TRANSFORMING INDIA THROUGH Sabka Saath, Sabka Vikas

INDIAN RAILWAYS Perseverance, Pace, Progress

MOVING TOWARDS 360° TRANSFORMATION!
Overview

- Network route kilometer: 1.16 lakh track km; 66,000 route km
- No. of trains per day: 13,000 passenger trains; 8,000 freight trains
- No. of stations: 8,000
- No. of employees: 13 lakhs approx (2nd largest employer in the country after Defence)
World’s largest passenger carrier

- Passengers carried – 822.7 crore in 2014-15 (largest passenger carrier in the world)
- 13,000 passenger trains daily
- Connecting over 8,000 stations
Passenger

Passenger kilometers in millions

Earnings from Passenger Operations (April-Sept.)

*2015-16 data is from April-September 2015
Largest Freight Transportation

- Freight carried – 1097.5 MT (4th largest in the world)
- 8,000 freight trains daily
- Indian Railways carries
  - 70% of Coal
  - 87% of Fertilizer
  - 81% of Iron ore
  - 42% of Cement
  - 17% of POL
  - 20% of Food grain
The commodity-wise performance of freight moved by Indian Railways is as under:

**Freight**

*Movement of Freight (April - September)*

- **2015-16**: 540.99 million tonnes
- **2014-15**: 532.42 million tonnes
- **2013-14**: 511 million tonnes

*2015-16 data is from April-September 2015*

**Expenditure**

The working expenses grew by only 0.39% for the period April-September 2015 over the corresponding period in 2014.

**Trends in Ordinary Working Expenses**

<table>
<thead>
<tr>
<th></th>
<th>Apr-Jun 13</th>
<th>Apr-Jun 14</th>
<th>Apr-Jun 15</th>
<th>Jul-Sept 13</th>
<th>Jul-Sept 14</th>
<th>Jul-Sept 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>26,607</td>
<td>29,760</td>
<td>31,131</td>
<td>25,266</td>
<td>29,431</td>
<td>28,288</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Transforming India Through Sabka Saath, Sabka Vikas

Indian Railways: Perseverance, Pace, Progress

Connectivity

Path-breaking steps in Budget 2015-16

Key features:
- 5 year masterplan - investment of Rs. 8.56 lakh crore; dovetailing annual budget to medium term goals
- Quantum jump in 2015-16 Plan Outlay to > Rs. 1 lakh crore – 2014-15 Plan Outlay Rs. 65,445 crore (BE)
- 1st innovative financing – mix of enhanced budgetary support, internal generation, institutional financing & PPP

Barrak Valley on Broad Gauge
North Bank of Brahmaputra on Assam-Arunachal Border on BG
Lumding-Badarpur-Silchar
Guna-Gwalior-Etawah rail link completed
Kasganj-Bareilly on BG
Gorakhpur-Gonda on BG
Koderma-Hazaribagh
Naxal affected Hazaribagh district on Railway map

Connectivity

Udhampur-Katra
Dudhnoi-Mendipathar
1st rail link to Meghalaya


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Financial Performance 2014-15

For the first time in the last 7 years, Operating Ratio has surpassed the BE target in 2014-15.

Operating Ratio:
- Actual 2013-14: 93.6%
- Budget Target 2014-15: 92.5%
- RE Target 2014-15: 91.8%
- Actual 2014-15: 91.3%

Infrastructure Creation:
- 723 km. of doubling completed
- 1375 Route km. of electrification completed – the highest ever
- 1329 km. of optical fibre cables laid
- 1983 km. of total lines commissioned – the highest ever

Ordinary working expenses budgeted at 11.7% of Total Revenue in Revised Estimates 2014-15, actually closed lower at 8.6%.
Major Achievements: Making Travel Comfortable

- Generated 66,456 berths by augmenting 884 coaches on a permanent basis which includes 390 general second class unreserved coaches.

- 65,362 temporary coachtrip have been provided that is equivalent to 3600 new trains

- Installed 2,500 water vending machines at stations.

- For the first time, we provided mobile charging points in general class coaches in all new coaches and the plan is of retro-fitment in old coaches.

- Provided dustbins in all new non-AC coaches

- Enabled online booking of retiring rooms

- Mechanized laundries were proliferated to provide clean and hygienic bed rolls. Disposable bed rolls are now available at select stations to all classes of passengers.
Unprecedented Achievements: Operation 5 minutes

- 2,000 Automatic Ticket Vending Machines and 225 cash-coin & smart card operated ticket vending machines
- Mobile based apps for purchasing unreserved and platform tickets
- GoIndia smart card scheme for cashless purchase of UTS and PRS tickets
- Multi-lingual e-ticketing portal
Unprecedented Achievements: Security

- 24x7 helpline number 182
- CCTV surveillance provided at 311 stations. All major stations to be brought under CCTV surveillance in phased manner
- CCTV cameras were installed in Mumbai Suburban trains
- Over 18,000 RPF personnel were recruited for train escorting
Unprecedented Achievements:
Connectivity to North East and J&K

- All State Capitals in North East to be connected by Rail in next 5 years

- Brought Agartala, the capital of Tripura on Broad Gauge Network

- In the state of Manipur, Broad Gauge connectivity has been done. Arunachal-Jiribam Gauge connectivity is also completed. By March 2016, Mizoram-Kathakal connectivity is set to be completed.

- Lumding-Silchar section in Assam opened on Broad Gauge thus connecting Barak Valley with rest of the country

- Rail connectivity in J&K is also a focus area - Work on Katra-Banihal section of Udhampur- Srinagar-Baramulla Rail Link Project is progressing well (35 Kilometers of tunneling, out of total of 95 Kilometers has been completed successfully)
Unprecedented Achievements: Energy efficiency measures

- 1000 MW solar power plants to be set up over next 5 years
- 10.5 MV wind mills working; 26 MV commissioned in 2015.
- 3-phase EMU with regenerative braking introduced in Mumbai Suburban
- Provision of solar panels on 50 coaches to harness solar energy.
- Dual fuel CNG DEMU trains introduced
- Bio-diesel – 5% blending introduced.

Saving of Rs.1200 crore in FY16 through bilateral power purchase
Major Achievements: Environment Initiatives

Environmental Initiatives

- A new Directorate of Environment created.
- A new Directorate for House - keeping set up.
- Visible improvement in cleanliness at stations as part of Swachh Bharat.
- Bio-toilets: 10500 Bio-toilets have been fitted in 3240 Coaches; 32.4% more than the corresponding period of last year.
- First ever in the world, bio-cum-vacuum toilet system introduced on Dibrugarh Rajdhani for trial.
- 1000 MW solar power plants being set up over next 5 years; 10.5 MW already set up; in 2015-16, additional 6.5 MW will be set up; PPP model finalized.
- 10.5 MW wind mills already working; 26 MW commissioned in 2015.
- 3-phase EMU with regenerative braking introduced in Mumbai Suburban service.
- Saving of Rs.200 crore in the financial year through direct bilateral purchase of power.
- Bio-diesel – 5% blending introduced.
- Dual fuel CNG DEMU trains introduced.
- EoI issued on 05.08.15 for disposal of MSW in an Environment friendly manner by setting up pilot plants on Waste to Energy.
Unprecedented Achievements: Make in India

- Contract awarded for Loco factories at Madhepura & Marhowra after 7 years. Significant part of equity expected through FDI. Order book of Rs. 40,000 cr.
- 200 Locomotives (9000 HP) being procured for Western DFC costing over Rs. 5000 crore; bid under evaluation.
- Train sets for improving passenger comfort & reducing travel time; Financial bids expected in February 2016.
- Rail Coach Factory at Kanchrapara— Fresh RFQ applications called. Will be opened in February 2016.
Major Achievements: Fast project delivery

Improvements in Project Delivery

- 80 capacity enhancement projects included in the Budget 2015-16.
- Out of total 80 new projects announced in Budget 2015-16, DPRs for 73 projects have been received from Zonal Railways, of which 37 DPRs already sent to NITI Ayog and approval of 15 projects received from NITI Ayog.
- All tender-related powers delegated to General Managers.
- All powers to sanction estimates delegated.
- Time period for project commencement since inclusion in budget compressed to 6 months from 2 years earlier.
- Timelines have been set with the objective of fixing contractual agency and commencing execution at the start of working season.
Major Achievements: Improved transparency

Transparency

- New transfer policy for officers issued.
- E-procurement and e-tendering system
- Sale of scrap is 100% computerised through E-auction.
- Introducing E-tendering in works contracts
- Intelligent Railways
- IR has decided to switch over to EPC mode of tendering to expedite project execution.
- Online examination for recruitment in 54 categories.
- Structural changes in Engineering Services Examination (ESE) and its syllabi.
- Question paper, answer sheet of the candidates and answer keys for SSE JE examination 2015 have been uploaded on RRB websites for self-check by candidates.
- New RRB Manual has been issued after a gap of 15 years.
Achievements: Asset Creation

**Asset Creation**

- Commissioning of New Lines, Doublings and Gauge Conversion: 2003 km. has been done in the current year as against 1626 km. in previous year.
- There has been 87.22% growth in electrification from April to September 2015 in route kilometers in comparison to previous year. 498 km. done this year as against 266 km. in corresponding period last year.
- Against 2715 km. of Track Renewals/replacement during previous year, 2800 km. has been done in the current year.
- Long pending Agra-Etawah new line (108 km.) commissioned.
- Loharu-Sikar GC (122 km.) commissioned.
- Dallirajhra-Dondi (17 km.) new line commissioned in Chhattisgarh.
- Port connectivity to Tuna Port provided.

### Key Performance Indicators

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Item Description</th>
<th>Progress during Nov’13 to Sept’14</th>
<th>Progress during past one year (Nov’14 to Sept’15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Track Renewals/ replacements</td>
<td>2715 km.</td>
<td>2800 km.</td>
</tr>
<tr>
<td>3.</td>
<td>Offering of Engineering Scrap</td>
<td>5.89 lakh MT</td>
<td>6 lakh MT</td>
</tr>
<tr>
<td>4.</td>
<td>Closure of Level Crossings (LCs)</td>
<td>310 Nos.</td>
<td>340 Nos.</td>
</tr>
<tr>
<td>5.</td>
<td>Elimination of Unmanned LCs (Nos.)</td>
<td>1100 Nos.</td>
<td>1150 Nos.</td>
</tr>
<tr>
<td>6.</td>
<td>Construction of ROBs (Nos.)</td>
<td>221 Nos.</td>
<td>176 Nos.</td>
</tr>
<tr>
<td>8.</td>
<td>Sanction of new ROBs/ RUBs</td>
<td>35 Nos.</td>
<td>970 Nos.</td>
</tr>
<tr>
<td>11.</td>
<td>Traffic facility works completed</td>
<td>47 Nos.</td>
<td>100 Nos.</td>
</tr>
<tr>
<td>12.</td>
<td>Land Earnings</td>
<td>1200 Cr.</td>
<td>1400 Cr.</td>
</tr>
<tr>
<td>13.</td>
<td>Sleeper Utilisation</td>
<td>47 lakh</td>
<td>56 lakh</td>
</tr>
</tbody>
</table>
Indian Railways: delivered most of last year’s promises

- 139 budget announcements implemented
- Increase in Doubling Kms (till Dec vs last year): +47%
- Increase in New line Kms (till Dec vs last year): +162%
- Increase in gauge conversion Kms (till Dec vs last year): +23%
- Increase in Electrification Kms (till Dec vs last year): +47%
Physical Targets

Unprecedented progress planned in next 5 years

<table>
<thead>
<tr>
<th>Year</th>
<th>New Line</th>
<th>Gauge Conversion</th>
<th>Doubling</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-15</td>
<td>380</td>
<td>880</td>
<td>723</td>
</tr>
<tr>
<td>2015-16</td>
<td>500</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>2016-17</td>
<td>400</td>
<td>800</td>
<td>1800</td>
</tr>
<tr>
<td>2017-18</td>
<td>400</td>
<td>800</td>
<td>2300</td>
</tr>
<tr>
<td>2018-19</td>
<td>400</td>
<td>800</td>
<td>2800</td>
</tr>
</tbody>
</table>

About 500-600 km doubling & 100 km gauge conversion to be commissioned every year through Railway PSUs.
## Overall Vision

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Current Performance</th>
<th>Targeted performance 2019</th>
<th>Targeted Performance 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modal Share (Freight)</td>
<td>30%</td>
<td>38%</td>
<td>45%</td>
</tr>
<tr>
<td>Freight loading (MT)</td>
<td>1115 MT</td>
<td>1800 MT</td>
<td>2600 MT</td>
</tr>
<tr>
<td>Passengers</td>
<td>Supply constraint</td>
<td>50% additional capacity</td>
<td>Berth on demand fully operational</td>
</tr>
<tr>
<td>Non fare revenues</td>
<td>3-4%</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>Average speed – Freight (Kmph)</td>
<td>25 Kmph</td>
<td>50 Kmph</td>
<td>75 Kmph</td>
</tr>
<tr>
<td>Top speed – Mail/Express (Kmph)</td>
<td>120 Kmph</td>
<td>160 Kmph</td>
<td>200 Kmph</td>
</tr>
<tr>
<td>Punctuality</td>
<td>80%</td>
<td>95%</td>
<td>99%</td>
</tr>
</tbody>
</table>
Initiatives
Works under progress

**Station Development**
- Model concession agreement and Development agreement drafted.
- Call for RFQ applications for Swiss challenge targeting 400 stations in 2-3 months.
- First station (Habibganj) contract to be awarded in soon.
- RFQs invited for Anand Vihar, Bijwasan. Surat, Gandhinagar also at advanced stages.

**Process improvements**
- EPC contract structures shared with zonal railways. Tendering to commence soon.
- E-tendering of works contract to commence from Feb.

**Rail Development Authority**
- Public comments being received on the concept note. Cabinet note to be submitted in 45 days.

**High speed trains**
- Bullet train - New company to be registered this month. Construction to commence by 2018.
- Semi high speed: Formal approvals for running at 160Kmph completed. Service to be launched by March on Delhi – Agra route.
- Semi high speed – Delhi-Ambala and Delhi-Kanpur also being upgraded for 160 Km/h.