

**LIST OF MODULES TO BE DEVELOPED****I. Signaling**

System	S. No.	Topic	Sub Topic (if any )	Details to be covered under the topic
BOMBARDIER	1	Point Machine EEA-5	Construction and mechanical design	Constructional Details, Operation and Working, Maintenance Practices and basics of fault finding
			Operation and Working	
			Circuit and Faults	
			Maintenance Practices	
	2	Point Machine JEA72	Construction and mechanical design	Constructional Details, Operation and Working, Maintenance Practices and basics of fault finding
			Operation and Working	
			Circuit and Faults	
			Maintenance Practices	
	3	EbiLock950 (CBI Bombardier)	Hardware description and arrangement	Description of System, Sub- equipment details, maintenance
			Data communication arrangement and networking details	
			Functional Description and Faults	
			Maintenance Practices	
	4	Track Circuits T-121M	Hardware description and arrangement	Description of System, various sub-equipment details, functioning connections and maintenance details
			Train Data flow and Hardware	
			Data communication arrangement and networking details	
			Functional Description and Faults	
			Maintenance Practices	
	5	Ebiscreen 2000 (Bombardier ATS system)	Hardware description and arrangement	Description of System, various sub-equipment details, functioning connections and maintenance details
			Train Data flow and Hardware	
			Data communication arrangement and networking details	
Functional Description and Faults				
6	ATP/ATO Bombardier	ATC Trackside System Bombardier	Track side equipment Details, Train board Equipment Details, Track side-train borne equipments interlink, RS Interface with ATP/ATO, Maintenance, Failure Indications and rectification of known type of failures	
		ATC Trainborne System Bombardier		
		ATC Sub System Interface Bombardier		
SIEMENS	7	ATP/ATO Siemens	ATC General Overview Siemens	Track side equipment Details, Train board Equipment Details, Track side-train borne equipments interlink, RS Interface with ATP/ATO, Maintenance, Failure Indications and rectification of known type of failures
			ATC Trackside System Siemens	
			ATC Trainboarn System Siemens	
			ATC Sub System Interface Siemens	
ALSTOM	8	ATP/ATO Alstom	ATC General Overview ALSTOM	Track side equipment Details, Train board Equipment Details, Track side-train borne equipments interlink, RS Interface with ATP/ATO, Maintenance, Failure Indications and rectification of known type of failures
			ATC Trackside System ALSTOM	
			ATC Trainboarn System ALSTOM	
			ATC Sub System Interface ALSTOM	
GENERAL SIGNALING	9	Signaling Control Tables/Selection Table/ Table of Control	Pre requirements of a control table	Basic rules for developing a control table for a given yard, the various columns in control tables and their relevance, comparison of control tables used in Delhi Metro.
			Basic and Common Requirements of a control table	
			System specific variations of control tables	
	10	Principles of Interlocking		General principles of interlocking in graphics and pictures for better understanding of topics