

MINISTRY OF RAILWAYS

I. PASSENGER AMENITIES AND DIGITAL INDIA INITIATIVES

- Railway Ministry made sustained efforts during the three years to enhance passenger earnings and no. of passenger. 1st time in recent year negative growth has been seized and increase in the number of passenger and earning started.
- 8221 Million Passengers travelled in 2016-17 as against 8151 Million passengers in 2015-16 registering a growth (+0.89 %). Passenger Earnings in 2016-17 is estimated at Rs. 2,000 crore more than last year. The total earnings in 2016-17 are estimated to be around Rs.47, 400 crore. This is the highest ever passenger earnings.
- To promote E ticketing, Implemented competitive ticket booking facility to the public at large. Service charges on e-ticket booked through IRCTC have been withdrawn. Cashless reservations (e tickets) have gone up from 58% to 68 %. Provided POS machines at important stations for reservation reducing waiting time in purchase.
- A more passenger friendly app with enhanced ease namely 'IRCTC- Rail Connect' with additional features launched. In addition to this, the existing UTSONMOBILE app has been improved with additional payment option of PayTM & Mobikwik.
- Yatri Ticket/Sewa Kendra (YTSK) Scheme launched to allow private agents to operate ticketing terminals for selling reserved as well as unreserved tickets.
- E-Ticketing portal in Hindi launched.
- Provision made for acceptance of international debit and credit cards for payment of E-ticket through IRCTC website
- New Services: Indian Railways implemented , 262 new services, 135 extensions of trains and 25 increase in frequency in last three years. This includes 5 Humsafar express trains, 2 Antyodaya trains, 10 DEMU and 82 MEMU trains
- Augmentation of passenger berths: Indian Railways made available 155949

additional berths through coach augmentation in last 3 years in comparison to 99859 in first three years of previous government. This is a 36% increase.

- Indian Railways attached 2208 coaches in regular trains in last three years.
- Special trains: About 105902 trips special trains run in last three years.
- Speeding up of trains: 350 trains speeded up in last three years. 104 trains converted to superfast express trains in 2016-17.
- New rakes: 52 pairs of trains replaced with LHB rakes in last three years.
- 57 coaches have been refurbished with improved interiors, vibrant colour schemes, additional amenities
- ICF Chennai has turned out 1 Glass Roof Top Tourist Coach called Vistadome coach having features like glass roof, LED lights, rotatable seats, GPS based info system etc. The coach has now been added for journey between Visakhapatnam and Araku Valley.
- 321 Deen Dayalu Coaches have been manufactured by ICF Chennai in last three years.
- 1435 stations have been provided with 100 % LED lights in last three years from 2014-17.
- Social media platforms on Facebook, Twitter and YouTube with the handle @railminindia launched. Ministry of Railways employed first of its kind, a real time 24x7 public grievance redressal system through Twitter, Facebook and provided medical, cleanliness, catering, security and other emergency assistance to travelling passengers.
- All India Security Helpline '182' setup to report any untoward incident and seek emergency help during travel & '138' to provide for all other query/complaints during travel
- A mobile based application viz. Complaint Management System (COMS) launched.

- E-catering facility launched at 250 stations. 408 Railway Stations designated for providing E-catering_in last three years.
- A massive scheme for providing Water Vending Machines (WVMs) to provide RO Water at affordable prices is implemented by Railway PSU IRCTC
- Enhanced Reservation quota for Senior Citizens and Women from two lower berths per coach to four lower berths per coach in Sleeper class
- Tatkal reservation timings have been staggered to serve dual purpose of providing convenience to and for staggering traffic on the e-ticket portal. All agents are debarred from booking tickets during first thirty minutes of opening of booking
- Automatic refund of Confirmed /RAC e-tickets on cancellation of trains similar to waitlisted e-tickets is granted without filing of TDR
- Time limit for booking reserved tickets was increased to 120 days w.e.f. 01.04.2015
- Destination alert and wake up alarm services launched on 139
- Automatic Destination Alerts to passengers through SMS for Rajdhani and Duronto trains.
- E-ticketing facility launched for disabled persons and for accredited journalists on concession pass.
- Yatri Mitras Sewa launched for enabling old and differently abled passengers requiring assistance to book wheelchair services cum porter services, at the stations
- Mobile charging facilities in all new general class coaches initiated and 6600 GS Coaches out of 17050 have already been provided with mobile charging points in last three years.
- Out of 1252 Stations identified for upgradation to Adarsh Stations', 1022 stations have so far been developed.
- Scheme namely 'SMS Gateway' launched enabling passengers to get SMS alerts on the status of reserved tickets

- New Generation system put in place on IRCTC website which can book 15000 online tickets instead of 2000 tickets per minute and can attend 2,00,000 enquiries instead of 50000 per minute
- Rationalization of Computerized Passenger Reservation System (PRS) done to enable passengers to buy tickets even after the preparation of reservation charts
- Paperless unreserved ticketing including Paperless Platforms tickets through mobile phone introduced in suburban sections of Western Railway, Central Railway, South Central Railway, Southern Railway, Eastern Railway, South Eastern Railway
- E-booking of disposable linen started on trains at New Delhi Railway Station, Nizamuddin Railway Station, Mumbai Central (BCT), Chhatrapati Shivaji Terminus (CSTM), Bangalore City Junction, Chennai Central and Trivandrum Central Stations.
- Currency Coin cum Card operated Automatic Ticket Vending Machines installed at select stations.
- Initiated one of the largest free public Wi-Fi systems in the world. Launched at 142 stations so far with a plan to extend it to 400 stations by 2018.
- The booking of retiring rooms at different railway stations made online and hourly booking introduced to enhance stay capacity, make it convenient and transparent.
- Total number of escalators installed in the last 3 years is 380 at 167 stations and 200 lifts at 99 stations. In 2016-17 alone, 61 escalators and 48 lifts were provided.
- Model Rake (a passenger carrying train with 24 coaches) developed with improved interiors, colour scheme, aesthetics and amenity fittings. This is running as Mahanama Express between New Delhi and Varanasi.
- Cancellation of confirmed, RAC and Waitlisted PRS counter tickets made easy using IRCTC website or phone No. 139.
- Indian Railways operated 28 pilgrims' special tourist trains.
- Dustbins to be provided in non AC coaches also

- NIFT, Delhi engaged for designing of bedroll etc.
- 3 new 'Rail Neer' plants for package drinking water set up at Amethi (UP), Parassala (Trivandrum) and Bilaspur (Chattisgarh) .
- In order to increase availability of accommodation for general class passengers on long distance Mail/Express trains, GMs were delegated powers to de-reserve Sleeper Class (SL) coaches as General Coaches (GS) in identified trains & sectors
- Suvidha Trains with graded pricing structure introduced with facility for booking on PRS in addition to e-tickets and facility of limited refund on cancellation of ticket.
- The Defense Travel System to eliminate exchange of defense warrants was rolled out on the NGeT platform. Till date about 4700 Defense units have started issuing tickets through this platform without exchange of warrants
- Number of berths available for physically challenged increased from 2 to 4
- Increase in RAC accommodation in various reserved class in SL, 2A, 3A.
- Transfer of vacant berths & next remote locations for confirmation and waitlisted berths.
- 'VIKALP', Alternative Train Accommodation System (ATAS) launched with a view to provide confirmed accommodation to waitlisted passengers and also to ensure optimal utilization of available accommodation. This facility initially started on New Delhi – Jammu, New Delhi – Lucknow, Delhi - Howrah, Delhi - Chennai, Delhi - Mumbai and Delhi - Secunderabad Circuits, is now expanded to all the sectors.
- Launched pre-cooked (ready-to-eat) meals of reputed brands on trains.
- Braille signage provided in approximately 9000 coaches to facilitate travel to visually impaired passengers.
- Provision of foldable ladder in First AC coaches launched
- Provision of Bio degradable garbage bags to passengers started on pilot basis

- In order to carry out efficient disposal of waste, Indian Railways has decided to provide separate dustbins for collections of biodegradable (wet waste) and non-biodegradable (dry waste) on the platforms and all passenger interface areas in A1 & A category stations apart from vending stalls.
- Middle bay reserved for women
- Pilot Project of Sale of Unreserved Tickets through Hand Held Terminals initiated at Hazrat Nizamuddin Railway Station of Northern Railway.
- “Janani Sewa” initiated – i.e. Hot Milk, Hot Water and Baby Food items at stations and children’s menu items on Trains.
- Implementation of policy allowing differently abled persons to avail concession even while travelling without escort.
- Single person accountability introduced for all facilities on trains-along with single nodal officer for monitoring.
- Launched optional travel insurance for passenger free of cost. Phase I rolled out with e ticket holders only.
- Flexi fare system introduced for Rajdhani/Duronto and Shatabdi trains.
- New system of allocating vacant berths after final charting to wayside stations started.
- “Rail Geet” dedicated to the Nation.
- Initiatives to Increase Non-Fare Revenue and to promote Ease of Ticketing through Digital Transactions Launched.
- First Humsafar Train Anand Vihar - Gorakhpur Flagged Off. So far 05 such trains on different routes have been launched.
- First Tejas Train with improved exterior and interior and with LED screen facilities and automatic entrance gates launched between Mumbai and Goa.
- First Antyodaya Train Ernakulam - Howrah Flagged off.

- New Catering policy 2017: unbundling food production and distribution and transferring catering to IRCTC for engaging professional agencies was launched.
- 33% Sub Quota for Women in Allotment of each Category of minor Catering Units at All Category of stations has been provided under the New Catering Policy of Indian Railways
- Ministry of Railways Roped in Self Help Groups To Make Local Cuisines Available Through E-Catering Services of its PSU IRCTC.

II. INFRASTRUCTURE CREATION

- Indian Railways commissioned 2855 Km of Broad Gauge lines, highest ever in 2016-17, 2828 Km 2015-16 & 1983 km of Broad Gauge lines in 2014 - 15 against an average of 1528 Km from 2009-14.
- 2013 kms of **energisation** has been done in 2016-17, another highest ever in Indian Railways. In the past 3 years, 5118 Kms of lines have been energised in comparison of 3257 kms in the first 3 years from 2009-10 to 2011-12
- Indian Railways have prepared an Action Plan for electrification of 24,400 route kilometer (rkm) of BG network in five years (2016-'17 to 2020-'21). Accordingly, pace of electrification has been increased to 4,000 rkm in 2017-'18 in comparison to an average of 1700 rkm from 2014-'15 to 2016-'17.
- To achieve, the target of 24,400 rkm of electrification, three more agencies viz IRCON, RITES & PGCIL have been assigned **electrification** works of 1735 rkm for the first time for fast track execution.
- 1435 no. of Railway stations have been provided with 100% LED lights in last 3 years, improving the illumination level at the Railway stations. All Railway stations shall be provided with 100% LED lights in the current year thereby improving lighting at the

Railway stations as well as saving electricity at the same time.

- During the year 2016-'17, CLW manufactured highest ever 292 locomotives of three-phase technology which are most energy efficient.
- The production targets for CLW for the year 2017-'18 have been revised to produce 300 three-phase electric locomotives. Dankuni and DLW will manufacture 25 three-phase electric locomotives each during 2017-'18. Overall 350 electric locos are planned for production in 2017-'18. Production target of 300, 75 and 50 locos has been assigned to CLW, DLW and Dankuni respectively in FY 2018-'19, thereby manufacturing 425 electric locos in 2018-'19.
- It is planned to upgrade the existing 6000 hp WAG locos to 9000 hp to improve the hauling speeds of freight trains.
- It is also planned to acquire passenger locomotives capable of hauling trains at 200 kmph on routes identified for semi high speed operation (160-200 kmph).
- High Horse Power loco of 12000 hp is expected to be inducted in the system in Feb., 2018.
- **Production of Electric Locomotive at DLW:** Pursuant to the decision taken by the Board, DLW was entrusted with the responsibility to manufacture two WAP₇ class of Three Phase IGBT based electric locomotives during current FY 2016-'17. With enormous efforts put in by officers and staff, DLW has turned out two electric locomotive during FY 2016-'17. DLW has also gained experience in manufacturing of Three Phase IGBT based electric locomotives.
- Further, target for manufacturing of 25 & 75 electric locomotives has been assigned to DLW for FY 2017-'18 & 2018-'19 respectively.
- Mission Raftar: To improve the average speed of freight trains on IR, 'Mission Raftar' has been launched. Under this project, measures are being taken to raise average speed of both passenger carrying trains and freight carrying trains. To begin with, the busiest

Ghaziabad – Allahabad - Mughalsarai route was taken up on priority basis for increasing average speed and it now has been successfully implemented. This was achieved by replacement of loco hauled commuter trains with Main line Electric Multiple Units (MEMU) and Diesel Electric Multiple Units (DEMU) trains. MEMU / DEMU trains have a potential for average speed increment upto 20 kmph in comparison to loco driven passenger trains. The Ghaziabad - Allahabad - Mughalsarai section is now free from conventional trains.

- 1306 ROB and subways completed in 2016-17. This is the highest ever. In last 3 years 3486 number of ROB and subways have been eliminated in comparison to 1814 in first 3 years of previous government.
- 45 freight terminals commissioned in 2016-17. This is the highest ever. In the past 3 years, 109 number of freight terminals have been commissioned in comparison of 85 in the first 3 years of previous government.
- 658 locomotives were manufactured in 2016-17. This is the highest ever. In the past 3 years, 1884 number of locomotives were manufactured in comparison to 1607 in the first 3 years of previous government.
- 4280 passenger coaches manufactured in 2016-17. This is the highest ever (last year 3978). In the past 3 years, 12137 number of passenger coaches were manufactured in comparison to 10791 in the first 3 years of previous government.
- Station Redevelopment – Indian Railways has taken up Station Redevelopment in a big way in Public Private Partnership model. Under this programme Indian Railways infact launched one of the largest transit oriented development program across the world worth Rs 1,00,000 Crores. A dedicated organisation for this purpose namely Indian Railway Stations Development Corporation (IRSDC) has been created. Redevelopment of 400 Stations is proposed to be done on e-bidding on “as is where is basis” ; 12 stations have been handed over to IRSDC for redevelopment. Habibganj railway station

in Bhopal has become the first railway station to be entrusted to the Developer by a transparent bidding process. This station is under the management of the Developer from 1st March 2017. The work of redevelopment of Gandhinagar (Gujarat) railway station has started from 9th January 2017. The work involves redevelopment of the station and construction of a 300 room hotel atop of the station roof. 23 stations are to be bid out by next year. Tenders for Anand Vihar, Bijwasan (Delhi) and Surat have been opened. Foreign countries have also expressed interest in the redevelopment of Railway Stations.

- IR commissioned two mega bridges over river Ganga at Patna and Munger. With these, the Railway networks of North and South Bihar have been integrated.
- The executions of the biggest infrastructural projects in the country, Eastern and Western Dedicated Freight Corridor (DFC) have been fast-tracked. The first ever section on DFC of 56 km between Durgawati-Sasaram commissioned. The project is progressing well for commissioning in phases by 2019
- One of the most challenging railway projects, conversion of 1500 V DC to 25000 V AC traction systems successfully completed over the entire Mumbai division of Central Railway.
- To link the Chardham pilgrimage centres through rail connectivity and in keeping with its budgetary commitment, the Indian Railways is taking the significant step to commence the **Final Location survey** for a single BG line rail connectivity for the Chardham Pilgrimage. Minister for Railways Shri Suresh Prabhakar Prabhu, laid the foundation stone for the **Final Location Survey for Single Broad Gauge Line Rail Connectivity** at a ceremonial program on 13th May at Badrinath.
- Rail Vikas Nigam Limited (RVNL), a Public Sector Enterprise under Ministry of Railways has been entrusted to undertake the Final Location Survey for rail connectivity to

Chardham and Chardham Yatra (Gangotri, Yamunotri, Badrinath & Kedarnath via Dehradun & Karanprayag) in the State of Uttarakhand.

III. MAKE IN INDIA INITIATIVE

- Indian Railways has taken a giant leap forward in 'Make in India' drive by signing Agreement for setting up of Diesel Locomotive Factory (DLF) at Marhowrah, Saran district, Bihar for procurement and maintenance of mainline most modern high power Diesel Electric Locomotives with M/s GE Diesel Locomotive Pvt. Ltd. A separate agreement signed with M/S ALSTOM for setting up of electric locomotive factory at Madhepura, Bihar for procurement and maintenance of most modern high power electric locomotives, both major PPP and FDI tenders of Indian Railways. This would be one of the highest FDI's in India amounting to order book of almost Rs 40,000 Crore. Construction of both the factories and maintenance depots has been started and prototype locomotives are expected by Feb'18.
- Rail Wheel Plant, Bela commissioned and regular production started
- Diesel loco factory at Varanasi is being expanded by 25%
- DEMU factory at Haldia was commissioned and Midlife Rehabilitation Workshop for coaches at Jhansi completed
- Construction of Electric Loco Assembly & Ancillary Unit of CLW at Dankuni in West Bengal completed
- Modern LHB Coach manufacturing facility commissioned at ICF Chennai.
- Bogie Manufacturing Factory at Budge Budge has been commissioned.
- RITES and SAIL Joint Venture factory for repair and overhauling of wagons commissioned at Kulti, West Bengal.

- Letter of Acceptance placed and construction work started for a forged wheel plant at Raebareli with ownership of Rashtriya Ispat Nigam Limited to manufacture 80000 forged wheels to substitute import. Railways have provided Land and Assured offtake support.
- Policy issued giving preference to local domicile holders for commercial licenses at stations.

III. A. REFORMS

- A Memorandum of Understanding with LIC of India for obtaining funds to the tune of Rs.1.5 lakh Cr signed.
- MOF approved issue of tax free bonds by IRFC amounting to Rs.6,000 Cr
- Powers delegated and decentralized for improving efficiency and transparency. Measures for E-tendering, E-auctioning, E-ticketing, E-Governance, E-Freight Demand, E-Catering, E-WheelChair, E-Concierge etc. taken for efficiency and transparency
- Ministry of Railways (MoR) signed Joint Venture agreement for formation of Companies with five State Governments viz. Odisha, Kerala, Chhattisgarh, Haryana, Jharkhand and Gujarat. JVs would undertake project development works for an identified basket of projects, which will inter-alia include surveys, preparation of Detailed Project Report (DPR) and getting requisite approvals, processing for sanctioning of identified projects and monitoring
- Ministry of Railways conducted world's largest online exam for recruitment for almost 92 lakh aspirants in more than 1100 centers in 351 cities across India. With a view to increase transparency, a new system of handing over the Question Booklets to the candidates has been introduced. A pilot project of uploading of Answer Keys and Cut-off marks has also been initiated.
- Replacement of Paper Applications, Duplicate OMR Sheets and bulky multilingual Question Booklets with Online Applications and Computer based online Exams has led

to saving 310 crore A4 size sheets, which means a saving of about 4 lakh trees from cutting, in last three examinations alone.

- Interviews eliminated for all recruitments for Staff at Group C & D level.
- Four Centres of Railways Research set up in premier educational institutions.
- A web enabled grievance redressal machinery (Nivaran) for both serving as well as retired railwaymen has been developed. The grievance can be tracked on real time basis, alongwith provision of appeal. 2000 senior authorities in 200 offices dealing with staff grievances have been integrated into one platform.
- An ERP based Human Resource Management System is proposed to be implemented all over Indian Railways and Rs. 339.72 Crores has been sanctioned for this purpose.
- Railways signed MoU to set up its own Railway Design Centre in collaboration with National Institute of Design (NID)
- “Rail Development Authority” to be set up. Cabinet has approved. The RDA will act within the parameters of the Railway Act, 1989 and undertake the following broad functions:
 - . Tariff determination – Framing principles, recommendations of tariff setting, principles for classification of commodities, framing principles for social service obligation and guidelines for track access charge.
 - Ensuring fair play and level playing field for stakeholder investment in Railways – Propose modifications and send suggestions/Advisory Notes on reference made by Ministry of Railways, make suggestions regarding policies for private investment, to ensure reasonable safeguards to PPP investors and to resolve dispute regarding future Concession Agreements.
 - Setting efficiency and performance standards.
 - Dissemination of information – Global best practices and benchmarking.
- 100 % FDI allowed in identified areas of railway sector and sectoral guidelines on FDI formulated

- 100% E-procurement solution Implemented for all kinds of contracts – goods, works and services. It is India's largest e-procurement system
- A web-enabled IT-Application "Project Monitoring and Information System (PMIS)" launched which will be implemented in Udhampur-Srinagar-Baramulla Rail Link (USBRL) project, followed by other mega and complex projects of Indian Railways. This will increase transparency in project monitoring
- "Technology Mission on Indian Railways (TMIR)" for Development/Research/Innovations in Railway Technologies in association with Department of Science & Technology, MoHRD and representatives of Industry has been set up.
- Big push to Non fare revenues - To be enhanced to 10-25% of the total revenue in five years through station redevelopment, monetisation of land and soft assets, advertising, Rail Display Network, On Board entertainment and overhaul of parcel business. Growth was 72% in 2016-17.
- Separate Directorate for Environment Created.
- Names & Jurisdiction of Members changed - Member Mechanical becomes Member Rolling Stock, Member Engineering becomes Member Infrastructure, Member Electrical becomes Member Traction.
- Prepared Handouts on 'Railway initiatives for Ease of Doing Business' and Nomination of 'Key Customer Managers'
- Merged rail budget with general budget w.e.f 2017-18 onwards as part of reform agenda.
- The setting up of Railway Planning and Investment Organisation is on to determine scientific planning process, professionalise preparation of project DPRs and financing of projects.
- The setting up of SRESHTHA, a new world class R&D organization is being taken up.
- Accounting Reforms: Expanded the scope and expedited the implementation of accounting reforms in Indian Railways.

- Creation of three secretary level posts for each department/ cadre.{(DG (S&T), DG Personnel, DG Stores.)}
- The process of transfers and postings of General Managers made absolutely transparent.
- The process of selection of DRMs revamped to ensure only deserving candidates are selected.
- Cabinet approves Productivity Linked Bonus to railway employees.
- Monitoring of Budget Implementation on daily basis through online system of E-Samiksha.
- Clear, measurable goals have been set for 2020 namely:
 - Reserved accommodation on demand;
 - Time-tabled freight trains;
 - Elimination of unmanned level crossings;
 - Average speed of freight trains at 50 kmph (Double of current average) and Mail/Express trains at 80 kmph (60% increase from current average);
 - Train punctuality to reach 95%;
 - Semi high speed trains along Golden Quadrilateral; and Zero direct discharge of human waste.
 - New Drug procurement policy for Indian Railway issued. Duties and responsibilities of Paramedical revised
 - Power to empanel Private Diagnostic Centers has been delegated to MD/CMS/CMO streamlining the procedure.
 - For better implementation of Food Safety and Standard Act, policy decision of one post of FSO in each division has been implemented
 - For improvement in food safety in trains and stations, joint policy issued in coordination with Commercial Directorate.

- The Power to empanel CGHS Recognized Hospitals has been delegated to General Managers of the Zonal Railways
- Guidelines for Cashless Treatment Scheme in Emergency (CTSE) for Retired Employees Liberalised Health Scheme (RELHS) beneficiaries have been issued. Initially, to gain experience a pilot will be run in four metros i.e. Delhi, Mumbai, Chennai & Kolkata.
- As a part of digital India - Common Hospital Information and Management System over Indian Railways –initiated pilot project in Northern Railway. Online system for issuing food license to food business operator is being developed in coordination with Food Safety and Standards Authority of India.
- IRMS has taken a major role in making India a “POLIO FREE COUNTRY”, by especially covering all children in transit.
- Academic achievement - Nine of railway zonal hospitals are functioning as institutions for training for the very prestigious DNB program in most of the specialties and some super specialties. Many of senior doctors of railways are examiners for Diplomate of National Board (DNB). Every year railway institutes are producing post graduate specialist and super specialist doctors who ultimately are the assets for the nation.
- Energy audit was conducted at 205 stations.
- Policy for provision of Distributed Power Wireless Control System (**DPWCS**) on all three phase locomotives being manufactured by CLW has been advised. This year, 75 sets are planned to be provided by CLW. This will help in improving safety while running long haul trains and reduce the requirement of drivers in the 2nd locomotive.
- In a very significant move, to elicit views & suggestion from non railway stakeholders on various Railway related issues, Ministry of Railways started a

new concept of organising Roundtable Conference. So far, Roundtable Conference on following subjects have been organised :

- LEVERAGING ICT IN INDIAN RAILWAYS
- MAKING DATA ANALYTICS WORK FOR INDIAN RAILWAYS
- RT WITH FREIGHT CUSTOMERS
- IMPROVING HEALTH SERVICES
- FINANCE
- ACCOUNTING REFORMS
- ENERGY
- PROMOTING SPORTING ECOSYSTEM IN THE COUNTRY
- ENHANCING SOCIAL FOOTPRINT OF INDIAN RAILWAYS
- TECHNOLOGY INFUSION IN INDIAN RAILWAYS
- ENVIRONMENT
- CATERING
- SECURITY

III B ADMINISTRATIVE REFORMS

- **Delegation & Decentralisation of powers to functional levels:** Significant reforms under this head have been operational since last year. E.g., All tenders for works and procurement contracts to be approved by Zonal Railways, which earlier used to come to Railway Board. Further power to sanction all cost escalations in estimates have also been delegated to Zonal Railways This is

leading to significant reduction in time taken for project approvals. In some cases, cycle time for procurement of material, reduced from 500 days to 88 days.

- Monitoring of zonal railways through MoUs/quantifiable performance parameters
Key Result Areas (KRAs): Right delegation has been accompanied with right accountability to ensure effectiveness. Overall vision and targets have been broken down to individual level targets for General Managers, PHoDs and DRMs, which are monitored on a monthly level. Performance is evaluated relatively to each other, which leads to a fair and objective evaluation.
- Revised performance appraisal – Formats for performance appraisal for all officers has been revised to make it more objective.
- Revamped contract management:-
 - Increasing use of EPC mode in construction. More than 10 projects worth Rs 5500 cr in various stages of award through EPC bidding.
 - Developed outcome based contract management for outsourcing contracts such as On Board House Keeping, which would lead to significant improvements in cleanliness levels on trains.

IV. GREEN INITIATIVES

- Commissioned 26 MW wind mill power plant at Jaisalmer
- 10 MW Solar Plants installed in two years. Massive solarisation (1000 MW Solar Power Plants) planned in next Five years with an eye on making Railways, the largest solar power producer in the country
- Direct procurement of about 750 MW of power by Ministry of Railways under Open Access as deemed license in the year 2016-17 a reduction in Traction power bill of Rs.

1400 Crore as against the power bill of 2014-15 was achieved. In the business as usual mode this reduction is more than Rs. 2000 Crore.

- In 2016-17 orders for the total capacity for solar installation has been increased to 16 MW and orders for 80 MW rooftop and 50 MW on Land based plants were placed. In addition tenders for about 350 MW have been planned and are at various stages.
- Railways provided 69,200 bio-toilets in trains in the last three years. 34078 bio-toilets were provided in 2016-17. 150 toilets have been provided for Divyang in 2016-17.
- First 'Green' DEMU train with 20% CNG introduced on Northern Railway to run between Rewari-Rohtak section
- Blending of 5% biodiesel in High Speed Diesel for traction purposes started.
- A hybrid toilet system, combining best features of a vacuum toilet system and indigenous bio-toilet system has been installed for trial in a First Class air conditioned coach of Dibrugarh Rajdhani which is running well since September 2015. The system does not require any waste handling facilities for evacuation and processing of waste. This system uses significantly less quantity of water is used for flushing
- M/s. RITES has been engaged for setting up of two pilot plants at NDLS and JP for disposal for Municipal Solid Waste (MSW) in an environment friendly manner including conversion of Waste to Energy (bio-methanation)
- A major push was given to get additional sanction of more than 30 Water Recycling Plants during 2015-16. As against this, less than 30 WRPs have been functioning all these years
- Setting up of Automatic Coach Washing Plants in major coach maintenance depots
- After field trials, Indian Railways has now developed the environmental friendly composite sleepers made up of recycled plastic waste, which will be used over all girder bridges in future for improved maintainability and facilitating higher speeds and higher axle loads.

- Indian Railways has started a massive exercise of planting trees alongside Railway Track with the signing agreement with Haryana & Punjab Government in the first phase.
- Tiger Express train was launched on the World Environment Day.
- International Conference on Decarbonisation of Indian Railways - Mission Electrification held.
- Indian Railways bagged highest ever 27 National Energy Conservation Awards for the Year 2015-16.
- Letters of Intent(LOI) on Environment Initiatives signed between Ministry of Railways and United Nations Environment Programme (UNEP).
- Change in Bio-diesel procurement & simplification of procurement policy with Cabinet approval.
- **Bio diesel:** 5% Blending of Bio Diesel started from 5th June, 2015 (i.e. World Environment Day) on Indian Railways.
- **Toilet onboard 4500 HP WDG4D Diesel Locomotive:** First WDG_{4D} 4500 HHP locomotive no. WDG_{4D}-70486 fitted with vacuum based toilet and bio-digester system rolled out from DLW.
- HOG supply: All WAP₇ locos to be turned out by CLW will be fitted with Hotel Load Converters. HOG power supply will do away with the requirement of diesel power car for feeding electric supply to coaches for train lighting and air conditioning, thereby carrying extra passenger coach and saving money. So far, CLW has manufactured 55 WAP₇ locomotives fitted with Hotel Load Converters (HOG). There is a saving of around Rs. 1.5 lacs per day per rake by HOG supply. Presently 26 Mail/Express trains are running on HOG on IR. It is planned to convert 100 rakes compliant to HOG supply by Mar'18, thereby resulting in saving of around Rs. 150 lacs/day i.e. around Rs. 550 crore per annum.

V.CLEANLINESS

- Indian Railways joined the Swachh Bharat Abhiyan in a big way. It formulated an integrated policy on cleanliness
- 27 Charitable Institutions/Social Organizations invited to take part in 'Swachh Rail, Swachh Bharat Abhiyan' through Shramdaan campaign
- Criterion for qualification of OBHS trains revised to include all important mail & express trains. OBHS facilities were extended to 193 more trains making a total of 864 trains in last three years.40 Clean Train Stations have been added in last 3 years.
- "Clean My Coach" Service launched for any cleaning requirement in the coach. A passenger can send an SMS on a mobile number 58888 or book through app and his request is attended to.
- Now around 45 percent linen is cleaned through mechanised laundries more such laundries planned.
- Intensive mechanised cleaning of coaches in coaching depots through professional agencies – 132 Coaching Depots in different Railways already have the system
- Cleanliness audit through 3rd party started for Railway stations institutionalised. Ranking of stations based on cleanliness being generated periodically
- A Nine-Day Long nationwide "Swachhta Saptah" launched.
- Use of CCTVs extended for monitoring of cleanliness activities at major stations.Weekly intensive cleanliness drives have been undertaken at various Railway stations, by Zonal Railways. Various theme-based drives have been undertaken from time to time with focus on cleanliness in different areas of Railways.
- Ministry of Railways released Third Party Audit Report on Station Cleanliness and Inaugurated Swachh Rail Portal. Vishakhapatnam in Andhra Pradesh and Beas in

Punjab is the Cleanest Station in A1, A Category Stations Respectively. South East Central Becomes the Cleanest Railway Zone.

- Ministry of Railways dedicated a “SWACHH RAIL PORTAL” to showcase rankings of stations and trains, methodology adopted for rankings and stations/trains specific dashboards. This web portal <http://www.railswachh.in> will also be leveraged to seek passenger feedback on cleanliness on a continual basis.

VI. CONNECTIVITY IN NORTH EAST AND J&K

- Indian Railways completed Udhampur-Katra Broad gauge line in the State of Jammu and Kashmir bringing Katra on Broad Gauge Railway map
- Lumding-Silchar Broad gauge section inaugurated giving seamless BG connectivity to Barak Valley of Assam
- Meghalaya came on the rail map with the flagging off the first ever train from Guwahati to Mendipathar in Meghalaya
- The Prime Minister laid the foundation for a new line to take rail connectivity to Mizoram’s capital Aizawl
- The Tripura’s Capital Agartala came on the broad gauge rail map.
- The capital of Arunachal Pradesh, Itanagar (service station Naharlagun) was connected to Delhi by Arunachal Express.
- All of 900 km of Meter gauge has been converted into Broad Gauge in North-East.
- Indian Railways commissioned 545 KM of Broad Gauge lines in North East in 2015-16 in comparison to 110 KM per year from 2009-2014
- An average of 411 Kms of lines were commissioned in North East in last 3 years in comparison to an average of only 110 Kms in previous government.

VII. PPP IN RAIL LINE PROJECTS

- In 2015-16, Indian Railways generated an investment of Rs.15,000Cr through PPP. This is the highest achieved till now.
- Partnership with State Governments, Industry is being encouraged to undertake coal and mining connectivity projects.
- To encourage port connectivity projects, thrust has been given to implementation of projects under the participative model policy of 2012.
- A Total of Seven Projects under Customer Funded Model or PPP costing about Rs. 2200 Crore have been cleared and are under implementation.
- Rail connectivity to Tuna Port at a cost of 142 Cr has been implemented in 2015.
- A Total of 6 Ports and mine connectivity projects costing about Rs. 3300 Crore have been approved for implementation under the Joint Venture Model
- Some of the projects under Joint Venture model are rail connectivity to the ports of Jaigarh (Rs 771 Cr.), Rewas (Rs.349 Cr), and Dighi (Rs.724 Cr.)

VIII. FREIGHT

- Massive rationalization of freight policies initiated
- Launch of rationalized siding policy-a major freight segment reform easing the setting up additional private terminals.
- Liberalized station to station special freight rates policy.
- Policy on Long term tariff contracts launched for Agreements with key customers.
- Merry-Go-Round system introduced to capture short lead traffic near steel plants and thermal power house
- Port congestion charges withdrawn which will help in increasing traffic from the Ports to hinterland
- Two-Point/Multi Point/Mini Rake facility extended to maximize traffic.

- Roll on – Roll off scheme launched on Digha Rail Bridge over River Ganges near Patna and on Northern Frontier Railway.
- Auto hub at Walajabad in Chennai Division developed for automobiles movement
- Dual pricing policy of Iron withdrawn.
- Automatic Freight Rebate Scheme for traffic loaded in Traditional Empty Flow Direction introduced.
- Computerized system to register demands for wagons introduced. Electronic forwarding note and Electronic Railway Receipts introduced to enhance efficiency and transparency in freight operations
- Liberalised Wagon Investment Scheme allows investment by End users in Special Purpose Wagons and High Capacity Wagons. So far approval has been given for procurement of 9 rakes under this scheme.
- Special Freight Train Operator Scheme has been launched to increase rail share of the non-traditional commodities like molasses, fly ash, edible oil, caustic soda, chemical, petrochemicals, alumina & bulk cement, etc. So far 6 rakes have been inducted under this scheme.
- Automobile Freight Train Operator Scheme has been launched which permits procurement and operation of special purpose rakes by private parties. So far 9 rakes have been inducted under this scheme.
- Wagon Leasing Scheme, Private Freight Terminals, accelerated to improve freight.
- Time-Tabled container train service from Domestic Container Terminal, Okhla (Delhi) and Whitefield (Bengaluru), Okhla - Tondiarpet, Okhla - Nagapalli, Tughlakabad - Khatuwas.
- Liberalized comprehensive parcel leasing policy & Liberalized policy for parcel cargo express trains launched.

- Several interactive seminars with major industries and stakeholders of Indian Railways freight business organized.
- Appointed Key Customer Managers to serve as a single point of contact for all major freight customers.
- Expanded commodity basket for container traffic – 43 additional commodities in FAK
- Key freight sector initiatives of Indian Railways inaugurated.
- Overall loading is about 1109.1 million Tonnes in 2016-17. This is the highest ever annual freight loading by Indian Railways (previous best of 1104.2 Metric Tonnes in 2015-16)
- Iron ore loading is the highest ever at 137.6 Metric Tonnes in 2016-17 (previous best was 136.9 Metric Tonnes in 2007-08)
- Steel loading is the highest ever at 48.4 Metric Tonnes in 2016-17 (previous best was 42.5 Metric Tonnes in 2015-16)
- Concession on bagged consignments loaded in open wagons.
- Classification of certain commodities such as 'Red Mud' etc changed to increase loading.
- Highest coal loading from CIL sources. (222 rakes/day in 2016-17)

IX. SAFETY IN RAIL OPERATIONS

- Working towards 'Zero Accident' Mission.
- 1503 unmanned level crossings eliminated in 2016-17. This is the highest ever. In the past 3 years, 3904 unmanned level crossings have been eliminated in comparison of 3422 in the first 3 years of previous government.
- TPWS is a safety Automatic Train Protection (ATP) system conforming to European Train Control System (ETCS) Level-1. TPWS trials at 160 Kmph were successfully conducted.

- A cost effective indigenous safety system – Train Collision Avoidance System (TCAS) is being developed indigenously by RDSO and the trails are on. 282 Level Crossing Gates have been interlocked with Signals to enhance safety.
- Pilot Project initiated for Improving Safety at Unmanned Level Crossing which include automatic warning to road users through flasher light and Sensing of Obstruction on level crossing and visual warning to train drivers.
- Compensation Rate Payable to Railway Accident Victims doubled.
- Mission to retrofit all existing passenger Coaches numbering around 45,000 with Central Buffer Coupler (CBC) so as to make them safer.
- Indian Railways to install Railway vehicle mounted sensor based “On Board Condition Monitoring System” (OBCMS) that will monitor the health and safety of key components of the coaches, freight cars, locomotives that would finally result in improved safety, improved reliability, higher utilization, increased up-time and reduced operation cost of the railway assets by enabling Predictive Maintenance and reduction in sudden catastrophic failures of these assets. An Expression of Interest (EOI) for development of “OBCMS” has been floated.

X. SECURITY IN RAILWAYS

- Fitment of CCTV surveillance cameras for women security in trains initiated with first such fitment undertaken in Amritsar-New Delhi-Shan-e Punjab Express
- Development of security App over some of the Zonal Railways.
- A total of **27,233** passenger complaints have been attended on Security Helpline 1800111322 & 182 from August, 2014 upto April, 2017
- A total of **8,284** complaints were received and attended on **Twitter** handle of Min. of Railways on security related issues, since July 2015 upto April 2017.

- Total of **24,167** runaway, missing, trafficked, destitute, kidnapped, etc. children were rescued by RPF over all Zonal Railways and handed over to their relatives/NGOs from the year 2014 upto April, 2017.
- 26 Child Help Desks, for taking care of runaway/destitute/abandoned/trafficked children, have been set up at 26 identified Railway stations.
- 344 railway stations have already been provided with CCTV cameras which include 101 railway stations where these cameras have been provided under Integrated Security System (ISS). 983 A1, A, B & C category railway stations have been further identified for installation of CCTV cameras under Nirbhaya Fund.
- Ministry of Home Affairs has awarded “Excellence in Service” award to DG/RPF.
- Decision to develop Forensic Science Lab for RPF, centralised dog training centre & special technology centre for RPF has been taken.

XI.HIGH SPEED RAIL

- Trials for 160/200 kmph train sets carried out which will improve average speed of passenger carrying trains thereby reducing journey time significantly.
- MoU between India and Japan signed for Mumbai–Ahmedabad High Speed Rail (Bullet Train) Project using Shinkansen Technology covering a total of 508 kms at an estimated cost of Rs. 98000 Crores. A new entity named National High Speed Rail Corporation Limited has been set up in February, 2016 to implement the project.
- Further high speed studies (300 + kmph) are being conducted by Ministry of Railways on Diamond Quadrilateral High Speed Rail network. Feasibility studies of Delhi- Mumbai, Mumbai- Chennai and Delhi- Kolkata are underway. The feasibility studies of Delhi-Nagpur and Mumbai –Nagpur corridors are being taken up through G2G cooperation with Chinese and Spanish governments respectively

- Ministry of Railways launched Gatimaan Express, country's first semi high speed train with a maximum speed of 160 kmph between Delhi and Agra heralding a new era of high speed rail travel in India.
- The trial run of fast Talgo Coaches from Spain was successfully conducted on three different sections (Bareilly Moradabad, Mathura- Palwal, New Delhi- Mumbai routes). The trials confirmed the reduction in transit time as compared to the Rajdhani / Shatabdi Trains operating in India.
- Delhi – Mumbai and Delhi – Kolkata corridors being developed to enable 200 kmph trains through this approach. Works at a cost of ₹ 18,163 crore have been sanctioned for upgrading the speeds on these two tracks.

XI.SPORTS

- 35 Sportspersons from Indian Railways participated in Rio Olympics. Indian Railways among all sports organization in the country becomes the highest contributor for the Indian Olympic Contingent. Almost Entire Indian Women Hockey Team & Weightlifting Team Comprises of Railways Players.
- Indian Railways' Employee Sakshi Malik won the Olympic Bronze in 58 kg Category of Women's Freestyle Wrestling.
- Indian Railways Men Hockey Team Won MCC Murugappa Gold Cup Hockey Tournament For The First Time.
- Indian Railways Team Won Senior National Powerlifting Championship.

XII. MISCELLANEOUS

- 14 MoUs/MoCs/other agreements for cooperation in rail sector have been signed with Railways/Governments of Czech Republic, China, South Korea, Canada, Kazakhstan, Slovak Republic, UK, Japan, Germany, France, Russia & Sweden.
- Under Skill India Initiative, 53 locations across the country have been identified by setting up training centres
- Indian Railways made successful arrangements to transport drinking water to drought-affected areas of Latur district in Maharashtra
- Indian Railways lent helping hand during the Nepal earthquake tragedy by providing 'Rail Neer' bottles and by transporting Nepal evacuees
- Railways also helped during the J&K floods
- Railways were in the forefront in extending help to the Indian nationals returning from Yemen
- Indian Railway weightlifters (5 Women & 1 Men) represented India in the Commonwealth Youth; Junior & Senior Weightlifting Championship held at Pune from 11th to 15th November, 2016. All Railway players won medals in this Championship
- Memorandum of Understanding (MoU) signed Ministry of Railways and PEC University of Technology for setting up of 'Kalpana Chawla Chair' on Geospatial Technology for Indian Railways at PEC University of Technology, Chandigarh.
- International Conference on Technology for Ultra High Speed Rolling Stock jointly organised by Institute of Rolling Stock Engineers (IRSE) and Indian Railways Service of Mechanical Engineers Association (IRSMEA) with active support of Indian Railways conducted.
- Indian Railways Ties up with Maharaja Sayajirao University, Vadodara for award of MBA Degree to Railway Probationary Officers in Specific Railway Fields.

- Ministry of Railways Promoting Railway Related Education in The Country in Collaboration With Premier Educational Institutions. Formal MoUs for setting up Centers of Railway Research (CRRs) have already been signed between Ministry of Railways and University of Mumbai, IIT Kanpur, IIT Madras, IIT Roorkee. Another Fifth Center for Railway Research is also in existence in IIT Kharagpur. To expand the areas of research further, Indian Railways have also set up the Malaviya Chair at IIT BHU, Varanasi for development of proper materials for use by Indian Railways.
- Customer Commitment Charter indicating service level commitments of Indian Railways to passengers and freight customers has been developed and all Zonal Railways have uploaded their respective Customer Commitment Charters on the web.
- Indian Railways Plan of Action To Promote SHGs.
- Cabinet approved Mumbai Urban Transport Project (MUTP)- Phase III.
- Minister of Railways inaugurated Website of National Rail Plan,2030.
- Conference on “Strengthening Railway Transport Connectivity in South and Southwest Asia” organized by United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) in coordination with Organization for Cooperation between Railways (OSJD) and Ministry of Railways, Government of India.
- National Rail Plan 2030 - To be prepared in consultation with state governments, public representatives and other relevant ministries for harmonious and integrated development of rail network in synergy with other modes.

AKS/MKV/AK