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(भारत सरकार) GOVERNMENT OF INDIA
(रेल मंत्रालय) MINISTRY OF RAILWAYS
(रेलवे बोर्ड) RAILWAY BOARD

No. 2021/SIG/14/ TRG/1

New Delhi, dated 16.08.2024

PCSTEs,
All Zonal Railways.

Sub: Training Module in connection Automatic Signalling.

Ref: (i) Rly Bd's letter no. 2010/Sig/IRISET/Trg/Pt-I dt. 28.06.2024

(ii) Rly Bd's letter no. 2020/Sig/G/2/RDSO dt. 23.04.2024

Instructions regarding, Train Detection system and Training of Supervisors & Maintainers for Automatic Block Signaling were recently issued vide Railway Board's letters under reference.

Zonal Railways S&T training centers are requested to review the content & course duration of Automatic Signalling and incorporate suitably various training module for ABS training in respective STTCs.

In this connection, contents of training module for ABS prepared by STTC, Ghaziabad (NR) comprising theory as well as lab sheets and ABS course programme by IRISET are also attached as Annexure-A & B for ready reference.

This is for your kind info/necessary action & feedback pl.

Shyam Kumar Verma

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Encl: As Above

Copy to : For kind info pl.
Director General/IRISET, Secunderabad

ONE WEEK COURSE FOR AUTOMATIC SIGNALLING

ANNEXURE - A

Theoretical Contents

SN	Topic Name	Hours Allotted
1	Semi-Automatic signal in Automatic/Manual mode in EI/PI/RRI working	1
2	Modified Automatic Signalling where provided	
3	Approach Locking, Back locking and Approach Warning at Level Crossings & Station	1
4	Automatic working on Single Line/3rd line sections (duly considering latest GR9.06(I) amendment)	1
5	Single DAC/Dual DAC Resetting procedure including Auto Resetting working in Preparatory Reset and Manual Resetting in case of dual detection failure	1
6	Lightening & Surge Protection system and Earthing requirements	1
7	Exception report to monitor mismatch in dual DAC on daily basis	1
8	Precaution before & during maintenance of DAC / Dual DAC/ Signals /LC Gates in Block section (Disconnection and reconnection)	1
9	Aspect control sequence functioning wrt approved Signalling Plan	1
10	'A' Marker, 'AG' marker, 'G' Marker working in GR3.17 —SR provisions	
11	Train operations in case of failure of Semi -Automatic Signal working in manual mode	3
12	Train operations in case of failure of Semi -Automatic Signal working in auto mode	
13	Train operations in case of failure of Automatic Signal with no LC Gate	
14	Train operations in case of failure of Automatic Signal controlling LC Gate	
15	Train Operation during prolonged failure and wrong direction movement	
16	Red Lamp Protection	1
17	Cascading/Cutting in arrangement	
18	Supervisory Track section working	
19	Duty and responsibility of "LOOK OUT PERSON "during Failure & Maintenance in Block Section	2
20	Duties of Signalling staff (Maintainer, JE/SSE)	
21	Duties of Loco Pilot/ALP	2
22	Duties of Panel ASM	
23	Checklist for Automatic Signalling works (ABS) commissioning	1
	Total Hours Allotted	17

Practical contents

SN	Topic Name	Hours Allotted
1	Identification of Automatic Signal	1
2	Control Aspect Chart in Automatic Signalling	1
3	Equipment used in Automatic Signalling	1
4	Maintenance in Automatic Signalling	1
5	Cascading/Cutting in arrangement.	1
6	Red Lamp Protection.	1
7	Resetting Procedures used in Automatic Signalling.	2
8	Working in Modified Automatic Signalling & Semi-Automatic Signal(Changeover procedure)	1
9	Approach Locking, Back locking and Approach Warning at Level Crossings & Station.	1
10	Duty of Technician during Failure Of Automatic Signalling	1
11	Checklist of Automatic Signalling	
12	Line demonstration	6
	Total Hours Allotted	17

Others

SN	Topic Name	Hours Allotted
1	Joining, Briefing & Spare	1
2	Exam viva	1
	Total Hours Allotted	2

Total Course Duration- 36 Hours (01 week)

Note: Competency will be updated after successfully completion of course.



ST-27 (AUTOMATIC SIGNALLING)

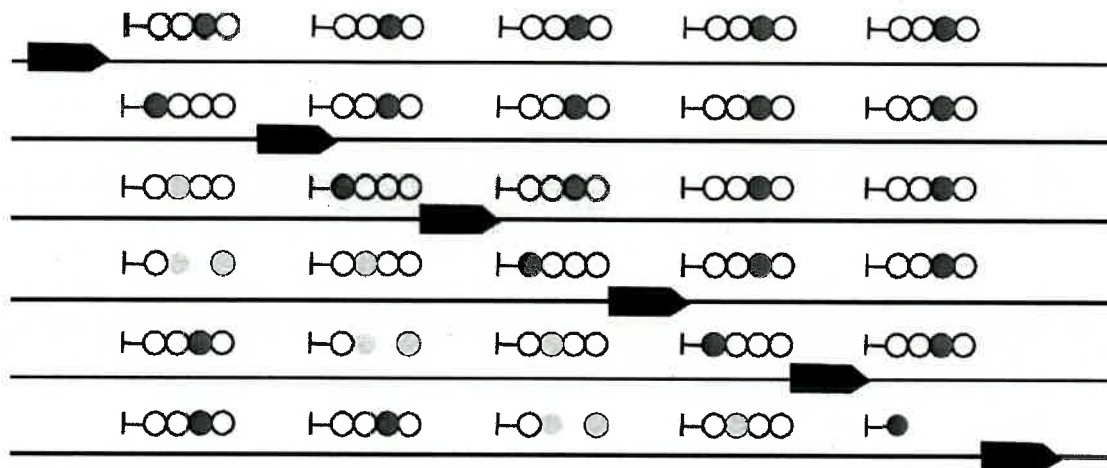
SIGNAL & TELECOM TRAINING CENTER GHAZIABAD (NORTHERN RAILWAY)

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INTRODUCTION

Automatic block working is a system of train working in which the movement of trains is controlled by automatic stop signals. These signals are operated automatically by trains passing in and out of automatic signaling sections.



AUTOMATIC CHANGE OF SEQUENCE OF ASPECT BEHIND THE TRAIN IN FOUR ASPECT SIGNALLING TERRITORY