



CIVIL SERVICE DIGEST (CSD-Daily)

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Year End Review-2018: Ministry of Tourism

DEVELOPMENT OF TOURISM INFRASTRUCTURE:

- Development of tourism infrastructure is being given priority to provide a better tourism experience to the tourists. Theme based circuits are being developed under the Swadesh Darshan Scheme spanning the entire country.
- Nine projects under the Swadesh Darshan Scheme have been inaugurated between August to December 2018 in the States of Manipur, Arunachal Pradesh, Andhra Pradesh, Nagaland, Chhattisgarh and Madhya Pradesh. Facilities like Tourist Facilitation Centers, Eco Log Huts, Sound and Light Show, Helipads, Cafeteria, Wayside Amenities, Nature Trails, Jetties, Boat club, Adventure Zones, Interpretation Centers, Water Sports, Craft Villages, Tribal Thematic Villages, Illumination etc. have been developed as part of the above projects
- Integrated development of identified pilgrimage destinations is being undertaken under the 'National Mission on Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive' (PRASHAD) Scheme.

'ADOPT A HERITAGE' PROJECT:

- Ministry of Tourism in close collaboration with Ministry of Culture and Archaeological Survey of India (ASI) launched “Adopt a Heritage Project” to provide world class tourist facilities at the various natural/cultural heritage sites, monuments and other tourist sites
- The project plans to entrust heritage sites/monuments and other tourist sites to private sector companies, public sector companies and individuals for the development of various tourist amenities.

BHARAT PARV:

- The prime objective of organizing the event is to generate a patriotic mood, promote the rich cultural diversity of the country, to ensure wider participation of the general public and to popularize the concept of ‘Ek Bharat Shreshtha Bharat’, ‘Dekho Apna Desh’ and ‘Tourism for All’

INDIA TOURISM MART 2018:

- The First edition of the India Tourism Mart 2018 was organized by the Federation of Associations in Indian Tourism and Hospitality (FAITH) with the support of the Ministry of Tourism and State Governments/Union Territory Administrations
- India Tourism Mart provided a platform to different tourism stakeholders for interacting and conducting business with foreign buyers.

INCREDIBLE INDIA MOBILE APP:

- The Incredible India Mobile App showcases India as a holistic destination, revolving around major experiences, such as spirituality, heritage, adventure, culture, yoga, wellness and more.
- The mobile app has been designed keeping in mind the preferences of the modern traveler and follows the trends and technologies of international

standards. The app has been equipped with features to assist the traveller in each phase of their journey to India.

North East Industrial Development Scheme (NEIDS)

About:

North East Industrial Development Scheme (NEIDS), 2017 covers eligible industrial units in the manufacturing and service sectors Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim to promote industrialization and boost employment and income generation.

Importance Of NEIDS

- **Promote industrialization:** It will promote industrialization in North Eastern Region (NER) states including Sikkim and will boost income generation and will boost income generation and employment.
- **Promote employment:** For this, government is incentivizing primarily MSME Sector through this scheme. It is also providing specific incentive through scheme to generate employment.
- **Benefits to industrial units:** It will provide various incentives and benefits to all eligible industrial units. The overall cap for benefits under all components of incentives will be of Rs. 200 crores per unit.

Incentives to be provided to new industrial units in NER

- **Central Capital Investment Incentive for Access to Credit (CCIIAC):** 30% of investment in Plant and Machinery with upper limit of Rs.5 Crore on the incentive amount per unit.
- **Central Interest Incentive (CII):** 3% on working capital credit advanced by eligible Banks and Financial institutions for first 5 years from date of commencement of commercial production.

- **Central Comprehensive Insurance Incentive (CCII):** Reimbursement of 100% insurance premium on insurance of building and Plant & Machinery for 5 years from date of commencement of commercial production.
- **Goods and Service Tax (GST) Reimbursement:** Reimbursement upto the extent of central government share of CGST and IGST for 5 years from the date of commencement of commercial production by the unit.
- **Income-Tax (IT) Reimbursement:** Reimbursement of centre's share of income tax for first 5 years including year of commencement of commercial production by unit.
- **Employment Incentive (EI):** The Government will pay 3.67% of employer's contribution to Employees Provident Fund (EPF) in addition to its bearing 8.33% Employee Pension Scheme (EPS).
- **Transport Incentive (TI):** Indian Railways will provide 20% of cost of transportation including subsidy currently provided for movement of finished goods by rail. Inland Waterways Authority of India (IWAI) will provide 20% of cost of transportation for finished goods for movement through inland waterways. Airport nearest to place of production will provide 33% of cost of transportation of air freight on perishable goods (defined by IATA) to any airport within country.

MeitY introduces - Draft rules of Information Technology (Intermediary Guidelines [Amendment] Rules), 2018

On December 24, 2018, the **Union Ministry for Electronics and Information Technology (MeitY)** announced draft rules of the **Information Technology (Intermediary Guidelines) Rules 2018**.

Objective:

To end the complete encryption system to trace 'unlawful' activities for better national security.

Key points:

i. These would amend and replace the **Information Technology Act, 2000** and would include the inter-ministerial consultations, followed by discussions with major social media platforms like **Facebook, Google, Twitter, Yahoo and WhatsApp** and associations representing intermediaries.

ii. According to the amended rules under Section 79 of the IT Act,

- It will be mandatory for online platforms to deploy technology to enable access to content seen as “unlawful”.
- Information about “unlawful acts” can be sought from the intermediaries by “court order”
- the parameter to judge unlawful acts would be **Article 19(2)** of the Constitution, which places restriction on freedom of speech and expression.
- the measures proposed include breaking end-to-end encryption so that the origin of messages can be traced.
- online platforms will keep a record of “unlawful activity” for a period of “**180 days**”, double the **90** days in the older version.
- When required by lawful order, the intermediary shall, within **72 hours** of communication, provide such information or assistance as asked for by any government agency.
- The intermediary should publish on its website the name of **the Grievance Officer** and his contact details.

iii. Furthermore, the intermediary who has more than **fifty lakh users in India** or is in the list of intermediaries specifically notified by the government of India shall:

- Be a company incorporated under the Companies Act, 1956 or the Companies Act, 2013;
- Have a permanent registered office in India with physical address; and
- Appoint in India, a nodal person of contact and alternate senior designated functionary, for 24×7 coordination with law enforcement agencies and officers to ensure compliance to their orders/requisitions made in accordance with provisions of law or rules.

Indian Railways achieved all- round progress during the year with firm focus on safety and passenger services by leveraging the latest in technology and marshalling the inherent strength of a highly dedicated workforce. Some of the significant achievements of the year are highlighted below:

Make In India

- Induction of semi-high speed Train-sets to European standard: ICF took up manufacturing of Semi High Speed (160 Kmph) Self Propelled Train-set with indigenous efforts, termed Train-18, with contemporary features as per global standards. The first trainset has been rolled out by ICF in October 2018 and will shortly be ready for service after testing & trials.

- ICF shall be making at least two more such rakes this year. Depending on feedback and requirements target for induction in 2019-20 shall be communicated in due course.

- 100% indigenization has already been achieved in manufacturing of around 20-25% of total fleet of the track machines such as Utility Vehicles (UTVs), Rail Bound Maintenance Vehicles (RBMVs), Track Laying Equipment (TLE), Rail Threader & Rail-cum-Road Vehicles (RCRVs) over IR.

- 70% of existing fleet of machines have been manufactured by a world's leading manufacturer with a local content in the range of 20% to 50%.
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 - Now the local content is being further increased to minimum 51% to 80% under Make in India Policy.
 - Encouraged by Make in India, one more manufacturing plant by a world's leading manufacturer of track machines is being set up in Gujarat and expected to start production by May'2019.

Technological Development

Ø Improvements in AT Welding technology has been carried out to improve quality of welds for enhancement in safety.

- **Thick Web Switches:** Policy decision has been taken to use only Thick Web Switches on IR network. This enhances mobility due to higher permitted speed for loop lines, improves safety and maintainability.
- **Weldable CMS Crossing :** It is planned to provide Weldable CMS Crossings on all important routes on Indian Railways. For the first time, order for manufacturing and supply of about 4000nos. Weldable CMS Crossings has been placed. Instead of importing the finished weldable CMS crossings, the working agency is required to set up requisite infrastructure in the country which besides ensuring transfer of technology will also contribute towards ‘**Make in India**’ mission.
- **Advancements in Ultrasonic Testing of Rails and Welds:** Analogue USFD testing machines have been replaced by digital USFD testing machines capable of data logging, saving and transferring testing results to on-line Application TMS and PCs.
- **Bridge Management System:** This Web-enabled IT Application covers all aspects of Bridge Master Data, drawings, photographs, etc. This will be a single IT-based repository for all aspects related to bridges on Indian Railways viz. Master Data, condition, inspections, design drawings, etc. The Application was launched by Minister of Railways on 12th July, 2018. It is being further developed to incorporate various bridge inspections.

Improved Sleepers And Fittings

- **Improvement in Concrete Sleeper:** In order to strengthen track structure, a wider and heavier sleeper has been developed in 2014 which is fit for 25 t axle load at 100 kmph. After successful field trial over five Zonal Railways wider and heavier sleeper has been adopted and approved for full use from FY 2019-20. This is done in a record time of 3 years from drawing board to insertion in field for trial against normal period of 8-10 years.:
- **Web base system for track crossing permission -** A web based system for granting permission of track crossing related to various public utilities i.e. water/sewerage/gas pipeline, OFC Cable etc. has been developed and made operational on Indian Railways since 01.04.2015. This system provides submission of online application and knowing status of the same till permission is

granted. **This avoids the frequent visits of the user to the Railway Offices for knowing the status of application.**

- To expedite clearance of track crossing cases, power to accord sanction is delegated to DRM for all the cases.
- **Land Data Management** - A web based application called Land Management Module integrated with Track Management System (TMS) of Indian Railways has been developed, for maintaining centralized land data i.e. details of acquisition/area/usages and land plans of Land Bank of Indian Railways in digitized form. **Indian Railways has already completed most of the work related to digitization of land record.**
- Indian Railways have also digitized details of vacant land plots measuring more than one acre .

Infrastructural Development

Capacity Augmentation through Dedicated Freight Corridors (DFCs)

- Thrust is to commission strategic projects like Dedicated Freight Corridors (DFCs).
- Work on both Eastern & Western Dedicated Freight Corridors progressed on full speed during the year culminating in successful trial of freight train over Phulera-Atari section of Western Dedicated Freight Corridor & Khurja- Bhadan section of Eastern Dedicated Freight Corridor(EDFC) in August & November 2018 respectively. The trials of Freight trains will be completed on extended sections of Rewari – Madar section of Western Dedicated Freight Corridor (WDFC) & Khurja – Bhaupur section of Eastern Dedicated Freight Corridor by the end of the financial year.
- The Dedicated Freight Corridor will be fully commissioned in phases by March 2020.
- Part sections of Western and Eastern DFCs viz 190 km Ateli-Phulera section of WDFC opened on Aug 15, 2018 and 194 km New Khurja – New Bhadan section of EDFC opened on Nov 23, 2018.

Railway Development in North East Region

The following are the most noticeable achievements of the last four years in NE Region:

- **Major Works and On-going Projects:**

- 970 km Gauge Conversion completed in NE region in last 4 years. Thus, all MG sections converted to BG and there is no MG operation in entire North East Region.
- 353.15 km of New Line/Gauge Conversion/Doubling commissioned per year during the period 2014-15 to 2017-18 as against on average of 110 km commissioning per year in NE Region in period from 2009 to 2014.
- 15 New lines projects of 1,397 km length having a total cost of Rs. 47,695 crore are in different stages of Planning/Sanction/Execution which fall partly or fully in the NE states.
- 6 Doubling projects of 482 km length having a total cost of Rs. 9,305 crore are in different stages of Planning/Sanction/Execution which fall partly or fully in the states of NE Region.

- **Connectivity to North Eastern States:**

The Seven Sister States of North Eastern India (Assam, Meghalaya, Nagaland, Tripura, Mizoram, Manipur and Arunachal Pradesh) have been connected by Rail Network.

- Meghalaya came on the rail map with the flagging off the first ever train from Guwahati to Mendipathar in Meghalaya on 29.11.2014 by Hon'ble Prime Minister Sh Narendra Modi.
- Tripura has been put on broad gauge railway map. On July 31, 2016, the then Railway Minister Shri Suresh Prabhu flagged off the Agartala-New Delhi 'Tripura Sundari Express'.
- The Agartala-New Delhi Rajdhani Express was launched on October 28, 2017. It trudges the longest route (2,422 km) for any Rajdhani Express in service.
- Jiribam, the first railway station in Manipur was connected by broad gauge line. **Hon'ble Prime Minister Sh Narendra Modi** flagged off the first passenger train service to Jiribam on May 27, 2016. The passenger train service to Bhairabi in Mizoram was also flagged off by him.
- Lumding – Silchar Broad Gauge section inaugurated after Gauge Conversion on November 20th, 2015, giving seamless BG connectivity to Barak Valley of Assam.

- **Connectivity to State Capitals:**

- As per Indian Railways' vision for North East region, all eight North East state capitals are to be linked with broad gauge rail link by 2020-21. Previously, only Guwahati had broad gauge railway linkage. Further, Arunachal Pradesh & Tripura State capital has been connected.

- **Marvels of Railway Engineering:**

- **Jiribam – Tupul - Imphal New line Project :**

- **India's tallest bridge** with pier height of 141 m is being constructed on Irang River at Noney in Tamenglong district, Manipur as part of the Jiribam-Tupul-Imphal new line project. Its height will be almost equal to two QutubMinars combined.

- There will be six tall bridges having pier height more than 70m in the Bhairabi-Sairang new line Project (51.3 km).

Mega Projects (Commissioning of Bogibeel Bridge):

- It is longest Rail-cum-Road Bridge of India.(4.94 Km long Bridge)
- Across River Brahmaputra near Dibrugarh in the State of Assam
- Dedicated to the Nation by **Hon'ble Prime Minister of India Shri Narendra Modi Ji on 25th December, 2018.**
- Double line track with 3 lane Road and 74 km of total Railway track
- This Project was sanctioned in 1997-98 at a cost of Rs.1000 crore and the work was commenced in April, 2002 by **Bharat Ratna Shri Atal Bihari Vajpayeeji, the then Prime Minister of India.**

The completion cost of the project is Rs.5820 crore (approx.).

- DEMU services were introduced in Tinsukia Division of NF Railway in 2016-17. New coaching depots have become functional at Silchar in Barak valley region of Assam and at Agartala in Tripura. These measures have provided better

connectivity to the isolated region of North East. The following projects have also been sanctioned for the North East region:

- Workshop for refurbishing of LHB coaches at New Bongaigaon at the cost of Rs 90 Crore, sanctioned in the year 2017-18. Tender awarded, ready to start shortly.
- Provision of Diesel Electric Multiple Unit / Mainline Electrical Multiple Unit Shed at Lumding at the Cost of Ra. 73.67 Crore, included in Pink Book 2018-19. Tender awarded, ready to start shortly.

Station Beautification

- Indian Railways has launched an innovative initiative for the station beautification with wall art of paints and graffiti or local arts with participation of local artists, private groups and volunteers. 65 stations across Zonal railways have been beautified under this initiative by utilizing skills of local artists, mostly using local art form, painting style, local themes or contemporary arts. This initiative provided forum for expression of the emerging talents in the area and visibility of local art forms to the travellers. Balharshah & Chandrapur Railway stations (Central Railway) Madhubani Railway station (East Central Railway) & Madurai Railway station (Southern Railway) Gandhidham Railway station (Western Railway), Kota Railway station (West Central Railway) & Secunderabad Railway station (South Central Railway) etc. have been beautified.
- Indian Railways has also commenced work on soft upgradation of 68 stations . This is targeted to be completed by 31st March, 2019. This initiative is to give substantial improvement to various passenger amenities like traffic circulation, inter platform transfer, waiting halls, facade improvement, lighting and accessible stations to Divyangjan.

Initiatives for Station Redevelopment over Indian Railways

- The Cabinet approved on 03.10.2018, for redevelopment of Railway Stations, through simplified procedures adopting various business model, commercial as well as residential development at railway stations and for longer lease tenure upto 99 years.
- Indian Railways Station Development Corporation (IRSDC) has been entrusted with all the stations to conduct techno-financial feasibility studies and prepare the business plan.

- Four stations are under progress i.e. Habibganj(Bhopal), Gandhinagar, Lucknow (Charbagh), Lucknow Gomtinagar.
- Habibganj and Gandhinagar are targeted to be completed by Feb 2019.

Improved Passenger Services

Indian Railways has introduced the following new Modern Trains/Coaches :

- **Humsafar Trains:** Humsafar trains having additional amenities in the coaches have recently been introduced for providing comfortable Air-Conditioned III Tier travel. So far 29 Humsafar rakes (9 rakes in 2016-17, 10 rakes in 2017-18, 10 rakes in 2018-19 upto 30.11.18) have been turned out by the Production Units.

Following major features have been introduced:-

- GPS based Passenger information system,
 - Passenger announcement system,
 - Dust bins in each bay,
 - Coffee vending m/c,
 - Improved aesthetics pleasing colour scheme,
 - Passenger announcement System,
 - Closed-Circuit Television (CCTV) based surveillance system,
 - Integrated Braille displays etc.
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- **Antodaya trains:** Long distance fully unreserved train, LHB general second class coaches with vestibules, cushioned luggage racks, additional hand hold in doorway area for the comfort of standing passengers, provision of J hooks near longitudinal luggage racks for hanging carry bags, enhanced number of mobile charging points, Fire extinguishers with anti-theft arrangement, more pleasing colour scheme for interior and exteriors, provision of MU cable in each coach for running train service with loco at both ends. So far, 15 Antodaya rakes (3 rakes in 2016-17, 10 rakes in 2017-18 and 3 rakes in 2018-19 upto 30.11.18) have been turned out by Production Units.

- **Deen Dayalu Coaches:** Main additional features of Deendayalu coaches are - Cushioned luggage racks, Additional hand hold in doorway area, provision of J hooks for hanging carry bags, Toilet occupation indication display board, Enhanced mobile charging facility, Fire extinguishers with anti-theft arrangement, Water level indicator, Pleasing Interiors, Improved exterior colour scheme with anti-graffiti coating, polymerized floor coating in toilets. So far more than 1100 Deen Dayalu coaches have been turned out by Production Units.

- **Tejas trains:** One Mumbai CST-Karmali Tejas train is plying between Mumbai CSTM to Karmali/Goa has been started on 24.05.2017. Two more Tejas rakes have been turned out of the PUs in the current year. These Ultra modern trains with speed potential of 200 kmph have following major distinguished features:
 - Automatic entrance doors,
 - Passengers Information display system (Electronic Reservation chart System),
 - GPS based Passenger information system,
 - Fire and Smoke detection system,
 - Superior toilet fittings,
 - Sealed vestibules,
 - LED lights,
 - CCTV,
 - Aesthetically pleasing colour scheme.

- **Vistadome Coaches:** These coaches are provided with enhanced viewing area including on roof to enable tourists to enjoy panoramic view while travelling. The feature has been well received. Total of four such coaches are in service on scenic sections.

- **Model Rakes :** Model Rakes include following features :

- Modular Panels,
- Superior material for panels,
- Ergonomically designed ladders,
- Aesthetically appealing toilet modules,
- Large size mirrors, Platform washbasin,
- Controlled discharged water taps,
- Odour control system,
- Dustbin inside the toilet,

First Model rake named as New Delhi-Varanasi Mahamana Express was started in Jan'16. Bhopal MLR Workshop has turned out more than 120 model rake coaches. ICF has also turned out 24 Model rake coaches. A total of four such rakes are in service on date.

- **Upgradation of coaches:**
- **Project Swarn** was started to upgrade the condition of Rajdhani and Shatabdi Express Trains, with the objective of significantly improving the passenger experience across 9 dimensions which include coach interiors, toilets, onboard cleanliness, staff behavior, catering, linen, punctuality, security, on-board entertainment. Real time feedback is also a part of Project Swarn. Under this scheme total 29 trains as targeted have been covered@ Rs. 50 lakh per rake.
- **Project Utkrisht** has been launched to improve condition of 66 important Mail/ Express trains, @Rs. 60 lakhs per rake, consisting of 140 rakes. As a part of this project improvement in coach interior, coach exterior, toilets, lighting and passenger amenity items will be carried out. This is targeted for completion in 2018-19. Phase II of Project Utkrisht has also been sanctioned in which 500 rakes of mail express trains will be upgraded targeted for completion in 2019-20.
- **LED Lights in Coaches:** All CFL/FL lights in all TL/AC and self propelled (EMU/MEMU/DEMU) coaches are being replaced with LED lights which is likely to save electrical energy to the tune of Rs. 19764/- per AC coach per Annum and Rs. 8424/- per non AC coach per annum.

- **Promotion of Digital Transactions:**

To promote cashless and digital transactions, Ministry of Railways took the following steps :

- Installation of Point of Sale (POS) machines at various Passenger Reservation System (PRS)/Unreserved Ticketing System (UTS) booking offices & Parcel and Goods location for acceptance of payment through credit/debit cards.
- Acceptance of Unified Payments Interface (UPI)/Bharat Interface for Money (BHIM) as a payment option for booking of reserved/unreserved tickets.
- Withdrawal of service charge on online booking of tickets.

- Withdrawal of service charge applicable on transactions against credit/debit cards for purchasing journey tickets at PRS/UTS counters.
- 0.5% discount on season tickets purchased through digital means.
- 5% discount on reserved counter ticket subject to maximum discount of `50 for tickets of value of `100/- or more for payments made through UPI/BHIM.
- Provision of 5% of the recharge value as bonus at the time of recharge of R-wallet in case of unreserved ticket booking through mobile phone.
- Provision of 3% bonus on every recharge of Automatic Ticket Vending Machines (ATVM) card as an incentive for promotion of ticket booking through ATVM.

- **Enhancing Passenger Convenience:**

To provide passengers with an elevated level of comfort and a highly satisfying experience, MoR has taken the following steps :

- Introduction of ticket booking through mobile phone - UTSONMOBILE App for unreserved ticket booking and IRCTC RAIL CONNECT App for reserved ticket booking.
- Establishment of Yatri Ticket Suvidha Kendras (YTSK) on public private partnership basis for issuing of tickets.
- Launch of the Next Generation E-ticketing System (NGeT) for improving accessibility and enhancing the overall experience of e-ticketing.

- Introduction of Defence Travel System enabling online booking of tickets for defence personnel.
 - Provision of concessional online ticket booking facility to persons with disabilities and accredited press correspondents.
 - Streamlining of Computerised Passenger Reservation System to facilitate timely preparation of Reservation Charts and transfer of vacant berths to next remote location.
 - Introduction of Alternate Train Accommodation Scheme known as VIKALP scheme on all trains to provide confirmed accommodation to waitlisted passengers.
 - Provision of SMS alerts facility to passengers in case of change in train running status like cancellation/delay of trains for more than one hour etc.
 - Acceptance of downloaded Aadhaar (e-Aadhaar) & m-Aadhaar also as one of the proof of identity for undertaking journey in any reserved class.
 - The concept of 'Train Captain' as a single person/leader responsible for coordinating the entire team and facilitating all services during the complete journey of the train has been introduced.
 - For the first time, passenger amenities are being provided at stations on the basis of passenger earnings as well as passenger footfalls. Revised criteria for categorization of stations has been issued on 22.11.2017. The revised criteria aims at providing higher level of amenities at bigger stations, commensurate with the earnings/passengers handled. Revised comprehensive instructions for provision of passenger amenities at various categories of stations has been issued.
 - Foot Over Bridge and High Level Platforms have been included in minimum essential category for all stations and accordingly all stations over Indian Railways will be provided with FOB and High Level Platforms in a phased manner. Also all new stations shall now be constructed with High Level platforms and Foot Over Bridge at all categories of stations on broad gauge including Halt stations.
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- Complete decentralization of powers to DRM and Field officer for fixation of Reserve Price for Parking, Pay & Use Toilet, charges for Retiring Rooms/dormitory, Portage charges etc.
 - Divisional Railway Managers (DRMs) have been empowered to extend the period of contract of physically handicapped PCO booth holders upto ONE year at a time on the basis of satisfactory performance of licensee.
 - Zonal Railways have been advised to provide one wheelchair per platform and in case of island platforms one wheelchair per two platforms at all A-1 and A category stations. General Managers have also been authorised to reduce/increase

the number of wheel chairs to be provided at stations based on the passenger traffic handled at the station and assessed requirement of wheel chairs at the stations.

- Provision of a segregated area within waiting halls to be known as feeding corner for feeding the babies by lactating mothers.
- Online booking of Retiring Rooms with the provision of hourly booking.
- Launch of 'Sarathi Sewa' for provision of Battery Operated Vehicles (BOVs) at stations through publicity route or CSR.
- Launch of 'Yatri Mitra Sewa' at major stations for booking of wheel chair service cum porter services etc.

Cleanliness

- **Important measures include :**
- Integrated mechanised cleaning was provided at 488 Railway stations up to March 2018. It is now provided at 697 stations.
- Independent third party Survey of passenger perception on Cleanliness standards of 407 major railway stations carried out first time in 2016 and repeated in 2017 and 2018.
- On Board House Keeping Service (OBHS) is being provided since 2008-09. Starting from 2008-09, OBHS was provided in 416 pairs of trains up to March, 2014. 448 pairs of trains added in 3 years from 2014-15 to 2016-17. Another 139 added in 2017-18 and 65 more in 2018-19. A total of 1068 trains are presently having facility of this service.
- All Rajdhani, Shatabdi, Duronto and other important long distance Mail/Express trains are provided with OBHS for cleaning of coach toilets, doorways, aisles and passenger compartments during the run of the trains.
- Service is supported by sms based on demand "Clean-my-Coach" service in 1059 trains, augmented to "Coach-Mitra", since 2017-18 to cover over 1020 trains presently.
- Railways are setting up mechanized laundries for improving quality of washing of linen provided to AC coach passengers. Starting from 2009-10, 25 Mechanized laundries were set up till March, 2014. 32 more mechanised laundries were set up from 2014-15 to 2018-19. Orders for 14 more mechanized laundries with total capacity 81 tonnes per day (TPD) have been placed. Nearly 283 TPD is presently being supplied from mechanised laundries. Target is to cover 100% linen washing requirement by mechanised laundries in next financial year.

- **Automatic Coach Washing Plants :** These not only clean exterior of coaches more effectively and efficiently, they also reduce the direct water requirement by avoiding wastage. In addition these also come with water recycling facility thereby further reducing the requirement. Based on the location feasibility, initially 122 locations have been identified for provision of ACWP. 10 plants have been installed and LOA has been issued for 7 more locations. Zonal Railways are tendering for provision at 31 locations. COFMOW has opened a tender on 17-10-18 for 21 more locations, likely to be finalised by end of December 2018. COFMOW has also floated a tender for Rate Contract for additional 80 locations.
- **Bio-Toilets:** As a part of “Swachh Bharat Mission”, IR is proliferating bio-toilets on all its coaching stock so that no human waste is discharged from coaches on to the track. **Make in India : Coaches**
- **Smart Coach:** MCF has rolled out a smart coach in Sept’18, providing better safety passenger amenities as well as enabling predictive maintenance. Diagnostic system monitor bearing vibrations provide advance information on health of bearing wheel & track. In addition, coach has been provided with wheel slip protection monitoring, water level indicator, Wi-Fi, infotainment system with emergency talk back and passenger announcement and information system alongwith digital destination board.

Further improvements are being brought about to provide and monitor improved air conditioning which will monitor particulate pollution inside the coach along with quantum of fresh air and power consumption. Fire safety through fire and smoke detection unit integrated with passenger announcement and information system for emergency evacuation and video analytics with phased detection and unusual occurrence features would further enhance safety and security.

Tender for 150 smart coaches is under finalization. Production is expected to start from January, 2019.

- **Air conditioned EMU rakes:** Prototype full air conditioned EMU rake was introduced in service on 25.12.2017 in Mumbai suburban area. Six more rakes are expected induction during the current year. This will be followed by more such rakes in 2019-20 along with partial air conditioned rakes for the first time in the history of suburban service. It is planned to partially air condition 78 existing EMU rakes of Mumbai suburban. Target for induction of first such rake is later part of 1st quarter of 2019.
- **Three phase MEMU rakes:** Three MEMU rakes equipped with 3 phase IGBT based electrics have been turned out from ICF in July, 2018. These are undergoing prototype test and trial under RDSO. The rakes will be inducted in passenger service after successful completion of trials. The technology is not only energy efficient in traction but also equipped with regenerative braking to save energy during braking.

Railway Electrification

- During year 2017-18, 4,087 RKM of BG routes have been commissioned on electric traction against target of 4,000 RKM. During previous (2016-17), achievement on electrification was 1,646 RKM, thereby increase of 148%. For period 2014-18, routes of 8,411 RKM have been commissioned on electric traction against 3,038 RKM commissioned during 2009-14, thereby increase of 177%. For the current financial year (2018-19) target for electrification has been set as 6,000 RKM. Up to 15.12.18, 1,667 RKM has been commissioned on electric traction in 2018-19. Achievement on electrification during corresponding period of 2017-18 was 1,648 RKM.
- With a view to transforming Indian Railways into “**Green Railways**” and to capture the economic benefits of electric traction in an accelerated manner, Indian Railways has planned to electrify balance BG routes by 2021-22. Accordingly, the work for electrification of balance un-electrified BG routes of IR covering 13,675 route kilometers has been approved by CCEA at a cost of Rs.12,134.50 crore. To achieve ambitious target for electrification of balance route, following strategic policy decisions have been taken:

- Base of executing agencies have been broadened and projects covering 1735 RKM have already been entrusted to Govt. PSUs i.e. IRCON, RITES and PGCIL.
- Timelines and approving authorities for various drawings/schematic/plan approval for RE projects have been re-defined.
- It has been decided that “Henceforth, where, electrification and doubling works are sanctioned; both works shall be executed by the same agency.
- Adoption of EPC mode of contraction for larger size projects i.e. 300/500/1000/1500RKM.
- Emphasis on mechanized execution of OHE construction works.
- Design for Cylindrical cast in-situ and prefabricated foundation developed for expeditious and mechanised execution of foundation works.
- Anchor bolt type foundation developed in rocky soil to speed up foundation work.
- OHE design revisited for low density traffic routes; to reduce the cost of electrification and also expedite execution of the work.
- Diesel Locomotives Works, Varanasi & Diesel Modernization Works, Patiala have been repurposed for manufacturing Electric locomotives and have already manufactured more than 50 electric locomotives by using existing resources & electric supply chain.
- Diesel loco sheds are being progressively repurposed for maintenance of Electric locomotives.

Important Projects

- **Electric Locomotive Factory, Madhepura in Bihar (A make in India Project):**
- As a first step of attracting private investment and FDI in Indian Railways, contract for setting up Electric Locomotive Factory at Madhepura/Bihar to manufacture 800 nos High Horsepower Electric Locomotive (12000 hp capacity) was signed between Madhepura Electric Locomotive Private Limited (MELPL), joint venture of Ministry of Railways and Alstom Manufacturing India Limited.
- First phase of the factory has been completed. First locomotive has been rolled out from the factory and is undergoing tests & trials. Further four locomotives are targeted to be supplied in 2018-19.

- **Diesel Locomotive Factory, Marhowra in Bihar (A make in India Project):**

- Contract for setting up Diesel Locomotive Factory at Marhowra/Bihar to manufacture 1000 nos High Horsepower Diesel Locomotive (4500/6000 hp capacity) was signed between GE Diesel Locomotive Private Limited (GEDLPL), joint venture of Ministry of Railways and GE Global Sourcing India Limited.

- Construction of the factory is ongoing as per schedule. Two Prototype locomotives (4500 hp) were handed over to Indian Railways in February, 2018 by the company. After tests/trials these locomotives have been accepted for commercial service. 50 locomotives have been supplied and out of 50 locomotives 19 are in commercial service. Total 98 locomotives are targeted to be supplied in 2018-19.

- **Electric Locomotives:**

- New Era of Green Technology- HOG power supply:

All Passenger (WAP7) locos turned out by CLW during 2017-18 are fitted with Hotel Load Converters. The main benefits of this system are supply of pollution free and cheaper power from OHE as compared to End on Generation (EOG) system besides other advantages like reduction of carbon emission, noise level and consumption of fossil fuels helping in protecting the environment. There is a saving of around Rs. 1.5 lacs per day per pair of rake by using HOG supply.

47 locos have been provided with HOG during the first nine months of 2018-19 (upto October, 18) as compared to 43 during last year.

- WAP-5 locomotive in push-pull mode:

Operation of Twin WAP5 loco in push-pull mode has been planned which has faster acceleration, faster braking and substantially lowered coupler forces.

One pair of WAP-5 loco and rake has been modified and **Confirmatory Oscillograph Car Runs (CoCR) Trial has been carried out by RDSO from**

Delhi (NZM) to Mumbai (Bandra Terminal) from 07.10.18 to 13.10.18. During the trials, a saving of 83 minutes running time was recorded.

- Upgradation of Electric locomotives:

It is planned to upgrade the existing 6000 HP WAG9H locos to 9000 HP to improve the hauling speeds of freight trains. **It's a make in India initiative already started at CLW.** First locomotive is expected to be commissioned by Jan'2019. Similarly, it has been decided necessary to upgrade existing WAP-7 locomotives from 6000 HP to 9000 HP to haul 24 coach trains at balancing speed upto 140 kmph. Process of development of High Horse Power Passenger locomotives (9000 hp) has already been initiated by CLW. First locomotive is expected to be commissioned by Mar'2019.

Design review for enhancement of speed from 140 kmph to 160 kmph has been completed and manufacturing process has been initiated at CLW and first locomotive is to be rolled out by January, 2019.

- Provision of Regenerative braking feature in WAG-7 locomotives:

Conventional Electric locomotives (fitted with DC Traction motor) are provided with Rheostatic braking wherein energy generated during braking is dissipated in dynamic Braking Resistance (DBR) resulting in wastage of energy. Regenerative braking feature in WAG-7 locomotives is being developed and one WAG-7 locomotive no 24571 fitted with re-generative converter is under testing. Saving due to regeneration braking would be around Rs 24.6 lakhs per loco per year.

- Development of Battery cum 25 kV AC operated Shunting Locomotive:

The Battery operated shunter is capable of shunting up to 59 BOXN/5800T train load/24 coach rake from one line to adjacent line at a speed of 10 - 15 kmph on level track. Development has been initiated at CLW & KPA/ER Workshop.

- Provision of EP Assisted system:

The purpose of EP assisted system is to minimize response time during braking and release, and to make braking simultaneous along the whole length of the train. This helps in reducing braking distance and facilitates quick release of brakes. Procurement action has been initiated at CLW and 20 passenger locomotives will be fitted on trial basis.

- Conversion of a locomotive from diesel to electric traction:

Indian Railways has created history by first-ever conversion of a locomotive from diesel to electric traction. The conversion of Diesel locomotive into Electric locomotive is a highly specialized and unique work **which was not done earlier in traction application worldwide.**

Two diesel locos (Alco) have been successfully converted to electric and sanction for operation of twin WAGC3 Electric locomotive converted from WDG3A Diesel locomotives has been issued.

Diesel HHP locomotive have also been successfully converted to electric and are under trial.

- Electric loco production at CLW:

CLW has produced 350 electric locos during the year 2017-18 as against 292 in 2016-17. **A new milestone has also been set by CLW in the process by becoming largest loco manufacturer in the world under single roof.**

- Manufacturing of Electric Locomotive at Diesel Modernization Works, Patiala:

In order to cater to the enhanced requirement of electric locomotives commensurate with 100% electrification and to utilize the infrastructure & manpower of DMW, mainly a Diesel loco rehabilitation workshop, DMW was entrusted with the responsibility to manufacture Three Phase IGBT based electric locomotives during current FY 2017-18. With enormous efforts put in by officers and staff, DMW has turned out two electric locomotives during 2017-18.

DMW has turned out 21 WAP-7 locomotives during the current year (upto November).

- Crew Voice/Video recording system (CVVRS):
 - First electric loco no. 32001 fitted with Crew Voice/Video recording system (CVVRS) has been commissioned in Dec'2017.
 - The system ensures the effective and temper proof video and voice recording of locomotive cab for post failure event analysis. CVVRS is being planned for 20 loco sets at CLW initially.
- Provision of Simulator:

A work for setting up of simulators amounting Rs. 350 crore for training of running staff for minimizing the accidents has been sanctioned under M&P (Plan head-41) against Pink Book no. 1177 of 2018-19.

- **Diesel Locomotives:**
 - LCAVR (Loco Cab audio video Recording System) – This system provide invaluable data to investigators which helps them in understanding the sequence of events leading up to an accident and for identifying operational issues and human factors, including crew performance. 23 Diesel locomotives have already been equipped with LCAVR while tenders for further 3000 have been floated recently by DMW/PTA against RSP.
 - Distributed Power Control System (DPCS) - DPCS provides real time communication between lead and remote locos through wireless data radio to synchronize locos. Main advantages of DPCS are increased hauling capacities and reduced crew requirements. DPCS has been fitted in 145 Diesel Locos (HHP-95 and ALCO-50) till date. NFR has started its successful running in critical graded LMG- BPB new BG section. Furthermore ECR has also been running freight train with DPCS which has enhanced wagon turn round and thus has increased mobility.
 - Diesel loco sheds are being progressively repurposed for maintenance of Electric locomotives.
 - Air Conditioning of Running Rooms - Provision of adequate quality of rest in Running Room and provision of adequate facilities in crew lobby has always been priority of IR. Accordingly, an umbrella work for upgradation of Running Room for Loco Pilots & Guards on IR” has been sanctioned under Pink Book 2018-19 at anticipated cost of Rs.225 crs. A Budgetary outlay of Rs. 200 crs. has also been granted and works are in progress over IR.

Energy Efficiency

- All railway stations (more than 8000) have been fitted with 100% LED luminaries.
- 99% of service buildings provided with 100% LED lights over IR.
- This will save 240 Million Units of electricity per annum amounting to Rs.180 Crores reduction in annual electricity bill of IR.
- So far, 574 no of escalators and 407 no of lifts have been provided covering 215 stations and 180 stations respectively.
- So far, **71.19 MW** of Solar plants have already been installed (68.19 MW rooftop + 3 MW land based at MCF Raebareli).So far, **36.5 MW Wind** power plant has been installed.

- **Open Access**

- IR is presently drawing about **1100 MW through Open Access**, in 10 States of Maharashtra, Madhya Pradesh, Gujarat, Rajasthan, Jharkhand, Haryana, Karnataka, Delhi, U.P. and also in Damodar Valley Corporation (DVC).
- Railway have saved **Rs. 1249 Cr. from April'18 to Sept'18.**
- Indian Railways is doing much better than what was targeted in Mission 41K and till Sept' 18, it saved about Rs 8902 Cr. This is more than 16% the proportionate target of Rs7653 Cr, as envisaged in "**Mission 41K.**"

- **Automatic Switched Neutral Section (ASNS)**

- Successful trials of ASNS have been carried out in the month of Oct'18(under the supervision of RDSO).
- This is going to be very important as Indian Railways have decided to run trains at 160 kmph.
- This will help in reduction of stress to Loco Pilots thereby efficient and safe operation of trains.
- This will also ruled out any damage to OHE due to Loco Pilots entering neutral section with DJ opening.

- **100% Green Powered station:**

- Indian Railways' go green and save electricity initiative has proved to be immensely beneficial.
- Malwal Railway station of Northern Railway under Firozpur Division is the first Green Powered station commissioned in India (Jan'11). It is meeting all its power needs like lighting and fans load from solar power only.

- Asangaon Railway station of Central Railway under Mumbai Division has been second 100 % Green Powered station powered with windmill & solar panels (March'18).
- On similar lines, Guwahati Railway station in the Northeast has become the first Railway station in northeast to run completely on solar power (May'18).
- Railways are making extensive efforts in this direction to make more and more 100% green powered stations.

- **Important Milestones for the current year**

- Indian Railways has been consistently trying to improve the illumination levels at various stations. Various policies have been issued from time to time to improve the illumination levels. The last major decision taken in this regard was to switch over to 100% LED on all Railway Stations.
- As per the direction of Minister of Railways, Indian Railways has switched over to 100% LED lights stations as on 30.03.2018; a day before the targeted date. This has improved the illumination levels considerably. This was done as Phase-I of the project for improvement in illumination, wherein the existing lights were replaced by LED lights on one is to one basis.
- **PAT:** Indian Railway is continuing on its path towards achieving higher energy efficiency & shall achieve the targets set for it under Govt. of India's Perform Achieve & Trade (PAT) cycle-II and in the next cycle and shall strive for maximizing its gains through earning of more & more energy saving certificates (ESCs).]
- Railway is also working on plans to install solar panels on vacant Railway Lands along the tracks and other land parcels for generating power to meet its Traction energy requirement. This would be done First time in the World.

Mission Raftaar

Golden Quadrilateral (GQ) along with diagonals carry approximately 58% of freight traffic and 52% of coaching traffic with a share of only 16% of the network (~10000km) taken up for initial emphasis. Major impediments to mobility have been identified viz. ~70% of the routes having sectional speed of less than 130kmph. 2736 level crossings, averaging one LC at every 3-4km. 730 locations speed restrictions (Average one SR at every ~15-20km). ~10% (~900) turnouts of speed of less than 30kmph. A road map has been developed to overcome the existing impediments in a systematic manner. All but 28 unmanned LCs removed

on IR.A speed policy framework has been developed to address this issue of the mismatch between speed potential of rolling stock and fixed infrastructure. It has been decided to upgrade 10000km of Golden Quadrilaterals and diagonals for 160 kmph speed and remaining routes for 130 kmph speed. Some of the important elements of the policy are :

- Replacement of loco hauled commuter trains with Mainline Electric Multiple Units (MEMU trains: MEMU trains have a potential for average speed increment of up to 20kmph in comparison to loco driven passenger trains. Busy Ghaziabad-Allahabad – Mughalsarai route has been made free from conventional trains by replacement by MEMU. For replacement of loco hauled commuter trains with MEMU trains on six routes, total 1048 MEMU coaches and 136 DEMU coaches are required. IR has planned to ramp up the production of MEMU rakes to 1232 coaches in next three years (approximately three times existing level) for ensuring full implementation. Total 124 pair passenger services have been replaced by MEMU/DEMU services on Indian Railways. The travel time has been reduced by 5-20 minutes in these services. Delhi- Mumbai, Delhi- Howrah and Mumbai-Chennai will be completed in Yr 2018-19. All routes will be made free from conventional commuter trains by Yr 2021.
- Right Powering of freight trains: Over the years Horse Power to trailing load ratio has deteriorated due to longer trailing loads. This has adversely affected average speed of freight trains. New policy introduced for right powering arrangement for freight trains with a horse power to trailing load ratio of 1.5-2.0 to bring it at par with international standards. For eight major railways out of the requirement of 663 additional locomotives, 300 locomotives have been provided.
- Introduction of Twin Pipe Air Brake System on freight trains: Twin piped braking system saves on an average ~90 seconds in every event of braking, which becomes significant over a long distance. All new wagons are being manufactured with twin pipe system. Retrofitment of all 1.7lac wagons has been sanctioned. Approximately 11000 wagons have been retrofitted.
- Procedural Improvements: Policy circular 6 which governs increasing speed of trains has been rationalized. It will enable faster realization of gains from new technology and various speed raising initiatives.
- Decision has been taken to stop the manufacture of conventional ICF coaches and replace them with LHB coaches with speed potential of 160kmph. Successful trial of T-18 by ICF has been done and the same is in the process of commissioning.
- Standardization of coaching rakes enables first-in-first-out/ reduce rescheduling/ avoid out of path running of trains. In the new time table 960 rakes out of 2732 rakes have been standardized.

Technology for practical uses

- **Quick Watering Facilities:** This facility allows quick filling of water in coaches, which is also essential to maintain cleanliness in them. 7 stations (Ajmer, Jaipur, Abu Road, Vijayawada, Villupuram, Erode and Vadodara stations) have been provided with quick watering facilities. Sanction for provision in 47 more stations has been obtained. For another 66 stations, work for out of sanction in Supplementary Demands for Grants 2018-19 at a cost of about Rs 230 cr has been planned and processed at Railway Board level. Instructions have been issued to all Zonal Railways to be in readiness to award the work as soon as sanction is received for above work. Further, Zonal Railways have been also processed sanction for 27 locations at their level.
- **Monitoring of punctuality through Data Loggers:** To authentically report train timings, a system of integrating data-loggers with the Control Office Application (COA) software has been started in Jan'08. Train timings are captured in real time at zonal interchange points and important inter divisional exchange points, there are 168 such points over IR.

Green Initiatives: Care for Environment

- Assessment and rating of IRs Production Units and major Workshops as Green Industrial Units started with 'GreenCo' certification of 2 Workshops and 1 Production unit in 2016-17. 31 more Workshops, 4 more Production Units, 2 Diesel Sheds, one Stores depot and 2 STCs have been 'GreenCo' certified since. 22 of these units have been certified in current financial year 2018-19.
- Eight Railway Stations and two Railway Schools have achieved Green Certification. 6 out of these 8 railway stations achieved Green Certification in 2018-19. Rail Nilayam/ Secunderabad, IRICEN/Pune and Administrative building of ICF/Chennai are also certified as Green buildings. Railway Hospital Ajmer is the first railway hospital to achieve Green rating recently.

- **Head On Generation (HOG) System:** EOG system requires diesel fuel besides having other problems related with maintenance & pollution. In Head on Generation (HOG) electric power for the coaches is received from over head lines through two 500 KVA converters fitted in electric locomotive. This helps in eliminating noise and reduction in carbon foot print. Average saving with HOG on an average is around Rs.70000 per trip per train as it varies with duration of journey.

After development of concept in 2013-14, Production Units have been turning out all LHB coaches as HOG compliant since December, 2016. A total of 126 EOG trains have been converted to HOG i.e. operating with HOG compliant locomotives.

Promoting Tourism

- **Vistadome Coaches & Hill Railways :** These coaches are provided with enhanced viewing area including on roof to enable tourists to enjoy panoramic view while travelling. The feature has been well received. Total of four such coaches are in service on scenic sections.

Preservation of Heritage in Railways

In 2018, Railways implemented various policy reforms for meaningful preservation of Railway Heritage and promoting steam heritage tourism. These include creation of budget head for funding heritage related activities, unified structure of zonal level heritage committees, special delegation of powers to Divisional Railway Managers for promoting steam tourism, provision of engagement of retired railway officials for heritage preservation etc. As a result of these reforms, this year witnessed inauguration of steam charter services over Kangra Valley Railway (KVR) and Nilgiri Mountain Railway (NMR), special steam hauled round trip services over Kalka Shimla Railway & Nilgiri Mountain Railway, introduction of AC coaches over Darjeeling Himalayan Railway, introduction of weekly steam service between Garhi Hasru – Farukhnagar in Delhi Division, steam tourist specials in South India hauled by EIR-21 (Express) which is one of the World's oldest working steam locomotives (Year built 1855) etc. All these have immensely helped creating interest in steam heritage tourism in the country. Steps taken include :

- As a major Digital India initiative in recent years, Ministry of Railways partnered with Google's nonprofit Arts & Culture initiative to make India's railways century old heritage accessible worldwide using advanced digital technologies through online storytelling and virtual reality. This is a first of its kind effort of Indian Railways to digitize its heritage and bring it online for universal access.
- The project, named Lifeline of a Nation (accessible at <https://g.co/indianrailways>) was launched by Minister of Railways on 28th September, 2018. The online platform brings together a collection of digital storytelling with more than 3,000 images, 150 videos and 150 iconic locations of Indian Railways across India. The project offers insights regarding the lesser known stories and heroic efforts of people like track men, station charges and workshop engineers, to celebrate their contribution to India's Railways.
- On 15th August, 2018, Railways launched digital museums at selected railway stations in India to spread awareness among public about the rich heritage of railways. The effort aimed at showcasing the more than century old the legacy of Indian Railways via one to two minute-long movie clips on digital LED screens at the entrance gate of railway stations and also at different comfort areas. The short films will showcase heritage buildings, locomotives and much more to make people aware of the rich heritage of Indian Railways. With a target to reach 100 stations, so far these screens are operational at more than 30 stations.
- As a living example of industrial heritage and to depict technological development over Indian Railways, five meter gauge (MG) and three narrow gauge (NG) lines have been identified for preservations and further developing them as heritage tourism destinations.
- In December, 2018, Railways notified the Indian Railways Heritage Charter (IRHC) -2018, for the first time in its history, outlining its commitment and providing broad guidelines for restoration, preservation and conservation of century old rich railway heritage of India.
- **Revival of steam locomotives:** To preserve the rich heritage of Indian Railways, vigorous efforts of revival of steam locomotives, since 2017 has been taken. This has resulted in to revival of EIR 21, the oldest steam locomotive in the world by Golden Rock Workshop of Southern Railway, Beyer Garratt by Kharagpur Workshop of South Eastern Railway, ZB 66 in Kangra Valley section and Miss Muffet by Jamalpur Workshop of Eastern Railway.

Customer Focused Policies for Freight

To make the rail transportation attractive to its customers, various initiatives were taken in 2017-18 which includes tariff rationalisation, classification of new commodities, expansion of freight basket through containerisation, new delivery models like RORO services, Long Term Tariff Contract policy with key customer, Station to Station rate, Double Stack Dwarf Container (DSDC), Customer friendly rationalization of weighment Policy, Electronic Registration for Demand of Wagons (e-RD) etc.

These policies launched in 2017-18 have been further extended upto March 2019.

The main initiatives undertaken during 2018-19 are:-

- **Electronic Transmission of Railway Receipts (eT-RR)**

With introduction of E-RD (Electronic Registration for Demand of wagon), eT-RR has been implemented which use a user-friendly and paperless transaction system where Railway Receipt is generated and transmitted electronically to customer through FOIS and delivery of goods is given through e-surrender of eT-RR. That is, customer is saved the hassle of carrying physical Railway Receipt from originating to destination station. After success of pilot project at one terminal namely HPCL/Loni of Central Railway, it has been implemented over Northern Railway in second phase in March 2018. Proliferation on pan India basis is on anvil.

- **Customer friendly rationalization of weighment Policy**

- Zonal railways have been empowered to permit weightometer / pre-weighbin system of weighment in private siding on case- to- case basis w.e.f. 18.06.2018.
- Dispensation from mandatory (100%) weighment in the case of container rake loaded with containers carrying standard bags of uniform size.

- Exemption from weighment has been granted in case of loading of standard Bags of uniform size in container. Low density commodities like Pet Coke, Met Coke, Chuni and De-oiled cake have been exempted from mandatory weighment.

- Designed tare weight of new wagons namely BOXNS, BCFC, BRHNEHS, BOBRNHS, BOBRNEL, BOBYNHS, BFNSM 22.9 has been notified

- **Issue of multiple Railway Receipts (RRs) for container traffic**

- Indian Railways had extended facility of multiple RRs in favour of more than one Container Train Operator for a single container train (w.e.f.20.04.2017). The guidelines have been implemented recently in September 2018. This facility has come in on an opportune time as M/o Shipping has now relaxed 'Cabotage' law for foreign vessels on transportation of loaded for empty containers between Indian ports. With this relaxation, aggregation of containers at ports is likely to get a fillip. The facility of multiple RRs(Railway Receipts) for each operator shall further aid aggregation and promote economic growth. In addition, it is in sync with GST requirements and shall help each operator to avail Input Tax Credit(ITC) as per freight paid.

- **Promoting containerization**

To promote containerisation, following measures have been taken: –

- Introduction of new delivery model of Double Stack Dwarf Container to be charged by applying 17% concession on FAK rate has been extended upto 31.03.2019.
- The methodology for levying Terminal Access Charge (TAC) for handling container train in railway terminal has been liberalised from 1.5 times to one time in case of double operation (i.e. unloading followed by loading), reduces non-freight cost to customer.
- With effect from 11.07.2018, movement of CP Coke, a restricted commodity, has now been permitted in transportation in container at CCR (Container Class Rate) i.e. by applying 15% concession on Applicable class rate published in Goods tariff.
- Decision has been taken to transport empty containers and empty flat wagon for private container rakes at a discount of 25%. The move is likely to give a thrust to movement of empty container by rail towards ports to return as loaded, thus profiting Indian Railway with higher container share.

- **Liberalised Automatic Freight Rebate Scheme in Empty flow Directions**

This scheme has been issued w.e.f.01.01.2017. Under this scheme loaded traffic in empty flow direction is being charged at LR1 (with certain conditions), which amounts to average discount of 30 – 40%. In the revised policy, benefit has been extended to the traffic booked from originating Division to intermediate point on that O-D division. Further, rebate has also

been extended to the traffic booked from originating division to all the other divisions (not listed in the empty flow direction) of the destination zone. This will help to decrease empty flow movement of rakes. This scheme has further reviewed and revised guidelines have been issued w.e.f. 01.10.2018. This will help to decrease empty flow movement of rakes.

- **Freight Heavy Haul Initiatives:**

- Prototype of the 25T axle load BOXNS wagons was made in Oct'15. The wagon will run at 100 kmph in loaded and empty condition with pay load to tare ratio of 4.1 as compared to conventional BOXNHL wagons, which have payload to tare ratio of about 3.6. These wagons will achieve increased throughput per rake by 14.8%. 25t wagons are required for operation on DFC, which were tried upto 110/100 kmph on SER successfully. Induction of these wagons has already started, till Nov. 2018, 2600 wagons are in operation and another 2400 are in the pipe line.
- For increasing throughput of finished goods and other containable goods, a dwarf container has been designed which can be moved in double stack loading even under electrified sections of IR. This enables increase in throughput of containable commodity even on electrified lines. This service has been opened on Jamnagar-Ludhiana route and efforts are on to proliferate on other routes also.
- In the area of multimodal transport, the concept of Road-Railers which was under trial for past few year has been finalized in 2016-17. The commercial operation of the train has started in August, 2018. This allows for specially designed road trailers to bring container load form the customer premises to Railway sidings where it gets converted to train and goes to the destination. This initiative brings door to door delivery for container traffic without need for any container handling at railway premises.
- In the area of transportation of finished steel namely hot rolled and cold rolled steel coils, new wagon BFNSM has been designed which is specifically designed for increasing the throughput of steel coil by more than 35% per rake compared to other similar wagons. Safety approvals for this have been obtained and induction of these wagons has started in 2018 already.

Transformation of Indian Railways

- Large scale process and cultural reforms are being introduced in order to steadily transform Indian Railways into a more vibrant and efficient organization and make it an engine of economic growth and development of the country. Empowerment of

General Managers (GMs), Divisional Railway Managers (DRMs) and frontline staff and comprehensive delegation of powers have been done so as to fast track decision making, Deliverance and overall working of Railways. Model Schedule of Powers has also been issued from Railway Board in October 2017 (revised version in July 2018) for the first time to bring uniformity in delegations across zones.

- The enhanced delegations and empowerment will improve safety, give faster access to work and breakdown sites, improve station and passenger interfaces, ease of procurement by user departments, improve upkeep of equipment, improve cleanliness and hygiene at stations and in trains and enhance training and capacity building of staff.
- Stress on integrity and ethics - Prime thrust of Indian Railways is on transparency in its functioning and on impeccable integrity of its employees at all levels. In this aspect, a policy of zero tolerance against corruption is being followed. Mission Satya Nishtha has been launched on 27 July 2018 across IR to inculcate the culture of honesty and transparency.
- Workshop on Leadership and Emotional Intelligence for GMs and DRMs has been organized at NAIR to further align the top management of the Railways with the Transformation initiatives (Workshop for GMs held on 10 & 11 Nov' 2018, for DRMs on 17 & 18 Dec 2018 and 8 & 9 Dec 2018). This is being further proliferated to the level of Principal Heads of Departments.

Personnel & Educational Initiatives

- Two recruitment drives were launched by the Railways in the first half of the year:-
- For 27,795 ALPs and 36,576 Technicians (Total – 64,371).
- For 62,907 vacancies in Level I including Trackmen.
- The first stage examination involving 47.56 lakh candidates have been successfully completed on 04.09.2018 with record attendance percentage of 77%.
- For Level I, a total of 1.90 crores have been called for examination which commenced on 17th September, 2018 and ended successfully on 17th December, 2018. Total attendance in this examination was about 61%. It is a paperless and computer based test.
- Thus in a short time of less than nine (9) months, the Railway has not only called for the applications, but shortlisted them and organized the recruitment examinations too. It is the biggest computer based test involving about 2.40 crore candidates.
- To address the problem of inaccuracies and deficiencies in the assessment of vacancies on Indian Railways and their linkages to RRBs, Online Indenting and

Recruitment Management System (OIRMS) has been implemented in recruitment processes against latest Centralized Employment Notifications (CENs) No.01/2018 for the posts of ALP & Technicians and 02/2018 for vacancy assessment by Railways/PSUs, and online indenting of the same have been carried out with the help of OIRMS software.

- **India's first Rail and Transportation University**

National Rail and Transportation Institute (NRTI), Vadodara has begun its first academic session with two under-graduate programmes from 05th September, 2018. A total of 103 students (17 girls and 86 boys) have joined the two courses (62 in B.Sc. and 41 in BBA). The Courses are:-

- B.Sc. in Transportation Technology
- BBA Programme in Transportation Management
- The NRTI was dedicated to the nation on 15th December, 2018.

- **Employees grievance redressal and health check up camps across Indian Railways**

- In September 2017 Zonal Railways and Production Units organized grievance redressal camps at various field locations for redressal of employees grievances. This was combined with health checkup of employees. In the above camp the service records of the employees were shown to the employees and copies also supplied to them.
- 9025 health camps were held throughout the country for employees during last 12 months. 12 lakh employees were covered in this drive.

- **Training under 'Project Saksham'**

- A massive training programme named as 'Project Saksham' has been launched this year for giving 5 days on the job training to all 12 lakhs employees of Indian Railways. This will help in competence building of employees and thereby productivity and efficiency of the organization. We have by now trained more than 12 lakhs employees which is a record in itself.

- **Introduction of objective type question in Departmental promotion examination in Railways.**
- In order to bring objectivity in the selection procedure in departmental selections, Ministry of Railways has introduced a system of 100% objective question for departmental selection in non-gazetted categories by way of either computer based test or by OMR sheets. The benefits of objective type question paper are – greater coverage of subject questions, transparency in selection, quick declaration of result and avoidance of complaint from candidates. A question bank on each of the subject will be prepared, to be updated from time to time.

- **Introduction of Mobile application on staff matter.**
- Various Zonal Railways have launched Mobile applications to cater to service request for Railway employees. This will improve the grievance redressal mechanism and help in better productivity of staff as satisfaction level of staff will improve.

- **Scanning of service records of all employees.**
- Ministry of Railways has had scan more than 12 lakh service records of its employees. This will improve access of service records to employees. Our further aim is to use the scanned records for development and launch of HRMS application.

- **Development and updation of data on COMPTRAN**
- A portal named as COMPTRAN (Common Portal for Mutual transfer) for employees desiring mutual transfer to their place of residence has been developed which helps in online search for mutual partners for employees' inter Zonal transfers. Recently, the Zonal Railways have been asked to update the data on the portal so that it is helpful for employees as regards search for their mutual partner is concerned. This is a welfare scheme for employees of Indian Railways.

- **Aadhar Enabled Bio-metric Attendance System (AEBAS)**

- AEBAS has been implemented on Indian Railways in compliance with DOPT's instructions contained in their OM No.11013/9/2014-Estt(A-iii) dated 21.11.2014. This will improve monitoring of staff attendance and hence improve productivity.

Sports

Continuing with its winning spree, RSPB has been doing fabulously in 28 game disciplines on national and international sports arena and is a established and one of the most prestigious Sports Bodies in India today. Indian Railways is a proud institutions today having 162 Arjuna awardees, 21 Padmashree and 5 Rajiv Gandhi Khel Ratna awardees on its roll besides thousands of national and international talented athletes. Indian Railways performance in the field of sports has been unparalleled.

Railway Sports Promotion Board made a number of policy changes in the larger interest of sports and brought out following changes during January-November 2018:

- To pave the way of becoming officer, RSPB has made provisions more easier to its athletes who are representing India in various international championships.
- RSPB has introduced 3-4 coaching camps and started fielding its teams atleast 4-5 national level tournaments and has started giving hotel accommodations to its athletes participating in national/international tournaments.
- As a result, RSPB has been able to get podium performances from its athletes in 40 national championships, best ever performance of RSPB till date. Internationally also, RSPB has come out with 10 gold medals in Commonwealth games and 27 medals in Asian Games besides other various international tournaments.
- RSPB successfully hosted the World Cycling Championship at Bikaner in North Western Railway recently.

Research and Development

- **Streamlining of vendor registration process of RDSO:** A number of steps have been taken by RDSO towards streamlining new vendor registration process. The process of vendor registration has been made completely online and there has been reduction in average time of fresh registration cases from existing 30 months to 6

months. EOI has been floated by RDSO open for application throughout the year. Hence suppliers based outside Lucknow, now have the provision of online vendor registration application and the whole process of registration is completed within a specific timeline. There was also an emphasis to resolve all the pending vendor registration cases in within reasonable time frame. There were 691 old pending cases initially by October'17 which have been brought down to 98 by December'18.

- **Collaboration with Other Research and Academic Institutions:** IR has made a significant move by engaging with IITs (Indian Institute of Technology) to leverage their core competencies in developing new technologies and products.

Other Notable Initiatives

- **‘SAMANVAY’ Portal for co-ordination with State Governments:** A ‘SAMANVAY’ portal (www.railsamanvay.co.in) has been developed for online reporting of issues pending with State Governments pertaining to infrastructural developmental projects which are being undertaken by different Railway agencies. Concerned State Governments were requested to go through the pending issues of Railways in States which are uploaded on SAMANVAY portal and take needful action to help Railway expedite its developmental/expansion projects.
- **Rail Good Work Portal:** With a view to generate numerous innovative yet practical ideas across the most critical areas of Railways Operations, the Railway board has undertaken several initiatives from time to time. Rail Good Work Portal is an on-line platform for all units under IR, where they can showcase the various good works being done by them. An exercise has been undertaken to identify the best and the most impactful entries uploaded on the good works portal and ask the innovators for descriptive videos for mass scale implementation across IR and to further encourage the habit of doing good work and reporting thereon.