## 3710

## OPERATING CONDITIONS FOR STATION/YARD CRASH MANAGEMENT SYSTEM AT DEAD END

## 1. Coach Type

- i) BG passenger coach fitted with Centre Buffer Coupler (LHB coaches)
- ii) BG passenger coach fitted with Semi-permanent coupler (EMU, MEMU, DMU coaches)
- iii) BG passenger coach fitted with screw coupling and side buffer (ICF Coaches)
- iv) Goods wagons of mixed type (BCN, BOXN etc.)

## 2. Mass

i) Passenger train – 2000 t.

Goods train - 5200 t.

- ii) Impact speed 05 kmph
- iii) Maximum permitted shunting speed -- 15 kmph
- 3. Side Buffer Type
  - i) Height 1105<sup>+0/-15</sup> mm. -- 1030 mm. (centre line from rail level)
  - ii) Distance between Side Buffers 1956 mm.
- 4. Centre Buffer Coupler type
  - i) Height -- 1105 mm. (Centre line from rail level)
  - ii) Distance between centre lines of the side buffers (end coaches are equipped with side buffers) -- 1956 mm
- 5. Wheel diameter 952 mm (new), 825 mm (condemning)
- 6. Maximum length of coach 24000 mm, Maximum width of coach 3660 mm.

  Maximum height of coach 4381 mm.
- 7. Axle load 16.25 t. to 20. 32 t.
- 8. Gauge 1676 mm. (Broad Gauge)
- 9. Environmental conditions -

Climatic & Environmental Conditions

-Maximum Temperature

: 70 C

(Under the sun)

-Maximum Temperature (Under shade)

: 45° C

- Minimum Temperature (at

night)

: -5 C

- Rainfall

: Fairly Heavy

- Humidity

: 100% saturation

Environment

: Dusty during hot weather and saline in coastal areas

- Maximum stopping distance 5 metres, However in case stopping distance of 5 metres leads to loss of berthing capacity, these should be provision in the system for catering to lesser speed impacts with reduced stopping distance.
- 11. Maximum Buffer/CBC drop under full load 75 mm.

- 12. Maximum operational speed 160 kmph
- 13. **Maximum gradient** 1 in 37
- 14. Radius of sharpest curve 175 M (10° curve)
- 15. Brake System
  - i) Coach Twin pipe air brake system and Electro pneumatic brake system
  - ii) Wagon Single pipe air brake system.
- Coach strength Satisfies end load requirements as per UIC 566.
   Wagon strength Satisfies end load requirements as per UIC 566.
- 17. Track is maintained as per permission of Indian Railway Permanent Way Manual.
- 18. System should be capable of accommodating the variations in gradient /and curvature for the platforms / sidings where it is installed

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