MINISTRY OF RAILWAYS   **Demand No. 82**

1. Training/Human Resource Development (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	**Output**	**Indicator(s)**	**Target 2019-20**	**Outcome**	**Indicator(s)**	**Target 2019-20**
125	1.Conducting trainings, seminars, workshops, etc.	1.1. No. of trainings / workshops / seminars held.	3,800	1. Capacity building of Railways Staff &related stakeholders	1.1. No. of persons trained.	3,80,000

2.Railway Research (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	**Output**	**Indicator(s)**	**Target 2019-20**	**Outcome**	**Indicator(s)**	**Target 2019-20**
90.1	1.i ncreased R&D activity at RDSO	dedicated Test Track for validation and testing of new Design Rolling Stock, track Components, OHE components and panto-interface with OHE, signaling systems etc.	Knowledge sharing, customization to suit operational conditions and creating a detailed plan for implementation	1.Assimilation of new gradation of	1.1 Finalizing a detailed design document incorporating track alignment, bridge spans, line side monitoring systems, OHE design etc. for execution under another ongoing project	*

FINANCIAL OUTLAY (Rs in Cr)		OUTPUTS 2019-20			OUTCOMES 2019-20	
		1.2 Procurement of Instrumented Measuring Wheel and wagon design software	Procurement of Instrumented Wheel sets for Coaching Stock, Wagon Stock		1.2 Developing capability for mapping rail-wheel forces for different types of rolling stock at different speeds for validation of design and assessing speed potential of rolling stock on different categories of track	*
		1.3 Consultancy on Tract Stress Calculation methodology	Verification of the track stress calculation methods and the factors involved		1.3 Comparing the stress calculation methodology adopted by Indian Railways with Internationally accepted norms being followed on railroads worldwide	*
		1.4 New Research activities for RDSO: Research Projects for Asset Health Monitoring Process Automation, speed upgradation technologies, heavy	Upgradation of existing laboratories and induction of additional testing facilities give pace to the Research activities at RDSO which ultimate benefits the Railway for safety and safe travelling.		1.4 Assimilation of new technologies beneficial for Railway Research & Safety.	*

		haul, Predictive maintenance technology for all categories of railway asset and infrastructure and all short term research projects of RDSO				
		1.5 Modernization of R&D facilities at RDSO	Creation of additional facilities and test equipment etc. at RDSO for taking up various Research/Simulation/ Trials/ Validation/Testing/ Evaluation of technology and development project including that for newly created wing of LTRR (SRESTHA) and all long term research projects of RDSO.		1.5 Provide world class Railway Research Facilities at par with any world class Railway R&D organization.	*

Targets not amenable for this indicator

3. New Lines (Construction)

4. Gauge

5. Line Doubling (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
47997.91*	1. Greater speed of construction of new lines, gauge conversion and Line doubling	1.1. New Lines constructed (km).	800	1. Greater access to unconnected routes especially LWE districts, Strategically important districts, Tribal areas, etc.	1.1. Locations connected to Railways due to NL construction (assuming standard last mile distanc	34
		1.2. Total length of Gauge Conversion (km)works	800			
		1.3. Total length of Line Doubling (km) completed.	4000	2. Greater safety and throughput as well as more freight services on congested routes	2.1.Increase in passenger throughput (PKM) on congested routes	0.05%
					2.2. Increase in freight throughput (NTKM) on congested routes	3.3%

* *The Budgetary allocation for this item is Rs. 10155 crore; rest is through EBR*

6. Electrification Projects (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	*Output*	*Indicator(s)*	*Target 2019-20*	*Outcome*	*Indicator(s)*	*Target 2019-20*

| 6960.26[*] | 1. Electrification of Railway Network | 1.1. Additional commissioni ng of rail routes on electric traction (Km.) | 7000 | 1. Reduction in dependence on imported fuel i.e. Diesel oil | 1.1. Percentag e reduction in diesel oil consumption for traction purposes in Indian Railways (%) | 2% reduction in diesel consumption. |

* The Budgetary allocation for this item is Rs. 1 crore; rest is through EBR.

7.Signaling & Telecom (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
1750.00	1. Signaling Replacement Works	1.1. No. of stations where Modern Signaling works undertaken	300	2. Increased safety at stations where Signaling Replacement works are done	2.1. Number of unsafe working incidents arising out of signal failures	0*
	2.Interlocking of Level Crossing gates	2.1. No. of LC gates where interlocking works undertaken	250	3. Increased safety at gates where Interlocking of Level crossings Gates are done.	3.1. Number of accidents at gates where works of Level Crossing Gates Interlocking are done.	

* **Railway has zero tolerance for accidents and unsafe working. Hence, target for the same is kept at zero**

8. Track Renewals (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019- 20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20

10120.00	1. Greater length of tracks renewed	1.1. Total length of tracks renewed (km)	4000	1. Reduced pipeline of track renewal works	1.1. Completing all sanctioned track renewal works in time bound manner.	Completing all sanctioned projects within 2 to 3 years.

9.Road over/Under bridges (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
6050	1. ROB construction	1.1 No. of ROB/RUBs constructed	1200	1. Increased Safety	1.1. Percentage reduction in number of accidents on LCs. (%)	Railway has zero tolerance for accidents and unsafe working. Hence, target for the same is kept at zero.

Road Safety Works -Level Crossings

10.Rolling Stock (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
	1. Acquisition of rolling stock of each type	1.1. No. of Electric Locomotives operationalized	725*	Greater throughput in freight and passenger services.	1. Increase in Passenger throughput (PKM	0.05%
		1.2. No. of LHB coaches operationalized	4941*			

| 6114.82 | | 1.3. No. of ICF coaches operationalized | | | 2. Increase in freight throughput (NTKM) | 3.3% |
| | | 1.4 No. of track machines operationalized | 65* | | | |

* Coach production programme is under review, targets may get revised accordingly.

11. **Traffic Facilities – Yard Remodeling & Others (CS)**

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	**Output**	**Indicator(s)**	**Target 2019-20**	**Outcome**	**Indicator(s)**	**Target 2019-20**
1210.03	1. Greater coverage of the works	1.1. No. of works commissioned.	98 Works	1. Greater passenger and freight throughput along routes where yard remodelled	1.1. Increase in passenger throughput (PKM) on congested routes	0.05%
					1.2. Increase in freight throughput (NTKM) on congested routes	3.3%

12.Workshop including Production Units (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
2550	1. Expedited commissioning of projects.	1.1. No. of Projects commissioned	75	1. Stock-wise outturn in workshops/PUs	1.1. Increase in outturn in workshop/ PUs in current year versus previous year.	For PUs, % improvement over last year for- Coaches -15.3% Locomotives 4.3% For rolling stock workshops- 5% increase in outturn of wagons and coaches is targeted in 2019-20 wrt the actuals of 2018-19.

13. Machinery & Plant (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
669.58	1. Replacement of new machinery and plant installations	1.1. Total value of machinery and plant on replacement basis.	321 Cr	1. Timely and efficient maintenance of Railway assets in workshops and PUs	Increase in outturn in workshop/ PUs in current year versus previous year.	For PUs, % improvement over last year for- Coaches- -15.3% Locomotives- 4.3%
		1.1. Total value of additional purchases done.	348 Cr			For rolling stock workshops- 5% increase in outturn of wagons and coaches is targeted in 2019-20 w.r.t. the actual of 2018-19.

14. Passenger Amenities (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019- 20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
3422.57	1. Building better passenger amenities	1.1. Upgradation of stations	68	1. Greater passenger satisfaction Index	1.1. Passenger satisfaction index	Maintaining Customer Satisfaction Index at 80%.

15.Metropolitan Transportation Projects (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
1600	1. Greater access of sub-urban rail	1.1. Length of metropolitan new lines works commissioned (km.)	63.22 Kms	1. Increased passenger throughput due to these projects	1.1. Total suburban PKMs achieved	156463

16.Bridge Works (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
745	1. Increased speed of Bridge works	1.1. No. of bridge works undertaken.	1000	1. Improved average speeds	1.1. Number of speed restrictions removed annually.	121