**Railways Budget 2012**

The Minister of Railways, Dinesh Trivedi, presented the Railways Budget 2012 to Parliament on 14th March. In his address, he commented on the performance of Railways in 2011-12 and laid out his budget proposals for 2012-13.

**Budget highlights**

While commenting on the financial position of Railways, the Minister said that 'the Indian Railways are passing through a difficult phase'. The Operating Ratio for the closing year is now estimated to equal 95%. This is significantly higher than the 91.1% figure budgeted last year.

Operating Ratio is a metric that compares operating expenses to revenues. A higher ratio indicates lower ability to generate surplus.

Surplus is used for capital investments such as laying of new lines, deploying more coaches etc. Therefore, a smaller surplus affects the Railway’s capability to make such investments.

**Budget v/s Revised estimates 2011-12**

(Details in Appendix I)

Budget 2011-12 had estimated the performance of Railways for the financial year. Revised estimates have now been submitted. Taken together, these two figures help in comparing actual performance against targets. Some observations are enumerated below:

- Total receipts decreased by Rs 2,746 crore.
- Total expenditure increased by Rs 2,102 crore.
- Operating Ratio increased from 91.1% to 95%. This implies a significant decrease in surplus.
- Appropriations to the ‘Development Fund’ and the ‘Capital Fund’ decreased from Rs 5,258 crore to Rs 1,492 crore (a decrease of 72%). The ‘Development Fund’ finances expenditure such as passenger amenities; the ‘Capital Fund’ is used for capital augmentation such as laying of new lines.

**Budget estimates 2012-13**

In 2012-13, Railways plan to improve Operating Ratio to 84.9% and to increase surplus to Rs 15,557 crore. This is more than 10 times the surplus generated in 2011-12 (Revised Estimates).

In the long term, the Minister has set a target of improving the Operating Ratio to 74% by the end of the 12th Five Year Plan (i.e. 2017).

**Growth in Traffic**

During 2011-12, passenger traffic (in Passenger Kms/ PKM) grew by 9% and freight traffic (in Net Tonne Kms/ NTKM) by 3%. In terms of achievements with respect to the 11th Plan targets, passenger traffic is at 97% of the 1100 billion PKM target and freight traffic is at 95% of the 674 billion NTKM target.

**(NTKM or Net Tonne Km is a measure of freight movement; 1 NTKM implies 1 tonne of freight was transported over 1 Km. PKM is the corresponding measure for passenger travel).**

Note that the targets used above are the revised targets, based on the mid-term review of the 11th Plan. During the review, the target for passenger traffic was revised upwards (from 880 to 1100 billion PKM) and the one for freight traffic was revised downwards (from 702 to 674 billion NTKM).

During the year, the effective increase in passenger fares averaged 3% and the effective increase in freight rates averaged 6%.

Freight traffic continued to be the larger contributor to Railway revenues; it contributed 64% of total receipts. In comparison, passenger traffic contributed 27% of total receipts.

In 2012-13, the effective increase in freight rates is estimated to average 23%. During this time, passenger fares are estimated to increase by an effective average rate of 19%.

**Figure 1: Growth in Traffic**

![Figure 1: Growth in Traffic](image)

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1 The ‘effective average fare’ has been calculated by dividing the total income from the segment (freight/ passenger) by the total traffic (in NTKM/ PKM). This would vary with changes in fares as well as the usage by different categories of users (including the proportion of tickets booked through Tatkal).
**Infrastructure**

**Performance during the 11th Plan**

Under the 11th Five Year Plan, the total plan expenditure for Railways had been approved at Rs 2,33,289 crore.

The Outcome Budget shows that the actual expenditure is only likely to be Rs 1,92,291 crore. Thus, expenditure will fall short by Rs 40,998 crore. This gap exists despite a significant increase in the Gross Budgetary Support approved by Parliament.

### Plan expenditure during 2007-12 (In Rs Crore)

<table>
<thead>
<tr>
<th></th>
<th>Approved</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Budgetary Support</td>
<td>63,635</td>
<td>75,979</td>
</tr>
<tr>
<td>Internal Resources</td>
<td>90,000</td>
<td>67,763</td>
</tr>
<tr>
<td>Extra Budgetary Support</td>
<td>79,654</td>
<td>48,549</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,33,289</strong></td>
<td><strong>1,92,291</strong></td>
</tr>
</tbody>
</table>

The Standing Committee on Railways, in its 11th report presented in August 2011, had sought an explanation from the Ministry.

According to the Ministry, lower mobilization of internal resources and lack of extra budgetary support are the main reasons for the shortfall. Internal resource mobilization has been low because of (i) impact of the 6th Pay Commission; and (ii) slow growth in freight earnings due to the economic slowdown. Extra budgetary resources have been low due to non-materialization of funds through the Public-Private Partnership route.

### Proposals for the 12th Plan

Two recent committees – Kakodkar Committee on Railway Safety and the Pitroda Committee on Railway Modernization – have called for large investments in the next five years. The Kakodkar Committee has recommended an investment of Rs 1,00,00,000 crore in the next five years to improve safety; the Pitroda Committee has recommended an expenditure of Rs 3,96,00,000 crore in the next five years on modernization.

*(See Appendix IV and V for a summary of their recommendations)*

The Railway sub-group of the 12th Five Year Plan has also estimated a requirement of Rs 4,42,744 crore for various other investments proposed to be undertaken during the Plan period.

All these three groups have called for significant investments in infrastructure augmentation in the next five years.

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2 Source: Report of the Expert Group on Railway Modernization (Chairman: Sam Pitroda)

### Budget proposals 2012-13

According to the Minister’s speech, the Annual Plan outlay for the year 2012-13 has been set at Rs 60,100 crore. The plan would be financed through:

- Gross Budgetary Support of Rs 24,000 crore
- Railway Safety Fund of Rs 2,000 crore
- Internal Resources of Rs 18,050 crore
- Extra Budgetary Resources of Rs 16,050 crore.

Of this, Rs 15,000 crore would be borrowed from the market through IRFC (Indian Railway Finance Corporation).

### Status of some infrastructure projects

Laying new lines, electrification of tracks, augmentation of rolling stock etc. are some of the infrastructure projects that the Railways has been undertaking.

*(See Appendix II for detailed figures on infrastructure development)*

The overall achievement is in line with the revised targets for the 11th Plan (as per the mid-term review).

However, note that most targets had been revised downwards during the mid-term review.

### Key Proposals in Budget 2012-13

The Minister put forward several proposals for the coming year. He proposes to:

**Infrastructure**

- Set up the:
  - Indian Railway Station Development Corporation to redevelop stations through PPP mode
  - Logistics Corporation for the development & management of existing railway goods, sheds and multi-modal logistics parks.
  - National High Speed Rail Authority

- Increase the attractiveness of private investment schemes for Wagon leasing, private freight terminals, container train operations, rail connectivity projects for PPP partners.

- Induct a new Board Member for PPP/Marketing

- Conduct a pre-feasibility study on the Delhi-Jaipur-Ajmer-Jodhpur high speed corridor in 2012-13

- Set up:
  - A wagon factory at Sitapali (Odisha)
  - A rail coach factory at Palakkad (Kerala)

3 To know the current status of projects proposed last year, see Appendix III
- Two new manufacturing units for coaches in Kutch (Gujarat) and Kolar (Karnataka)
- A plant for manufacture of components of diesel locomotives at Vidisha (MP)
- A factory for manufacture of components of electric locomotives at Shyamnagar (WB)
- A coaching complex at Panvel and coach maintenance complex at Kalamboli (both Maharashtra).
- A coaching terminal at Naihati (WB)

- Work with State governments on a cost sharing basis to hasten development of select projects. As of now, 31 projects covering a length of more than 5,000 km in 10 states are being executed with contribution from state governments. In 2012-13, four more projects will be taken up in partnership with state governments. These are:
  - Rohtak-Hansi via Meham (Haryana)
  - Akkanapet-Medak (AP)
  - Bhadrachalam-Kovvur (AP)
  - Rajabhatkhowa-Jainti (WB)
- Take up work on the project to connect Agartala with Akhaura in Bangladesh.

Metropolitan projects
- Hyderabad - Set up Special Purpose Vehicle (SPV) with the government for the commercial management of MMTS.
- Mumbai - Carry out feasibility study for construction of faster corridors on CSTM (Panvel and Virar-Vasai-Diva-Panvel sections).
- Mumbai - Initiate work for facilitating the deployment of 12-car rakes on the Harbour line.
- Mumbai – Conduct the financial modeling for the elevated rail corridor from Churchgate to Virar.

Freight business
- Award contracts for civil and track works for about 1000 route km on the Eastern and Western Dedicated Freight Corridors (DFCs) in 2012-13.

Passenger amenities
- Provide 75 additional services in Mumbai suburban area, 18 additional services in Chennai area, 44 new suburban services in Kolkata area and 50 new services in Kolkata Metro.
- Introduce 75 new express trains, 21 new passenger services, 8 new MEMU and 9 DEMU services, extend the run of 39 trains and increase the frequency of 23 trains.
- Upgrade 84 stations to Adarsh Stations in 2012-13.
- Introduce the Alternate Train Accommodation System to accommodate waitlisted passengers on alternate trains.
- Introduce satellite based real time train information system (SIMRAN) to provide train running information to passengers through SMS, internet, etc.
- Provide specially designed coaches for differently-abled persons in each Mail/Express trains.

Safety and Security
- Set up the:
  - Railway Safety Authority as a statutory regulatory body (as recommended by Kakodkar Committee).
  - Rail-Road Grade Separation Corporation to eliminate level crossings.
- Induct a new Board Member for Safety/Research.
- Set up three ‘Safety Villages’ at Bengaluru, Kharagpur and Lucknow for skill development for disaster management.
- Install Integrated Security System at 202 identified stations.
- Extend the protection provided by RPF/GRP to 3,500 trains.

Tariff proposals
- Increase passenger fares by:
  - 2 paise per km for suburban and ordinary second class
  - 3 paise per km for mail/express second class
  - 5 paise per km for sleeper class
  - 10 paise per km for AC Chair Car, AC 3 tier and First Class
  - 15 paise per km for AC 2 tier
  - 30 paise per km for AC I.
- Price minimum fare and platform tickets at Rs 5.

Others
- Set up 200 remote railway stations as ‘green energy stations’ powered entirely by solar energy.
- Set up new Rail Neer Plants at Palur (TN) and Ambernath (Maharashtra)
- Recruit one lakh people in 2012-13 and eliminate the backlog of SC/ST/OBC and other categories.
## Appendix I: Railway Revenue and Expenditure (In crore)

<table>
<thead>
<tr>
<th></th>
<th>Actuals 2010-11</th>
<th>Budget 2011-12</th>
<th>Revised 2011-12</th>
<th>Revised - Budget 2011-12</th>
<th>Budget 2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Receipts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger - Upper Class</td>
<td>6,226</td>
<td>7,006</td>
<td>6,964</td>
<td>(42)</td>
<td>8,383</td>
</tr>
<tr>
<td>Passenger - Second Class</td>
<td>19,567</td>
<td>23,450</td>
<td>21,836</td>
<td>(1,614)</td>
<td>27,690</td>
</tr>
<tr>
<td>Other Coaching</td>
<td>2,470</td>
<td>2,903</td>
<td>2,750</td>
<td>(153)</td>
<td>2,994</td>
</tr>
<tr>
<td>Freight</td>
<td>62,845</td>
<td>68,620</td>
<td>68,620</td>
<td>-</td>
<td>89,339</td>
</tr>
<tr>
<td>Sundry</td>
<td>3,418</td>
<td>4,060</td>
<td>3,700</td>
<td>(360)</td>
<td>4,096</td>
</tr>
<tr>
<td>Suspense</td>
<td>10</td>
<td>200</td>
<td>47</td>
<td>(153)</td>
<td>50</td>
</tr>
<tr>
<td><strong>Gross Traffic Receipts</strong></td>
<td>94,536</td>
<td>106,239</td>
<td>1,03,917</td>
<td>(2,322)</td>
<td>1,32,552</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2,145</td>
<td>3,154</td>
<td>2,730</td>
<td>(424)</td>
<td>3,142</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>96,681</td>
<td>109,393</td>
<td>1,06,647</td>
<td>(2,746)</td>
<td>1,35,694</td>
</tr>
<tr>
<td><strong>Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary Working Expenses</td>
<td>68,139</td>
<td>73,650</td>
<td>75,650</td>
<td>2,000</td>
<td>84,400</td>
</tr>
<tr>
<td>Appropriation to Depreciation Reserve Fund</td>
<td>5,515</td>
<td>7,000</td>
<td>6,160</td>
<td>(840)</td>
<td>9,500</td>
</tr>
<tr>
<td>Appropriation to Pension Fund</td>
<td>15,820</td>
<td>15,800</td>
<td>16,800</td>
<td>1,000</td>
<td>18,500</td>
</tr>
<tr>
<td><strong>Total Working Expenditure</strong></td>
<td>89,474</td>
<td>96,450</td>
<td>98,610</td>
<td>2,160</td>
<td>1,12,400</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>861</td>
<td>950</td>
<td>892</td>
<td>(58)</td>
<td>1,061</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td>90,335</td>
<td>97,400</td>
<td>99,502</td>
<td>2,102</td>
<td>1,13,461</td>
</tr>
<tr>
<td>Dividend payable to General Revenues</td>
<td>4,941</td>
<td>6,735</td>
<td>5,652</td>
<td>(1,082)</td>
<td>6,676</td>
</tr>
<tr>
<td><strong>Net Surplus after payment of Dividend</strong></td>
<td>1,405</td>
<td>5,258</td>
<td>1,492</td>
<td>(3,766)</td>
<td>15,557</td>
</tr>
<tr>
<td><strong>Operating Ratio</strong></td>
<td>94.6%</td>
<td>91.1%</td>
<td>95.0%</td>
<td>84.9%</td>
<td></td>
</tr>
<tr>
<td>Appropriation to Railway Development Fund</td>
<td>1,405</td>
<td>2,400</td>
<td>550</td>
<td>(1,850)</td>
<td>10,557</td>
</tr>
<tr>
<td>Appropriation to Capital Fund</td>
<td>-</td>
<td>2,858</td>
<td>942</td>
<td>(1,916)</td>
<td>5,000</td>
</tr>
</tbody>
</table>

### Explanatory Notes

**Other sources of earning**

1. Coaching earnings include income from parcels and luggage
2. Sundry earnings represent earnings from lease of railway land, advertisement and publicity etc.
3. Suspense represents unrealized traffic earnings

**Performance parameters**

4. ‘Net Surplus after payment of Dividend’ represents excess of receipts over expenditure after the Dividend liability (payment for investment in Railway capital) of General Revenues has been paid off
5. ‘Operating Ratio’ is the ratio of operating expenses to receipts. A lower ratio indicates higher surplus availability for investments.

**Railway Funds**

6. Depreciation Reserve Fund – Finances the cost of new assets replacing old assets including the cost of any improved features. Appropriation to this fund are made on the recommendations of the Railway Convention Committee (RCC)
7. Pension Fund – Finances all pension payments to retired Railway staff
8. Development Fund – Finances expenditure on Passenger and Other Railway Users’ Amenities Works, Staff Welfare Works, Un-remunerative operating improvements etc.
9. Capital Fund - Used for capital augmentation. Appropriations to this fund are made only after making necessary appropriations to other funds
### Appendix II: Infrastructure/stock augmentation

#### Infrastructure (in Route-Kms)

<table>
<thead>
<tr>
<th></th>
<th>Target (2011-12)</th>
<th>Provisional (2011-12)*</th>
<th>Initial 11th Plan target (by 2012)</th>
<th>Revised 11th Plan target (by 2012)**</th>
<th>Achievement, % of revised target</th>
<th>Target (2012-13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New lines</td>
<td>700</td>
<td>700</td>
<td>2,000</td>
<td>2,000</td>
<td>109%</td>
<td>700</td>
</tr>
<tr>
<td>Gauge conversion</td>
<td>825</td>
<td>825</td>
<td>10,000</td>
<td>6,000</td>
<td>88%</td>
<td>800</td>
</tr>
<tr>
<td>Electrification</td>
<td>1,110</td>
<td>1,110</td>
<td>3,500</td>
<td>4,500</td>
<td>100%</td>
<td>1,110</td>
</tr>
<tr>
<td>Doubling</td>
<td>700</td>
<td>700</td>
<td>6,000</td>
<td>2,500</td>
<td>108%</td>
<td>700</td>
</tr>
</tbody>
</table>

#### Rolling stock augmentation (in Vehicle Units)

<table>
<thead>
<tr>
<th></th>
<th>Target (2011-12)</th>
<th>Provisional (2011-12)*</th>
<th>Initial 11th Plan target (by 2012)</th>
<th>Revised 11th Plan target (by 2012)**</th>
<th>Achievement, % of revised target</th>
<th>Target (2012-13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wagons</td>
<td>18,000</td>
<td>18,000</td>
<td>1,55,000</td>
<td>62,000</td>
<td>104%</td>
<td>16,000</td>
</tr>
<tr>
<td>Coaches</td>
<td>3,786</td>
<td>3,786</td>
<td>22,500</td>
<td>18,550</td>
<td>93%</td>
<td>3,816</td>
</tr>
<tr>
<td>Diesel Loco</td>
<td>300</td>
<td>300</td>
<td>1,800</td>
<td>1,379</td>
<td>95%</td>
<td>330</td>
</tr>
<tr>
<td>Electric Loco</td>
<td>280</td>
<td>280</td>
<td>1,800</td>
<td>1,205</td>
<td>100%</td>
<td>300</td>
</tr>
</tbody>
</table>

Note:

* The ‘provisional’ achievements for 2011-12 have been calculated by subtracting the total achievement during the preceding four years from the ‘Likely achievement’ during the duration of the 11th Five Year Plan.

** The figures represent the revised targets set during the mid-term review of the 11th Five Year Plan.
Appendix III: Status of some key initiatives proposed in Budget 2011-12

<table>
<thead>
<tr>
<th>Project</th>
<th>Current status/ Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment</strong></td>
<td></td>
</tr>
<tr>
<td>• Establishment of a Central Organization for Project Implementation (COPI) with offices in Delhi, Kolkata, Mumbai and Bangalore to address issues of delay in implementation and non-utilisation of funds.</td>
<td>• PRS could not find information about the status of this proposal.</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td>• Setting up of the 'National High Speed Rail Authority' was first announced in Budget 2010-11.</td>
<td>• According to the Minister’s speech, the ‘National High Speed Rail Authority is under formation’.</td>
</tr>
<tr>
<td>• During the last budget i.e. 2011-12, it was announced that the ‘Railways is in the process of setting up the National High Speed Rail Authority’.</td>
<td></td>
</tr>
<tr>
<td>• 236 stations to be upgraded to Adarsh Stations; 45 more Multi-Functional complexes. (Note that 93 Multi-Functional Complexes had also been proposed in 2010)</td>
<td>• PRS could not find information about the status of this proposal.</td>
</tr>
<tr>
<td></td>
<td>• However, according to the Minister’s speech, 929 Adarsh stations have so far been identified. Out of these, works at 490 stations have been completed.</td>
</tr>
<tr>
<td></td>
<td>• On Multi-Functional complexes, the Minister’s speech just states that complexes at 24 locations have been completed so far.</td>
</tr>
<tr>
<td><strong>Freight business</strong></td>
<td></td>
</tr>
<tr>
<td>• Dedicated Freight Corridors to be completed as scheduled (by December, 2016).</td>
<td>• Funding assistance from World Bank and JICA has been ‘tied up’.</td>
</tr>
<tr>
<td></td>
<td>• Out of the 10,700 hectares of land required for the project, 6,500 hectares of land has already been acquired.</td>
</tr>
<tr>
<td></td>
<td>• The bidding process for the civil and track works has commenced. It is ‘expected that the contract for civil and track works for about 1,000 Kms on Eastern and Western DFCs would be awarded during 2012-13’.</td>
</tr>
<tr>
<td><strong>Passenger business</strong></td>
<td></td>
</tr>
<tr>
<td>• Introduction of 56 new Express trains, 3 new Shatabdis and 9 Duronto trains.</td>
<td>• According to the Outcome Budget, so far 37 new Express trains, 2 Shatabdis and 1 Duronto train has been introduced.</td>
</tr>
<tr>
<td><strong>Safety and Security</strong></td>
<td></td>
</tr>
<tr>
<td>• Elimination of all unmanned level crossing upto 3000 TVUs (Train Vehicle Units)</td>
<td>• Against a target of 2,045 works related to manning of unmanned level crossings, 1,178 crossings had been manned by Jan 2012.</td>
</tr>
<tr>
<td></td>
<td>• Against a target of 160 works for installation of ‘lifting barriers’ (to prevent users from crossing tracks during train movement), 94 installations had been done by Jan 2012.</td>
</tr>
</tbody>
</table>
The Ministry of Railways had appointed a High Level Safety Review Committee under the chairmanship of Dr. Anil Kakodkar to review the safety of the Indian Railways and recommend improvements. The Committee recently presented its report.

If the Committee’s recommendations are accepted, the total financial implication over the five year period is likely to be Rs 1,00,000 crore.

The key observations and recommendations of the Committee are listed below:

- The Committee notes that the ‘present environment on Indian Railways reveals a grim picture of inadequate performance’ largely due to poor infrastructure and resources, and lack of empowerment at the functional level.

- The financial state of Indian Railways is ‘at the brink of collapse’ unless some concrete measures are taken. Passenger fares have not been increased in the last decade and the infrastructure is severely strained. All safety margins have been squeezed. This has led to a neglect of infrastructure maintenance.

- In the present situation, the three vital functions (rule making, operations and the regulation) are all vested in the Railway Board. There is need for an independent mechanism for safety regulation. The Committee recommends the creation of a statutory Railway Safety Authority with enough powers to have a safety oversight on the operational mode of Railways.

- The Research Design and Standards Organization (RDSO), the apex technical wing of the Railways, is highly constrained. This has hampered the ability of the system to internalize emerging technologies. The Committee recommends restructuring of RDSO for greater empowerment. It also recommends that a Railway Research and Development Council (RRDC) be set up directly under the government.

- The Committee recommends the adoption of an Advanced Signalling System (akin to the European Train Control System) for the entire trunk route length of 19,000 km within 5 years. This is estimated to cost Rs 20,000 crore.

- All Level Crossings (both manned and unmanned) should be eliminated over five years. An estimated expenditure of Rs 50,000 crore will be required for achieving this target. The Committee is of the belief that this amount will be recovered within 7-8 years through savings in maintenance costs and improved train operations.

- The Committee also recommends a switch over from the ICF design coaches to the much safer LHB design coaches. This is likely to cost Rs 10,000 crore over the next five years.

- Other Committee recommendations on the maintenance of safety related infrastructure are estimated to cost about Rs 20,000 crore.
Appendix V: Expert Group for Modernization of Indian Railways

The Ministry of Railways had appointed an Expert Group on the Modernization of Indian Railways under the chairmanship of Mr. Sam Pitroda. The Expert Group recently presented its report.

The Modernization plan proposed by the Expert Group envisages a funding of Rs 5,60,396 crore over the next ten years. Of this, Rs 3,96,000 crore (or 71%) is to be spent in the first five years i.e. during the duration of the 12th Plan. The report recommends that this amount be raised by leveraging four main sources of funds:

- Budgetary support
- Internal revenue generation by Railways
- Monetization of blocked assets such as surplus land available with the Railways, and Public-Private Partnerships
- Fund raising from financial institutions and markets

The report also points out that many of the proposed measures will increase track life, improve loading capacity and allow operations at higher speeds. These improvements will contribute to system efficiency and improve revenue generation in Railways.

The key observations and recommendations of the Expert Group are listed below:

**Track & Bridges (Estimated cost Rs 33,046 crore)**
- Modernize 19,000 kms of existing tracks on routes A, B and D special. The tracks should be upgraded to carry heavier freight trains and achieve higher speeds. A, B and D special routes comprise nearly 40% of the total network and carry 80% of the traffic.
- Eliminate level crossings and provide fencing alongside tracks.
- Provide 100% mechanized track maintenance on routes A and B.

**Signaling (Estimated cost Rs 25,000 crore)**
- Implement Automatic Block Signaling on A and B routes.
- Introduce GSM-based mobile train control communication systems on A, B and C routes.

**Rolling-stock (Estimated cost Rs 72,571 crore)**
- Modernize rolling stock with investments in new-generation electric and diesel locomotives, high speed LHB coaches and heavy haul freight bogies.

**Stations (Estimated cost Rs 1,27,000 crore)**
- Of the total 7,083 stations, modernize 100 major stations immediately.
- Modernize the top 50 freight terminals.
- Develop 34 multi-modal logistics parks to provide integrated transport infrastructure facilities for users.

**Dedicated Freight Corridors (DFCs) (Estimated cost Rs 2,04,000 crore)**
- Construct Eastern and Western DFCs in the next 5 years.
- Construct North-South, East-West, East-Coast and Southern DFCs in the next 10 years.
- Upgrade feeder routes to DFCs.

**High Speed Passenger Train Corridors (Estimated cost Rs 60,000 crore)**
- Construct a High Speed (350 kmph) railway line between Ahmedabad & Mumbai within the next 10 years.
- Undertake studies for other tracks.

**Other PPP Initiatives (Estimated cost Rs 37,000 crore)**
- Attract private investment to augment locomotive and coach manufacturing units, captive power units, private freight terminals, etc.

**Information and Communication Technology (ICT) (Estimated cost Rs 1,315 crore)**
- Set up Real Time Information Systems (RTIS) to provide real time information at stations on running trains.
- Set up Radio frequency Identification (RFID) tracking system for wagons, coaches and locomotives to enhance wagon management and real time monitoring.
- Computerize Railway files and expedite decision making.

**Indigenous R&D (Estimated cost Rs 464 crore)**
- Develop indigenous capabilities to be a global leader in state-of-the-art railway technologies.
- Establish Indian Institute of Railway Research with Centers of Excellence in safety, wagon prototyping etc.

**Human Resource**
- Install and operationalize a modern Computerized Human Resource Management System.
• Rationalize and consolidate multiple services and cadres.
• Enable lateral recruitment from market for specialist functions.
• Create a system of reward for collective performance linked to incremental surplus generated by various units.

Organization

• Re-organize the Railway Board along business disciplines. The Chairman should serve as the Chief Executive Officer and Members should be responsible for disciplines such as:
  − Safety
  − Business development/commercial
  − Technology/ICT and signalling
  − Freight
  − Passenger Services
  − Infrastructure
  − Finance
  − HR
  − Public-Private Partnership

• Create commodity wise Key Account Directors for major commodities like coal, iron ore, steel, foodgrain, fertiliser etc. Coal forms 45% of total freight traffic and needs special attention.
• Similarly, create Key Account Directors of suburban, long distance passenger etc.
• Empower Zonal Railways. The present system of seeking sanction for capital investment from the Railway Board should give way to a more decentralized form or decision-making. GMs of Zonal Railways should be empowered to take decisions within certain investment limits.
• Revamp accounting systems so that train-wise and route-wise profitability analysis is available.
• Review the existing PPP policy framework to attract better investments.
• Constitute a Railways Tariff Regulatory Authority.

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