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| *TEST CASE DESCRIPTION* | | | | | | | |
|  | | Code | Version | | Title | | |
| Test Case | | 2.1.2 | 2 | | Level transition from LNTC LZB to L1. TSR in L1 area. | | |
|
| Baseline applicable | | Baseline 3 | | | | | |
| Test case author | | ADIF | | | | | |
| Test Objective(s) | | Verify that the EVC supervises the permitted speed for a TSR set in the L1 area on performing a level transition from level NTC LZB to level 1. | | | | | |
| Diagram | |  | | | | | |
| Starting conditions | | Level | | | | NTC LZB | |
| Mode | | | | SN | |
| Train Speed (km/h) | | | | NR | |
| Additional starting conditions | | | | The train is running in LNTC LZB with transmission and approaching a BG with level 1 transition announcement and the signals ahead are in permissive aspect. It is requested to the signalman to set a TSR with a speed as low as possible in the Level 1 area and close to the level transition.  The signalman shall establish the TSR according to the procedure (this could include to introduce the TSR in both systems, ETCS and LZB). | |
| 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. | DMI (O) | | Level 1 transition announcement | | |  |
| DMI (I) | |  | | |  |
| JRU | | M\_LEVEL = 1  M\_MODE = 13  Packet 41 (LRBG1) | | |  |
| D\_LEVELTR = D1  M\_LEVELTR = 2  L\_ACKLEVELTR = L1  DMI\_SYMB\_STATUS  LE10 | | |
| 2 | The EVC runs the distance “D1-L1” at which the acknowledgement window of the transition to Level 1 is shown to the driver. | DMI (O) | | Level 1 Acknowledgement is displayed | | |  |
| DMI (I) | |  | | |  |
| JRU | | Estimated front end=D1-L1-L\_DOUBTUNDER  DMI\_SYMB\_STATUS  LE11 | | |  |
| 3 | The driver acknowledges the level transition | DMI (O) | | Level 1 Acknowledgement disappears | | |  |
| DMI (I) | | Driver acknowledges the level transition. | | |  |
| JRU | | M\_DRIVERACTIONS = 7 | | |  |
| 4 | The EVC receives a MA from a BG | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Packet 12  Packet 21 | | |  |
| Packet 27 | | |
| 5 | The EVC runs the distance "D1" or the balise group with level transition order to L1 and TSR information is read. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Packet 41 (LRBG2)  D\_LEVELTR = 32767 | | |  |
| M\_LEVELTR = 2  Packet 65   NID\_TSR= TSR1  V\_TSR = V1  L\_TSR= L1  D\_TSR= D2 > D1 (LRBG1) | | |
| 6 | Transition to L1 is performed. (without abrupt changes in the permitted speed) | DMI (O) | | Level 1 Symbol | | |  |
| FS Symbol  Entering FS message  Level 1 transition announcement disappears | | |
| DMI (I) | |  | | |  |
| JRU | | M\_LEVEL= 2  M\_MODE = 0 | | |  |
| DMI\_SYMB\_STATUS  LE03, MO11  SYSTEM\_STATUS\_MESSAGE  Entering FS | | |
| 7 | The train starts the braking curve to the TSR. | DMI (O) | | Braking curve with V\_target = V1  Vtrain < Vpermitted | | |  |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN < V\_PERM  SPEED AND DISTANCE MONITORING INFORMATION  M\_SDMTYPE=1  V\_TARGET = V1 | | |  |
| 8 | The train reaches the TSR area when the max safe front end of the train has run the distance D2. | DMI (O) | | Vpermitted = V1 Vtrain ≤ V1 | | |  |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN ≤ V1  estimated front end = D2(LRBG2) - L\_DOUBTUNDER  SPEED AND DISTANCE MONITORING INFORMATION  M\_SDMTYPE=0  V\_PERM = V1 | | |  |
| Final state | | Level | | 1 | | |  |
| Mode | | FS | | |  |
| Train Speed (km/h) | | NR | | |  |
| Other parameters | |  | | |  |
| Final Test Result | |  | | | | | |
| Field of Application | | Spain | | | | | |
| Briefing instructions | | In case the train is equipped with L0+LZB, the test case shall be adapted accordingly. | | | | | |