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Addendum & Corrigendum No.3 to Operating Manual Book 2008 of S. E. C. Railway.

In Operating Manual (SECR) Book 2008

1. The existing para 1.10 is replaced by the following:-

Standards of Signaling and Interlocking: - Interlocking at stations is standardized into four different classes viz. I(R), II(R), III(R) and IV(R). The regulations prescribing the four standards have been drawn up primarily to meet the needs of crossing stations on the single line but, with such modifications as may be necessary in regard to the equipment of signals; these are also applicable to other stations both on single and double lines. The standards are as follows: -

Note: - For details see para 170 to 174 of "Indian Railway Signal Engineering Manual".

Two aspect signalling.

(a) Standard I(R)

- (i) Speed - 50 kms. Per hour.
- (ii) Isolation - Isolation of the main line is recommended, but is not essential.
- (iii) Points - the facing points should be provided with key locks, locking both switches independently and the switches detected independently by relative signals.
- (iv) Interlocking - Interlocking between points and signals may be carried out indirectly by means of key locks.
- (v) Signals - Outers and Bracketted Home signals shall be provided. The provision of Starter signals is optional. Working Warners may be provided for metre gauge stations where trains run through, if considered necessary, but are not required for other stations signalled to standard I.

(b) Standard II(R)

- (i) Speed - 110 kms. per hour.
- (ii) Isolation of the main line is essential.
- (iii) Points - the facing points should be provided with plunger type locks, locking both switches independently and the switches and the bolt being detected independently by relative signals.
- (iv) Interlocking - The interlocking between points and signals may be direct or indirect. Where indirect interlocking is used, signals shall be worked from a position under the control of the Station Master and

key must be provided to enable the Station Master to lock up the signal frame.

- (v) Signal - Outers, Warners and bracketed Home signals must be provided, and Starters where considered necessary; (ii) Where Starters are not provided the "off" position of the Warner signal shall be dependent upon the receipt of 'Line Clear' on the block instrument.

(c) Standard III(R)

- (i) Speed - 140 km/h Unrestricted speed.
 (ii) Isolation - same as for Standard II.
 (iii) Interlocking: - the interlocking between points and signals must be direct.
 (iv) Signals. - Outers, Warners, Bracketed Home Signals and Starters must be provided and Advanced Starters as may be necessary.

(d) Standard-IV(R)

- (i) Speed upto 160 km/h
 (ii) Isolation - as per Standard III

Multiple aspect signalling.

The Standards, their speeds, requirements of isolation equipments of points and requirements of interlocking between points and signals are the same as in the case of two aspect signalling. The Signalling, however, should be as under: -

- (i) Standard I - A Distant and a Home Signal in each direction.
 (ii) Standard II - A Distant, a Home and a Starter Signal in each direction.
 (iii) Standard III - A Distant, a Home and a Starter signal in each direction.

S. No.	Item	Standard I	Standard II	Standard III	Standard IV
	Allowable Speed (Kmph)	Upto 50	Upto 110	Upto 140	Upto 160
1	Isolation	Y*	Y	Y	Y
2	2 aspect (2A) Semaphore/ Multi Aspect (MA) Signalling	2A/MA	2A/MA	MA	MA
3	Double distant	N	Y**	Y	Y
4	Point Operation	Mech	Mech/Elect	Mech/Elect	Elect
5	Point Locking	Key/FPL/HPL	FPL/Pt M/c	FPL/Pt M/c	Clamp type direct%
6	Point Detection	Mech/Elect	Mech/Elect	Mech/Elect	Elect
7	Lock Detection	N	Y	Y	Y
8	Interlocking	Key/Mech	Mech/Elec/ Electronic	Mech/Elec/ Electronic	Electric/ Electronic

9	Track Circuiting	N	Mech Interlocking: Run Through Lines (Main), Elec/Electronic: All Running Lines	All Running Lines	All Running Lines
10	Block Working (minm)	Token	Token/SGE	#SGE/TC	#SGE/TC
11	Preventing signal passing at danger	N	N	N	Y%

*Isolation is not compulsory provided that the conditions laid down in the second paragraph of the general rule 4.11 are complied with "Limits of speed while running through stations"

**Double distant on sections where goods trains have a braking distance of more than 1 km.

% Desirable

At station provided with CPI or high density routes, Means for verifying complete arrival of train by suitable means.

Note: The provisions of the revised Addendum Corrigendum Slip No.6 Chapter VII, Para 7.131 Section "M" of Signal Engineering Manual will only apply to future signaling and Interlocking installations. Wherever existing installation do not fulfill these requirements, existing speed of operation may be permitted to continue.

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