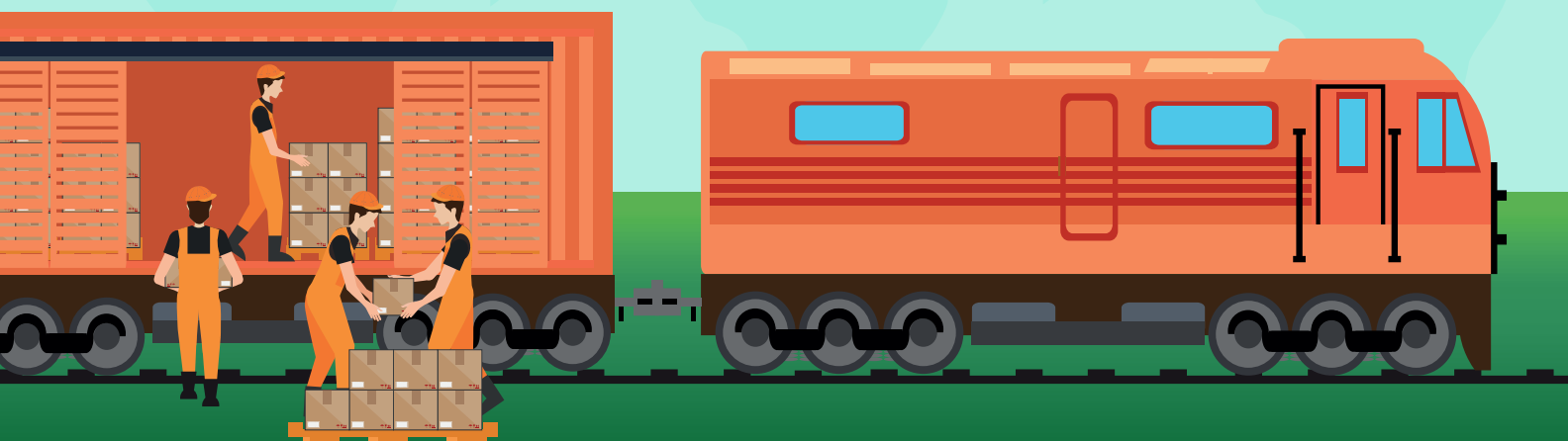


MOVING TOWARDS A LOW-CARBON TRANSPORT FUTURE

Increasing **Rail Share** in Freight Transport in India

Working Paper – Parcel



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Increasing Rail Share in Freight Transport in India: Working Paper – Parcels

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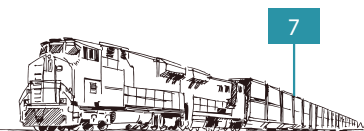
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PARCELS

A typical logistics market is characterized by the type of services required by the customers and classified into courier, express, and parcel segments, mainly based on the size of consignment, transport pricing, and delivery time. The mode through which the consignment moves depends upon the requirement of the customer. For instance, if a document needs to be urgently delivered (within a day) from one city to another, then air (mode of movement) is preferred over rail or road. Guaranteed transit time and safe transit of consignment is of utmost importance to the customer. Parcels usually involve relatively larger consignment size as compared to courier or express service. From the theoretical perspective, ‘a typical parcel carrier transports shipments that are sufficiently small to be handled by one person without aid, but which are often larger than a normal letter.’¹ The Indian Railways (IR) define ‘parcels’ as ‘goods entrusted to a railway administration for carriage by a passenger or a parcel train’.

Scope of the parcels study

The primary focus of this study is to understand the parcel movement by railways, without missing on the role and competition from road transportation. The study covers all the modes used by Indian Railways in moving parcels—space/rolling stocks as well as the lease and non-lease methods of booking.

In terms of data, Indian Railways has mainly two sources of data—departmental source providing an overall picture of parcel traffic, earnings, lease vs non-lease booking, and space-wise booking; and data captured by

the Parcel Management System (PMS) at the Centre for Railway Information System (CRIS). PMS data is available only for 91 stations and therefore the analysis is limited to these representative stations.

Commodity-specific analysis has been conducted for non-lease traffic captured by PMS. Such data is not available for lease business as it is not captured by the PMS. TERI has conducted a survey involving lease holders to understand the commodities that they move through Indian Railways as well as issues faced. The lease holders contacted by TERI have their presence in the Northern, Southern, Central, Eastern, and South Central zonal railways.

During the course of the study, TERI interacted with a number of road transporters as well, including the major players, primarily to understand parcel movement through road.

Parcel Market in India

The Indian parcel market is characterised by the presence of a large number of unorganised and small players as well as a few large players. In a scenario like this, it is very difficult to accurately estimate the size of the Indian parcels market. It is only on the basis of certain assumptions that the overall size of the Indian parcel market can be estimated. These assumptions have been taken based on literature survey, and discussion with the industry stakeholders and experts in the subject area. A detailed estimation of the Indian parcel market is given in Table 1.

¹https://www.theseus.fi/bitstream/handle/10024/68332/Aranko_Jenni.pdf?sequence=1



Table 1: Estimation of Indian Parcel Market Size and the Share of Railways	
Parameters	Details
1. Total tonnage in 2007-08 (million tonne) (Total Transport Study, 2007-08)	2,555
2. Estimated transport demand in 2016-17 (MMT)	3,637
3. Volume of traffic by Rail (MMT) (30% of total tonnage)	1,091*
4. Volume of traffic by Road (MMT)	2,546
5. Parcel Traffic on ROAD: Parcel traffic on road (Of the total road, 75-80% is assumed to be non-bulk/parcel/small consignment and remaining as bulk) ²	1,910-2,037
6. Parcel Traffic on RAIL: Parcel traffic by rail (MMT) (2016-17)	5.36
7. Total parcel traffic in MMT (6+7)	1,915-2,042
8. Share of rail in total parcel market	0.28%- 0.26%

*IR reported total tonnage of 1,109 MMT during 2016-17; MMT: million metric tonne

Source: RITES - Total Transport Study, 2007-08; and TERI estimates, 2016-17

Parcels Movement by Rail

Movement of parcels by Indian Railways is categorized under the non-core business of the national transporter. However, with the kind of revenue contribution of this segment and infrastructure set up for the movement of parcels, it still constitutes a major business operation for Indian Railways as of now.

Modes of parcel transportation by railways

By nature, parcels require faster transit time and therefore moved through passenger/parcel trains. The parcel traffic is presently transported using Assistant Guard’s Cabin (AGC), Brake Vans (SLRs), Parcel Vans (VPs/VPU/ VPHs), Special Parcel Trains, BCN rakes for perishables traffic and Special Purpose Vehicles like Rail Milk Tanker,

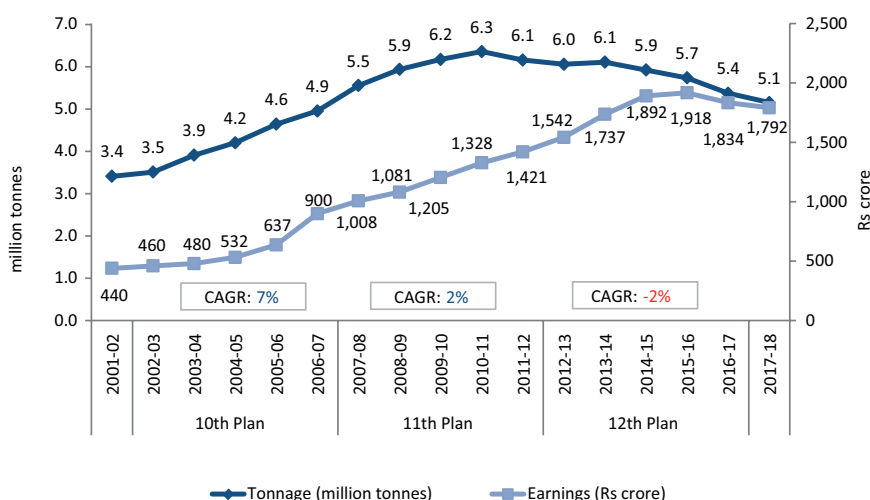


Figure 1: Parcel traffic and earnings trend of Indian Railways
 Source: Indian Railways and National Transport Development Policy Committee (NTDPC) report

²<https://www.hdfcsec.com/hsl.docs/Bharat%20Road%20Network%20Limited%20IPO%20Note-201709060919183983436.pdf> (accessed in May 18, 2018)



Refrigerated Vans, etc. The traffic in AGC, SLR & VPs is carried by mail/ express trains and passenger trains.

Indian Railways moves parcels through non-leased (departmental) and leased spaces. In the latter, parcel movement is done by private players who 'lease' space from Indian Railways. Leasing out of cargo space to private parties was initiated by Indian Railways to utilize the space that were plying empty. The scheme to lease out space was introduced in 1991.

Leased traffic in AGC, SLR & VPs is governed by the 'Comprehensive Parcel Leasing Policy' and leased traffic in parcel train is governed by policy on 'Parcel Cargo Express trains'. Non-leased parcel traffic can be departmental and demand based and can be booked through the Railways from parcel offices at railway stations.

Table 2: Types of space for the movement of Parcels by Indian Railways

Type of space	Details
Assistant Guard Cabin (AGCs)	<ul style="list-style-type: none"> Capacity of 1 tonne. Leased under 'Comprehensive Parcel Leasing Policy'. Issuance of lease of 1 tonne parcel space of the AGCs has been called off and no fresh tender shall be called. However, operational contracts for leasing parcel space of AGCs shall be allowed to complete its tenure as per agreement.
Brake Vans (SLRs)	<ul style="list-style-type: none"> Mail/express trains and passenger trains have 2 brake vans – one at the front and another in rear. Each van has two compartments of 4/5 tonne capacity and available for lease and non-lease operation. For every four SLRs in a train, Zonal Railways are allowed to lease up to three SLRs and remaining one is for non-leased traffic booked by Zonal Railways. Leased traffic is governed by the 'Comprehensive Parcel Leasing Policy' and non-leased parcel traffic can be booked departmentally.
Parcel Vans (VPs)	<ul style="list-style-type: none"> Capacities of 23 tonne (VPH/high capacity VPs) and 18 tonne (VPU/8 wheel VPs) available. VPs, carried by mail/express/passenger trains, are governed by the 'Comprehensive Parcel Leasing Policy', while leased traffic in parcel trains is governed by policy on 'Parcel Cargo Express Trains'. Non-leased parcel traffic can be booked departmentally at stations. Based on demand, a Ventilated Parcel Van is added to the train keeping into consideration the maximum hauling capacity of the engine.



Table 2: Types of space for the movement of Parcels by Indian Railways

Type of space	Details
Special Parcel Trains (PCET)	<ul style="list-style-type: none"> Standard rake composition of 20 VPs and one brake van. Governed by the policy on Parcel Cargo Express Trains. Leased out on round trip basis, only on long term contracts through open tender. Leasing of parcel train is not permitted on short term, temporary or day to day basis.
Refrigerated Parcel Vans (VPRs)	<ul style="list-style-type: none"> VPRs are attached to mail/express trains to carry perishable goods like fruits, vegetables, marine products, etc. As of February 2018, there were only 9 VPRs available with IR³.

Source: Compiled by TERI

Private entities in parcel movement

As discussed earlier, IR has allowed private players to move parcels through railways. In this regard, rail space, including SLRs, VPs and parcel trains, is leased out through the bidding process. The lease holders are responsible for aggregating the cargo from the customers, loading/unloading at originating/destination station, and door-to-door service. The lease holders are free to charge additional amount for the value-added services from the customers. However, one compartment of the brakevan of each passenger carrying train remains with railways for the clearance of newspapers, luggage, etc., from the originating as well as from intermediate station(s), wherein parcels are booked by the Railways on tariff rates applicable for such booking.⁴

Rate structure

The rate structure for booking of parcel traffic was

rationalized during the year 2006. Broadly, there are two sets of tariff rates—one for parcel and another for luggage. Instead of the earlier commodity-based rate structure, a new concept of service-based rate structure for booking of parcel traffic was introduced. There are three scales for parcel traffic, namely—Scale-R, Scale-P, and Scale-S.⁵

The tariff rate for a parcel packages is determined not only on the basis of weight but also on the basis of dimension or volume, whichever gives the maximum revenue to Indian Railways. As per Indian Railway Conference Association (IRCA) Coaching Tariff,⁶ the conversion factor for volume to weight is 28 cubic decimeters equal 4 kg.

The tariff rates for the movement of parcels were last revised by Indian Railways in September 2013. Table 3 indicates the tariff rates for key weight and distance slabs under different scales.

³<http://164.100.47.194/Loksabha/Questions/QResult15.aspx?qref=62225&lsno=16>

⁴<http://164.100.47.194/Loksabha/Questions/QResult15.aspx?qref=140103&lsno=15>

⁵Note: Only parcels movement has been considered under this study. Luggage related analysis is beyond the scope of the study.

⁶<https://irtpms.in/site/wp-content/uploads/2017/09/Commercial-0116.pdf> (Page 42 of 61)



Table 3: Railway tariff rates for key weight and distance segments (Rs)

Scale	Distance (km)	Weight				
		1-10 kg	21-30 kg	51-60 kg	71-80 kg	91-100 kg
	↓					
R	101-110	9	26	53	70	88
	251-260	15	44	89	118	148
	501-510	23	69	138	184	230
	751-760	32	96	193	257	321
	1001-1025	42	126	252	337	421
	1501-1525	59	176	353	471	588
	2001-2025	71	214	429	572	715
	2501-2550	84	251	502	669	836
	3001-3050	93	280	559	746	932
	3451-3500	102	306	611	815	1018
P	101-110	6	18	35	47	59
	251-260	10	30	59	79	98
	501-510	15	46	92	123	153
	751-760	21	64	129	171	214
	1001-1025	28	84	168	224	280
	1501-1525	39	118	235	314	392
	2001-2025	48	143	286	381	477
	2501-2550	56	167	334	446	557
	3001-3050	62	186	373	497	621
	4001-4050	75	225	449	599	749
4951 5000	87	262	525	700	875	
S	101-110	3	9	18	23	29
	251-260	5	15	30	39	49
	501-510	8	23	46	61	77
	751-760	11	32	64	86	107
	1001-1025	14	42	84	112	140
	1501-1525	20	59	118	157	196
	2001-2025	24	71	143	191	238
	2501-2550	28	84	167	223	279
	3001-3050	31	93	186	249	311
	4001-4050	37	112	225	300	375
4951 5000	44	131	262	350	437	

R: Parcels carried on the Rajdhani Express trains and thereby being assured of the speediest delivery of all IR's services; P: Parcels carried on certain Shatabdi Express trains, certain other Mail/ Express trains, and all Special Parcel trains; S: Parcels carried on other passenger trains
 Source: Indian Railways



Table 4: Maximum dimension and weight per unit of parcel allowed by Indian Railways

	Maximum weight per parcel (kg)	Maximum dimension per parcel
Broad Gauge	150	2m x 1.5m x 1.5m
Meter Gauge	150	2m x 1.5m x 1.5m
Narrow Gauge	125	1.5m x 1.07m x 1m

m: metre; Source: Indian Railways

Indian Railways has placed restrictions on the dimension and/or weight of a single unit of parcel booked onto railways (Table 4). However, the minimum distance for charge for all parcels, except registered newspapers and magazines is 50 km and the minimum charge is Rs 30.

IR Policies

Indian Railways has come up with a number of dedicated policies and schemes to encourage private participation in the movement of parcels through railways. IR, in order to maximize the utilization of un-utilized/under-utilized parcel space, introduced the scheme for leasing of SLRs in November 1991. Several amendments were made under the scheme so as to increase the percentage of parcel carried by lease operator (Refer Appendix 1). In November 1999, a comprehensive policy was released by the Indian Railways to attract private players in the parcel space. The initiative towards leasing of space to private parties was taken forward with the launch

of Parcel Express trains known as “Millennium Parcel Express” trains in March 2001. It envisaged operation of time-tabled parcel express trains through lease operators. Despite all these, not much interest was generated among the private players/lease holders.

In the years to follow, IR introduced three more policies related to parcel movement. These are Comprehensive Parcel Leasing Policy (CPLP) in 2006; Policy on Parcel Cargo Express Train (PCET) in 2007; and the most recent Special Parcel Train Operator (SPTO) Scheme in 2014. The key features of these policies have been discussed below.

Comprehensive Parcel Leasing Policy, 2006

The policy with regard to parcel space leasing was brought in by the Indian Railways in March 2006. It focussed on leasing of AGCs, SLRs, and VPs space in passenger trains, including Shatabdi, Rajdhani, superfast

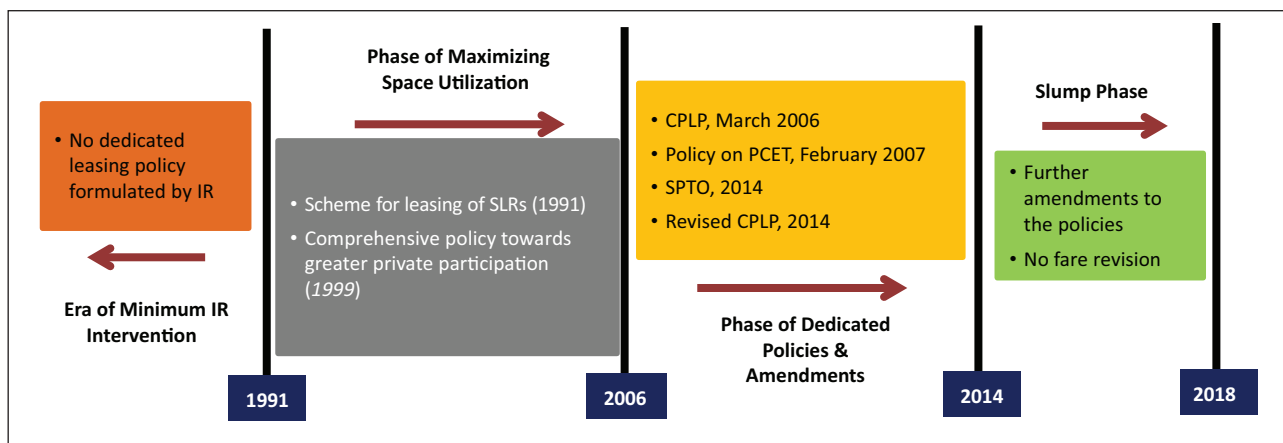


Figure 2: Evolution of parcels related policies
Source: TERI Research

⁷ Board letter No. 97/TC(M&S)/10/1/Pt.-I dated 16.11.1999



trains, and mail and express trains. Some of the key features of the revised Comprehensive Parcel Leasing Policy (2014) are given below.

Eligibility: Interested lease holders must be registered with the concerned division/zonal headquarters. Further, the annual turnover of the lease holders should be Rs 2 crore (for category A – all three spaces), Rs 50 lakhs (for category B – AGCs and SLRs), and Rs 10 lakhs (for category C – AGCs).

Registration of lease holders: Registration fee of Rs 1 lakh for category A, Rs 50,000 for category B, and Rs 25,000 for category C, is required to be submitted along with relevant documents (audited balance sheet, tax submission records, etc.).

Earnest money: In order to bid for the space, the registered lease holders are required to deposit earnest money of Rs 1 lakh for SLR and Rs 4 lakh for VP.

Duration: The time duration of the lease agreement varies with the space. For AGCs/SLRs, the lease agreement is of (a) long-term (5 years), (b) temporary (30 days at a time) and (c) day-to-day contract (maximum of 10 days). For VPs, the agreement is only for long-term lease (5 years).

Reserve price: The fixation of reserve price has been entrusted with the divisional/zonal railways.

Loading/unloading points: Besides originating station, lease holders are allowed to load parcels at a maximum of one intermediate station over each zone through which the parcel train passes.

Theft: “In case of theft, parcels will be unloaded at destination station in presence of chief parcels supervisor (CPS), RPF and lease holder or his representative, and compared with the manifest.”

Policy on PCET, 2007

Almost a decade ago, the Ministry of Railways came out with a detailed policy on leased cargo express trains for parcel movement in February 2007. The policy set out the set of rules for the operation of leased trains for parcel

movement. Amendments to the policy were brought in June 2010 and June 2016. Some of the key features of the policy are given below:

Service: Contracts are awarded for only round trip service on end-to-end basis, except towards North Frontier Railway.

Contract duration: Parcel cargo express trains shall be leased out for a period of 6 years.⁸ For the first 3 years, there will not be any increase in lumpsum leased freight, with an increase of 10% in subsequent years. Parcel Express trains shall not be leased out on medium term, short term, temporary or day-to-day basis.

Rake composition: Minimum composition of 15 VPs + 1 brakevan for the first 6 months of contract which can be increased to 20 VPs + 1 brakevan post initial 6 months. Also, the lease holder can run up to 24 VPs subject to permission from IR.

Eligibility criterion: The interested lease holder should have a turnover of not less than Rs 10 crore per annum during the last three financial years.

Earnest money: Bidders are required to deposit Rs 1 lakh as earnest money. This amount shall be forfeited in case the successful bidder fails to start operations within 30 days from the date of receipt of the acceptance letter.

Security deposit: Successful lease holder need to submit security deposit within 30 days of issuance of ‘Letter of Acceptance’. The amount stands at 10% of the annual contract value as per the lumpsum lease freight rate (@ rate 20 VPs + 1 brakevan).

Punctuality of train: The parcel cargo express trains shall run on fixed path with scheduled time table as far as possible. Transit time of train should be monitored by the operating department.

Space to lease holders: Free space of 15’ x 15’ may be provided, till the period of operation of contract, at suitable location for development of office at originating and destination parcel terminals.

Loading/unloading points: Besides originating station,

⁸http://www.indianrailways.gov.in/railwayboard/uploads/directorate/traffic_comm/Freight_Marketing_2016/FM_04_15062016.pdf



lease holders are allowed to load/unload parcels at four stations covering a distance of 2,000 km, and one additional intermediate station for trains running beyond 2,000 km.

Theft: In case of theft, parcels will be unloaded at destination station in presence of CPS, RPF and lease holder or his representative, and compared with the manifest.

Special Parcel Train Operator Scheme, 2014

SPTO scheme is one of the latest policy initiatives of the Indian Railways to increase parcel loading on to its trains through private participation. It allows private parties to procure rolling stock, including general service parcel vans, refrigerated vans, etc., and operate it as special parcel trains. Some of the key features of the SPTO scheme are given below:

Eligibility: Companies with experience in the field of logistics, warehousing, manufacturing, terminal operation and wagon leasing, and with a net worth of Rs 20 crore or annual turnover of Rs 30 crore are eligible.

Categories for procurement: There are two categories (a) General service parcel vans (freight stock) with a minimum of 20 wagons and maximum of 24 wagons, and (b) Special purpose vehicles (coaching stock) with a minimum of 15 wagons and maximum of 24 wagons. Amalgamation of two different stocks in a rake has been allowed under the scheme.

Procurement of stock/wagons: Indian Railways has allowed private operators to procure wagons other than Indian Railways standard designs, subject to approval from the Research Designs and Standards Organisation (RDSO). The wagons could also be procured from the wagon leasing companies, subject to approval from the Railway Board.

Maintenance of wagons/stock: Maintenance activities will be carried out at Base Depot nominated by the concerned zonal railways and at a predetermined cost. The operator will be charged 5% per annum of the capital cost of private wagons and reviewed every 3 years.

Haulage charges: IR charges as per the category of stock. Freight stock is charged as per the general service rate for parcel vans notified by Railway Administration. Under coaching stock, milk tankers are charged as per rates determined for specifically for milk movement, while rates for refrigerated vans are 1.45 times the rate charged for VPs for single journey freight.

Operation of SPTs: It will run on fixed paths with scheduled time table. Further, loading and unloading does not require any permission at intermediate stations. Attaching/detaching of coaches is allowed only after approval of Ministry of Railway. However, the minimum composition of rake has to be maintained between originating and destination stations.

Data analysis

Parcel business does not fall under the core operations of the Indian Railways. Data available with the Railway Board is in a disaggregated form and had to be collated and analysed. The Railway Board facilitated the data related to Parcel Management System (PMS) from Centre for Railway Information Systems (CRIS) for a more focussed station-level and commodity-wise analysis. However, with the limited number of stations under the Parcel Management System (PMS) coverage and also the staggered manner of PMS implementation, a comprehensive analysis could not be done. Limited analysis could be done related to Parcel Cargo Express Trains on account of paucity of data.

The data analysis has been done in two parts: (A) Overall data provided by the Railway Board, and (B) PMS data provided by CRIS (non-lease and lease segments).

A. Parcel movement by Railway – Overall analysis

Parcel traffic under Indian Railways data management system includes luggage as well. Luggage accounts for about 10%–12% in total 'parcel + luggage' traffic and about 7% of the total earnings from 'parcel + luggage' segment. Under this study, data related to only parcels is considered and does not include analysis on luggage as it comes as a complementary traffic with the passenger traffic.



Parcel traffic and earnings

- Parcel segment accounts for about 0.4% in total freight traffic (2017–18) of Indian Railways and 1.6% in the total freight earnings.
- Over the last five years (2013-18), the parcel traffic volume has declined at a compound annual growth rate (CAGR) of -3.3%. On the other hand, earnings from parcel traffic increased at a CAGR of 0.6% during the same period.
- Increasing earnings from parcel segment could be on account of either increase in tariff rate (freight marketing circular FM-21, September 2013) or increase in lead distance for which parcels are booked.

Table 5: Total IR traffic and earnings vis-à-vis parcel traffic and earnings

	2013-14	2014-15	2015-16	2016-17	2017-18
Total IR traffic and earnings					
Traffic (million tonnes)	1,054	1,098	1,104	1,109	1,162
Earnings (Rs crore)	93,472	1,05,313	1,09,287	1,04,475	1,13,025
NTKM (billion)	652	686	656	620	658
Parcel traffic and earnings					
Traffic (million tonnes)	6.09	5.91	5.72	5.36	5.14
Earnings (Rs crore)	1,736.60	1,891.89	1,917.60	1,833.85	1,792.01
NTKM (billion)	NA	NA	NA	NA	NA
% share of parcel traffic in total IR traffic	0.6%	0.5%	0.5%	0.5%	0.4%
% share of earnings from parcels in total IR earnings	1.9%	1.8%	1.8%	1.8%	1.6%

Source: Railway Board

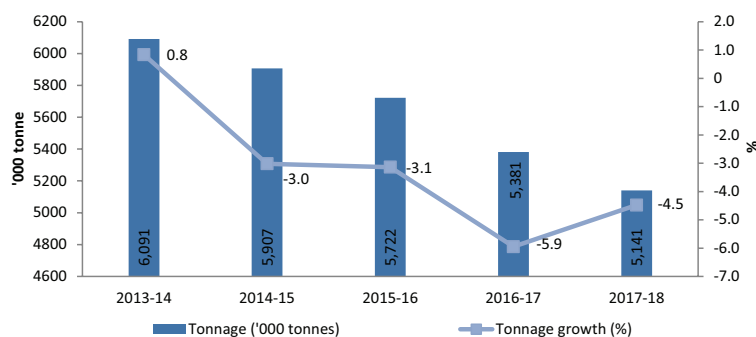


Figure 3: Total parcels traffic carried by IR during the last five years – tonnage ('000 tonnes) and YoY growth; Source: Indian Railways

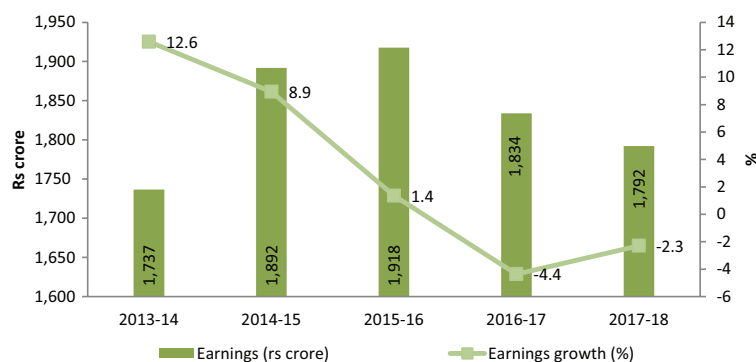


Figure 4: Total earnings from IR's parcels business during the last five years – Earnings (Rs crore) and YoY growth; Source: Indian Railways



➤ Earnings per tonne: The rapid growth experienced during the two periods highlighted in the figure could be explained factors like the increase in tariff rates, increase in distance moved and/or type of commodities moved (refer Annexure 6 for commodity-wise earning intensity over the years). Another key reason for the uptrend during 2006-07 and initial period of 12th plan is that these were the periods when leasing policies were rolled out and later modified, as well as tariff rates were revised (September 2013).

Seasonality

A clear seasonality trend could be observed in the parcel movement through IR. The months of April and May are the busiest period when high volume of parcel traffic is

booked onto Indian Railways. Other important months for parcel traffic onto Railways are between October and December which are the months reporting several festivals. As depicted in Figure 7, there is a dip between November 2016 and March 2017, which is primarily on account of demonetization effect as the parcel business is heavily dependent upon cash transaction.

Since hard parcels and perishables account for the maximum share in the parcel business, seasonality in parcel traffic is primarily on account of the seasonality in these categories of commodities. An analysis of commodity-wise non-lease data indicates that loading of hard parcels and perishables increases after February till May and then tapers to again rise during the months of September to December.

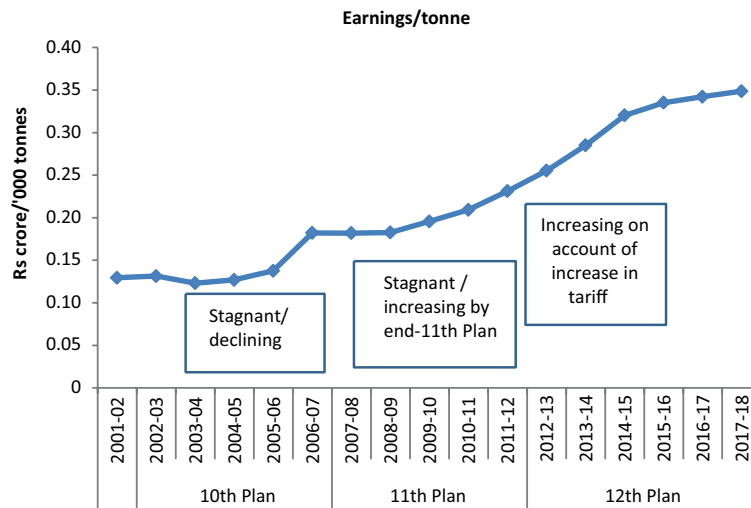


Figure 5: Earnings per tonne for parcels movement by rail
Source: Indian Railways

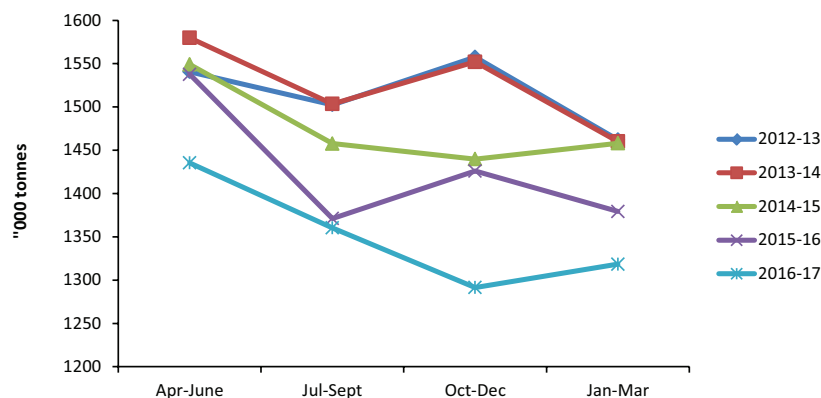


Figure 6: Quarter-wise parcel traffic on Indian Railways (2012-13 to 2016-17)
Source: Indian Railways



Space-wise movement of parcel traffic

As discussed earlier, parcels are primarily moved through SLRs, VPs, AGCs, and Parcel Specials/PCET. Key findings of the analysis of space-wise parcel data:

- SLRs accounted for the highest share both in terms of traffic and earnings. Its share in total traffic and earnings has also increased from 2013-14 to 2017-18. In other words, more and more parcel traffic is moved through SLRs.
- Share of SLRs in total traffic increased from 76% in 2013-14 to 83% in 2017-18. The share of earnings from SLRs increased from 69% to 77% during the same period.
- Share of all other stocks (VPs, AGCs, and Parcel

Specials) in total traffic as well as total earnings declined between 2013-14 and 2017-18.

- Parcel Specials traffic recorded a CAGR of -5.6% and earnings from the same recorded -9.8% CAGR between 2013-14 and 2017-18. It accounted for only 7% in total parcel traffic and 4.7% in total parcel earnings in 2017-18.
- The decline in traffic and earnings accruing on account of VPs and Parcel Specials is largely due to inadequate utilization of these spaces by IR. This has been explained later in the chapter while dealing with operational challenges and declining percentage of available parcel space being leased out by IR.
- IR's policy of moving away from AGCs is reflected in its declining share in total traffic and earnings.

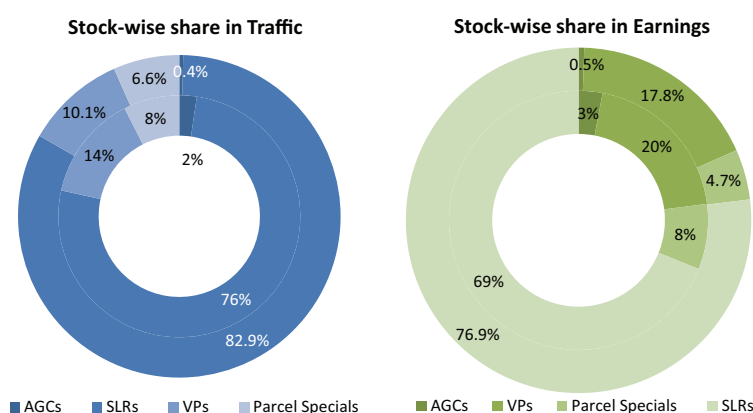


Figure 7: Space-wise share in total traffic and earnings
 Note: Inner circle – 2013-14; Outer circle – 2017-18; Source: Railway Board

Table 6: Space-wise parcel traffic and earnings reported by IR during 2013-14 and 2017-18

Space	2013-14	2014-15	2015-16	2016-17	2017-18	CAGR (%)
Traffic ('000 tonnes)						
AGCs	141	100	47	25	20	-32.3
SLRs	4,637	4,587	4,562	4,340	4,263	-1.7
VPs	859	753	700	583	517	-9.7
Parcel Specials	454	467	414	408	341	-5.6
Earnings (Rs crore)						
AGCs	52	40	21	13	9	-28.8
SLRs	1,196	1,328	1,375	1,355	1,379	2.9
VPs	347	363	359	353	319	-1.7
Parcel Specials	142	161	163	112	84	-9.8

Source: Railway Board



Earning intensity – Space-wise

It is interesting to note that the earnings received by Indian Railways for a tonne of parcel moved is higher in case of VPs (2017-18), where the traffic has declined rapidly during the last 5 years. On the other hand, SLRs, which carry majority of the parcel traffic (about 81%), has the lowest earning intensity of 0.32 (in Rs crore/'000 tonne) as compared to other spaces made available by IR for parcel movement. Earning intensity of Parcel Specials is also on the lower side at 0.25 (Rs crore/'000 tonne).

reduced leased traffic share from 35% to 21% over the same period.

- Leased traffic on Indian Railways declined continuously between 2013-14 and 2017-18 (CAGR of -12.4%), while non-leased traffic increased marginally at a CAGR of 0.4% during 2013-14 and 2017-18.

Earnings – Leased and non-leased

- Earning from non-leased business was recorded at Rs 1,142 crore (64% of total earnings) in 2017-18, as

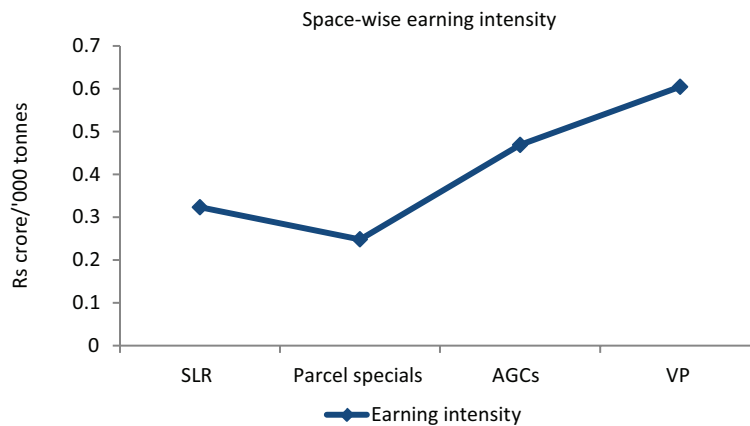


Figure 8: Earning intensity of spaces used for parcel movement (2017-18)

Non-lease and lease parcel movement

Traffic – Leased and non-leased

- Non-leased traffic in 2017-18 was recorded at about 4 million metric tonne (MMT) as compared to leased traffic of 1.1 MMT during the same year.
- Share of non-leased traffic increased from 65% in 2013-14 to 79% in 2017-18. This was at the cost of

compared to an earning of Rs 650 crore (36% of total earnings) from leased business during the same year.

- Earning from leased traffic on Indian Railways declined continuously between 2013-14 and 2017-18 (CAGR of -4.2%), while that from non-leased traffic increased marginally at a CAGR of 4.2% during the same period.

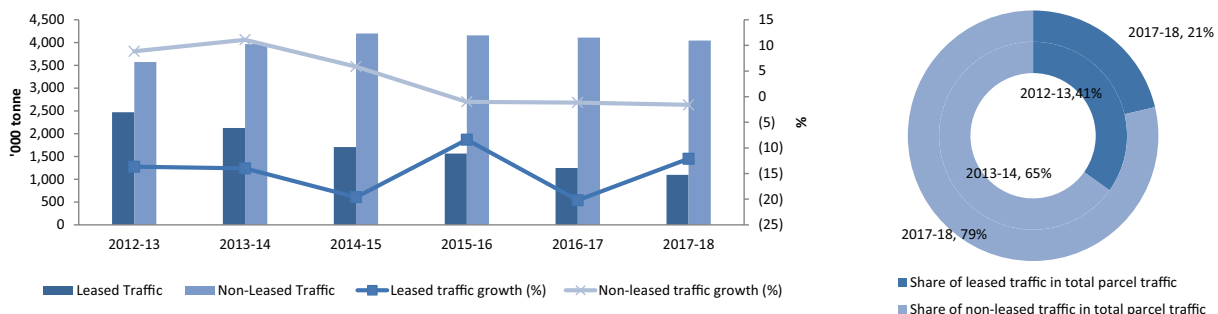


Figure 9: Leased and non-leased parcel traffic trend and share in total parcel traffic of Indian Railways; Source: Railway Board



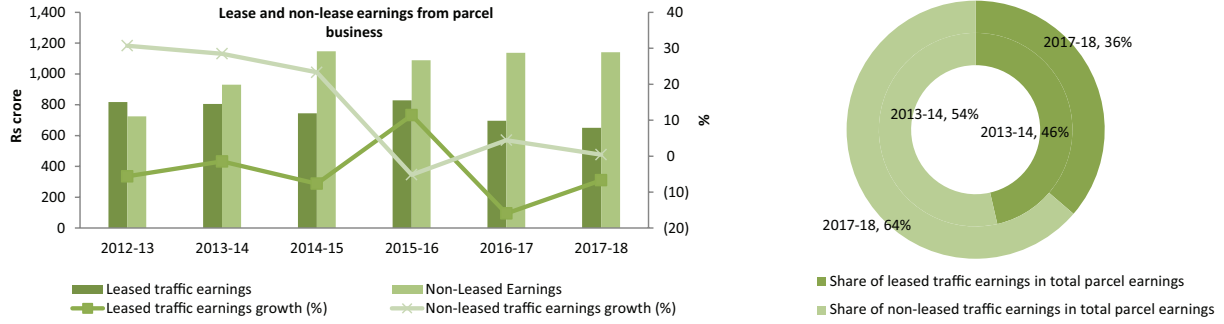


Figure 10: Leased and non-leased parcel earnings trend and share in total parcel earnings of Indian Railways; Source: Railway Board

Space-wise lease and non-lease traffic

Key findings of the analysis of data related to leased and non-leased parcel traffic:

Leased business

- Maximum leased traffic and earnings, thereof, is through SLRs, followed by Parcel Vans.

- Under leased business, maximum volume of total leased traffic (64% in terms of tonnage) is carried through SLRs, followed by Parcel Vans at 31% in 2017-18.
- AGCs and Parcel Specials, 2% and 3% respectively, account for very small share in total leased traffic.

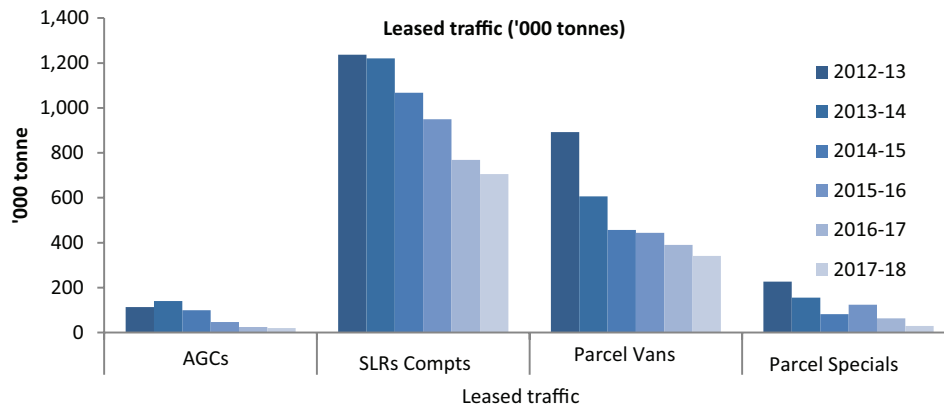


Figure 11: Space-wise leased parcel traffic trend
Source: Railway Board

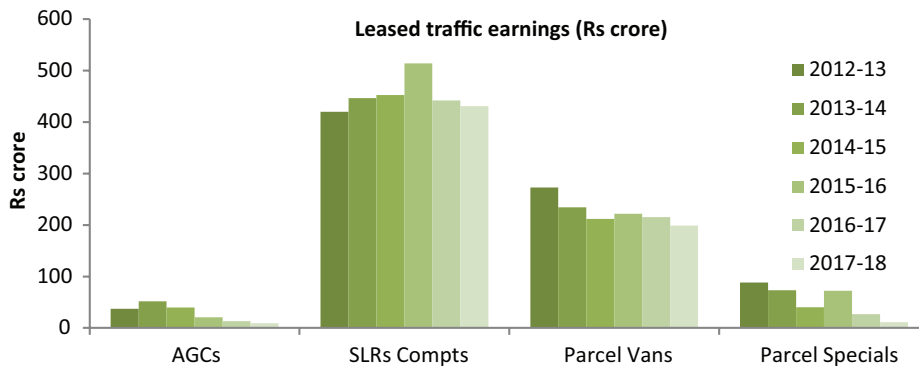


Figure 12: Space-wise leased parcel earnings trend
Source: Railway Board



Non-leased business

- Non-leased parcels are not moved using AGCs.
- In 2017-18, 88% of the total non-leased parcel traffic is moved through SLRs, followed by VPs and Parcel Specials at 4% and 8%, respectively.
- Share in total earnings is also dominated by SLRs at 83%, followed by VPs at 11% and 6% by Parcel Specials (in 2017-18).

As seen in the analysis above, the share of SLRs in moving leased traffic is higher as compared to non-leased traffic. Also, leased traffic reported relatively higher share of VPs as compared to non-leased traffic. This indicates that utilization of VPs is much higher by the private agencies as compared to department movement.

Parcel train loading

Total number of parcel trains loaded, both leased and non-leased, during the years has been declining over the years. From a high of 1,213 parcel trains in 2012-

13, the number came down to 990 in 2016-17, at a negative CAGR of 4%. The number of VPs attached to the rake also reported a negative CAGR of 3%. While comparing the October–December quarter for 2013-14 to 2017-18, number of rakes loaded reported a negative CAGR of 9%. This quarter usually witnesses relatively higher traffic than July–September and January–March quarters.

B. Analysis of PMS Data

Between November 2006 and March 2017, the Indian Railways commissioned Parcel Management System (PMS) on 91 stations across the country. In 2015-16, maximum number of stations (39) was added on to the PMS platform (see Figure 15).

Data related to booking of non-lease and lease parcels is captured by the PMS platform (2014-15 to 2017-18 for lease traffic; and 2012-13 to 2017-18 for non-lease traffic).

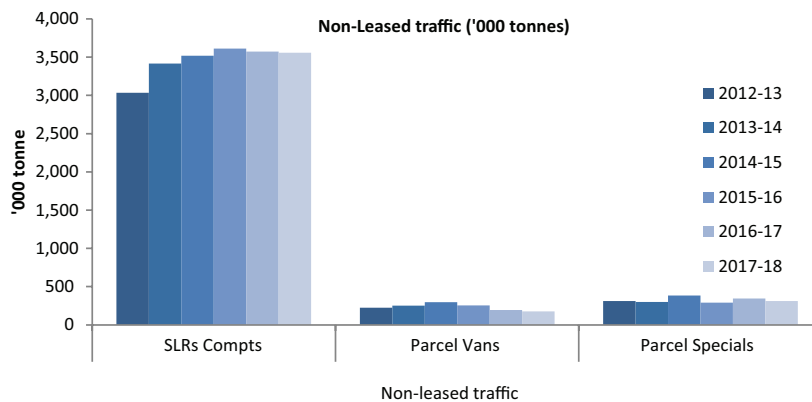


Figure 13: Space-wise non-leased parcel traffic trend; Source: Railway Board

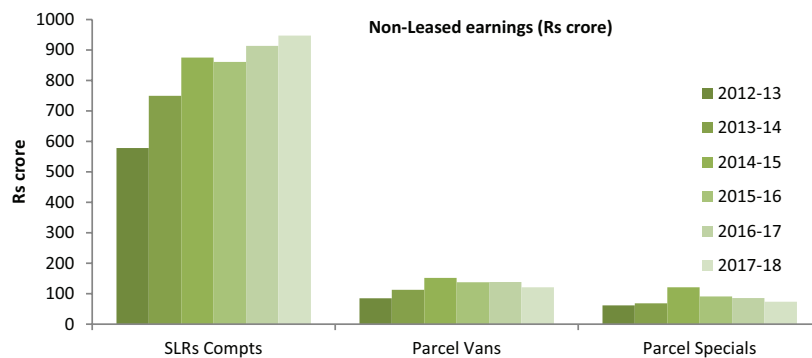


Figure 14: Space-wise non-leased parcel earnings trend; Source: Railway Board



Table 7: Number of rakes and VPs loaded during 2012-13 till 2017-18

	2012-13		2013-14		2014-15		2015-16		2016-17		2017-18	
Quarter	Rakes	VPs	Rakes	VPs	Rakes	VPs	Rakes	VPs	Rakes	VPs	Rakes	VPs
Apr-Jun	305	5,666	262	5,053	298	5,880	354	6,967	305	6,063	277	5,262
Jul-Sept	315	5,749	232	4,588	338	6,659	290	5,571	235	4,586	136	2,568
Oct-Dec	326	5,940	265	5,069	303	5,923	303	5,841	211	4,094	165	3,152
Jan-Mar	267	5,021	250	4,845	346	6,776	268	5,209	239	4,597	-	-
Total	1,213	22,376	1,009	19,555	1,285	25,238	1,215	23,588	990	19,340	578	10,982

Source: Railway Board

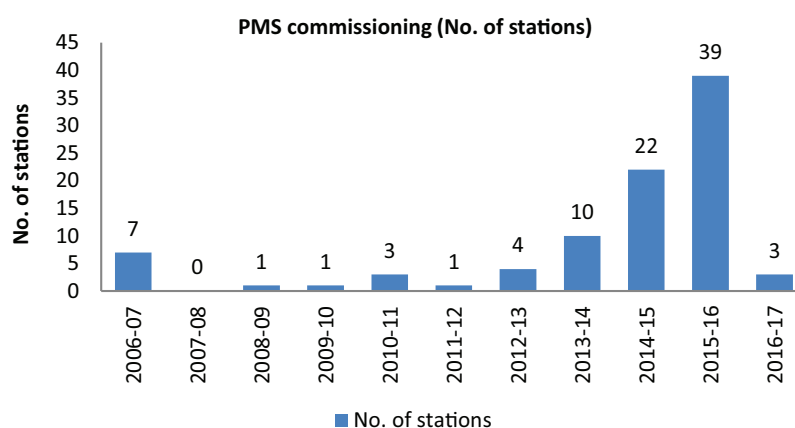


Figure 15: Year-wise number of stations brought under the PMS; Source: CRIS

Currently, 91 stations are under PMS. However, data related to parcel cargo express trains (PCET) is not captured under this system or under Freight Operation Information System (FOIS).

An analysis of the non-lease and lease parcel traffic captured under the PMS has been done by TERI. Some of the findings have been discussed in the sections

below. Please note that only 91 stations out of the total 7,216⁹ stations have been brought under the PMS, and the analysis below is restricted to these stations. As of September 2017, PMS captured 16% of the total leased parcel traffic (by volume) and about 30% of total non-leased parcel traffic (by volume) moved by Indian Railways on its network.

Table 8: Comparison of volume captured by PMS vis-à-vis overall lease and non-lease traffic on IR

	PMS Stations_ Non-lease traffic ('000 tonnes)	Railway Board_Non- lease_All stations ('000 tonnes)	% share	PMS Stations_ lease_ ('000 tonnes)	Railway Board_Lease_ All stations ('000 tonnes)	% share
2014-15	634	4,200	15%	67	1,707	4%
2015-16	1,003	4,158	24%	205	1,564	13%
2016-17	1,208	4,135	29%	205	1,271	16%

Source: CRIS and IR

Non-leased traffic

⁹http://www.indianrailways.gov.in/railwayboard/uploads/directorate/stat_econ/2015-2016/Fact_Figures_%202015-16.pdf



Non-leased traffic

As mentioned above, non-lease segment of parcel movement captured by PMS accounts for about 1/3rd of the total non-lease parcel carried (quantity-wise) by the Indian Railways. In this section, TERI analyses the data shared by CRIS from the period April 2012 to September 2017.

Originating stations

Of the 91 stations currently under PMS coverage, the top

20 stations (listed in the table below) account for about 3/4th of the total non-lease parcel traffic (by volume) and about 80% of the total earnings for the period 2016-17. Key originating stations for non-lease traffic include three in Delhi (Delhi Jn., New Delhi, and Hazrat Nizamuddin Jn.) accounting for 30% of the total non-lease parcel traffic captured by PMS), Howrah, Chennai Central, and Mumbai Chhatrapati Terminus.

Looking at the five year period between 2012-13 and 2016-17, highest growth (CAGR) in traffic growth was

Table 9: Top 20 originating stations in terms of parcel traffic and earnings captured under PMS (2016-17)

Sr. No.	Station from (Origin)	Parcel traffic ('000 tonne)	Sr. No.	Station from (Origin)	Freight earnings (Rs crore)
1.	Delhi Jn.	158.01	1.	New Delhi	66.12
2.	Howrah Jn.	135.67	2.	Howrah Jn.	63.07
3.	New Delhi	123.45	3.	Delhi Jn.	54.05
4.	Chennai Central	71.26	4.	Chennai Central	35.72
5.	Hazrat Nizamuddin Jn.	45.68	5.	Hazrat Nizamuddin Jn.	29.12
6.	Mumbai Chhatrapati Terminus	44.86	6.	Mumbai Chhatrapati Terminus	24.56
7.	Sealdah	35.66	7.	Secunderabad Jn.	15.61
8.	Secunderabad Jn.	30.20	8.	Sealdah	13.40
9.	Kanpur Central Jn.	23.32	9.	Nagpur Jn.	8.18
10.	Bilaspur Jn.	22.13	10.	Kanpur central Jn.	8.17
11.	Agra Cantt. Jn.	21.79	11.	Visakhapatnam	7.99
12.	Nagpur Jn.	21.67	12.	Bandra Terminus	7.90
13.	Vijayawada Jn.	21.51	13.	Agra Cantt. Jn.	7.10
14.	Visakhapatnam	20.44	14.	Surat	6.95
15.	Mumbai Central	17.03	15.	Bhubaneswar	6.81
16.	Tata Nagar Jn.	16.54	16.	Mumbai Central	6.55
17.	Bhusaval Jn.	16.24	17.	Vijayawada Jn.	6.47
18.	Surat	16.18	18.	Bhusaval Jn.	6.28
19.	Bandra Terminus	16.00	19.	Hyderabad Deccan	6.03
20.	Hyderabad Deccan	15.60	20.	Kharagpur Jn.	5.38

Source: CRIS



reported by Chennai Central and Secunderabad Jn. The three stations in Delhi reported traffic growth (CAGR) in the range of 1%–9% during 2012-13 and 2016-17. It is to be noted that PMS was commissioned at Chennai Central station in March 2013, Secunderabad station in November 2011, and at Bilaspur station in May 2015 (Refer Appendix 4 for a detailed list of station-wise PMS implementation).

With regard to trend in earnings from non-lease segment, the three stations in Delhi recorded a CAGR in the range of 7%–20% during 2012-13 and 2016-17. Other stations also reported decent growth over the last five years mainly because of the tariff rate revision in September 2013. Despite registering a negative CAGR of 2% in terms of traffic, Kanpur Central reported a CAGR of 5% in terms

of earnings from non-lease parcel movement during 2012-13 and 2016-17.

Commodity-wise share

CRIS has classified commodities carried as parcels under nine major commodity heads. These are hard parcel; perishable parcel; newspapers/magazines; horse, dog, cattle, birds and poultry; valuable items; arms and ammunition; dangerous good; and subsidiary items. Hard parcels account for the highest share in the total non-lease parcel traffic. There are about 1,550 commodities grouped under hard parcels. The second highest share in total traffic is that of perishable goods, which includes fruits, vegetables, eggs, etc. Newspapers and magazines are the third biggest commodity carried under the non-lease segment of parcel segment.

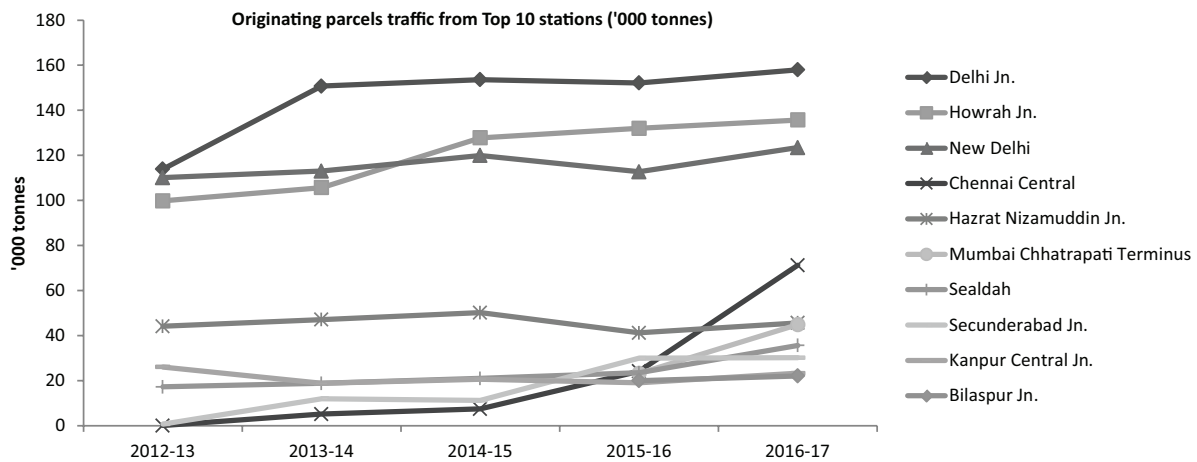


Figure 16: Traffic trend of Top 10 originating stations for the period 2012-13 till 2016-17 ('000 tonnes); Source: CRIS, TERI Analysis

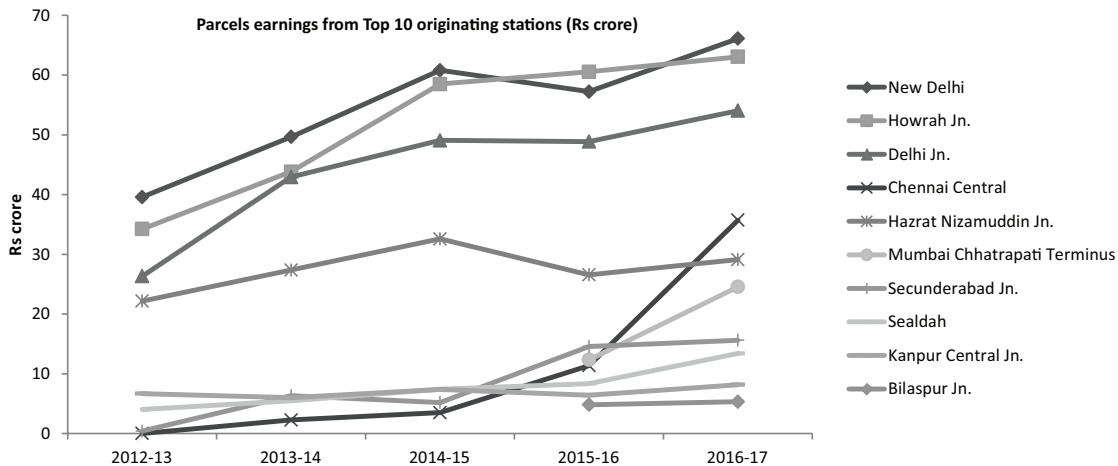


Figure 17: Earnings from Top 10 originating stations for the period 2012-13 till 2016-17 (Rs crore) Source: CRIS, TERI Analysis



Table 10: Commodity-wise traffic and earnings under non-lease segment (2016-17)

Commodity	2016-17			
	Traffic ('000 tonnes)	% share	Earning (Rs lakh)	% share
Hard parcel	870	72.1	36,094	73.02
Perishable parcel	303	25.1	12,324	24.93
Newspaper magazine	22	1.85	125	0.25
Horse, dog, cattle, birds and poultry	7	0.57	606	1.23
Others	5	0.41	281	0.57

Source: CRIS, TERI Analysis

Space-wise analysis

SLRs account for the largest share (92%) in total non-lease parcel traffic captured under the PMS. In terms of earnings, SLRs account for about 90% of the total earnings as well.

Station-wise non-lease parcel traffic

Overall observations:

1. SLRs account for the maximum share in terms of space used to move parcels.
2. Higher CAGR of earnings during the period 2012-13 and 2016-17 as compared to CAGR reported for traffic is mainly on account of tariff revision in September 2013.
3. Hard parcels account for the maximum share in total volume of parcel moved at these stations, followed by perishables and newspapers.

4. Very small quantities of perishables are currently being moved in VPs at the top stations analysed here.
5. Parcel traffic during the month of November 2016 dipped below the November 2012 level, which could be explained by the demonetization measure of the Government of India.

The stations analysed in this section are Howrah, Delhi Jn., New Delhi, Hazrat Nizamuddin, and Secunderabad Jn.

HOWRAH

Traffic ('000 tonnes): 99.7 in 2012-13 and 135.7 in 2016-17

Earnings: Rs 34 crore in 2012-13 and Rs 63 crore in 2016-17

Key commodities handled (2016-17): Hard parcel, perishables and newspapers

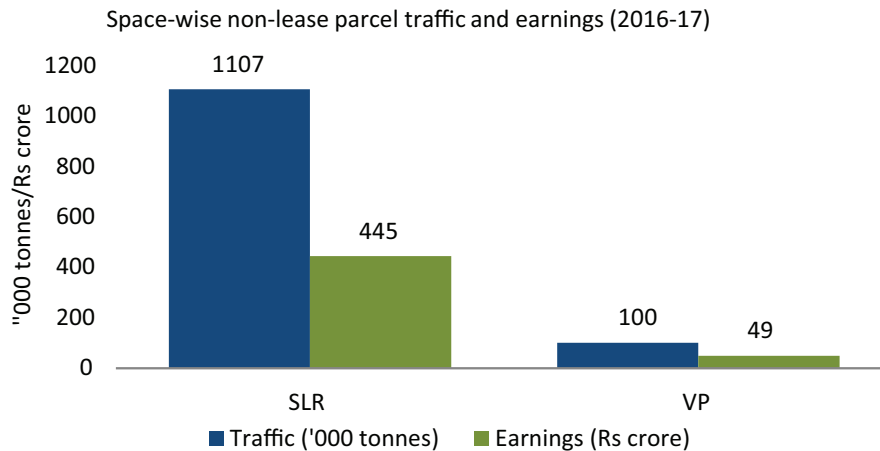


Figure 18: Space-wise traffic and earnings trend of non-lease parcels between 2012-13 and 2016-17

Source: CRIS

Note: As of March 2013, PMS was commissioned at 17 stations, which increased to 91 stations as of March 2017



- The overall parcel traffic at Howrah increased at a CAGR of 6% between 2012-13 and 2016-17.
- The share of SLRs continues to dominate the space utilized to move parcels at Howrah Junction. The share of VPs increased from 0% in 2012-13 to 11% in 2016-17.
- The space-wise earning intensity (earnings/traffic) of VPs was slightly higher (0.49 Rs crore/’000 tonne) as compared to SLRs (0.46 Rs crore/’000 tonne) for the year 2016-17.

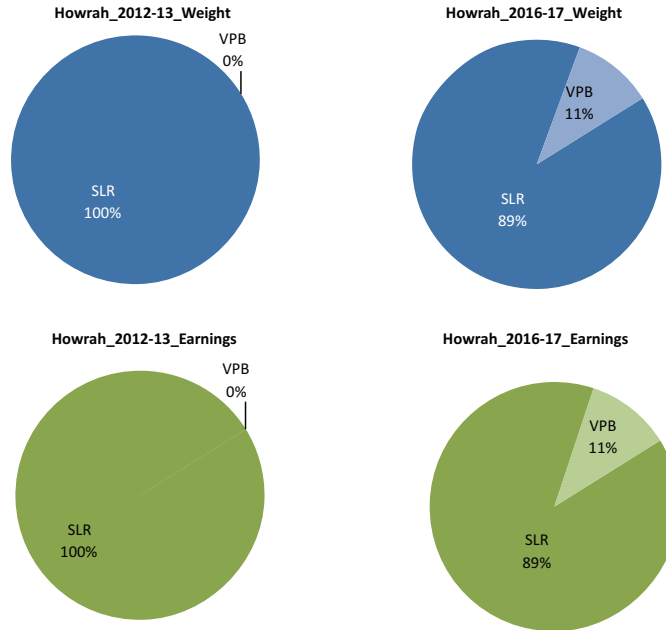


Figure 19: Space-wise traffic and earnings trends at Howrah Junction (% share in total at Howrah Jn.) (2012-13 and 2016-17)
Source: CRIS

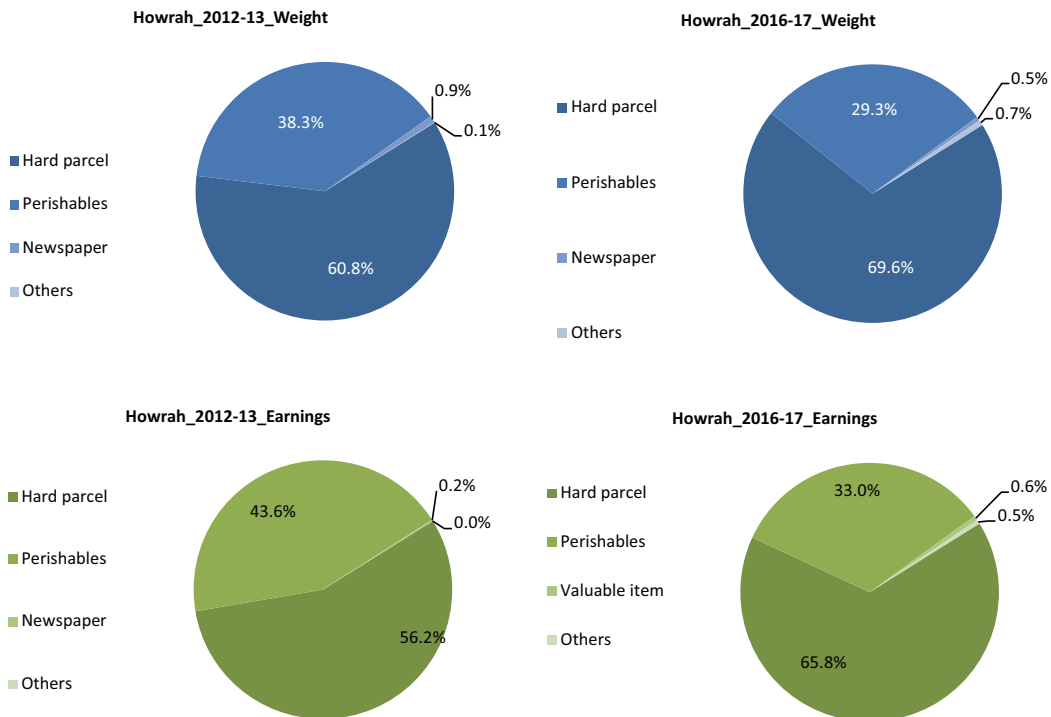


Figure 20: Commodity-wise traffic and earnings trends at Howrah Junction (% share in total at Howrah Jn.) (2012-13 and 2016-17);
Source: CRIS, TERI Analysis



- Hard parcels constitute the largest share in total parcel traffic. Its share increased from 60% in 2012-13 to about 70% in 2016-17. Share of hard parcels in total earnings also increased during the same period.
- The share of newspapers in total earnings during 2016-17 stood at 0.06% as compared to its share in total traffic at 0.7%.

DELHI JUNCTION

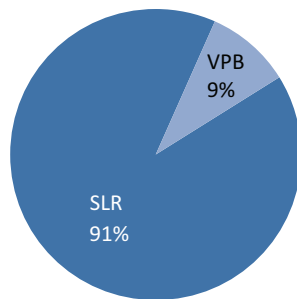
Traffic ('000 tonnes): 114 in 2012-13 and 158 in 2016-17

Earnings: Rs 26.4 crore in 2012-13 and Rs 54 crore in 2016-17

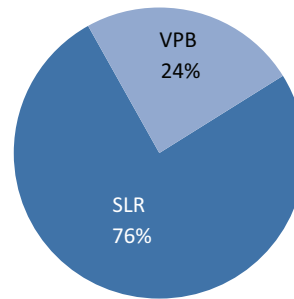
Key commodities handled (2016-17): Hard parcel, perishables and newspapers

- The overall parcel traffic at Delhi Junction increased at a CAGR of 6.8% between 2012-13 and 2016-17.
- The share of SLRs continues to dominate the space utilized to move parcels at Delhi Junction. However, the share of VPs increased from 9% in 2012-13 to 24% in 2016-17.
- The space-wise earning intensity (earnings/traffic) of VPs at Delhi Junction was higher (0.44 Rs crore/'000 tonne) as compared to SLRs (0.31 Rs crore/'000 tonne) for the year 2016-17.
- Hard parcels constitute the largest share in total parcel traffic. Its share increased from 96% in 2012-13 to about 98% in 2016-17. The share of hard parcels in total earnings also increased during the same period.
- The share of newspapers in total earnings during 2016-17 stood at 0.1% as compared to its share in total traffic at 0.34%.

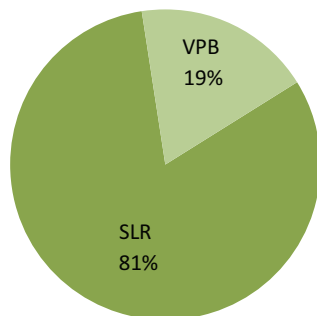
Delhi Jn._2012-13_Weight



Delhi Jn._2016-17_Weight



Delhi Jn._2012-13_Earnings



Delhi Jn._2016-17_Earnings

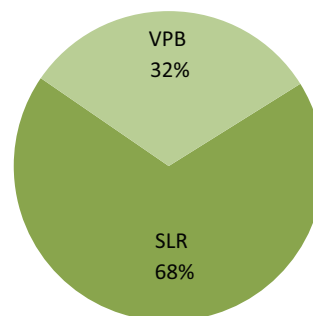


Figure 21: Space-wise traffic and earnings trends at Delhi Junction (% share in total at Delhi Jn) (2012-13 and 2016-17)
Source: CRIS



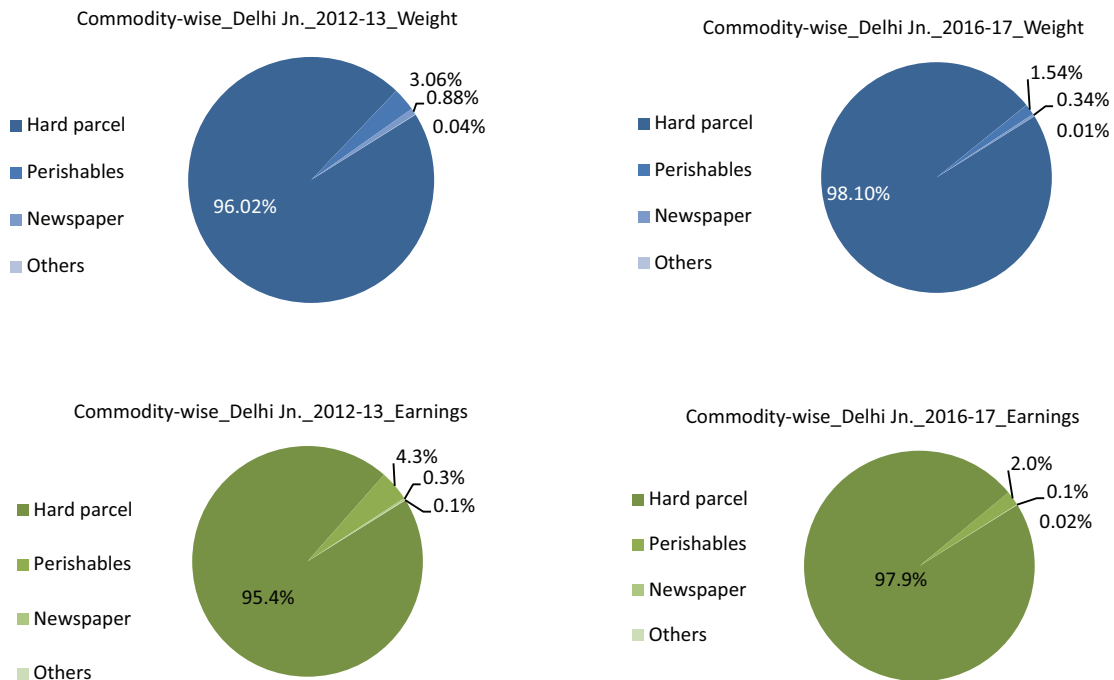


Figure 22: Commodity-wise traffic and earnings trends at Delhi Junction (% share in total at Delhi Jn) (2012-13 and 2016-17)
 Source: CRIS, TERI Analysis

NEW DELHI

Traffic ('000 tonnes): 110 in 2012-13 and 123.5 in 2016-17

Earnings: Rs 39.6 crore in 2012-13 and Rs 66 crore in 2016-17

Key commodities handled (2016-17): Hard parcel, perishables and newspapers

- The overall parcel traffic at New Delhi station increased at a CAGR of 2% between 2012-13 and 2016-17, while earnings grew at CAGR of 11% during the same period.

- The share of SLRs continues to dominate the space utilized to move parcels at New Delhi station. However, the share of VPs in total traffic as well as earnings increased from 2% in 2012-13 to 4% in 2016-17.
- Hard parcels constitute the largest share in total parcel traffic. Its share increased slightly from 79% in 2012-13 to about 80% in 2016-17. The share of hard parcels in total earnings also increased during the same period.
- The share of newspapers in total earnings during 2016-17 stood at 0.8% as compared to its share in total traffic at 6.1%.



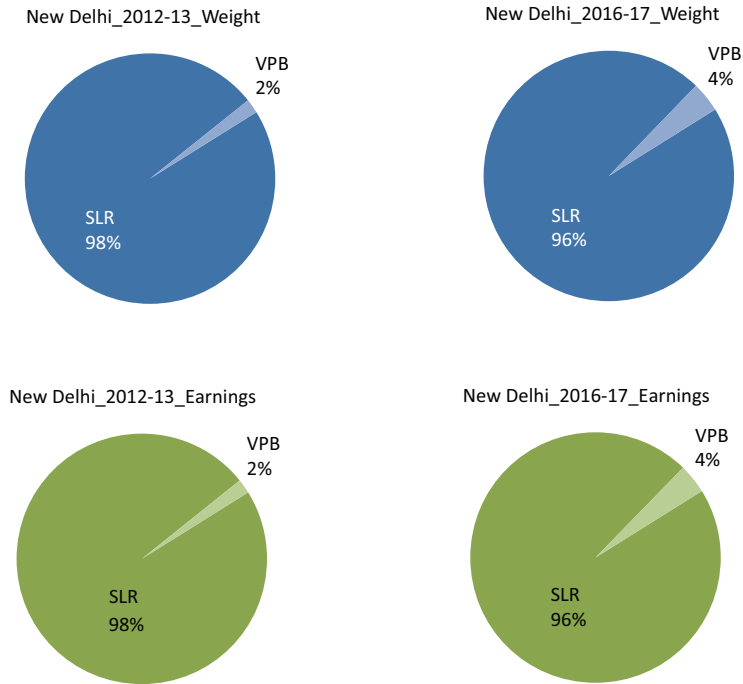


Figure 23: Space-wise traffic and earnings trends at New Delhi (% share in total at New Delhi) (2012-13 and 2016-17); *Source: CRIS*

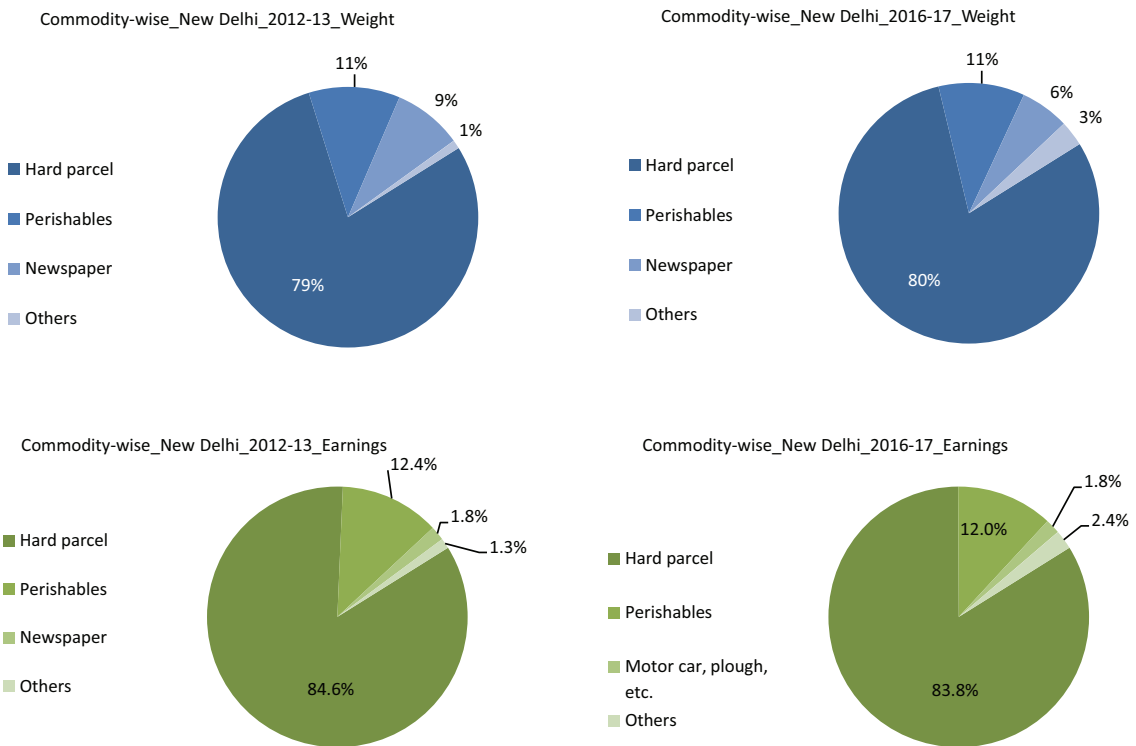


Figure 24: Commodity-wise traffic and earnings trends at New Delhi Junction (% share in total at New Delhi) (2012-13 and 2016-17) *Source: CRIS, TERI Analysis*



HAZRAT NIZAMUDDIN

Traffic ('000 tonnes): 44 in 2012-13 and 45 in 2016-17

Earnings: Rs 22.1 crore in 2012-13 and Rs 29.1 crore in 2016-17

Key commodities handled (2016-17): Hard parcel, perishables and newspapers

- The overall parcel traffic at Hazrat Nizamuddin station increased at a CAGR of 1% between 2012-13 and 2016-17 while earnings grew at CAGR of 6% during the same period.

- The share of SLRs continues to dominate the space utilized to move parcels at Hazrat Nizamuddin station. However, the share of VPBs in total traffic as well as earnings declined from 5% in 2012-13 to 4% in 2016-17.
- Hard parcels constitute the largest share in total parcel traffic. Its share falls in the range of 87%–90% between 2012-13 and 2016-17. The share of hard parcels in total earnings declined slightly during the same period.
- The share of newspapers in total earnings during 2016-17 stood at 0.2% as compared to its share in total traffic at 2%.

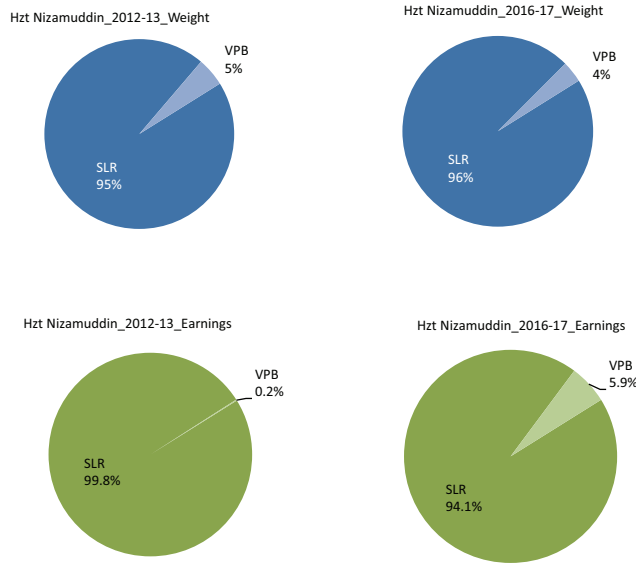


Figure 25: Space-wise traffic and earnings trends at Hazrat Nizamuddin (% share in total at Hazrat Nizamuddin) (2012-13 and 2016-17); Source: CRIS

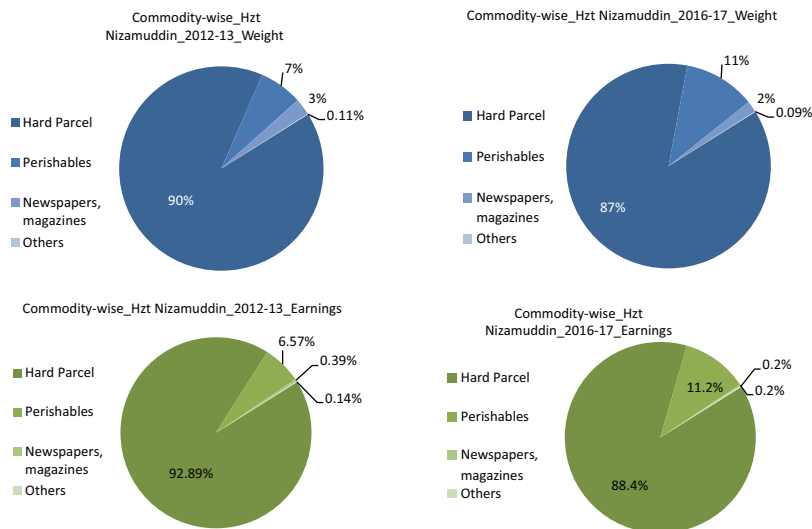


Figure 26: Commodity-wise traffic and earnings trends at Hazrat Nizamuddin (% share in total at Hazrat Nizamuddin) (2012-13 and 2016-17) Source: CRIS, TERI Analysis



SECUNDERABAD

Traffic ('000 tonnes): 11.97 in 2013-14 and 30.2 in 2016-17

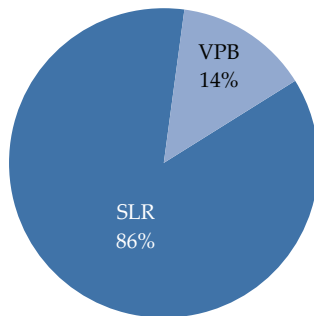
Earnings: Rs 6.3 crore in 2013-14 and Rs 15.6 crore in 2016-17

Key commodities handled (2016-17): Hard parcel, perishables and newspapers

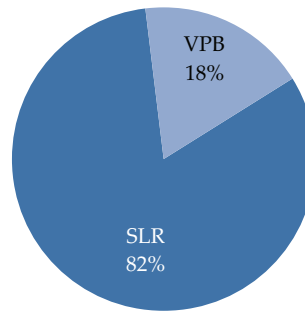
➤ The overall parcel traffic at Secunderabad Jn. increased at a CAGR of 26% between 2013-14 and 2016-17, while earnings grew at CAGR of 35% during the same period.

- The share of SLRs declined slightly from 86% in 2013-14 to 82% in 2016-17 at Secunderabad Jn. This was compensated with the increase in the share of VPs in total traffic.
- The share of VPs in total earnings increased briskly from 19% in 2013-14 to 31% in 2016-17.
- Despite the fact that the share of perishables declined from 44% in 2013-14 to 31% in 2016-17, it still remains one of the highest as compared to other stations.
- The share of newspapers increased in total traffic from 0.86% in 2013-14 to 3.3% in 2016-17. However, its share in total earnings increased from 0.1% in 2013-14 to 0.4% in 2016-17.

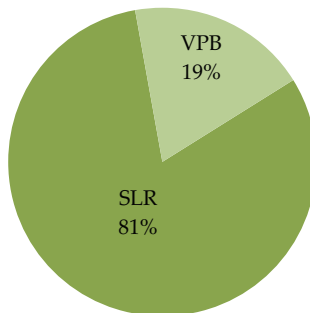
Secunderabad_2013-14_Weight



Secunderabad_2016-17_Weight



Secunderabad_2013-14_Earnings



Secunderabad_2016-17_Earnings

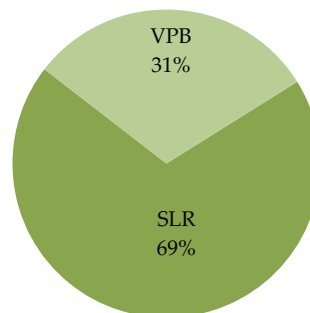


Figure 27: Space-wise traffic and earnings trends at Secunderabad Jn. (% share in total at Secunderabad Jn.) (2013-14 and 2016-17)
Source: CRIS



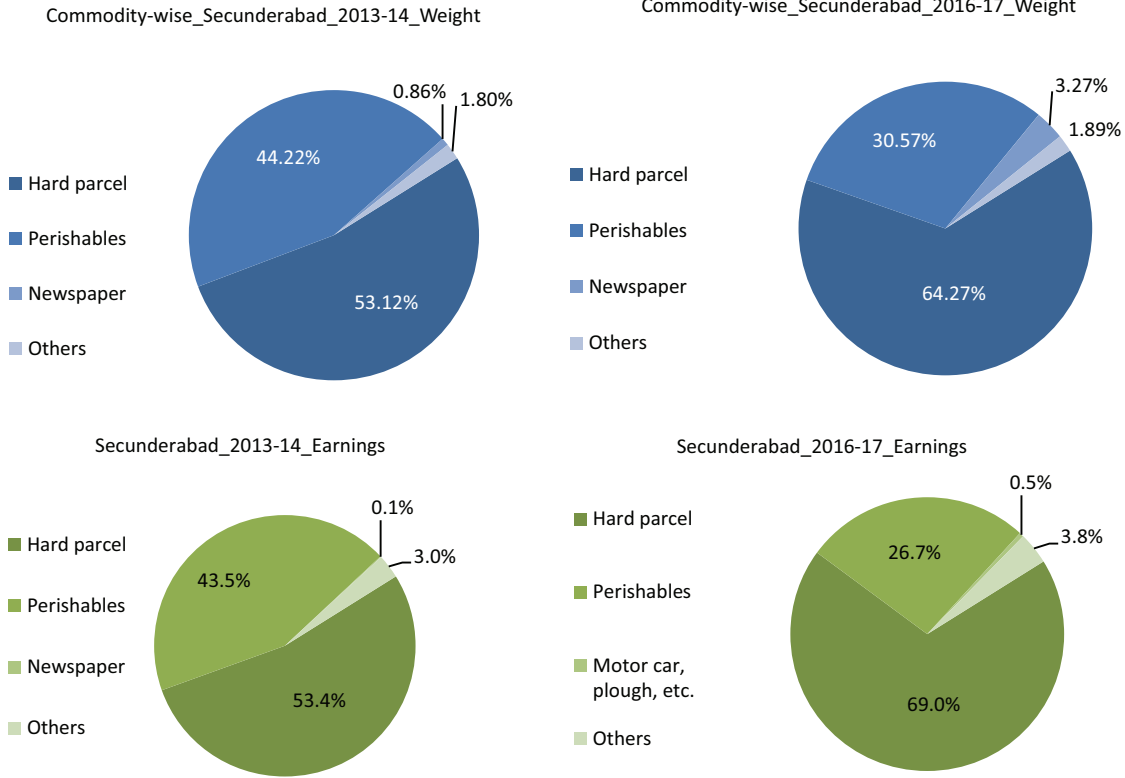


Figure 28: Commodity-wise traffic and earnings trends at Secunderabad Jn. (% share in total at Secunderabad Jn.) (2013-14 and 2016-17)
Source: CRIS, TERI Analysis

Leased traffic

Data for leased parcel traffic was made available by CRIS and the analysis has been done for the period April 2014 to March 2017. As discussed earlier, it is to be noted that over the period, a number of stations have also been

added to the PMS. This would explain the rapid increase in traffic and earnings during 2015-16 (39 stations were added to the PMS in this year alone). It would, therefore be important to undertake a station-wise analysis instead of an overall analysis.

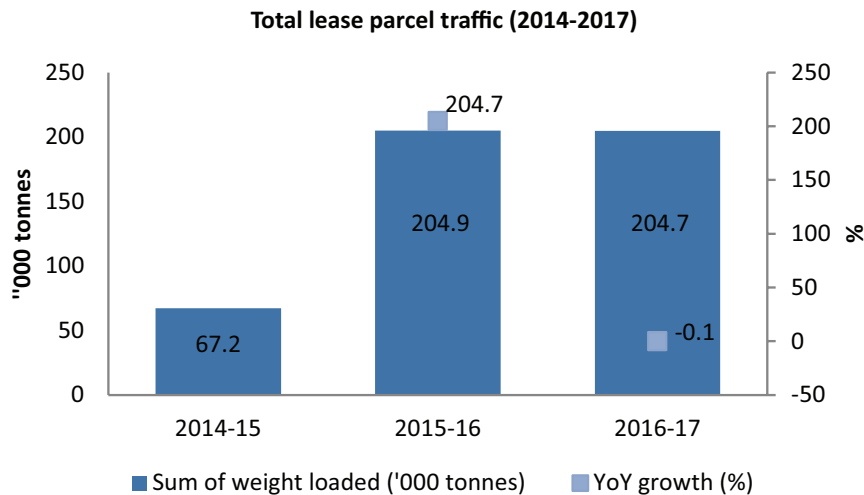


Figure 29: Total lease parcel traffic captured by PMS ('000 tonnes)
Source: CRIS



Month-wise capacity utilization within leased out space

The PMS does capture the volume of space leased out and the actual weight loaded which has been used here to understand the capacity utilization. The data indicates that the capacity utilization has been declining over the years, which is also reflected in Figure 31.

Space/coach-wise lease traffic

As is the case with non-lease segment, SLRs dominate the mode through which parcels are moved under the lease segment. However, the space utilization for VPs is

at significantly low level for the year 2016-17, while that of SLRs was at 62%.

Station-wise lease parcel movement

The top 10 stations in terms of originating lease parcel traffic have been listed in Table 11. These stations account for about 90% of the lease traffic captured under PMS. Major stations like Howrah, Kanpur Central, Mumbai Central, New Delhi, Sealdah, and Secunderabad have reported low capacity utilization of the leased out space between 2014-15 and 2016-17.

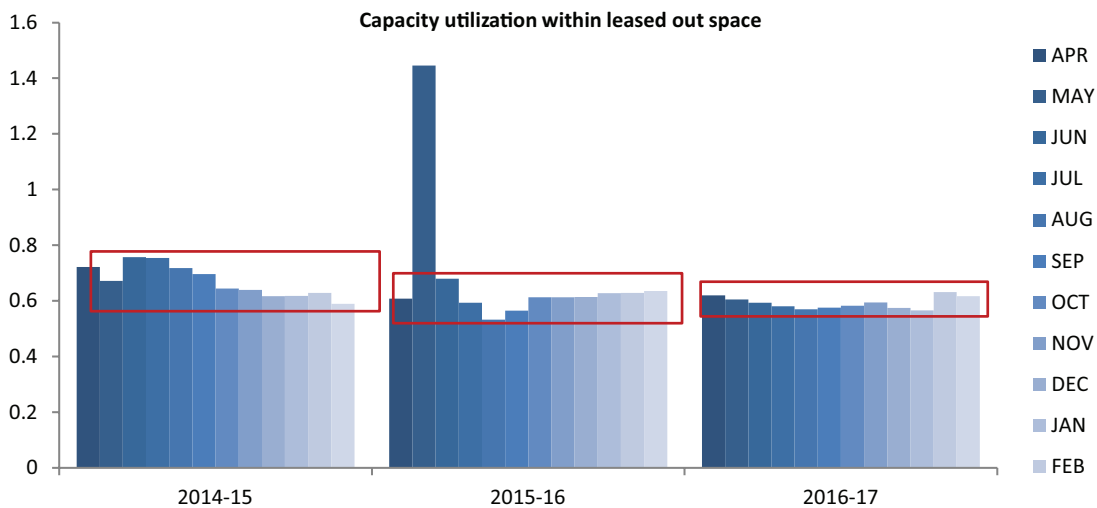


Figure 30: Month-wise capacity utilization of leased space
Source: CRIS

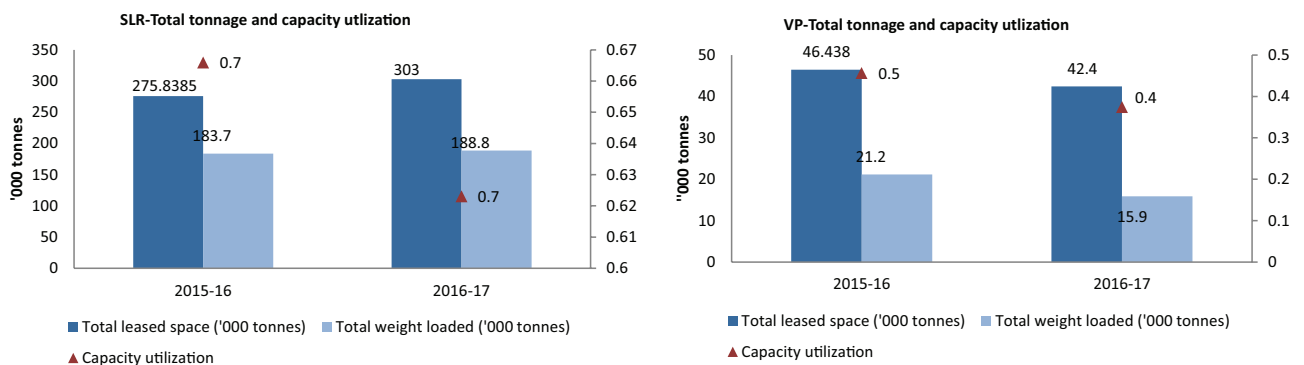


Figure 31: Total lease traffic and capacity utilization by SLRs and VPs under PMS for 2015-16 and 2016-17
Source: CRIS



Table 11: Station-wise leased space and actual loading during 2014-17 ('000 tonnes)

Station	2014-15			2015-16			2016-17		
	Sum of leased space	Sum of weight loaded	Capacity utilization	Sum of leased space	Sum of weight loaded	Capacity utilization	Sum of leased space	Sum of weight loaded	Capacity utilization
Allahabad	1.15	0.72	62%	1.52	1.53	101%	1.60	1.54	96%
Delhi Junction	15.03	10.97	73%	36.04	27.04	75%	37.98	31.44	83%
H. Nizamuddin	0.60	0.54	90%	12.29	12.43	101%	19.83	16.23	82%
Howrah	31.39	15.89	51%	76.36	33.17	43%	78.86	36.05	46%
Kanpur Central	23.83	17.17	72%	33.56	22.05	66%	12.46	7.63	61%
Mumbai (Dadar)	0.10	0.10	96%	3.07	3.02	98%	1.18	1.11	94%
Mumbai Central	0.29	0.07	25%	6.40	2.32	36%	15.31	7.16	47%
New Delhi	27.52	17.87	65%	66.23	47.64	72%	61.51	42.00	68%
Sealdah	6.17	3.91	63%	49.80	32.24	65%	32.74	19.89	61%
Secunderabad	-	-	-	11.22	7.86	70%	23.13	14.34	62%

Source: CRIS

The top 10 stations, given in Table 12, account for about 90% of the total earnings from the lease business captured under the PMS. The key stations are New Delhi,

Howrah, Hazrat Nizamuddin, Delhi Jn. Sealdah, and Secunderabad.

Table 12: Station-wise earnings from leased parcel movement during 2014-17 (Rs crore)

Station	2014-15	2015-16	2016-17
Allahabad	0.28	0.45	0.46
Delhi Junction	7.44	23.54	16.55
H. Nizamuddin	0.64	14.23	22.47
Howrah	12.15	40.54	43.36
Kanpur Central	4.99	7.55	2.73
Mumbai (Dadar)	0.00	1.07	0.27
Mumbai Central	0.18	3.03	7.10
New Delhi	25.79	86.02	79.99
Sealdah	2.51	23.15	16.48
Secunderabad	-	6.21	15.62

Source: CRIS



Policy Performance-related issues

As seen earlier, IR has made concerted efforts to boost parcel traffic through the introduction of several policies. It has also been flexible to the demands of the private players and made amendments to the parcel policies. Despite all this, no significant increase in traffic or improvement in capacity utilization has been reported. On the one hand, parcels are gradually being separated from the passenger service while on the other hand, no effort is being made towards the increase in parcel traffic onto railways. An analysis of the issues with the PCET and CPLP policies of IR is as follows.

Issues with the PCET policy

The loadings and earnings from the special parcel trains

have declined since the launch of the PCET policy. Data provided by Railway Board for the three years from 2014-15 till 2016-17 indicate that the total number of rakes loaded declined from a total of 1,285 in 2014-15 to 990 in 2016-17 (CAGR of -8%). Consequently, the earnings also declined from Rs 252 crore to Rs 203 crore during the same period (CAGR of -7%).

Some of the reasons for the decline highlighted by the sector experts and stakeholders include *non-availability of parcel vans, issues related to non-compliance of transit time commitment given by Indian Railways, and the lack of accountability of IR for the safe movement of parcels.*¹⁰ A detailed analysis of data related to special parcel trains has been done in the issues section of this report, which helps in explaining the reasons why this scheme did not take off as expected.

Table 13: Number of special parcel trains loaded and earnings reported by IR (Rs crore)

Month	2014-15		2015-16		2016-17	
	No. of rakes	Earnings	No. of rakes	Earnings	No. of rakes	Earnings
April	84	17.50	117	22.34	95	18.46
May	107	21.84	131	25.05	121	22.47
June	107	22.01	106	20.72	89	16.09
Q1	298	61	354	68	305	57
July	115	21.66	78	14.77	73	15.47
August	107	20.52	109	22.37	78	14.42
September	116	22.06	103	21.89	84	15.57
Q2	338	64	290	59	235	45
October	92	18.27	110	23.90	83	15.83
November	105	20.69	97	20.05	64	13.35
December	106	21.25	96	20.94	64	13.32
Q3	303	60	303	65	211	43
January	112	22.11	90	19.38	71	14.77
February	112	21.25	86	19.37	71	14.23
March	122	23.07	92	20.58	97	28.78
Q4	346	66	268	59	239	58
Total (Year)	1,285	252.23	1,215	251.35	990	202.76

Source: Railway Board

¹⁰TERI interacted with the operator of the Chitpur-Kalyan special parcel train, the operation of which has been suspended on account of significantly higher transit time as compared to initially committed time.



Issues with the CPLP

Even after the launch of a comprehensive parcel leasing policy by the Indian Railways in 2007, the share of parcel traffic moved through lease holders and the earnings thereof, as seen in Figure 33, have declined in the past few years. The share of lease traffic in total parcel traffic declined from 46.6% in 2011-12 to 23.5% in 2017-18. There are a number of reasons for the rapid decline of lease traffic on Indian Railways. TERI's interaction with lease holders highlighted the possible reasons for the decline of lease traffic from IR.

There are two key reasons for the failure of the CPLP scheme. These are: (i) Higher reserve price set by the Indian Railways, and (ii) lack of lean period for the leaseholders. Relatively higher tariff rates as compared to road transport, introduction of GST on July 1, 2017 – making road transport cheaper and faster, non-availability of VPs, non-issuance of shortage certificate in case of theft, and lack of dedicated space for lease operations (storage/holding area). Another key reason for the declining participation of lease holders in parcel movement though IR is the lengthy and cumbersome process of appointment through tendering route.

TERI analysed lease contracts for spaces offered in key trains operating under the Northern Railway. These are as follows:

Punjab Mail Express

In the last 8 years or so, parcel loading contract by lease holders for the Punjab Mail Express were completed only three times, while for rest of the years either the contracts were cancelled/abandoned or no bids were received by IR. There could be several reasons for the declining or low interest from the lease holders. One of the primary reasons for the high rate of contract surrender is that since this express train passes through New Delhi and there is relatively low traffic from the originating station (Firozpur Cantt.), the lease holder find it difficult to book traffic between Firozpur and New Delhi (and vice versa).

Another probable factor for high attrition rate could be the consistent increase in the reserve price set by Northern Railway. Reserve price fixed by Northern Railway for the parcel space in Punjab Mail has more than doubled over the years – from Rs 17,748/- per 4-tonne in 2009 to Rs 34,659 per 5-tonne in 2017.

In order to get a holistic picture, TERI analysed the contract information related to trains originating from key stations in the Delhi division to major destinations. It can be seen that a number of contracts did not complete the tenure and were either surrendered or terminated by IR on account of punitive measures. This could be attributed to the issues faced by the lease holders, which have been discussed in the following section.

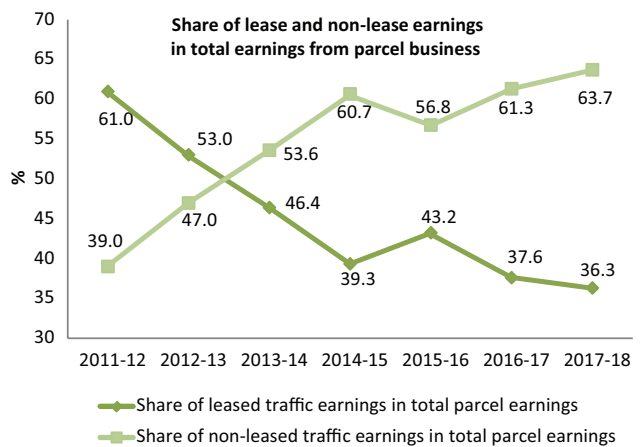
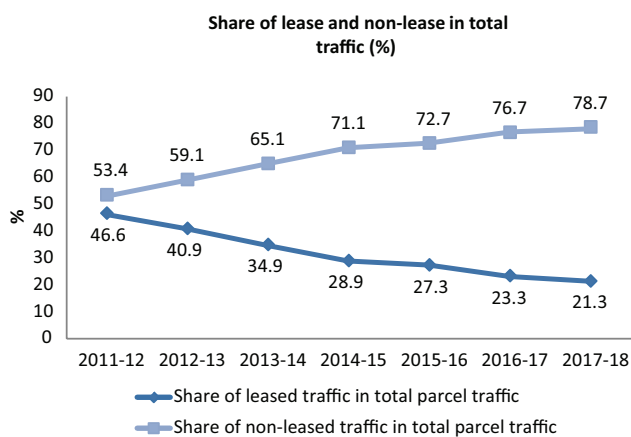


Figure 32: Share of lease and non-lease traffic and earnings in overall parcels carried by IR
Source: Railway Board



Table 14: Contract details of parcel space leased out for Punjab Mail (Train No. 12138)

Date of tender issue	Reserve price	No. of offers received	Space offered (Tonne)	% variation between offered price and reserve price	Contract status
05.12.17	Rs. 34,659/- per 5-tonne	0	15	-	No bid received
03.11.16	Rs. 34,659/- per 5- tonne	0	5	-	No bid received
18.11.15	Rs. 32,632/- per 4- tonne	0	4	-	No bid received
24.01.14	Rs. 28,101/- per 4- tonne	3	8	10%	Contract completed
16.07.13	Rs. 28,101/- per 4- tonne	2	4	4%	Contract cancelled
28.01.13	Rs. 28,101/- per 4- tonne	5	8	9%	Contract abandoned
28.01.13	Rs. 6,610/- per 1- tonne	8	AGC	94%	Work not started
15.02.11	Rs. 17,748/- per 4- tonne	3	4	58%	Contract completed
17.12.09	Rs. 4,437/- per 1- tonne	11	AGC	49%	Contract completed
10.12.09	Rs. 17,748/- per 4- tonne	6	4	4%	Contract surrendered

Source: Northern Railway

Table 15: Contract details of parcel space leased out in key trains originating from Delhi Division

Train No.	From	To	Frequency	Compartment	Lease freight (Rs)	Contract start from	Contract valid up to	Party Name	Remarks
12652	HNZM	MDU	2,4	F-1	45,186	06.10.2015	05.10.2018	Suraksh Rail	Running
12652	HNZM	MDU	2,4	F-2	46,602	02.09.2015	01.09.2018	R.R Freight Forwarders	Running
12652	HNZM	MDU	2,4	R-1	49,106	26.08.2015	25.08.2018	R.R Freight Forwarders	Surrender notice accepted LDL on 23.05.17



Table 15: Contract details of parcel space leased out in key trains originating from Delhi Division

Train No.	From	To	Frequency	Compartment	Lease freight (Rs)	Contract start from	Contract valid up to	Party Name	Remarks
12628	NDLS	SBC	D	R-1	49,672	18.10.2013	17.10.2016	Guneet Singh	Surrender notice accepted LDL on 27.06.16
12628	NDLS	SBC	D	F-1	54,445	17.02.2016	16.02.2019	ARC Logistics	Surrender notice accepted
12628	NDLS	SBC	D	F-2	59,492	15.03.2016	14.03.2019	Mica Cargo Movers	Surrender notice accepted LDL on 14.03.17
12628	NDLS	SBC	D	R-1	53,488	10.06.17	09.06.2022	ARC Logistics	Running
12724	NDLS	HYB	D	F-1	53,047	14.02.2015	13.02.2018	Amit Rail Cargo	Surrender notice accepted LDL on 09.06.17
12724	NDLS	HYB	D	F-2	54,060	19.02.2015	18.02.2018	M/s Eagle Rail Cargos	Completed its tenure
12724	NDLS	HYB	D	R-1	56,179	20.02.2015	19.02.2018	M/s ARC Logistics	Completed its tenure
12156	HNZM	HBJ	D	F2	36,036	01.05.2017	30.04.2022	M/s Harsh Transport	Running
12156	HNZM	HBJ	D	F2	43,000	03.05.2015	02.05.2018	Eagle Rail Cargos	Left and terminated in May 2016
12156	HNZM	HBJ	D	F-1	39,177	31.03.2015	30.03.2018	Sakhi Rail Parcel	Terminated on account of punitive measures
12952	NDLS	BCT	D	FSLR	56,789	04.03.2016	03.03.19	M/s Shiv Shakti Carriers & Cargo	Left contract and terminated in May 2016
12952	NDLS	BCT	D	F-1	45,888	05.04.2017	04.04.2022	M/s Ami Rail Cargo	Terminated on account of punitive measures



Table 15: Contract details of parcel space leased out in key trains originating from Delhi Division

Train No.	From	To	Frequency	Compartment	Lease freight (Rs)	Contract start from	Contract valid up to	Party Name	Remarks
12274	NDLS	HWH	2,6	F-1	77,189	12.09.2015	11.09.2018	M/s Xtra Freight Forwarders	Surrender notice accepted LDL on 11.09.16
12274	NDLS	HWH	2,6	F-1	65,771	23.05.2017	22.05.2022	M/s C.T. Enterprises	Left and terminated in April 2018

Note: R-class tariff rate is charge in all the above trains; D: Daily
MDU: Madurai; SBC: Bangalore City; HYB: Hyderabad Deccan; BCT: Mumbai Central; HWH: Howrah
Source: Delhi Divisional Office, Indian Railways

Issues raised by Parcel Leaseholders

TERI's research team undertook a survey work and interacted with a number of the parcel leaseholders from Northern, Southern, South Central, and Central zonal railways. As seen above, a number of lease holders are abandoning the contracts before completion of agreed period. Some of the reasons, which could be attributed to the failure of the CPLP policy, are mentioned below:

R-scale for parcel movement through SLRs with utilization rate of over 60%: IR's notification, which states that R-scale tariff rate will be charged for parcels loaded onto SLRs in all trains where 60% of capacity is already utilized instead of S-class rate, has played a key role in increasing the cost of parcel movement through railways.

Poor storage infrastructure at the stations: Lack of dedicated space or poor condition of existing space allocated to the lease holders for parcel storage/holding purpose at the stations is a major issue.

Theft and lack of security: The issue of theft of parcel is prevalent in this business. Not only does the theft occur in the storage area or during loading/unloading, but also during the transit where anti-social elements cut open the SLRs/VPs or break the locks.

Non-issue of claim/shortage certificate by the Railways: Another issue raised was the non-issuance of claim/shortage certificate by the Railway authorities. In majority of the instances, there is no one to record the information related to theft as soon as it is detected.

Charging lower rate from those who operate on 'VPs on demand' basis: The lease holders who are operating VPs on a return basis are paying double the cost as compared to those who are operating VPs on demand (one way movement). In a number of cases, the return traffic is not enough to cover the costs incurred by the leaseholders.

Lack of reliable internet connections at the booking counters: Due to outages in internet connection or non-working of PMS, parcel booking cannot be done at the booking counters. Till the time work is re-established or permission is granted for manual booking, significant delay already occurs leading to inconvenience to the leaseholders.



Constraints in increasing parcel business of IR

As part of this report, TERI tries to highlight the constraints in increasing parcel business of IR in a summarised form

as enumerated in Table 16. A detailed explanation of each of the issues raised in the table is reported later in the section.

Area	Issues
Institutional	<ul style="list-style-type: none"> IR's lack of vision/strategy for the parcel transportation segment. Lack of IR's strategy is not only in terms of policy initiatives but also in terms of infrastructure (terminals, etc.), rolling stock (SLRs, VPs, LHB compliant stocks, etc.), and manpower
Freight	<ul style="list-style-type: none"> Parcels loaded in SLRs (of all trains) with over 60% capacity utilization being charged at R-class rate instead of S-class rate, substantially increases the cost of transporting parcels by rail Stiff competition from road transportation faced by IR in terms of cost and better/additional services. Because of the tariff rate regulation and higher reserve price set by IR during tendering process, moving parcels by rail has become expensive
Infrastructure – Terminals	<ul style="list-style-type: none"> Lack of clear guidelines and policy outlook for parcel terminals Lack of dedicated loading/unloading space at stations for parcels at railway stations Lack of basic facilities at the stations where loading/unloading of parcels are done to/from trucks/tempos/etc. There is a severe lack of mechanized loading/unloading facilities at the platforms or parcel holding areas of railway stations Issues related to the working of weighing machines
Infrastructure – Rolling stock	<ul style="list-style-type: none"> As mentioned earlier, there is lack of IR's focus towards rolling stock. There has been almost no increase in the rolling stock capacity over the period 2013 to 2017 Lower volumetric capacity of current stock of VPs as compared to the non-standardized containers used by road transporters IR's lack of planning to manufacture VPs for LHB rakes



Table 16: Summary of constraints in increasing parcel business of IR

Area	Issues
Operations	<ul style="list-style-type: none"> Lack of responsibility/accountability on IR's part on safe and secure transit of parcels Non-issue of shortage certificate by IR Number of parcel stocks (SLRs and VPs) leased out remains significantly low as compared to the available stock The number of special parcel trains loaded in a year has been declining over the last 5-6 years mainly on account of lack of IR's focus in running these trains. Tender process to award space for parcel movement is time consuming and inefficient Unrealistic transit time commitment in tender documents Slow speed of Parcel Special Trains Lack of aggregation and efficient parcel handling services Over-carriage of parcels beyond destination stations mainly due to shortage of manpower at stations
IT	<ul style="list-style-type: none"> Delay in the implementation of PMS Issues related to poor internet connectivity and frequent outages

Sources: Compiled by TERI

Based on the interactions with the stakeholders involved in the parcel business, TERI has come out with a list of recommendations in order to boost parcel traffic on

Indian Railways. These have been summarized in Table 17 and elaborated later in this section.

Table 17: Summary of recommendations to increase parcels loading onto Indian Railways

Area	Recommendations
Institutional	<ul style="list-style-type: none"> Formulation of a Resurrection Plan for IR's parcel business Constitution/evolution of a dedicated agency/organization to handle parcel business of Indian Railways
Freight	<ul style="list-style-type: none"> Tariff fixation should be dynamic in nature and responsibility of a separate authority. It should be benchmarked with the road transport Relook at the R-scale rate for loadings in SLRs with over 60% capacity Benchmarking IR's activities and services related to parcel business with road transport sector – pricing and space



Table 17: Summary of recommendations to increase parcels loading onto Indian Railways	
Area	Recommendations
Infrastructure – Terminals	<ul style="list-style-type: none"> • Focus on separate/dedicated and mechanized parcel terminals • IR should make the provision of electronic weighing machines at all parcel booking centres • Provision of basic facilities (basic amenities at the booking counters, safety and security provision, etc.) at railway stations
Infrastructure – Rolling stock	<ul style="list-style-type: none"> • Typical progression of IR's parcel business demands more attention towards parcel vans and containers • Round trip VP arrangement for leased operation • IR should induct light and high capacity parcel vans (higher cubic metre/tonne); will result in lower unit cost and higher profitability • IR needs to increase the no. of SLRs and VPs leased out to private parties
Operations	<ul style="list-style-type: none"> • IR should take accountability for the safe and secure movement of parcel • The issuance of shortage certificate should be made hassle free and fast • Offering 'Parcel Insurance' service to the operators • IR needs to focus on maintaining the time schedule of parcel express trains so as to overcome the delay faced by consigners • Realistic transit time to be stated by IR in bid documents for lease holders • Indian Railways could allow authorized parties to operate collection/distribution centres for rail bound parcel traffic across major cities • Inclusion of lean period in bid documents while appointing lease holders • Induction of parcel handlers to overcome the key issue of staff constraint/outourcing of this activity could also be looked at
IT	<ul style="list-style-type: none"> • Paperless booking as well as delivery of parcels • Faster implementation of PMS across all major stations • IR as well as CRIS should proactively look at faster disposal of complaints related to any PMS malfunction/outages

Sources: Compiled by TERI

The issues highlighted in Table 15 have been discussed in detail in separate sections along with corresponding

recommendations to improve the operations and functioning of IR in parcel handling.



Institutional Set-up and Approach

One of the key areas of concern for the parcel segment in Indian Railways is related to institutional set up and approach in managing the parcels business. This section looks into specific issues related to the institutional set up and approach, followed by recommendations.

Lack of attention by IR towards parcel business: One of the primary reasons cited by a number of stakeholders for the constant decline in parcel traffic growth rate is the lack of dedicated effort/strategy from the Indian Railways' (IR) side to push towards higher growth. Indian Railways categorises parcel business under the 'non fare revenue' segment, which also covers areas, such as advertising, real estate development/land monetization, and value added services. A number of measures, which were suggested under the Vision 2020 document for the increased loading of parcels on Indian Railways, still remain to be implemented.

From Fragmented Approach to Holistic Approach: Indian Railways has to leap frog from decisions and measures which are piecemeal in nature to a holistic approach involving all aspects of parcel business. It is recommended that IR formulate a plan to move from 'controlled operation of parcels' to a more 'private/separate agency managed and regulated' approach. This would require a thorough analysis and developing a robust business model for running parcels segment. All aspects need to be covered under the recommended IR plan, including regulatory aspects, terminal infrastructure, rolling stock, tariff rate/pricing of services, safety and security, insurance coverage, claims and compensation, inter-modal operations (first mile-last mile operations), manpower, mechanization, and IT systems. IR could decide as to which all service components in parcel transportation mentioned above need to be transferred to the private agency and which component should be retained.

Dedicated agency to handle parcel business of Indian Railways: In 2001, the Government of India had accepted the recommendation of the 9th Parliamentary Standing Committee Report on Railways which called for the segregation of parcel services from passenger services.¹¹ One of the most important steps that the IR still needs to take, which has also been highlighted in the Vision 2020 document (released in December 2009), is setting up of a dedicated unit or agency to manage and operate parcel business of Indian Railways. The Vision 2020 document stated that *"the business would be segregated from passenger services"*.

In the absence of any expertise and capability in undertaking last mile and first mile movement of parcels because of which road transport is preferred by the customers, *it becomes imperative that IR works toward creating capacity under a separate umbrella organisation/unit.*

There are two important points under this recommendation, which are also an addition to that mentioned in the Vision 2020 document. *These are: (1) Permanency of senior officials in the organization, and (2) Inclusion of a private sector expert at the helm of the organization. Also, tariff fixation should be done by a dedicated division under the Corporation, which would regularly benchmark the tariff rate with the road transport sector.* These will go a long way in ensuring the smooth and successful functioning of the organization, leading to rapid growth in Railways' share in parcel movement.

In the current scenario, it will be operationally very difficult to commission a separate agency. It is recommended that IR focusses on expanding and redistributing the work instead of creating a separate agency at this stage and IR should take stock of parcels operation after 5 years or so before constituting a separate organization. (Document links used in the box given below are given in footnote¹²)

¹¹<https://indiankanoon.org/doc/1511034/> (Point No. 15)



Recommendations related to Parcels Business in Key Policy Documents

11th Five Year Plan, 2007 (a)

“IR needs to seriously consider provision of complete logistic solutions to its freight customers, in addition to decreasing unit costs and providing superior services.”

Vision 2020 (published in 2009)

- A dedicated organization to look into the marketing, sales and transport of parcel services within an agreed transit time through timetabled trains and parcel specials
- IR should invest in rolling stock, storage and handling facilities at loading and unloading ends, and development of allied infrastructure for connectivity to road and other modes, in partnership with aggregators and logistics players in the field
- A market-oriented strategy, with focus on total logistics support, value-added services, rational cost-and-value-based tariff, state-of-the art IT applications for providing real-time online access to information on movement of consignments
- Engaging private players to provide end-to-end logistics

12th Plan, 2013 (b)

“Increase in rake loading; Introduction of High Capacity Parcel Vans; Development of dedicated parcel terminals; Mechanisation of handling; Provision of end logistics with value added services; Introduction of premium super-fast parcel express services between major production and consumption centres with guaranteed transit and assured supply on the nominated day of loading; and Computerisation of Parcel Management System.”

NTDPC Report, 2014 (c)

“An efficient ‘rail-borne parcel traffic’ has to be multimodal if it has to be user-centric; institutional aggregation is a basic requirement. Collection and delivery have to be at locations decided by the users, with a single agency dealing with all matters documentation, enquiries, tracking, financial and tariff-related issues, claims, etc. This activity needs to be managed professionally as a separate business unit that combines the advantages and strengths of rail movement with those of road; otherwise IR will not be able to take advantage of the opportunities in the market for parcel movement.”

Rail Budget – 2016-17 (d)

“Plan to liberalize the current parcel policies including opening the sector to container train operators to effect a quantum jump in IR’s share of the national parcel market. Door to door connectivity is especially important for this market segment and will take all steps necessary to expand service offerings especially to growing sectors such as e-commerce. Also initiate a pilot project for online booking of parcels.”

¹² (a) http://planningcommission.gov.in/plans/planrel/fiveyr/11th/11_v3/11v3_ch9.pdf

(b) http://planningcommission.gov.in/plans/planrel/fiveyr/12th/pdf/12fyp_vol2.pdf

(c) http://planningcommission.gov.in/sectors/NTDPC/volume3_p1/railways_v3_p1.pdf

(d) http://www.indianrailways.gov.in/railwayboard/uploads/directorate/finance_budget/Budget_2016-17/RailBudgetSpeech_2016-17_Eng.pdf



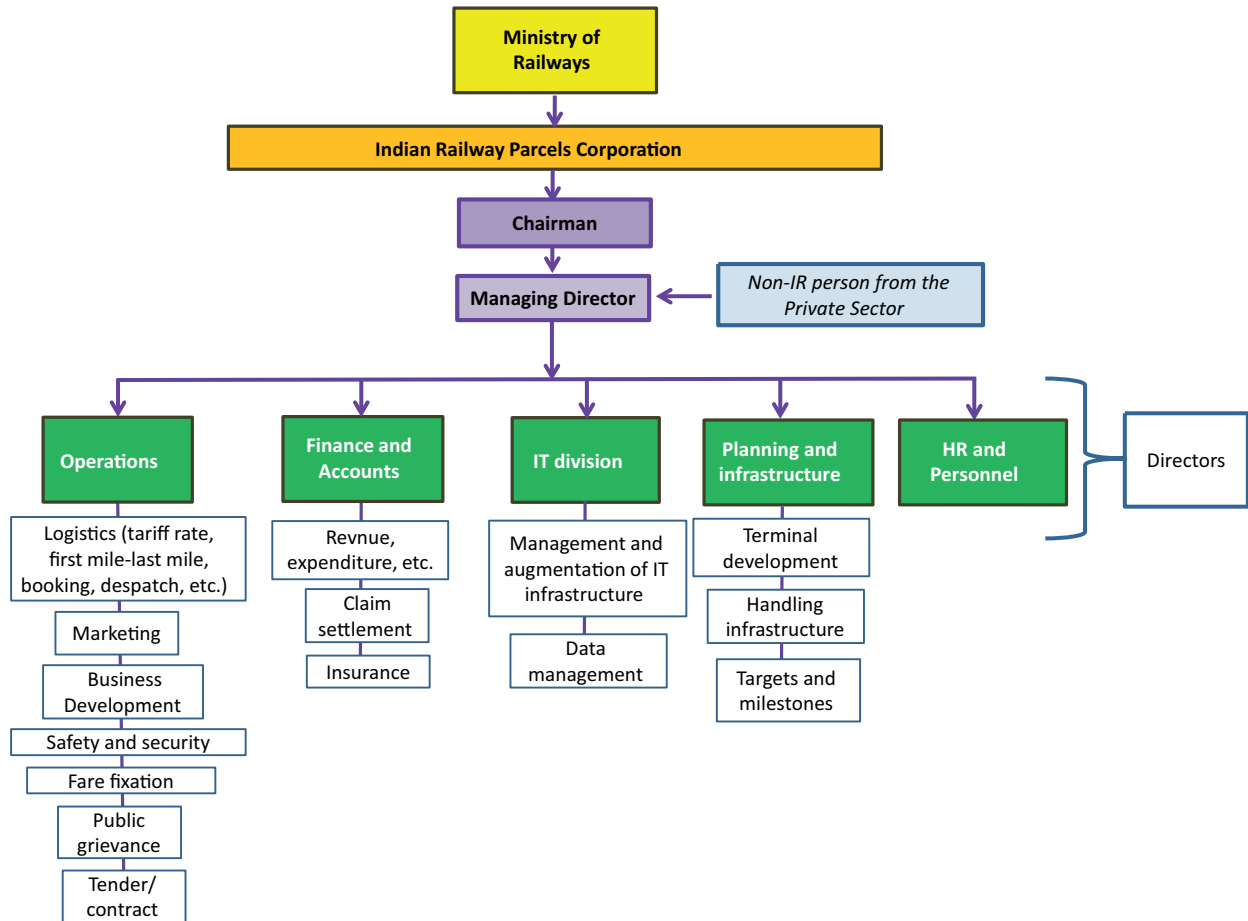


Figure 43: Proposed organizational architecture for parcel business of Indian Railways

Freight-related Concerns

One of the key areas of concerns for the stakeholders—private operator/lease holders—is related to how parcel consignments are charged by Indian Railways. The rates charged by IR are non-competitive as compared to road transportation which leads to a large diversion of parcel traffic from railways. In addition, IR’s marketing circular related to rate classification, based on capacity utilization, has led to significant increase in the cost of parcel transportation by rail.

R-scale for parcel movement through brakevans/ SLRs: IR’s notification which states that parcels loaded

in SLRs (of all trains) with over 60% capacity utilization will be charged at R-class rate instead of S-class rate, is one of the key reasons for the higher cost of transporting parcels by rail.¹³ R-class rate is three times more expensive than the S-class rate and the parcels moved by Rajdhani/Shatabdi/Duronto trains are charged at 25% over the R-class rates. For all other trains, R-class rate is applicable for parcels loaded in a brakevan which is over 60% occupied. As a result of this kind of tariff structure, IR’s tariff rates become non-competitive to road transportation. This tariff rationalization is one of the key factors that contributed to the slide in lease parcel traffic starting 2010.

¹³http://www.indianrailways.gov.in/railwayboard/uploads/directorate/traffic_comm/freight_marketing_2k7/FM-05.pdf; http://www.indianrailways.gov.in/railwayboard/uploads/directorate/traffic_comm/Freight-Mktg-2k13/FM_21_Annexure_parcel_rate_table.pdf



Table 18: Train-wise utilization and scale applicable for parcel movement by IR

Type of train/space	Business model	Scale for parcel booking
All Rajdhani/ Shatabdi/ Duronto Express trains		
Utilization of Brakevan > 60% at the originating station	Lease	Scale – R*
Utilization of Brakevan > 60% at the originating station	Non-lease	Scale – R*
Utilization of Brakevan < 60% at the originating station	Lease	Scale – R*
Utilization of Brakevan (SLR) < 60%	Non-lease	Scale – P
All trains		
Utilization of Brakevan > 60% at the originating station	Lease	Scale – R
Utilization of Brakevan > 60% at the originating station	Non-lease	Scale – R
Utilization of Brakevan < 60% at the originating station	Lease	Scale – P
Utilization of Brakevan (SLR) < 60% at the originating station	Non-lease	Scale – S

R: While calculating rates for Rajdhani/Shatabdi/Duronto trains, parcel rates are charged 25% over the Scale-R rates*

Source: Freight Marketing Circular (FM-05, 2007 and FM-21, 2013), Railway Board

Suggested interventions: IR should reconsider and roll back the tariff rate decision to charge R-class rate for parcels booked in SLRs of all trains with over 60% capacity utilization. Besides the service level, IR's effort should be towards making rail tariff rates for parcel movement competitive to those charged by the road transporters.

Competition from road transportation: Given the modal share in parcel movement, road transport offers services, such as door-to-door services, customized solutions based on the need of the consigner, safety, assured transit time, etc., which at this stage, are not offered by

Indian Railways. On top of these, the tariff rates charged are not in favour of the Indian Railways. Lower tariff rate offered by the road transportation sector remains one of the key challenges in increasing parcel traffic onto Indian Railways. Currently, the amount charged in moving parcels, especially in a 'full truck load'-volume scenario, by road transporters is significantly lower than the cost of moving parcels through railways. TERI conducted an analysis on cost differential between few ODs based on the information provided by lease holders and road transport operators; the comparison is presented in Table 19.

Table 19: Freight rate comparison – road vs rail – in the movement of parcels

Mode	Tariff rate – 100 kg consignment
Secunderabad to Delhi	
Road	Rs 500
Rail	Rs 800 (approx., including cost of labour)
% variation	60%
Delhi to Patna	
Road	Rs 851
Rail	Rs 1,700
% variation	100%

Note: Costs include first mile-last mile handling/movement for both the modes of transport

Source: Industry sources



Suggested interventions: Benchmarking IR's activities and services related to parcel business with road transport sector - as mentioned above, Indian Railways need to reconsider its tariff rate policy to compete with the road transport sector, at least in terms of costing. It should also look at providing services and benchmark these with the road transport sector. It is time that IR realises that one-size-fit-all policy is not going to work in the parcel business. Going forward, better service quality and customization of services as per the need of the consigners will help bring about higher parcel loading onto Indian Railways. It is unlikely that quality services could be provided through the current set and therefore requires change in the institutional framework as suggested previously.

Infrastructure-related Constraints

Adequate infrastructure and its utilization is another major area of concern which requires Indian Railways' (IR) immediate attention. Issues exist both in the terminal infrastructure as well as rolling stock segments. These have been dealt separately in this section.

Issues related to Terminal Infrastructure

Lack of clear guidelines with regard to parcel terminals: Since the parcel business is largely run as a piggy back service of the passenger movement, IR does not have any specific terminal policy. Even after launching the special parcel train service, IR has not considered formulating dedicated terminal policy for efficient handling of parcels, although it has identified terminals, PFTs, and facilities of Central Rail Warehousing Corporation (CRWC) where parcel traffic is allowed to be handled.¹⁴ However, this initiative is limited to the handling of parcel cargo express trains/parcel express trains only, which carried about 6% of the total parcel traffic in 2016-17, while the remaining parcel traffic was moved through SLRs, VPs and AGCs attached to passenger trains.

Lack of separate loading/unloading space at stations for parcels: The issue of dedicated space for loading/unloading of parcels at railway stations continues to be a major factor for inefficient movement of parcels. This issue was also raised in the Vision 2020 document released by the Indian Railways in December 2009. The lack of dedicated terminals with modern facilities — an ecosystem of aggregator, trained railway staff, and infrastructure (technology, equipment, storage facility, etc.) — to handle parcel movement has eventually resulted in the fall of parcel traffic on railways.

As such handling of parcels in the passenger area creates obstructions in free movement of people. Therefore, the obvious decision of the Indian Railways to give priority to passenger movement as compared to loading/unloading of parcels at railway stations has also resulted in significantly less utilization of VPs and SLRs. Since loading/unloading of parcels on/from passenger trains is a time consuming activity and often results in holding up of trains at stations, less importance is given by the senior authorities towards parcel movement.

Poor condition of holding area/warehouse: There is lack of basic facilities at the stations where loading/unloading of parcels are done to/from trucks and other road-based transport modes. Sometimes, the access points are choked or are left in poor condition for the trucks/tempos to reach the final point of loading/unloading. At Old Delhi Railway Station, which is one of the biggest loading points in the country, the access point was dug up and left for months creating huge inconvenience in undertaking loading/unloading activities. During monsoon, a large volume of parcel consignments get damaged due to leakages and inadequate shelter.

Lack of mechanized loading/unloading parcel handling facilities at stations: There is a severe lack of mechanized loading or unloading facilities at the platforms or parcel holding areas of the railway stations. In fact, railways hardly invest in procuring manually-pulled trolleys to handle parcels at stations which are mainly brought in by the private parties. With the lack of adequate handling facilities, there is always the risk of damage to the parcel/consignment.

¹⁴ http://www.indianrailways.gov.in/railwayboard/uploads/directorate/traffic_comm/Freight-Mktg-2k13/FM_25_20131.pdf





Figure 33: Photographs showing the poor condition of access points for parcel holding/loading areas at the Old Delhi Station (May 1, 2018)



Figure 34: Photographs showing the lack of mechanized loading/unloading facilities at the Old Delhi Railway station (May 1, 2018)

Issues related to weighing machines: There are instances where the weighing machines have not been integrated with the PMS. In the photograph displayed in Figure 36, we can see the conventional weighing machine being used at the parcel depot of the Old Delhi Railway Station; however, the PMS-equipped booking centre is housed in another building. Similar issue was also highlighted in the CAG report (Report No. 14 of 2017) where weighing machine was not integrated with PMS at Mumbai CST parcel depot.

Another issue highlighted during the interaction with the railway department at few stations is related to regular maintenance of the weighing machine. Also, the process involved and time taken to correct any fault in the weighing machine is too lengthy, ultimately affecting the smooth functioning of the parcel booking centre.



Figure 35: Conventional weighing machine used at Old Delhi Station



Suggested recommendations to improve terminal infrastructure

Focus on separate/dedicated and mechanized parcel terminals: In the long run, passenger and parcel movements should be separated from each other – both in terms of sharing of rolling stock as well as station infrastructure. For the short to medium term, dedicated space close to the available station area will be the way forward.

Different funding models (VGF, revenue sharing, annuity model, etc.) could be adopted based on the economic viability to finance setting up of dedicated parcel terminals (at least at the major parcel origination stations – Delhi, Mumbai, Kolkata, Chennai, Secunderabad, Bengaluru, and Kanpur) with mechanized parcel handling facilities and adequate staff strength. Setting up of a dedicated parcel terminal, like the planned terminal at Anand Vihar Terminal (Delhi), will go a long way, provided allied facilities (rolling stock, handling equipment, manpower, etc.) are made available for parcel movement.

For the short term, IR should offer adequate warehousing facilities to the operators, while the latter should be allowed to contribute in terms of development of superstructure based on the traffic requirement.

Installation of electronic weighing machines at all parcels booking centres: IR should aim to install electronic weighing machines at all parcel booking counters on its network. In the future, the aim should be to link these weighing machines with the PMS, based on IR's PMS expansion plan. In a scenario where electronic

weighing machines are non-functional at key parcel booking centres, the authorities at the station should be given power to rectify the same at the earliest.

Provision of basic facilities at railway stations: It is important for the Indian Railways to keep its staff motivated so that it translates into higher parcel loadings onto railways. Basic amenities at the place of work should be provided. At many places, it has been seen that potable water facilities as well as toilet facilities are missing. Safety and security of the staff at the terminals and stations is another area that the Indian Railways should look into.

Issues related to Rolling Stock

Slow growth in Rolling Stock capacity: It has been seen earlier that even though the earnings from the parcels segment has been increasing steadily, the traffic has been going down. As per the White Paper released by the Indian Railways in February 2015, there is heavy unmet demand which necessitates the capacity expansion. On the contrary, there has been almost no increase in the rolling stock capacity over the period 2013 to 2017 (CAGR of 0.07% during the period 2013-14 and 2016-17). In fact, VPH and VPU wagons, which account for a combined share of about 75% in total holding, reported a negative CAGR of 1.2% and 1.6% respectively between 2013-14 and 2016-17. In terms of numbers, VPHs declined from 1,015 in 2013-14 to 967 in 2016-17, while VPUs declined from 463 to 434 during the same period. Notably, the number as well as share of VPUHXs in total holding increased between 2013-14 and 2016-17.

Table 20: Growth of rolling stock and capacity to handle parcels by IR (holding in numbers, capacity in tonnes)

Stock	2013-14		2014-15		2015-16		2016-17		% share in total holding (2013-14)	% share in total holding (2016-17)
	H	C	H	C	H	C	H	C		
VPUHX	316	5,688	358	6,444	391	7,038	401	7,218	16.6%	21.1%
VPHX	79	1,422	80	1,440	99	1,782	82	1,476	4.2%	4.3%
VPH	1,015	18,270	1,030	18,540	976	17,568	967	17,406	53.4%	50.8%
VPU	463	8,334	451	8,118	492	8,856	434	7,812	24.4%	22.8%



Table 20: Growth of rolling stock and capacity to handle parcels by IR (holding in numbers, capacity in tonnes)

Stock	2013-14		2014-15		2015-16		2016-17		% share in total holding (2013-14)	% share in total holding (2016-17)
VPR	11	198	11	198	11	198	11	198	0.6%	0.6%
VP	15	270	15	270	15	270	8	144	0.8%	0.4%
Total	1,899	34,182	1,945	35,010	1,984	35,712	1,903	34,254	100.0%	100.0%

H: Holding; C: Capacity; Source: Railway Board

Low demand for refrigerated vans: IR has been unable to tap the market for perishable items requiring refrigerated vans. This particularly requires time-tabled movement without considerable delays. Given the past performance of IR with respect to time-tabled parcel trains, it is difficult for the customers to consider transporting perishable items through refrigerated vans¹⁵.

As of February 2018, IR had nine refrigerated vans of which, three were available for service, while the remaining six were under maintenance/out of service. Due to lack of demand for such vans, IR has been unable to fully utilize the rolling stock. During 2017-18, a total of only 18 refrigerated vans were loaded by IR (14 from Yesvantpur to Gorakhpur and four from Palanpur to Palwal) fetching revenues to the tune of Rs 33.24 lakhs.

Low capacity of current stock of VPs and SLRs: There is a clear disconnect between the department designing the parcel carrying coaches and those involved in actual movement of parcel traffic. The high tare weights of VPU and SLR and low payload capacity, as indicated in Figure 37, has resulted in significantly low payload-to-tare weight ratio for such stocks. It is seen that the requirement of passenger coaches gets into the design of VPU and SLR, ultimately resulting in inadequate capacity and higher cost of transportation. This is a major issue in the context when IR charges parcel traffic based on not only weight but also volume, whichever gives maximum revenue. Even though the actual weight of parcel package could be low, the volume based on IR's conversion factor (28 cubic decimetre = 4 kg) could make the parcel package fall in the higher weight category while fixing tariff rate.

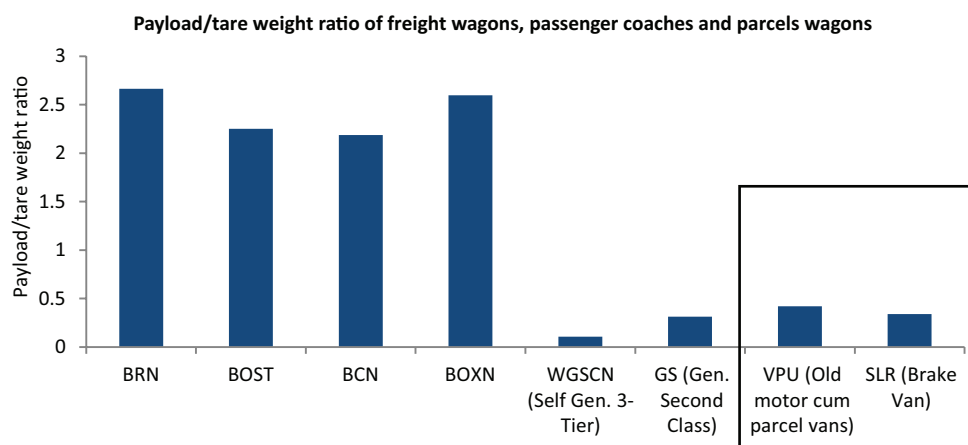


Figure 36: Comparison of payload to tare weight ratio of freight wagons, passenger coaches and parcel wagons
Source: IRFCA

¹⁵<http://164.100.47.194/Loksabha/Questions/QResult15.aspx?qref=62225&lsno=16>



Interaction with the lease holders revealed that the evolution of road transport in increasing the volumetric capacity without changing the carrying capacity (CC) of the trucks has resulted in great benefit to them, which also increased their profitability. This is especially in a scenario where volume plays a key role in determining the freight rate apart from gross weight of consignments. Since IR's tariff rate for parcels is also determined on either weight or dimension, space constraint in terms of lower volume, especially in SLRs, significantly increases the unit cost of moving parcels by rail.

Conversion of conventional coaches to LHB coaches:

IR plans to replace conventional coaches of key mail/express trains with Linke Hofmann Busch (LHB) coaches and also introduce new trains with LHB coaches in a phased manner. For this, the production of LHB coaches is being increased over the years. As per the Indian Railways, 2,373, 3,025 and 3,349 LHB coaches are planned to be manufactured in the year 2017-18, 2018-19 and 2019-20, respectively¹⁶. Major implication of this progressive shift to LHB coaches on parcel movement is that there is no clarity in IR's plan towards manufacturing VPs which are LHB compliant since the shift to LHB has an implication on coupling of VPs with the new rake.

For instance, Delhi division invited bids for leasing of VPs to be operated with six passenger trains in November 2017¹⁷. Of these, it awarded letter of allotment to a private operator for running the VP with Anand Vihar–Agartala train (14019/14020). However, due to change in the rake composition to LHB, the issue of compatibility of conventional VP with the LHB rake has arisen. As of mid-May 2018, formal commencement of VP operation was yet to start. It is likely that the contract will be surrendered by the lease operator on account of operational challenges.

Suggested recommendations to enhance rolling stock utilization

Focus on VPs and containers: Typical progression of IR's parcel business demands more attention towards parcel vans and containers. It is only through efficient operation of VPs or express parcel trains that higher volume onto

Indian Railways could be achieved, which is difficult through SLRs in the current scenario. Given the fact that the SLR capacity to carry parcels will continue to decline in the coming years and with the discontinuation of AGCs for carrying parcels, IR should start giving enhanced importance to running VPs by making policy changes and allocating more capital.

Secondly, parcel business being time sensitive, the commitment to adhere to the time table will only be achieved through round trip VP arrangement. In the current scenario, VPs are provided on demand basis to the customers that make it difficult to guarantee its availability in the near future.

Thirdly, since parcel business is primarily a game played by volume, induction of light and high capacity parcel vans (higher cubic metre/tonne) will result in lower unit cost and higher profit margin.

Finally, all the rolling stocks used to carry parcels should be classified as freight stock so that turnaround time is reduced. Currently, these are equated with coaching stock leading to terminal detention for examination purpose.

Increasing the share of leased out space in total space available:

Given the low level of private participation, as discussed in the issues section, IR needs to increase the number of SLRs and VPs leased out to private parties. Higher private participation in the parcel business of Indian Railways could be achieved by a slew of measures suggested in this section (incorporating lean period in the bid document, real assessment of transit time, reconsidering R-scale rate revision, etc.).

Operational Hurdles

There are quite a number of operational challenges that Indian Railways (IR) needs to tackle. The areas of improvement include safety and security of consignments and IR's accountability for the same, inability of the zonal railways to utilize/award parcel stocks for private operations, non-commitment of guaranteed transit time, inadequate manpower to load/unload parcels, etc. These have been discussed below in detail.

¹⁶ <http://164.100.47.194/Loksabha/Questions/QResult15.aspx?qref=51500&Isno=16>

¹⁷ http://www.nr.indianrailways.gov.in/cris/nr/notice/1510900415232_NIT%20Hndi%20English.pdf



Low percentage of available parcel space leased out: Despite continued effort from the Indian Railways, it has been witnessed that the number of parcel stocks (especially SLRs and VPs) leased out remains significantly lower than the potential. In other words, SLRs and VPs leased out by zonal railways as a percentage of total available stock or even in terms of total stock identified for leasing remains very low. This is also evident from the data published in the CAG’s Report No. 14, 2017 (Annexure 5). Under this study, TERI also sourced data related to available stock, stock identified for leasing and actual leased out stock from two key zonal railways—Northern Railway and Southern Railway.

Northern Railway

The Northern Railway (NR), which accounts for the largest share in total parcels traffic— around 35%, has reported extremely low share of leased out SLR space to

private players. Over the last few years, the percentage of leased SLRs in total available SLRs with NR remained in the range of 10%–20%. Notably, the overall number of available SLRs has also declined from 1,117 as of March 2014 to 1,065 as of February 2018.

With regard to VPs, Northern Railway discontinued leasing of VPs since 2012. The VPs are now made available to private operators on demand basis.

Southern Railway

Of the 32 VPs available/identified by the Southern Railway (SR), only 12 were leased out in 2017. Between 2016 and 2017, there was a decline of 16 VPs available with the SR.

With regard to SLRs, the available stock with SR stood at 904 out of which only 8.5% were leased out.¹⁸

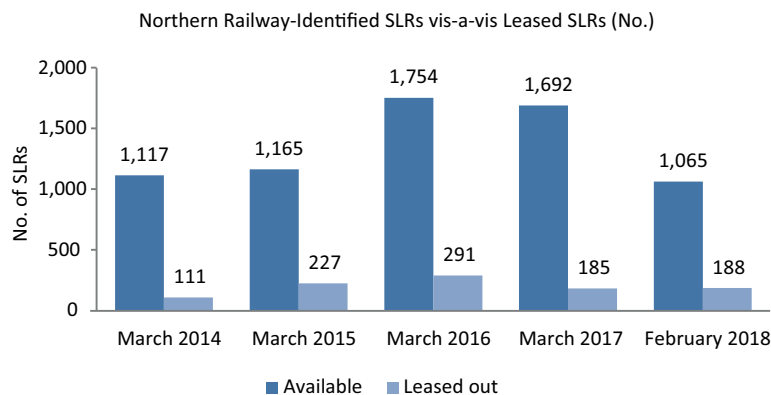


Figure 37: Identified number of SLRs for leasing and actual number of SLRs leased out under Northern Railway (2014-2018)
Source: Northern Railway

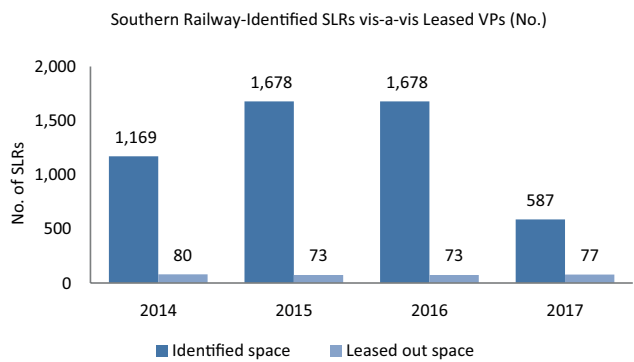
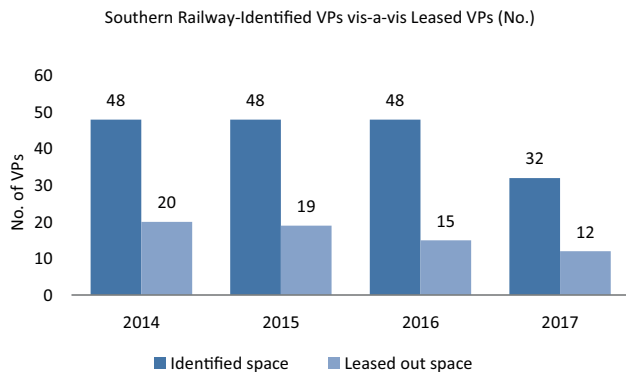


Figure 38: Identified parcel space for leasing and actual leased out space under Southern Railway (2014-2017)
Source: Southern Railway

¹⁸Data related to available stock from 2014 to 2016 was not made available by the SR



Declining number of special parcel train loadings: The number of special parcel trains loaded in a year has been declining over the last 5–6 years. Between 2012-13 and 2016-17, the number of parcel special trains loaded recorded a negative CAGR of 5%. In absolute terms, the number of special trains loaded declined from 1,213 in 2012-13 to 990 in 2016-17. The number for 2017-18 is also not promising as only 578 special rakes were loaded during the April–December period as compared to 751 special rake loadings during the same period of 2016-17, a year-on-year fall of 23%.

Safe and secure movement of parcels through railways: In the road transport sector, the carrier gives the assurance of moving parcels in a safe and secure manner. Any damage to the consignment has direct implication on the road transporter. This is not the case when parcels are moved by Indian Railways. This is one of the primary reasons for road transport being the preferred mode of parcel movement by the customers.

Even during the entire chain of parcel movement by rail, IR has failed to provide a safe and secure transit system

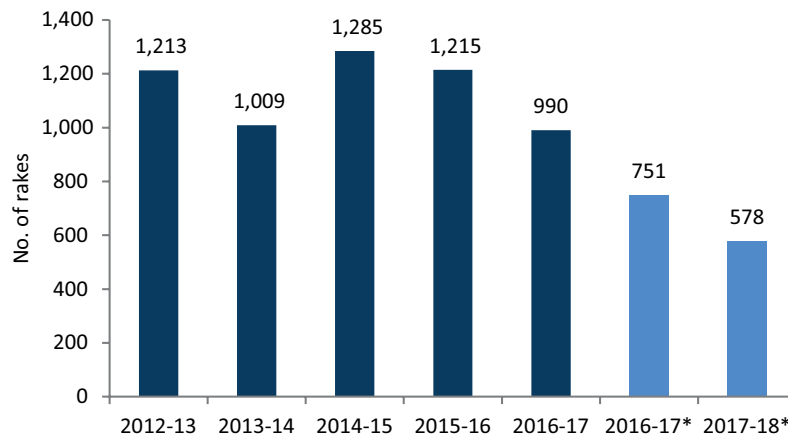


Figure 39: Year-wise loading of parcel special rakes; *April-December; Source: Railway Board

The fall in the number of rakes loaded for leased segment is even worse. This segment witnessed a negative CAGR of 20% between 2012-13 and 2016-17. The number of leased parcel trains loaded for April–December 2017-18 stood at 102 as compared to 185 during April–December 2016-17, a year-on-year fall of 45%.

which is one of the primary service requirements sought by the customers. Some of the issues faced in this regard include non-coverage of parcel areas, including loading/unloading areas, by close circuit television (CCTV) as well as lack of security personnel in such areas. The CAG's Report No. 14 of 2017, has already indicated the areas

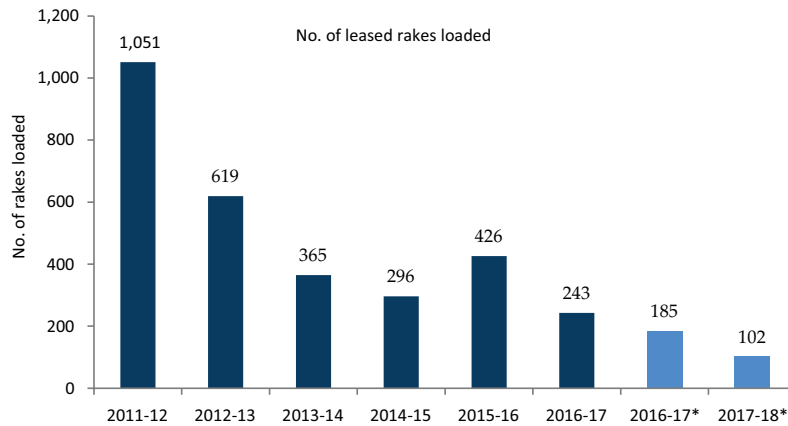


Figure 40: No. of leased special parcel rakes loaded *April-December; Source: Railway Board





Figure 41: Parcels lying in the open area without security coverage

of concern in this regard. For instance, in several railway zones, including CR, ER, ECR, ECoR, NR, NCR, NWR, SCR, and SECR, CCTV cameras were not deployed in the parcel area.

The number of registered theft cases, as indicated in the table below, remained significantly high. While interacting with the leaseholders, it was also revealed that many of the theft cases were not reported by them because the entire consignment is then held up by the Railway Protection Force (RPF).

In addition, the success rate of the authorities to resolve and recover the stolen parcels is on a lower side. In fact, the percentage of parcels recovered in terms of value remains low, as enumerated in the table below.

Non-issue of shortage certificate by IR: The IR does not issue any certificate for shortage in case of thefts during the period in which the consignment is under railways custody. As a result of this, the lease holders cannot claim insurance amount also. From the lease holder's perspective, on the one hand their consignments are stolen during transit and on the other they cannot claim for the theft. Due to this, a large number of lease holders have restrained from entering into any contract for moving parcels with the Indian Railways.

Unrealistic transit time commitment in tender documents: TERI analysed few tender documents with regard to transit time commitments made by the railway authorities. On comparing it with the actual time taken, it

Table 21: Number of parcel theft cases registered and recovery made by Indian Railways

Year	No. of cases registered	No. of cases detected	Value of property stolen (Rs lakh)	Value of property recovered (Rs lakh)	% of property recovered in terms of value	% of cases detected
2014-15	732	430	102.19	54.83	54%	59%
2015-16	709	398	710.83	63.09	9%	56%
2016-17	726	370	179.83	61.20	34%	51%

Source: Railway Board



was seen that the time committed by the railways often remain on the lower side/ambitious. For instance, the tender document for operations of cargo express train between Korukkupet and Shakurbasti¹⁹, a distance of 2,175 km, indicate transit time of about 57 hours (see Table 20). However, in reality the distance is currently covered in around 90–100 hours. Similar information was gathered for the Ekambarakuppam to Moga corridor and the deviation of at least 15 hours was found. The deviation in the two transit times is misleading and ultimately results in discontent among the train operators. As a result, operators handling express cargo on the North–South

and East–West corridors have abandoned because road alternatives are more attractive.

Slow speed of Parcel Special Trains: The transit time on almost all sectors are higher than the committed time by Indian Railways. In fact, the average speed of special parcel trains is in the range of 15-17 km/hour as compared to the average speed of express passenger trains of around 50-60 km/hour and freight trains of 24 km/hour. As can be seen in Figure 43, average speed of special parcel trains running on the key routes (highest number of loadings in a year) consistently remain lower than the average speed of freight trains.

Table 22: Transit time for Parcel Express Train between Korukkupet and Shakurbasti in Southern Railways’ tender document

Station	Day	Time of departure/ arrival	Activity
Korukkupet (KOKG)	Day 1	14.30	Departure
Shakurbasti (SSB)	Day 3	23.45	Arrival
Total time from KOKG to SSB as per tender			57.15 hours
Shakurbasti (SSB)	Day 4	20.00	Departure
Korukkupet (KOKG)	Day 6	23.45	Arrival
Total time from SSB to KOKG as per tender			51.45 hours

Source: Southern Railway

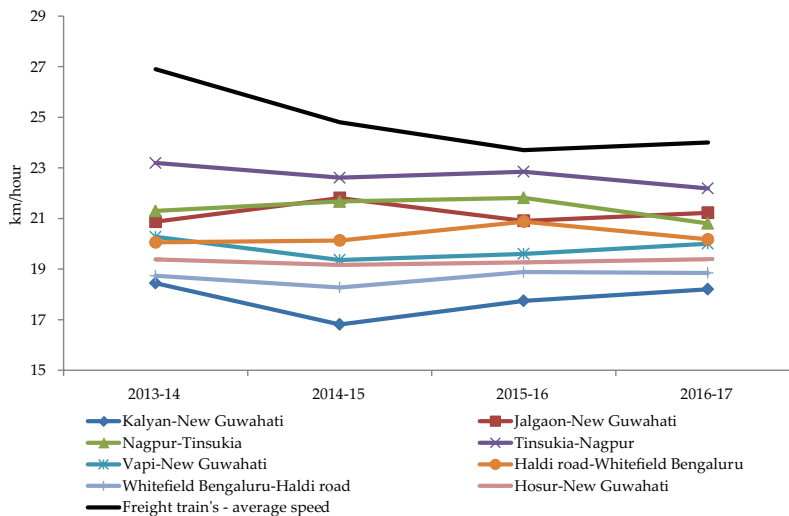


Figure 42: Average speed of special parcel trains between key ODs (2013-14 to 2016-17)
Source: Railway Board



Lack of aggregation and efficient parcel handling services: One of the inherent issues with the railways in handling parcels is the lack of expertise in aggregation and efficient parcel handling services. Due to lack of proper aggregation and handling services, IR has not been able to adequately tap the huge demand in this segment.

To overcome this, IR allowed private parties/lease holders to transport parcels through railways. As mentioned earlier, several policies and schemes have also been introduced by the IR to promote private participation. However, all these schemes have been unable to bring in more parcel traffic onto railways. As a result, the Vision 2020 target of five times increase in earnings from parcel movement seems highly improbable.

Over-carriage of parcels beyond destination stations: There are numerous instances where the parcels are carried beyond their destinations, sometimes thousands of kilometres away, causing huge distress to the customers who book their parcels through railways. This issue was also highlighted in CAG's Report No. 14 of 2017. Such over-carried consignments not only result in additional handling of parcels, loss of freight, but also reflect on the quality of services being provided by Railways to the customers. It takes a lot of time and effort, especially on part of the customers to retrieve their consignment. This also leads to loss of space, which could have been used for fresh parcel booking.

Shortage of staff at railway stations for loading/unloading activities: There is an acute shortage of staff/handlers at the stations to carry out loading/unloading of parcels. It is because of this that parcels are over carried beyond their destination station, as there are fewer staff for the unloading purpose. Indian Railways has long since stopped hiring parcel handlers and rely mostly on the contract workforce or private contractors for the parcel handling at the stations. In such a scenario, there is no incentive for the handlers to perform their duties, which lead to inefficiencies in operation.

Operations related interventions

Safety and security

Ensuring safety of consignment during transit and storage: Indian Railways should ensure safe movement of parcels through interventions such as provision of CCTVs and security guards at the stations as well as trains. IR should undertake a detailed analysis of the vulnerable locations, based on which anti-theft measures should be taken. Fund allocation towards provision of CCTVs in the parcel holding area is required which could be taken at the zonal or divisional railway level. The current practice of allocation of fund from the overall station development and maintenance works should be discontinued and a dedicated line of funding towards parcel areas should be initiated.

Further, RPF should be made accountable for the security of parcel vans/SLRs attached with the passenger trains. To implement this, deployment of additional security should be done by the Indian Railways.

Issuing shortage certificate by IR in case of theft: The process of issuance of shortage certificate to the leaseholders should be made transparent and unencumbered. This would help build up confidence among the leaseholders and restore faith in the movement of parcels by Indian Railways. In the road sector, for instance, the transporter signs an agreement with the consigner taking liability of the consignment. Similar measures by Indian Railways would go a long way in ensuring better service to the leaseholders.

Offering 'Parcel Insurance' service to the operators: IR should engage an insurance company who could offer parcel insurance service to the leaseholders and customers on payment of premium. The premium amount could be fixed depending upon the value of the consignment as well as space booked. This will instil a sense of confidence among the customers and help IR regain parcel traffic onto its system. Initially, IR should

²⁰https://www.edelresearch.com/showreportpdf-35319/RAILWAYS_-_SECTOR_REPORT-JAN-17-EDEL

²¹https://www.cag.gov.in/sites/default/files/audit_report_files/Report_No.14_of_2017_-_Compliance_audit_Union_Government_%28Railways%29.pdf (Page No. 58 of 237)



offer insurance service for the parcel consignments booked from stations which are linked with the PMS, as it would be easier to capture the value and other details accurately.

Transit time

Transit time assurance: This is specifically for the movement of parcel express trains where transit time has been guaranteed by the Indian Railways. In majority of the cases, the parcels moved by Indian Railways are time sensitive and any delay in delivery schedule has a direct impact on the consigners who then opt for road transportation as the preferred mode of parcel movement. The Indian Railways need to focus on maintaining the time schedule of parcel express trains so as to overcome the delay faced by consigners.

Further, the running time of passenger trains should also be restricted to the scheduled transit time as these carry about 94% of the total parcel cargo through SLRs, VPs and AGCs.

It is only through persistent efforts, such as improved signalling and scheduling technologies that the Indian Railways could achieve higher efficiency and faster transit time. This is more so important when IR had mentioned “parcel services within an agreed transit time through timetabled trains and parcel specials would be needed” in the Vision 2020 document.

Realistic transit time in bid document for leaseholders: In the bid document for the selection of parcel cargo express train operator, railways should make an effort

to mention realistic transit time between origin and destination stations. As mentioned in the issues section, the transit time for PCET mentioned in bid documents are often unrealistic and on the lower side giving an incorrect picture to the probable bidders.

Tendering process

IR should switch to e-auction method to appoint leaseholders: Since all the participants are already shortlisted by IR through an eligibility criterion, the e-auction mode should be followed to fast track the contract award process. The problem faced right now of longer award duration, cost incurred in advertising, etc., will be overcome through the e-auction process.

Focus on Perishables and Livestock

IR should dedicate infrastructure and effort towards perishables and livestock: As can be seen in Figure 45, the earning intensity of perishables and livestock is on a higher side. These require specialized rolling stock/space for movement as well as dedicated space for storage and loading/unloading facilities/equipment. It is suggested that IR should focus more on the movement of relatively high yielding commodities, such as perishables and livestock.

Aggregation of parcels

Authorized collection centres for parcel consignments: Indian Railways could allow authorized parties to operate collection centres for rail-bound parcel traffic across major cities. This will also help overcome

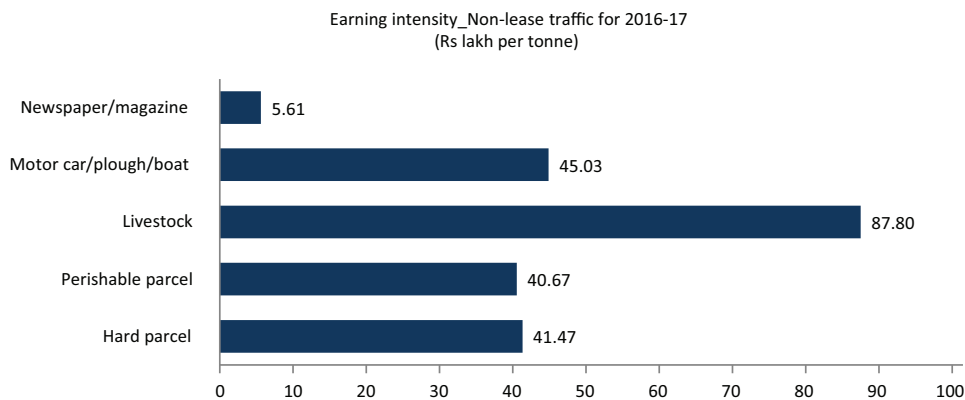


Figure 44: Earning intensity of non-lease traffic captured by PMS (2016-17)
Source: CRIS



the last mile issue related to rail transportation. The same collection centres could also be roped in for last mile delivery as well, thus bridging the gap related to first mile-last mile problem of the Indian Railways.

Palletisation of consignments for efficient handling:

The issue of over carriage could be resolved through palletisation of consignments. Right now all kinds of commodities/parcels are stuffed in the SLRs/VPs which make it difficult for the parcel handlers at the stations to find and offload the consignment within the stipulated stoppage time. The move towards palletisation would create a systematic and efficient method of loading of consignments. Another advantage of palletisation would be that lesser instances of damage will be reported. For parcel traffic on IR, palletisation could be conducted at the collection centres itself or at the station through private participation. A similar method is already being adopted by the Indian road transporters while moving cargo from one city to another.

Overcoming manpower constraint

Induction of parcel handlers to overcome the important issue of staff constraint:

The issue of over-carriage of parcels beyond destination stations, as discussed in the issues section, arises from the fact that there is a shortage of manpower at the stations to load/unload parcels from trains. Sometimes, there are more than one train arriving on different platforms at a station, eventually leading to mismanagement and over-carriage of parcels by trains. IR should immediately look into this issue and restart inducting parcel handlers at stations. Besides, adequate interventions, technological, infrastructure as well as sensitization of parcel handlers across all railway stations, should be taken up by the Indian Railways to reduce the instances of over-carriage of parcels. It is also important to impart training to the parcel handlers and keep them motivated towards the delivery of highest level of service quality.

Inclusion of lean period in the bid document while appointing leaseholders:

One of the major reasons for the regular surrender of lease contracts by the lease holders, as discussed in the issue section, is the lack of scope for lean period in parcel business considered by Indian Railways. For instance, parcel traffic is lower on public holidays and days when markets are closed (Sunday or Monday in many cities). In the bid document itself, Indian Railways could relax the payment of lease by the private players for particular number of days in a month. This would enable leaseholders to earn decent margin and remain engaged with the railways in the parcel business.

Inadequate IT Infrastructure

The objective of implementing technology to improve transparency and accountability of Indian Railways' (IR) parcel operation has been jeopardised by the delay and significantly small coverage of stations with parcel management system (PMS). IR's emphasis and investment in this direction, of course consistent with its parcel business plan, will go a long way in improving the parcel movement by rail.

Delay in the implementation of PMS: The implementation of PMS was highlighted as one of the recommendations of the Expert Group on Indian Railways, 2001. In May 2008, the Railway Board sanctioned the implementation of PMS at 220 stations under two phases. Phase I, which envisaged roll out of PMS at 77 stations, was targeted to be completed till February 2010. However, only 9 stations were commissioned with PMS till the targeted date. It has been reported that PMS was fully implemented on 29 stations and partially implemented on 48 stations.

Under Phase II, also targeted to be completed by April 2010, is seriously lagging behind. As per the CAG report released in 2017, PMS was not implemented at any of the 143 shortlisted stations till March 2016. One of the primary reasons cited by the Railway Board is the delay in submission of rate contract/purchase order by CRIS (Report No. 17, 2017, CAG).

²²http://www.rakeshmohan.com/docs/Railway_Report.pdf

²³http://www.cag.gov.in/sites/default/files/audit_report_files/Report_No.14_of_2017_-_Compliance_audit_Union_Government_%28Railways%29.pdf (Section 2.1.4.1)



Table 23: Implementation of PMS between launch date (2006) and targeted date (February 2010)

Station	Date and year of commissioning
New Delhi	01-11-2006
Howrah	15-12-2006
Delhi Jn.	27-12-2006
Sealdah	27-12-2006
Kanpur Central	11-01-2007
Allahabad	11-01-2007
Gaya	14-03-2007
Patna	31-03-2009
Mughalsarai	29-04-2009

Source: CRIS

The delay in PMS implementation seriously compromises the transparent operations of parcel movement in Indian Railways. The aim to make parcel booking customer friendly would be difficult to achieve without the implementation of PMS at booking counters at railway stations.

Currently, only 30% of the total non-lease traffic and only 16% of the total lease traffic are captured by the PMS. It is seen that parcel booking centres, even at major stations like Delhi Jn., are not connected with PMS, thus giving incomplete data related to parcels booking from a particular station.

Issues related to poor internet connectivity and frequent outages: There were several complaints related to internet interruptions/outages reported by the authorities during the site visits conducted over the course of this study. This hampers the normal booking process through PMS, wherein for majority of the cases, parcel booking cannot be done for hours at a stretch. In order to book manually, the railway personnel need to secure permission from higher authorities which is time consuming and thus, it is not possible to book parcels. This leads to a lot of inconvenience for the customers who have to wait at the station with the parcel consignment.

Implementation of robust IT Infrastructure

Faster implementation of PMS across all major stations: The reasons for the delay in PMS implementation under the two phases should be looked into by the Indian Railways. The tender process should be fast tracked. The need is also to make the PMS system more robust to ensure real time condition (coach positioning, type of commodities loaded under lease operation, etc.) is captured. There is a need to cover all the counters of the stations where PMS is already working. It is seen that few counters of specific stations still have manual parcel booking system instead of PMS.

Quick response to tackle malfunction/system outages: Indian Railways as well as CRIS should proactively look at faster disposal of complaints related to any malfunction in the PMS or internet outages reported by the parcel booking centres across India.

IR should also allocate power to the senior officials at respective stations to take the decision to switch to manual process in case the booking cannot be completed through PMS.



Vision 2020 – Parcel Business ²⁴

Indian Railways has always looked at the parcels business as a great opportunity to increase its revenue. IR came out with a dedicated section on parcel movement by railways in its **Vision 2020 document, released in 2009**. At this point, it is important to look at the issues and recommendations highlighted in the Vision 2020 document. A summary of the targets, challenges and recommendations is given below. ²⁵

Target

- Indian Railways will manage parcel services as a separate business with dedicated terminals and separate parcel trains
- Parcel services on key origin-destination will be run as efficiently and professionally as air cargo services
- The target is to increase the revenue from parcel services from Rs 1,644 crore in 2011-12 to Rs 8,000 crore in 2019-20

Challenges

The main challenges are:

- Inadequate carrying capacity (in terms of rolling stock) and dedicated terminal infrastructure
- Piggy-back service of the passenger business

Conclusion

India's parcel market is of significant size with the total tonnage moved in the range of 1,900-2,040 million tonnes (2017). ²⁶ However, the volume of parcels moved through railways is marginal at about 0.25%. This is despite several policy initiatives and schemes introduced by Indian Railways since 1991. Despite all this, the level of private participation in parcel movement through railways did not pick up. Therefore, the volume of parcel traffic moved through railways did not increase to the level envisaged under the Vision 2020 document.

With the introduction of GST, road transportation has become even more competitive by offering lower transit time to its customers, reduced cost of operation, and

increased manpower/capital utilization. Indian Railways needs to make serious effort towards parcel movement to increase its share. To begin with, a short-term plan to revive the parcels traffic through a dedicated team of railway officials could be formulated.

The parcel loading onto railways could be considerably increased through various measures, such as a market-oriented approach by Indian Railways, time-bound services, improved efficiency, value-added facilities to the customers (including first mile-last mile services), augmenting infrastructure and manpower, and higher penetration and usage of technology. Most importantly, a dedicated and focussed department should be established within the Railway Board to handle the entire parcel business.

²⁴http://www.indianrailways.gov.in/railwayboard/uploads/directorate/infra/downloads/VISION_2020_Eng_SUBMITTED_TO_PARLIAMENT.pdf

²⁵Note: Italicised texts have been directly taken from the Vision 2020 document

²⁶ TERI estimates



ANNEXURE 1: AMENDMENTS IN POLICIES - CPLP AND PCET

List of key amendments in Comprehensive Parcel Leasing Policy from March 2006 till March 2018

Date	Event	Circular No.
March 2006	CPLP launch	FM-12 2006
May 2006	Reduction in registration fee by 5 times	FM-20 2006
May 2006	Escalation in the reserve price	FM-21 2006
March 2007	- Earnest money increased (5,000, 25,000 and 1 lakh) - Security deposit amount increased (5,000, 25,000, 1 lakh)	FM-07 2007
April 2007	Amendments related to overloading of coaches	FM-11 2007
January 2008	- Each unit of minimum space to be leased out shall be floated as a separate tender. This was amended and the award of more than one SLR could be done through single tender - Parcel Vans shall only be leased out on long term contracts. No clarification in the original policy.	FM-01 2008
February 2009	Amendments related to non-loading of leased space	FM-05 2009
June 2009	Amendments related to non-loading of leased space	FM-13 2009
February 2010	- Contract cannot be terminated before one year - Registration fee increased (50,000, 25,000, and 5,000) - Earnest money increased (10,000, 50,000 and 2 lakh)	FM-03 2010
July 2012	Multiple amendments - Issuance of procedural orders by originating zonal railways giving details of the lease holders - Lease holders required to furnish manifest for consignments for loading - Originating station shall weigh at least 20% of the total leased traffic on daily basis	FM_15 2012
July 2012	Revision in tariff rates to be adjusted in all leased contracts	FM_16 2012



Date	Event	Circular No.
November 2012	There will not be any 'escalation' element in the 'Reserve Price' for taking care of future budgetary increase in parcel rates. This was replaced by increase in tariff rates applicable in case of leased traffic during the currency of contractual period, and the lumpsum leased freight shall be increased accordingly on prorata basis.	FM_25_2012
December 2012	Amendment with regard to number of packages declared and actual packages loaded	FM_26_2012
February 2013	- Revision of earnest money (20,000 for AGCs, 75,000 for 4-tonne SLRs, and 4 lakh for VPs) - Revision of security deposit (20,000 for AGCs, 75,000 for 4-tonne SLRs, and 4 lakh for VPs)	FM-01_2013
April 2014	Modified CPLP	FM_06_2014
July 2015	Discontinuation of awarding AGCs and contracts for AGCs in Rajdhani/Duronto/Shatabdi trains to be terminated	FM-13_2015
August 2015	Loading/unloading operation at new/additional intermediate stations subject to approval from concerned division and fulfilment of other conditions	FM_17_2015
June 2016	- Security deposit - Duration of leasing contract for SLRs (5 years/long-term, 30 days/temporary, and day-to-day/max 10 days) and VPs (long term only/5 years)	FM_05_2016
October 2017	Security deposit increased (1 SLR=Min. 1 lakh; VP= Min. 4 lakh)	FM_14_2017
December 2017	Inclusion of bank guarantee as a mode of security deposit	FM_14_2017
January 2018	Power to revise reserve price for round trip VPs - approval of Sr DCM required.	FM_01_2018

Source: Freight Marketing Circulars, Railway Board



List of key amendments in Parcel Cargo Express Train Policy from 2007 to March 2018

Date	Event	Circular No.
February 2007	Launch of PCET policy	FM_02_2007
February 2009	No part cancellation of indent raised by lease holders are allowed	FM_06_2009
March 2010	Composition of express trains revised to 20 VPs + 1 brakevan	FM_17_2010
October 2012	<ul style="list-style-type: none"> - Eligibility criteria: Average turnover of Rs 10 crores during the last 3 years, instead of 'turnover of not less than 10 crore per annum during the last 3 years' - Earnest money increased from Rs 1 lakh to Rs 10 lakh - Security/performance guarantee equivalent to 3 round trip of freight if less than 5 round trips are made in a month, and 5 round trip of freight if more than 5 round trips are made in a month 	FM_22_2012
November 2013	Terminals, PFTs and facilities of Central Rail Warehousing Corporation (CRWC) where parcel traffic was allowed to be handled	FM_25_2013
June 2016	<ul style="list-style-type: none"> - Contract duration: 6 years - First six months: rake composition of 15+1; post six months: 20+1 (this can be increased up to 24 + 1) 	FM_04_2016
May 2017	<ul style="list-style-type: none"> - Service to be provided on end-to-end basis on round trip arrangement only - Reserve price for round trip - 1.25 times of single journey freight at Scale-P 	FM_07_2017
January 2018	<ul style="list-style-type: none"> - Reserve price for round trip - 1.25 times of single journey freight at Scale-P. The Divisional Railway Manager has been authorized to revise the reserve price downward to maximize utilization 	FM_01_2018

Source: Freight Marketing Circulars, Railway Board



ANNEXURE 2: LEASED AND NON-LEASED (TRAFFIC AND EARNINGS)

Leased and Non-leased parcel traffic reported by Indian Railways ('000 tonne)

Segment	Space	2013-14	2014-15	2015-16	2016-17	2017-18
Leased traffic	AGCs	141	100	47	25	20
	SLRs	1,221	1,068	949	769	706
	Parcel Vans	606	457	444	391	341
	Parcel Specials	156	82	124	63	29
Non-leased traffic		2013-14	2014-15	2015-16	2016-17	2017-18
	SLRs	3,416	3,519	3,612	3,572	3,557
	Parcel Vans	253	296	256	193	176
	Parcel Specials	299	385	290	345	311
Total Parcel Traffic (1) + (2)	6,091	5,907	5,722	5,358	5,141	

Source: Railway Board



Earnings from leased and non-leased parcel moved by Indian Railways (Rs crore)

Segment	Space	2013-14	2014-15	2015-16	2016-17	2017-18
Leased traffic						
	AGCs	52	40	21	13	9
	SLRs	447	452	514	442	431
	Parcel Vans	234	212	222	215	199
	Parcel Specials	73	40	72	27	11
Non-leased traffic		2013-14	2014-15	2015-16	2016-17	2017-18
	SLRs	749	875	861	914	948
	Parcel Vans	113	152	137	138	121
	Parcel Specials	68	121	90	85	73
Total Parcel Earnings (1) + (2)	1,737	1,892	1,918	1,834	1,792	

Source: Railway Board



ANNEXURE 3: ZONE-WISE PARCEL TRAFFIC AND EARNINGS

Zone-wise parcel traffic reported by Indian Railways ('000 tonnes)

Zonal Railway	2012-13	2013-14	2014-15	2015-16	2016-17
CR	637	613	633	540	458
ER	427	404	360	332	321
ECR	154	154	131	99	75
ECoR	179	161	140	123	113
NR	1,610	1,820	1,835	1,978	1,960
NCR	120	143	150	141	121
NER	131	110	95	81	67
NFR	260	247	257	291	311
NWR	161	179	172	153	131
SR	482	442	439	380	379
SCR	406	378	369	362	322
SER	330	327	306	290	278
SECR	125	117	116	106	91
SWR	229	194	165	183	163
WR	646	667	619	551	517
WCR	144	136	121	113	100
Total	6,041	6,091	5,907	5,722	5,406

Source: Railway Board



Zone-wise earnings from parcel business reported by Indian Railways (Rs crore)

Zonal Railway	2012-13	2013-14	2014-15	2015-16	2016-17
CR	224	251	296	283	234
ER	99	111	120	125	131
ECR	25	28	28	22	21
ECoR	33	37	40	38	41
NR	376	432	436	470	460
NCR	25	32	40	41	37
NER	20	20	20	19	18
NFR	69	70	83	103	109
NWR	50	58	61	68	65
SR	139	153	173	160	150
SCR	87	91	100	99	95
SER	90	106	123	127	125
SECR	19	23	26	27	26
SWR	89	93	93	102	99
WR	176	207	228	207	216
WCR	21	23	25	26	26
Total earnings	1,542	1,737	1,892	1,918	1,854

Source: Railway Board



ANNEXURE 4: MONTH-WISE PARCEL TRAFFIC

Month-wise parcel traffic reported by Indian Railways
(‘000 tonnes)

Month	2012-13	2013-14	2014-15	2015-16	2016-17
April	513.1	524.8	513.2	507.5	483.1
May	543.4	559.4	549.5	533.8	472.5
June	484.0	495.6	486.4	496.3	479.7
July	505.2	503.5	493.3	444.8	445.8
August	492.4	488.9	476.1	456.5	448.1
September	504.9	511.1	488.3	469.9	466.4
October	525.1	533.9	465.8	493.4	478.2
November	503.8	497.8	473.1	460.0	409.2
December	528.6	520.4	500.9	472.6	404.0
January	486.0	482.4	481.9	459.1	412.9
February	461.0	473.2	473.1	453.0	448.2
March	515.2	504.5	503.2	467.2	457.4

Source: Railway Board



ANNEXURE 5: PMS COMMISSIONING ON RAILWAY STATIONS

Station-wise year of PMS implementation

Station	Year of commissioning	Station	Year of commissioning
NDLS	2006-07	GNT	2014-15
HWH	2006-07	KZJ	2014-15
DLI	2006-07	DR	2014-15
SDAH	2006-07	KYN	2015-16
CNB	2006-07	ITR	2015-16
ALD	2006-07	BSP	2015-16
GAYA	2006-07	R	2015-16
PNBE	2008-09	G	2015-16
MGS	2009-10	RJY	2015-16
DNR	2009-10	COA	2015-16
VSKP	2010-11	SLO	2015-16
DURG	2010-11	NED	2015-16
NZM	2011-12	AWB	2015-16
SC	2012-13	RJN	2015-16
GHY	2012-13	AK	2015-16
MAS	2012-13	BBS	2015-16
AGC	2012-13	CTC	2015-16
BCT	2013-14	KUR	2015-16
HYB	2013-14	EE	2015-16
MTJ	2013-14	GDV	2015-16
BZA	2013-14	PSA	2015-16
KOTA	2013-14	VZM	2015-16
SWM	2013-14	TPTY	2015-16
BTE	2013-14	RIG	2015-16
KCG	2013-14	CSTM	2015-16



Station	Year of commissioning	Station	Year of commissioning
RJPB	2013-14	TATA	2015-16
MS	2013-14	BHC	2015-16
BVI	2014-15	BSL	2015-16
BDTS	2014-15	MMR	2015-16
DDR	2014-15	GDR	2015-16
RTM	2014-15	PKU	2015-16
ST	2014-15	ROU	2015-16
NAD	2014-15	JSG	2015-16
BRC	2014-15	JJKR	2015-16
BL	2014-15	PURI	2015-16
VAPI	2014-15	BAM	2015-16
JHS	2014-15	NODA	2015-16
NGP	2014-15	BLS	2015-16
BPQ	2014-15	MCA	2015-16
GWL	2014-15	NK	2015-16
ET	2014-15	KGP	2015-16
BINA	2014-15	CKP	2015-16
BPL	2014-15	SBC	2016-17
RU	2014-15	JP	2016-17
WL	2014-15	YPR	2016-17
TEL	2014-15		

Source: CRIS



ANNEXURE 6: COMMODITY-WISE EARNINGS PER TONNE (2012-17)

Commodity-wise earnings per tonne (2012-17) (Rs crore/tonne)

	2012-13	2013-14	2014-15	2015-16	2016-17
Arms and Ammunition	9.44	18.06	29.01	11.12	12.50
Dangerous Good	3.85	4.57	5.20	3.55	3.79
Hard Parcel	3.17	3.71	4.13	3.94	4.15
Horse Dog Cattle Birds and Poultry – Livestock	5.51	9.56	10.48	10.12	8.78
Motor Car/ Plough/Boat (VP Load)	3.32	4.17	4.04	5.38	4.50
Newspaper/ Magazine	0.71	0.60	0.64	0.57	0.56
Perishable Parcel	3.34	4.15	4.51	3.95	4.07
Subsidiary Item	3.79	2.92	3.43	1.37	5.42
Valuable Item	4.73	4.78	5.78	11.60	8.27

Source: CRIS



ANNEXURE 7: ZONE-WISE SHARE OF LEASED SLRS IN TOTAL NO. OF AVAILABLE SLRS

Zone-wise share of leased SLRs in total no. of available SLRs

Zonal Railway	Year	No. of trains tendered for leasing SLRs	No. of trains leased out	Total No. of SLRs available for leasing	No. of SLRs not leased out and hauled empty	No. of SLRs leased out	% of available SLRs lease out
CR	2013-14	248	13	520	497	23	4%
	2014-15	249	33	565	521	44	8%
	2015-16	402	41	930	876	54	6%
ECR	2013-14	142	4	358	354	4	1%
	2014-15	27	3	303	300	3	1%
	2015-16	110	6	280	278	2	1%
ECoR	2013-14	69	11	19	6	13	68%
	2014-15	74	5	29	22	7	24%
	2015-16	141	5	34	28	6	18%
NR	2013-14	382	104	699	548	151	22%
	2014-15	167	103	403	230	173	43%
	2015-16	278	141	598	354	244	41%
NCR	2013-14	86	14	211	185	26	12%
	2014-15	47	10	190	174	16	8%
	2015-16	53	12	197	180	17	9%
NER	2013-14	159	11	434	420	14	3%
	2014-15	208	2	364	361	3	1%
	2015-16	290	5	796	788	8	1%
NFR	2013-14	2	2	69	67	2	3%
	2014-15	42	0	46	46	0	0%
	2015-16	39	39	77	77	0	0%
NWR	2013-14	100	28	233	196	37	16%
	2014-15	316	26	524	489	35	7%
	2015-16	183	15	357	341	16	4%
SR	2013-14	232	16	599	575	24	4%



Zonal Railway	Year	No. of trains tendered for leasing SLRs	No. of trains leased out	Total No. of SLRs available for leasing	No. of SLRs not leased out and hauled empty	No. of SLRs leased out	% of available SLRs lease out
	2014-15	73	14	168	150	18	11%
	2015-16	240	26	619	582	37	6%
SER	2013-14	93	13	206	191	15	7%
	2014-15	149	25	343	309	34	10%
	2015-16	155	22	346	318	28	8%
SECR	2013-14	40	8	94	76	18	19%
	2014-15	58	8	126	113	13	10%
	2015-16	17	2	31	29	2	6%
SWR	2013-14	202	42	518	471	47	9%
	2014-15	107	19	274	247	27	10%
	2015-16	276	20	276	233	43	16%
WR	2013-14	337	80	640	548	92	14%
	2014-15	290	36	536	490	46	9%
	2015-16	401	39	826	784	42	5%
WCR	2013-14	60	17	60	43	17	28%
	2014-15	48	11	50	37	13	26%
	2015-16	91	11	91	78	13	14%

Source: Report No. 14, 2017, Comptroller and Auditor General of India²⁷

²⁷[https://www.cag.gov.in/sites/default/files/audit_report_files/Annexure_of_Report_No.14_of_2017_-_Compliance_audit_Union_Government_\(Railways\).pdf](https://www.cag.gov.in/sites/default/files/audit_report_files/Annexure_of_Report_No.14_of_2017_-_Compliance_audit_Union_Government_(Railways).pdf)



ANNEXURE 8: KEY TAKEAWAYS - SECUNDERABAD SITE VISIT

Key issues raised by the lease holders during one of the site visits to Secunderabad Jn.

- Major cost incurred: Lease cost and labour cost (labour cost of Rs 500 per person per day)
- Majority of the volume consists of perishable, hard parcel and livestock. For instance, the biggest lease holder at the Secunderabad Jn., which transports minimum 30 tonnes per day, reports 90% of the total volume to be livestock, fish, and hatched eggs.
- Majority of the movement occurs through R-scale trains
- Issues:
 - Dedicated space for the lease holders to store consignments near the parcel booking centre at the Secunderabad station.
 - GST has affected their business – overall production has declined and movement through road has increased.
 - The lease rates are also on the higher side – For instance, 100 kg package to be moved between Delhi and Hyderabad by road cost Rs 500 but by rail it costs Rs 700 + labour cost.
 - Non-availability of VPs is a major issue faced by the leaseholders. Earlier, 3 VPs were provided for parcel movement at the Secunderabad Jn., now there are no VPs available.

All the lease holders stated that there are no issues related to safety and security. Even in a scenario where theft has taken place, they prefer not to report the same to the authorities as it would lead to holding up of the remaining consignment for investigation purpose.



ANNEXURE 9: TOP 10 DESTINATIONS FOR EACH OF THE TOP 10 ORIGINATING STATIONS (NON-LEASE PARCELS)

The period considered for the OD data analysis is April-September 2017. Top 10 originating stations were identified for the period. These stations accounted for 54% of the total non-lease traffic (captured by PMS from the 91 stations) for the period April-September 2017. Thereafter, top 10 destinations for each of the top originating stations were then identified and have been listed below.

Top 10 destinations for parcel traffic originating from Howrah Junction (April–September 2017)

Howrah Jn.	73.7 ('000 tonnes)
OD	Sum of chargeable weight ('000 tonnes)
Howrah Jn. - Tata Nagar Jn.	3.6
Howrah Jn. - Rourkela Jn.	3.5
Howrah Jn. - New Delhi	3.4
Howrah Jn. - Yesvantpur Jn.	3.2
Howrah Jn. - Secunderabad Jn.	3.1
Howrah Jn. - Chennai Central	2.4
Howrah Jn. - Varanasi Jn.	2.3
Howrah Jn. - Mumbai Chhatrapati Terminus	2.0
Howrah Jn. - Khurda Road Jn.	1.6
Howrah Jn. - Guwahati	1.5
% share of total originating from Howrah Jn.	36.3%

Source: CRIS



Top 10 destinations for parcel traffic originating from Delhi Junction (April–September 2017)

Delhi Jn.	72.0 ('000 tonnes)
OD	Sum of chargeable weight ('000 tonnes)
Delhi Jn. - Bareilly Jn.	4.9
Delhi Jn. - Muzaffarnagar	4.8
Delhi Jn. - Gorakhpur Jn.	4.6
Delhi Jn. - Sealdah	4.0
Delhi Jn. - Saharanpur Jn.	3.4
Delhi Jn. - Howrah Jn.	2.7
Delhi Jn. - Jalandhar City Jn.	2.2
Delhi Jn. - Jodhpur Jn.	2.1
Delhi Jn. - Moradabad Jn.	2.0
Delhi Jn. - Amritsar Jn.	1.9
% share of total originating from Delhi Jn.	46%

Source: CRIS

Top 10 destinations for parcel traffic originating from New Delhi (April–September 2017)

New Delhi	57.5 ('000 tonnes)
OD	Sum of chargeable weight ('000 tonnes)
New Delhi - Lucknow Jn.	3.5
New Delhi - Chennai Central	3.0
New Delhi - Howrah Jn.	2.9
New Delhi - Manduadih	2.4
New Delhi - Sealdah	2.2
New Delhi - Rajendra Nagar (Bihar)	2.2
New Delhi - Bhubaneswar	2.1
New Delhi - Patna Jn.	2.1
New Delhi - Kanpur Central Jn.	1.9
New Delhi - Allahabad Jn.	1.8
% share of total originating from New Delhi	42%

Source: CRIS



Top 10 destinations for parcel traffic originating from Chennai Central (April–September 2017)

Chennai Central	38.4 ('000 tonnes)
OD	Sum of chargeable weight ('000 tonnes)
Chennai Central - Howrah Jn.	4.6
Chennai Central - New Delhi	2.9
Chennai Central - Kozhikode	2.4
Chennai Central - Bangalore City Jn.	1.9
Chennai Central - Ernakulam Town	1.7
Chennai Central - Pune Jn.	1.6
Chennai Central - Vijaywada Jn.	1.5
Chennai Central - Kannore	1.3
Chennai Central - Coimbatore Jn.	1.0
Chennai Central - Secunderabad Jn.	1.0
% share of total originating from Chennai Central	52%

Source: CRIS

Top 10 destinations for parcel traffic originating from Mumbai Chhatrapati Terminus (April–September 2017)

Mumbai Chhatrapati Terminus	27.2 ('000 tonnes)
OD	Sum of chargeable weight ('000 tonnes)
Mumbai Chhatrapati Terminus - Howrah Jn.	5.2
Mumbai Chhatrapati Terminus - Chennai Central	2.4
Mumbai Chhatrapati Terminus - Hyderabad Deccan	1.7
Mumbai Chhatrapati Terminus - Nagpur Jn.(CR)	1.6
Mumbai Chhatrapati Terminus - Bhubaneswar	1.4
Mumbai Chhatrapati Terminus - Mangalore Junction	1.2
Mumbai Chhatrapati Terminus - Ernakulam Town	1.0
Mumbai Chhatrapati Terminus - Lucknow Jn.	0.9
Mumbai Chhatrapati Terminus - Bangalore City Jn.	0.8
Mumbai Chhatrapati Terminus - Varanasi Jn.	0.7
% share of total originating from Mumbai Chhatrapati Terminus	62.4%

Source: CRIS



Top 10 destinations for parcel traffic originating from Hazrat Nizamuddin Jn. (April–September 2017)

Hazrat Nizamuddin Jn.	22.1 ('000 tonnes)
OD	Sum of chargeable weight ('000 tonnes)
Hazrat Nizamuddin Jn. - Hyderabad Deccan	1.5
Hazrat Nizamuddin Jn. - Habibganj	1.3
Hazrat Nizamuddin Jn. - Ernakulam Jn.	1.3
Hazrat Nizamuddin Jn. - Yesvantpur Jn.	1.0
Hazrat Nizamuddin Jn. - Raipur Jn.	1.0
Hazrat Nizamuddin Jn. - Kota Jn.	1.0
Hazrat Nizamuddin Jn. - Kozhikode	0.9
Hazrat Nizamuddin Jn. - Katni Jn.	0.9
Hazrat Nizamuddin Jn. - Nagpur Jn.(CR)	0.9
Hazrat Nizamuddin Jn. - Jabalpur Jn.	0.7
% share of total originating from Hazrat Nizamuddin Jn.	48%

Source: CRIS

Top 10 destinations for parcel traffic originating from Renigunta Jn. (April–September 2017)

Renigunta Jn.	21.94
OD	Sum of chargeable weight ('000 tonnes)
Renigunta Jn. - Hazrat Nizamuddin Jn.	20.55
Renigunta Jn. - Vijaywada Jn.	0.44
Renigunta Jn. - Chennai Central	0.25
Renigunta Jn. - Mumbai Chhatrapati Terminus	0.16
Renigunta Jn. - Aurangabad	0.05
Renigunta Jn. - Chennai Egmore	0.03
Renigunta Jn. - Berhampur	0.03
Renigunta Jn. - Kacheguda	0.03
Renigunta Jn. - Gudur Jn.	0.03
Renigunta Jn. - Kharagpur Jn.	0.02
% share of total originating from Renigunta Jn.	98%

Source: CRIS



Top 10 destinations for parcel traffic originating from Secunderabad Jn. (April–September 2017)

Secunderabad Jn.	16.37 ('000 tonnes)
OD	Sum of chargeable weight ('000 tonnes)
Secunderabad Jn. - New Guwahati G/Shed	1.73
Secunderabad Jn. - Visakhapatnam	1.42
Secunderabad Jn. - Howrah Jn.	0.91
Secunderabad Jn. - Danapur	0.83
Secunderabad Jn. - Varanasi Jn.	0.83
Secunderabad Jn. - Vijayawada Jn.	0.75
Secunderabad Jn. - Bhubaneswar	0.49
Secunderabad Jn. - Chennai Central	0.48
Secunderabad Jn. - Khurda Road Jn.	0.48
Secunderabad Jn. - Aurangabad	0.47
% share of total originating from Secunderabad Jn.	51%

Source: CRIS

Top 10 destinations for parcel traffic originating from Bangalore City Jn. (April–September 2017)

Bangalore City Jn.	15.33 ('000 tonnes)
OD	Sum of chargeable weight ('000 tonnes)
Bangalore City Jn. - New Delhi	1.09
Bangalore City Jn. - Mumbai Chhatrapati Terminus	0.90
Bangalore City Jn. - Hazrat Nizamuddin Jn.	0.76
Bangalore City Jn. - Mughal Sarai Jn.	0.74
Bangalore City Jn. - Bhubaneswar	0.73
Bangalore City Jn. - Danapur	0.70
Bangalore City Jn. - Chennai Central	0.68
Bangalore City Jn. - Kacheguda	0.66
Bangalore City Jn. - Ernakulam Town	0.62
Bangalore City Jn. - Madurai Jn.	0.56
% share of total originating from Bangalore City Jn.	49%

Source: CRIS



Traffic trend of Top 10 originating stations ('000 tonnes)

Originating stations	2012-13	2013-14	2014-15	2015-16	2016-17
Delhi Jn.	114	151	154	152	158
Howrah Jn.	100	106	128	132	136
New Delhi	110	113	120	113	123
Chennai Central	0	5	7	24	71
Hazrat Nizamuddin Jn.	44	47	50	41	46
Mumbai Chhatrapati Terminus				23	45
Sealdah	17	19	21	24	36
Secunderabad Jn.	1	12	11	30	30
Kanpur Central Jn.	26	19	21	19	23
Bilaspur Jn.				20	22

Source: CRIS

Earnings trend of Top 10 originating stations (Rs crore)

Originating stations	2012-13	2013-14	2014-15	2015-16	2016-17
New Delhi	40	50	61	57	66
Howrah Jn.	34	44	58	61	63
Delhi Jn.	26	43	49	49	54
Chennai Central	0	2	3	11	36
Hazrat Nizamuddin Jn.	22	27	33	27	29
Mumbai Chhatrapati Terminus				12	25
Secunderabad Jn.	0	6	5	15	16
Sealdah	4	5	7	8	13
Kanpur Central Jn.	7	6	7	6	8
Bilaspur Jn.				5	5

Source: CRIS





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