

Important Achievement of Signal Directorate (Updated July-2021)

SN	Financial Year	Broad Area of Achievement	Title of Achievement	Description of Achievement	Likely Benefits	Current Status of Implementation
1	2012-13	Safety	Specification No. RDSO/SPN/183/2012 Ver3.0	Train Protection & Warning system	Improvement in safety	Implemented. Zonal Railways Are floating tenders.
2	2012-13	Safety	Indigenous development of multi Section Digital Axle Counter (MSDAC)	Multi Section Digital Axle Counter (MSDAC)	Improvement in safety	Implemented
3	2012-13	Reliability	Revised Specification RDSO/SPN/165/2012	Integrated Power Supply	Improvement in reliability	Implemented
4	2012-13	Safety	Block Proving by Digital Axle Counter (BPAC) using UFSBI	Block Proving by Digital Axle Counter (BPAC) using UFSBI	Improvement in safety	Implemented
5	2012-13	Reliability	Integrated for main LED Signal (with integrated)	Integrated for main LED Signal (with integrated)	Improvement in reliability	Implemented
6	2013-14	Safety	LED based Flashing Hand Signal Lamp	LED based Flashing Hand Signal Lamp	Improvement in safety	Implemented
7	2013-14	Safety	LED Tail Lamps for Guard	LED Tail Lamps for Guard	Improvement in safety	Implemented
8	2013-14	Efficiency	Capacity Optimization and Simulation Tool(COST)	Line capacity optimization	Improvement in line capacity	Under implementation
9	2014-15	Safety	Fog Pilot Assistance System for Safety	Improvement in specification of Handheld Device which can guide loco pilots about land Marksmen route.	Improvement in safety	Implemented
10	2014-15	Efficiency	Fuse auto change over system	Monitoring of signaling fuses	Improvement in invalidation	Implemented
11	2015-16	Reliability	I.P-67 for Motor Electric Point machine	Improved Point motor	Improvement in reliability	Under implementation(Trial on going)
12	2015-16	Reliability	Stainless steel Apparatus case drawings	Improved fabricated apparatus case stainless steel	Improvement in reliability	Under Implementation (Trial on going)
13	2015-16	Safety	Indigenous development of Advance Auxiliary Warning system	Advance Auxiliary warning system	Improvement in reliability	Implemented
14	2016-17	Fire safety	Automatic Fire Detection and Alarm Systems for signaling installations.	Detections and Alarm Systems	Improvement in fire Security of signaling installations.	Specification developed. Vendor approval Under process.
15	2017-18	Fire Safety	Automatic Fire Suppression System for signaling systems	Clean agent based fire suppression system.	Improvement in fire Security of signaling installations.	Specification developed
16	2019-20	Safety	Indigenous development of Train Collision Avoidance System (TCAS)	Train Collision Avoidance System (TCAS)	Improvement in safety	Implemented.
17	2018-2019	Reliability & Safety	Modeling and Validation of interlocking for railway signaling systems	Modeling and validation of interlocking for railway signaling systems	Improvement in Reliability & Safety	implemented
18	2019-2020	Safety	Report on Standardization of the Typical Circuits for Electronic Interlocking Report No. -SS/155/2019	Report on Standardization of the Typical Circuits for Electronic Interlocking	Improvement in safety also Reliability	Implemented