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| *TEST CASE DESCRIPTION* | | | | | | | |
|  | | Code | Version | | Title | | |
| Test Case | | 3.17.9 | 2 | | Level transition from L2 to LNTC LZB. Degraded braking conditions + maximum train length | | |
|
| Baseline applicable | | Baseline 3 | | | | | |
| Test case author | | ADIF | | | | | |
| Test Objective(s) | | Verify that the transition from level 2 to level NTC LZB is performed correctly. | | | | | |
| Diagram | |  | | | | | |
| Starting conditions | | Level | | | | 2 | |
| Mode | | | | FS | |
| Train Speed (km/h) | | | | Maximum permitted speed | |
| Additional starting conditions | | | | The train is approaching the level transition to Level NTC LZB and the first signal after the transition border displays stop aspect.  The braked weight percentage entered in the train data entry is the corresponding to the worst running conditions, and the entered train length is the maximum train length possible. | |
| Sequence of the Test Case | | Checkpoints | | | | | |
| Step | Step description | Interfaces | | Description of what to be tested at the interface | | | OK? |
| 1 | The train receives the level transition announcement via balise group or RBC. | DMI (O) | | Level NTC LZB transition announcement | | |  |
| DMI (I) | |  | | |  |
| JRU | | (LRBG1)  (If received from RBC Message 3/24/33)  Packet 41 | | |  |
| D\_LEVELTR = D1  M\_LEVELTR = 1  L\_ACKLEVELTR = L1  NID\_NTC = 10 (LZB)  DMI\_SYMB\_STATUS  LE08 | | |
| 2 (\*) | The RBC sends a MA with EoA beyond the transition border. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 3 | | |  |
| Packet 15  Packet 21  Packet 27 | | |
| 3 | The EVC runs the distance “D1-L1” at which the acknowledgement window of the transition to Level NTC LZB is shown to the driver. | DMI (O) | | Level NTC LZB Acknowledgement is displayed | | |  |
| DMI (I) | |  | | |  |
| JRU | | Estimated front end=D1-L1-L\_DOUBTUNDER  DMI\_SYMB\_STATUS  LE09 | | |  |
| 4 | The train passes over CDI and enters in LZB transmission | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | |  | | |  |
| 5 | The driver acknowledges the level transition | DMI (O) | | Level NTC LZB acknowledgement disappears | | |  |
| DMI (I) | | Driver acknowledges the level transition. | | |  |
| JRU | | M\_DRIVERACTIONS = 10 | | |  |
| 6 | The EVC runs the distance "D1" or the balise group with level transition order to LNTC LZB is read | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | NID\_BG = BG2  Packet 41 | | |  |
| D\_LEVELTR =32767  M\_LEVELTR = 1  L\_ACKLEVELTR = 0  NID\_NTC = 10 (LZB) | | |
| 7 | The EVC switches to Level NTC LZB (permitted speed does not decrease abruptly) | DMI (O) | | Level NTC Symbol  SN Symbol  LNTC LZB transition announcement disappears  Vpermitted does not decrease | | |  |
| DMI (I) | |  | | |  |
| JRU | | M\_LEVEL=1  M\_MODE=13 | | |  |
| DMI\_SYMB\_STATUS  LE02, MO19 | | |
| 8 | The train reports its position to the RBC due to the level transition | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 136  Packet 0 | | |  |
| M\_LEVEL=1 | | |
| 9 | The train is at standstill in front of the light signal showing stop aspect. The driver selects “Override” in the NTC LZB equipment. | DMI (O) | | Vtrain = 0 km/h | | |  |
| DMI (I) | | NTC LZB Override | | |  |
| JRU | | V\_TRAIN = 0  LZB Command = True | | |  |
| 10 | SN Override functionality activation. | DMI (O) | | EoA Override Symbol | | |  |
| Vpermitted = Vov | | |
| DMI (I) | |  | | |  |
| JRU | | V\_PERM = V\_NVSUPOVTRP  DMI\_SYMB\_STATUS  MO03 | | |  |
| 11 (\*\*) | The train runs the length of the train from the transition border. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 136  Packet 0/1 | | |  |
| Estimated front end (LRBG2) = L\_TRAIN + L\_DOUBTOVER | | |
| 12 (\*\*) | The RBC sends an order to terminate the communication session and the termination of the communication session is performed. | DMI (O) | | Safe radio connection “Connection Up” symbol disappears | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 3/24/33  Packet 42 | | |  |
| Q\_RBC=0  Message 156  Message 39 | | |
| Final state | | Level | | NTC LZB | | |  |
| Mode | | SN | | |  |
| Train Speed (km/h) | | NR | | |  |
| Other parameters | |  | | |  |
| Final Test Result | |  | | | | | |
| Field of Application | | Spain | | | | | |
| Briefing instructions | | The braked weight percentage corresponding to the worst running conditions shall be defined by the rolling stock operator for each train.  (\*) The order of this step could be different. In any case to enter the LZB area the EVC must have information of the new area. This information can be transmitted as MA and track description of the new area or as a V\_LOA at the transition border.  (\*\*) These steps could be executed before steps 8 and 9 if the distance from the transition point to the first light signal of the LZB area is longer than the train length. | | | | | |