|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *TEST CASE DESCRIPTION* | | | | | | | |
|  | | Code | Version | | | Title | |
| Test Case | | 4.2.1 | 2 | | | Level transition from L2 to L0+LZB. Signal at proceed aspect. | |
|
| Baseline applicable | | Baseline 2 (2.3.0.d) | | | | | |
| Test case author | | ADIF | | | | | |
| Test Objective(s) | | Verify that the transition from level 2 to level L0 + 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 LZB at the maximum speed of the line and the last lineside signal in the Level 2 area displays proceed aspect and all the marker boards at the level LZB area are also in proceed aspect.  A level 2 movement authority beyond the transition border is stored onboard. | | |
| 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 0 transition announcement is displayed | | |  |
| DMI (I) | |  | | |  |
| JRU | | (LRBG1)  (If received from RBC Message 3/24/33)  Packet 41  D\_LEVELTR = D1  M\_LEVELTR = 0  L\_ACKLEVELTR = L1  START DISPLAYING TEXT MESSAGE (1) | | |  |
| 2 (\*) | The EVC runs the distance “D1-L1” at which the acknowledgement window of the transition to Level L0 + LZB is shown to the driver. | DMI (O) | | Level 0 acknowledgement is displayed | | |  |
| DMI (I) | |  | | |  |
| JRU | | START DISPLAYINGTEXT MESSAGE (2)  Estimated front end=D1-L1-L\_DOUBTUNDER | | |  |
| 3 (\*) (\*\*) | The train passes over BKW/CDI with its rear End. The LZB onboard unit enters in “transmission mode”. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | |  | | |  |
| 4 (\*) | The driver acknowledges the level transition. | DMI (O) | | Level 0 acknowledgement disappears | | |  |
| DMI (I) | | Driver acknowledges the level transition. | | |  |
| JRU | | M\_DRIVERACTIONS = 6  STOP DISPLAYINGTEXT MESSAGE (2) | | |  |
| 5 | The EVC runs the distance "D1" or the balise group with level transition order to L0 is read | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | (LRBG2)  Packet 41  D\_LEVELTR =32767  M\_LEVELTR = 0 | | |  |
| 6 | The EVC switches to Level L0 + LZB (the permitted speed does not decrease). | DMI (O) | | Level 0 symbol  UN Symbol  Level 0 transition announcement disappears | | |  |
| DMI (I) | |  | | |  |
| JRU | | M\_LEVEL=0  M\_MODE=4  STOP DISPLAYING TEXT MESSAGE (1) | | |  |
| 7 | The train reports its position to the RBC due to the level transition | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 136  Packet 0  M\_LEVEL=0 | | |  |
| 8 | The EVC runs the distance 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 | | |  |
| 9 | The RBC sends an order to terminate the communication session and the termination of the communication session is performed. | DMI (O) | | Radio Connection Symbol disappears | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 3/24/33  Packet 42  Q\_RBC=0  Message 156  Message 39 | | |  |
| 10 | The train passes through the first signal after the transition border. | DMI (O) | | Vtrain ≤ V associated to the signal aspect | | |  |
| DMI (I) | |  | | |  |
| JRU | |  | | |  |
| 11 (\*\*) | LZB system continues with transmission mode. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | |  | | |  |
| Final state | | Level | | 0 + LZB | | |  |
| Mode | | UN | | |  |
| Train Speed (km/h) | | NR | | |  |
| Other parameters | |  | | |  |
| Final Test Result | |  | | | | | |
| Field of Application | | Spain | | | | | |
| Briefing instructions | | This test case shall be executed with the maximum train length  (\*) These steps could be executed in different order.  (\*\*) These steps should be checked in the LZB onboard unit. | | | | | |