penalty to those opting for the Engine-On-Load scheme.

The WIS is an improvement over the earlier OYWS in several ways. Thus, unlike OYWS which flopped, no lease charges shall be payable under the present scheme. Second, any escalation in rates and tariffs is taken care of as the rebate is in percentage. Third, unlike OYWS, it is not linked to PLR and therefore much simpler and more transparent.

[Compiled by the authors]

## Exhibit 7: A Comparison of Wagon Related PPPs

	<b>Own Your Wagon Scheme (OYWS)</b>	<b>Wagon Investment Scheme (WIS)</b>	<b>Liberalized Wagon Investment Scheme (LWIS)</b>	<b>Wagon Leasing Scheme (WLS)</b>
<b>Who can invest</b>	<ul style="list-style-type: none"> <li>•Bulk users</li> <li>•Financing/leasing companies</li> </ul>	<ul style="list-style-type: none"> <li>•Individuals as producers</li> <li>•Corporate entity as producers</li> </ul>	<ul style="list-style-type: none"> <li>•Wagon leasing companies<sup>2</sup></li> <li>•End users</li> </ul>	<ul style="list-style-type: none"> <li>•Wagon leasing companies</li> </ul>
<b>Types of wagons</b>	any	<ul style="list-style-type: none"> <li>•BCN</li> <li>•BOXN</li> </ul>	<ul style="list-style-type: none"> <li>•HCW<sup>3</sup></li> <li>•SPW<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>•HCW</li> <li>•SPW</li> <li>•Wagons for container movement</li> </ul>
<b>Wagon procurement</b>	From IR or directly from wagon manufacturer	Directly from wagon manufacturer or import	Directly from wagon manufacturer or import	Directly from wagon manufacturer or import
<b>Restricted commodities</b>	no	no	Coal and coke, ores and minerals including iron ore	Coal and coke, ores and minerals including iron ore
<b>Benefits</b>	<ul style="list-style-type: none"> <li>•Pure Lease (IR will pay 16% lease charge per annum for the first 10 years to owners.)</li> </ul>	<ul style="list-style-type: none"> <li>•BCN</li> <li>10% freight concession for 15 years.</li> <li>4 guaranteed rakes per month</li> <li>2 additional rakes without EOL scheme and 4 additional rakes with EOL scheme as bonus per month without freight concession</li> </ul>	<ul style="list-style-type: none"> <li>•HCW</li> <li>12% freight concession for 20 years.</li> </ul>	<ul style="list-style-type: none"> <li>•HCW</li> <li>12% freight concession for 20 years.</li> </ul>
	<ul style="list-style-type: none"> <li>•Lease cum Guaranteed Clearance with General Service wagons (Lease charges as above. IR assures the lessor to clear a minimum volume of traffic during a specific period.)</li> </ul>	<ul style="list-style-type: none"> <li>•BOXN</li> <li>10% freight concession for 10 years.</li> <li>6 guaranteed rakes per month</li> <li>2 additional rakes without EOL scheme and 4 additional rakes with EOL scheme as bonus per month without freight concession</li> </ul>	<ul style="list-style-type: none"> <li>•SPW</li> <li>15% freight concession for 20 years</li> </ul>	<ul style="list-style-type: none"> <li>•SPW</li> <li>15% freight concession for 20 years</li> </ul>

<sup>2</sup>Wagon Leasing Company: A Leasing Company engaged in the business of procuring railway wagons and making them available to other business entities authorized to deploy such wagons for operation over IR network in accordance with the extant policy of MoR

<sup>3</sup> High Capacity Wagons: Wagons with payload which are at least 2 tons higher than the payload of extant similar wagons on IR for 25.0 or 22.9 tons axle load route, as the case may be.

<sup>4</sup> Special Purpose Wagons: Wagons designed for rail transportation of a specific commodity or group of commodities.

	<b>Own Your Wagon Scheme (OYWS)</b>	<b>Wagon Investment Scheme (WIS)</b>	<b>Liberalized Wagon Investment Scheme (LWIS)</b>	<b>Wagon Leasing Scheme (WLS)</b>
	•Guaranteed Clearance with Special Wagons (No lease charges to owners. Concession in freight rates)			No benefits if wagons are leased to contractors
<b>Wagon maintenance</b>	IR, without any extra cost (chargeable for special wagons)	IR, without any extra cost	IR, on payment basis	IR, on payment basis
<b>Empty run</b>	Not charged	Not charged	Class 100	Class 100
<b>Dispute resolution</b>	By three arbitrators. One arbitrator is to be nominated by the Investor, the other by the Railways and the third by mutual agreement between the parties	By three arbitrators. One arbitrator is to be nominated by the Investor, the other by the Railways and the third by mutual agreement between the parties	By arbitrator nominated by the General Manager of the Zonal Railway	By arbitrator nominated by the General Manager of the Zonal Railway

[Authors' Analysis]

## Exhibits 8: Lessons from Container Train Operations

“Introduction of competing entities has provided the much needed choice to users of container services. It has led to expansion in capacity. The new concessionaires have acquired 89 container trains as compared to 189 trains owned by CONCOR as of September 2009. Inability of IR to provide or promote common ICDs coupled with the restricted commodities has constrained the growth potential.

The evolution of policy in this case sheds light on the nature of impediments that are faced when the policy involves participation of the private sector in an area traditionally served by the public sector. It is evident that **incumbent resistance** influenced the policy making process. While the objective of the policy started with introduction of competition to bring efficiency gains, the objectives quickly expanded to protection of IR revenues, and to mitigate the effect of capacity constraints, resulting in **entry barriers**. As far as users were concerned, competition would have been the best remedy to protect their interests as the bargaining power of new entrants, given an active incumbent, would have been low. The policy making at an entry stage also did not factor in risks, which would be imposed on the private players if ambiguities and discretion of the public entities enhanced by a non **level playing field** could affect their use of investment and profitability.

The policy process brings out the significance of the role of the non-IR stakeholders in dealing with incumbent resistance and the consequent entry barriers while ensuring a level playing field. Though there is recognition of the ambiguities and distortions, the issue may be far from being addressed. It would be essential to have an independent regulator on issues of service levels, pricing, non transparent collusion etc, primarily focused on the transactions between the IR and the operators.”

[Morris et al, 2010 and Raghuram et al, 2010]



## Exhibit 9: Umbrella SPVs for PPPs

To facilitate project development and structuring and to make it amenable to private participation, railways have created umbrella SPVs.

### 1. Container Corporation of India Ltd (CONCOR) (1988)

CONCOR was incorporated in March 1988 under the Companies Act and commenced operation from November 1989 taking over the existing network of 7 ICDs from the IR. The prime objective was to provide efficient and reliable multi modal logistics support for the country's export import and domestic trade.

CONCOR is also a stakeholder in two container terminals at Indian ports. It holds 26% stake in Gateway Terminals India Pvt Ltd (GTIPL), a joint venture with Maersk, Denmark, for owning and managing the third container terminal at Jawaharlal Nehru Port. This terminal was awarded in August 2004 through a competitive bidding. In February 2005, CONCOR picked up 15% stake in India Gateway Terminal Pvt Ltd, a joint venture with Dubai Ports International, to set up and operate an international container transshipment terminal at Vallarpadam, under the Cochin Port.

### 2. Indian Railway Catering and Tourism Corporation Ltd (IRCTC) (2001)

[<http://www.irctc.co.in/RTI.htm>]

Indian Railway Catering and Tourism Corporation Ltd (A Government of India Enterprise) was set up by the MoR with the basic purpose of hiving off entire catering and tourism activity of the railways to the new Corporation so as to professionalise and upgrade these services with public-private participation. The mission of IRCTC is to "Enhance customer services and facilitation in railway catering, hospitality, travel and tourism with best industry practices". IRCTC handles a wide range of Rail Passenger front end services such as Catering on Trains and at stations, production of Rail Neer bottled drinking water, Internet Ticketing, Railway Enquiry Call Centre-139, a complete range of Travel and Tourism related services including Rail based Tour Packages, Train Charters, Village and Wheels, Hotel Bookings, Cab Rental etc.

### 3. Partnerships with State Governments

- *Government of Karnataka*

MoR and Government of Karnataka have created a SPV namely, Rail Infrastructure Development Company of Karnataka (KRIDE) in 2002 with 26% equity each held by MoR and Karnataka Government and 48% equity by Infrastructure Development Corporation of Karnataka. This SPV was entrusted development of the following 4 projects:

- i. Solapur-Gadag: Gauge Conversion
- ii. Guntakal-Hospet Doubling
- iii. Hubli-Ankola: New Line
- iv. Hassan-Mangalore Gauge Conversion

- *Government of Tamilnadu*

The Government of Tamil Nadu shares two-thirds of the cost of Mass Rapid Transport System project between Thirumayilai and Vellacherry. It had contributed 50% of the cost of Salem - Cuddalore gauge conversion project and Chennai Beach - Tambaram – Chengleput suburban gauge conversion project.

- *Government of Jharkhand*

An MOU was signed between the Government of Jharkhand and MoR in February 2002 for execution of six projects estimated at Rs 1997 cr. Two-thirds of the final completion cost will be borne by the State Government and one third by the MoR. The projects include Ranchi-Hazaribagh-Koderma new line (189 kms), Ranchi-Lohardaga gauge conversion with extension to Tori (113 kms), Koderma-Giridih new line (105 kms), Deoghar-Dumka new line (60 kms), Dumka-Rampurhat new line (64 kms) and Koderma-Tilaiya new line (20 kms).

- *Government of West Bengal*

Government of West Bengal have agreed to share one-third of the cost of the extension of Metro Railway from Tolly Ganj to Garia.

- *Government of Andhra Pradesh*

An MoU has been signed with the Government of AP for development of the Multimodal Urban Transport System in the twin cities of Hyderabad and Secundrabad through JVs. Train services have been introduced. An SPV is proposed to be set up for managing the project.

- *Government of Kerala*

IR has signed an MoU with the Kerala Government to form a JV for fabrication of bogie frames for passenger coaches and side walls for the wagons for IR.

Railways will utilize the land and other assets of SIKL, a public sector undertaking of the Government of Kerala, which has two units in Alleppey - Steel Fabrication Unit (SFU) and Autokast. IR will hold 51% stake in the JV and the remaining by the Kerala government. The JV will be set up in a phased manner. The Kerala government will have to clear all liabilities and obligations of state government as owner, promoter and guarantor of SFU and Autokast and transfer the assets to the JV along with employees.

[http://machinist.in/index.php?option=com\\_content&task=view&id=1423&Itemid=2](http://machinist.in/index.php?option=com_content&task=view&id=1423&Itemid=2)

- In addition, there are MoUs with *Government of Maharashtra* for three projects, and *Government of Haryana* for one project.

#### 4. Rail Vikas Nigam Limited (RVNL) (2003)

[Jain, 2007; [http://www.rvnl.org/annual\\_report/20100119031530\\_Annual\\_Report\\_RVNL\\_2008\\_09.pdf](http://www.rvnl.org/annual_report/20100119031530_Annual_Report_RVNL_2008_09.pdf)]

MoR has created another SPV in the name of Rail Vikas Nigam Limited in 2003 for project development under PPP structure for implementing 55 projects identified under National Rail Vikas

Yojana. These Projects pertain to strengthening of golden quadrilateral (29 projects), port connectivity and corridors to hinterland connectivity (26 projects). Salient features of project development SPV are as under:

- Selection of sanctioned and viable projects
- The SPV will mobilise/raise financial resources, secure traffic guarantees, and select strategic partners in a project funding
- It can implement the projects by creation of project specific SPV or any other financing structure

Operational Joint Venture SPVs of RVNL are:

- Kutch Railway Company Limited
- Haridaspur Paradip Railway Company Limited
- Krishnapatnam Railway Company Ltd
- Bharuch Dahej Railway Company Limited
- Angul Sukinda Railway Limited

SPVs in the pipeline are:

- Surat Hazira Railway Company on Western Railway
- Dighi Port Railway Company on Konkan Railway
- Dholera Port Railway Company on Western Railway

Upto 31<sup>st</sup> March 2009, SPVs had raised a total equity to the tune of Rs 635 cr which includes Rs 340 cr equity from shareholders other than RVNL.

## 5. Rail Land Development Authority (RLDA) (2007)

[<http://www.rlda.in/>]

RLDA, setup in 2007, is a statutory Authority, under the MoR, set-up by an Amendment to the Railways Act, 1989 (Amendment No. 47 of 2005), for development of vacant railway land for commercial use for the purpose of generating revenue by non-tariff measures.

The Executive Board of RLDA consists of Member Engineering/IR Board as ex-officio Chairman, one Vice Chairman and four Members.

IR (IR) has approximately 43,000 hectares of vacant land. Land which is not required for operational purposes in the foreseeable future would be identified by the zonal railways and the details thereof would be advised to Railway Board. Such plots of land would thereafter be entrusted to RLDA by Railway Board in phases for commercial development.

Commercial development of vacant railway land by RLDA would generally involve the following steps:

- Inspection of the sites entrusted by MoR to ensure that these are free from any encumbrances/encroachments and are prima-facie suitable to commercial development.
- Getting a survey done for each individual plot of land from a reputed real estate consultant, to identify the use of the land which results in maximum revenue.

- Based on the commercial use decided, to call for an expression of interest/request for proposals from developers for commercial development through the Public Private Partnership (PPP) route, and
- Selecting a suitable developer based on laid down technical and financial parameters, after calling for financial bids from the short-listed developers.

RLDA's expenses are met out of grants provided by IR. The entire earnings generated from development of railway land would be transferred by RLDA to IR.

[Compiled by the authors]

## Exhibit 10: Policy on Luxury Tourist Trains

**GOVERNMENT OF INDIA (BHARAT SARKAR)  
MINISTRY OF RAILWAYS (RAIL MANTRALAYA)  
(RAILWAY BOARD)**

No. 2007/Tourism/140/12

New Delhi, dated 7/03/2008

General Manager,  
All Indian Railways.

**(Commercial Circular No. 14 of 2008)**

**Sub: Policy on Luxury Tourist Trains being operated or to be operated in association with State Tourism Departments or IRCTC.**

Railway Board has reviewed the policy for all the Luxury Tourist Trains which have been introduced in the last five years and the new trains which may be introduced in future in association with State Tourism Departments or Indian Railway Catering & Tourism Corporation Ltd. The main features of the revised policy are as under:

1. The capital investment for manufacturing of the rake including furnishing of the rake for all the new projects will be made by State Tourism Departments / Indian Railway Catering & Tourism Corporation Ltd. except those projects for which specific commitments have been entered into.
2. State Tourism Departments or Indian Railway Catering & Tourism Corporation Ltd. will be responsible for marketing, publicity and the management of the train including on-board, off-board and other services.
3. The ticket tariff for the trains will be fixed by State Tourism Departments / Indian Railway Catering & Tourism Corporation Ltd. under intimation to Railway Board.
4. The operation of the train will be undertaken by the Railways including the provision of loco, track, terminal facilities and other concurrent facilities required for operation of the train.
5. The scheduled safety maintenance including periodical overhauling of the train will be undertaken by the Railways. The charges for maintenance and periodic over hauling will be paid by State Tourism Department / Indian Railway Catering & Tourism Corporation Ltd. as a part of the haulage charges.
6. The Railways will charge haulage charges for the trip by the train for the initial three years. After three years of operation of the train, Railway will take additional charges, in addition to haulage charges, as a percentage of gross revenue in a graded manner linked to the occupancy of the train as per para 7 below.

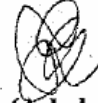
7. The additional charges, in addition to the haulage charges will be payable to the Railways from the fourth year onwards of operation of the train as under:

<b>Occupancy of the train</b>	<b>Share of the Gross revenue payable to Railway</b>
Upto 50%	5%
Upto 60%	6%
Upto 70%	7%
Upto 80%	8%
Upto 90%	9%
Above 90%	10%

8. Gross revenue will mean the total revenue generated by the operation of the train from business of operating the tourist train which shall include the charges for train journey, on-board services, off-board services, sales of any kind including food items, beverages, spa / gym, souvenirs, etc. However, in order to simplify the calculation of revenue from value added services i.e. sale of beverages / liquor, spa / gym, souvenirs, etc., Railway may fix the value of earnings from these services as a percentage of total ticket revenue which may vary from 5% to 10% of the total revenue generated from standard ticket tariff. This percentage will be based on the actual sales of these services in the first two-three years of operation of the train.
9. Revenue sharing arrangement for first five years of train operation should be included in the agreement. After 5 years, the same should be reviewed. Additional charges payable to the Railways as per para 7 will be applicable for the fourth and fifth year and these charges will be reviewed by Railways at the end of the 4<sup>th</sup> year of the operation of the train and the revised rates will be applicable from the 6<sup>th</sup> year onwards.
10. State Tourism Departments / IRCTC will maintain proper records related to the revenue and occupancy of the train and the details shall be made available to the Railways every quarter from the inception of the project. Railways will have right to verify the original records as and when needed.
11. The haulage charges will be paid to the Railways on a quarterly basis atleast 15 days before the beginning of each quarter. Operation of train will not commence unless the haulage charges have been paid to the Railways for the concerned quarter in advance.

The additional charges as per para 7 above will also be paid to the Railways on a quarterly basis within 45 days after each quarter. Delay in making payment to the Railways shall attract penal interest rate at 18% per annum.

12. All proposals regarding introduction of Luxury Tourist Trains will be dealt by the Railway Board. No work should be undertaken or commitment should be given by any Zonal Railway before the proposal for Luxury Tourist Train is cleared by the Railway Board.
13. The concerned Zonal Railway should enter into an agreement in line with the draft agreement to be circulated by the Railway Board with the State Tourism Department / Corporation or IRCTC as the case may be before the commercial run of the train is started. A copy of the signed agreement should be sent to Board.



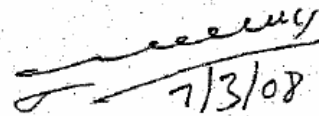
(Ashok Kumar)  
Executive Director (Tourism & Catering)  
Railway Board

No. 2007/Tourism/140/12

New Delhi, dated 7/03/2008

Copy forwarded to:

1. Dy. Comptroller & Auditor General of India (Railways), Room No. 224, Rail Bhawan, New Delhi with 36 spares.
2. FA & CAOs, All Indian Railways.
3. Principal Director of Audit, all Indian Railways.



(Naresh Salecha)  
Executive Director Finance (C)  
For Financial Commissioner / Railways

**DA: 36 spares**

No. 2007/Tourism/140/12

New Delhi, dated 7/03/2008

Copy forwarded to:

1. CRB, MT, FC, Secretary, Railway Board.
2. Secretary (Tourism), Ministry of Tourism, Government of India, New Delhi.
3. AM(B), Adv.(Finance), AM(IT), AM(C), Adv.(Vig.), ED(PM), ED(A), EDF(C), ED(C&IS), EDTC(R), EDV(T), ED/Safety, DPR, CFC, TC(CR), V(SS), PR, F(C) Branches, Railway Board.
4. Director General, Railway Staff College, Vadodara.
5. Managing Director, Centre for Railway Information System (CRIS), Chanakyapuri, Near National Rail Museum, New Delhi.
6. Managing Director, Konkan Railway Corporation Ltd., Belapur Bhavan, Plot No. 6, Sector 11, CBD Belapur, Navi Mumbai-400014.
7. General Manager, Metro Railway, 33/1, J.L.Nehru Raod, Kolkata-700071.
8. Chief Commissioner of Railway Safety, Lucknow.

9. Indian Railway Catering & Tourism Corporation (IRCTC), 9<sup>th</sup> Floor, Bank of Baroda Building, 16, Parliament Street, New Delhi-110001.
10. CCMs, All Indian Railways.
11. CCM(PS)s, All Indian Railways.
12. Secretary (Tourism), Government of Rajasthan, Maharashtra, Karnataka, Punjab, Andhra Pradesh, Madhya Pradesh, Tamil Nadu, West Bengal, Pondichery, Kerala, Gujarat, Chattisgarh, Orissa.



**(Ashok Kumar)**  
**Executive Director(Tourism & Catering)**  
**Railway Board**

[<http://www.indianrailways.gov.in/deptts/commercial/comm-cir-2k8/CC-14.pdf>]



## Exhibit 11: Attributes of Commercialization by the Railways

	Equity Leverage	Goal Clarity	Revenue/ Market Risk	Decision Making Autonomy	Partner/ Stakeholders' Interest	Project Structuring Quality	Transaction Costs	Transparency/ Contestability
<b>CONCOR</b>	Low	High	High	High	Low	High	High	Low
<b>POW<sup>1</sup></b>	Low	High	High	Low	High	Low	*	Medium
<b>Sidings</b>	Low – Medium	Low	High – Medium	Low	High	Low	*	Medium
<b>PRCL</b>	Medium	*	Medium	*	High	Medium	High	Low
<b>KRC</b>	High	Medium	Medium	High	Low	Low	*	Low
<b>OYWS</b>	High	Low	Low	*	High	Low	*	Medium
<b>Catering</b>	High	*	Low	*	High	High	*	High

<sup>1</sup>Palace on Wheels; \* Information available is not sufficient to comment upon

[Raghuram, 2002]

**Exhibit 12: Excerpts from the Railway Act 1989 on non-Government Railways**

- 2 (25). "*non-Government railway*" means a railway other than a Government railway
- 2 (32). "railway administration", in relation to-- a *non-Government railway*, means the person who is the owner or lessee of the railway or the person working the railway under an agreement
6. Power of railway administrations to execute all necessary works.-Notwithstanding anything contained in any other law for the time being in force, but subject to the provisions of this Act and the provisions of any law for the acquisition of land for a public purpose or for companies, and subject also, in the case of a *non-Government railway*, to the provisions of any contract between the *non-Government railway* and the Central Government, a railway administration may, for the purposes of constructing or maintaining a railway-- (a) make or construct in or upon, across, under or over any lands, or any streets, hills, valleys, roads, railway, tramways, or any rivers, canals, brooks, streams or other waters, or any drains, water-pipes, gas-pipes, oil-pipes, sewers, electric supply lines, or telegraph lines, such temporary or permanent inclined-planes, bridges, tunnels, culverts, embankments, aqueducts, bridges, roads, lines of rail, ways, passages, conduits, drains, piers, cuttings and fences, in-take wells, tube wells, dams, river training and protection works as it thinks proper; 255 (b) alter the course of any rivers, brooks, streams or other water courses, for the purpose of constructing and maintaining tunnels, bridges, passages or other works over or under them and divert or alter either temporarily or permanently, the course of any rivers, brooks, streams or other water courses or any roads, streets or ways, or raise or sink the level thereof, in order to carry them more conveniently over or under or by the side of the railway; (c) make drains or conduits into, through or under any lands adjoining the railway for the purpose of conveying water from or to the railway; (d) erect and construct such houses, warehouses, offices and other buildings, and such yards, stations, wharves, engines, machinery apparatus and other works and conveniences as the railway administration thinks proper; (e) alter, repair or discontinue such buildings, works and conveniences as aforesaid or any of them and substitute others in their stead; (f) erect, operate, maintain or repair any telegraph and telephone lines in connection with the working of the railway; (g) erect, operate, maintain or repair any electric traction equipment, power supply and distribution installation in connection with the working of the railway; and (h) do all other acts necessary for making, maintaining, altering or repairing and using the railway.
13. Protection for Government property - Nothing in sections 11 and 12 shall authorise-- a railway administration of a *non-Government railway* to do anything on or to any works, lands or buildings vested in, or in the possession of, the Central Government or a State Government, without the consent of the Government concerned. 256
169. Levy of penalty on *non-Government railway*.- If a *non-Government railway* fails to comply with, any requisition made, decision or direction given, by the Central Government, under any of the provisions of this Act, or otherwise contravenes any of the provisions of this Act, it shall be open to the Central Government, by order, to levy a penalty not exceeding two hundred and fifty rupees and a further penalty not exceeding one hundred and fifty rupees for every day during which the contravention continues: Provided that no such penalty shall be levied except after giving a reasonable opportunity to the *non-Government railway* to make such representation as it deems fit. 304

170. Recovery of penalty - Any penalty imposed by the Central Government under section 169, shall be recoverable by a suit in the District Court having jurisdiction in the place where the head office of the *non-Government* railway is situated.
171. Section 169 or 170 not to preclude Central Government from taking any other action.- Nothing in section 169 or 170 shall preclude the Central Government from resorting to any other action to compel a *non-Government* railway to discharge any obligation imposed upon it by or under this Act.

[<http://www.icf.gov.in/rpf/linkpage/Railways%20Act%201989.pdf>]

### Exhibit 13: Excerpts from the Statement on Industrial Policy 1991 on Railways

Proposed list of industries to be reserved for the Public Sector

1. Arms and ammunition and allied items of defence equipment, Defence aircraft and warships
2. Atomic Energy
3. Coal and lignite
4. Mineral oils
5. Mining of iron ore, manganese ore, chrome ore, gypsum, sulphur, gold and diamond.
6. Mining of copper, lead, zinc, tin, molybdenum and wolfram.
7. Minerals specified in the Schedule to the Atomic Energy (Control of Production and Use) Order, 1953
8. *Railway transport*

List of industries for automatic approval of foreign technology agreements and for 51% foreign equity approvals

Transportation

- Shock absorbers for railway equipment and
- Brake system for railway stock and locomotives.

[<http://siadipp.nic.in/publicat/nip0791.htm>]

## Glossary

BOLT	Build Own Lease Transfer
BOT	Build Operate and Transfer
CEO	Chief Executive Officer
CIDCO	City and Industrial Development Corporation of Maharashtra Ltd
CONCOR	Container Corporation of India Ltd
CTO	Container Train Operator
DDA	Delhi Development Authority
HCW	High Capacity Wagons
HMRDC	Hassan Mangalore Rail Development Company
ICD	Inland container Depot
IPO	Initial Public Offering
IR	Indian Railways
IRCTC	Indian Railway Catering and Tourism Corporation Ltd
IRFC	Indian Railway Finance Corporation
JV	Joint Venture
KRC	Konkan Railway Corporation Limited
KRCL	Kutch Railway Corporation Limited
KRIDE	Rail Infrastructure Development Company of Karnataka
LWIS	Liberalized Wagon Investment Scheme
MCD	Municipal Corporation of Delhi
MD	Managing Director
MMLP	Multi Modal Logistics Parks
MoR	Ministry of Railways
MRTS	Mass Rapid Transit System
MRVC	Mumbai Rail Vikas Corporation Ltd
MSTDC	Maharashtra State Tourism Development Corporation
NDMC	New Delhi Municipal Corporation
OYWS	Own Your Wagon Scheme
PC	Planning Commission
PPP	Public Private Partnership
PRCL	Pipavav Railway Corporation Limited
RFP	Request for Proposal
RFQ	Request for Quotation
RLDA	Rail Land Development Authority
RTDC	Rajasthan Tourism Development Corporation
RVNL	Rail Vikas Nigam Limited
SPV	Special Purpose Vehicle
SPW	Special Purpose Wagons
TDS	Terminal Development Scheme
WIS	Wagon Investment Scheme
WLS	Wagon Leasing Scheme

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