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| --- | --- | --- | --- | --- | --- | --- | --- |
| *TEST CASE DESCRIPTION* | | | | | | | |
|  | | Code | Version | | Title | | |
| Test Case | | 3.3.4 | 1 | | MA shortening in RBC/RBC Handover area. | | |
|
| Baseline applicable | | Baseline 3 | | | | | |
| Test case author | | ADIF | | | | | |
| Test Objective(s) | | Verify the management of a shortened MA when the train is performing an RBC/RBC Handover procedure. | | | | | |
| Diagram | |  | | | | | |
| Starting conditions | | Level | | | | 2 | |
| Mode | | | | FS | |
| Train Speed (km/h) | | | | NR | |
| Additional starting conditions | | | | The EVC is able to manage two communication sessions simultaneously.  A communication session is established between the EVC and the Handing RBC.  An MA reaching the RBC/RBC Handover border is stored on board. | |
| Sequence of the Test Case | | Checkpoints | | | | | |
| Step | Step description | Interfaces | | Description of what to be tested at the interface | | | OK? |
| 1 | The RBC1 sends an announcement to perform a handover from RBC1 (Handing Over RBC) to the RBC2 (Accepting RBC). | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 3/24/28/33  Packet 131 (LRBG1) | | |  |
| NID\_RBC=RBC2  NID\_RADIO= RADIO2  D\_RBCTR = D1 | | |
| 2 | The establishment of a communication session is initiated by the EVC with the RBC2. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 155  Message 32  Message 159 | | |  |
| Message 129  Message 8 | | |
| 3 | The train receives a MA from RBC1 that extends the MA beyond the RBC/RBC Handover border. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 3  Packet 15 | | |  |
| L\_ENDSECTION = L1 > D1 | | |
| 4 | When the train is approaching the RBC/RBC Handover border, it is requested to the signalman to close a light signal or ETCS markerboard beyond the RBC/RBC Handover border.  The RBC sends a conditional emergency stop (CES) to the markerboard (\*). | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 15  NID\_EM = EM1  D\_EMERGENCYSTOP = D2 < L1  D2 > D1 | | |  |
| 5 | The EVC checks that the min safe front end of the train has not passed the proposed CES stop location yet and that the proposed CES stop location is not beyond the current EoA/SvL  The EVC accepts the CES (i.e. defines a new EoA/SvL) and informs the RBC. | DMI (O) | | Dtarget is shortened | | |  |
| Vpermitted decreases | | |
| DMI (I) | |  | | |  |
| JRU | | Message 147  NID\_EM = EM1  Q\_EMERGENCYSTOP = 0  Packet 0/1  D\_LRBG - L\_DOUBTOVER < D2  D\_TARGET = D2 (distance to the light signal or ETCS markerboard) | | |  |
| 6 | The RBC revokes the CES. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 18  NID\_EM = EM1 | | |  |
| 7 | The train approaches to the RBC/RBC Handover border. The EVC sends to both RBC1 and RBC2 a position report when the maximum safe front end of the train has passed the border location. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Estimated front end (LRBG1) = D1 - L\_DOUBTUNDER | | |  |
| Message 136  Packet 0  Message 136  Packet 0 | | |
| 8 | At the border location the train receives from balise group an order to switch to RBC2. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Packet 131 (LRBG2)  NID\_RBC=RBC2 | | |  |
| NID\_RADIO=RADIO2  D\_RBCTR = 0 | | |
| 9 | The EVC sends to the RBC1 a position report when the min safe rear end of the train has passed the border location. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Estimated front end (LRBG2) =L\_TRAIN + L\_DOUBTOVER. | | |  |
| Message 136  Packet 0 | | |
| 10 | The RBC1 sends an order to terminate the communication session. Communication session is terminated with the RBC1. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 3/24/28/33  Packet 42  Q\_RBC=0  NID\_RBC=RBC1 | | |  |
| Message 156  Message 39 | | |
| Final state | | Level | | 2 | | |  |
| Mode | | FS | | |  |
| Train Speed (km/h) | | NR | | |  |
| Other parameters | |  | | |  |
| Final Test Result | |  | | | | | |
| Field of Application | | Spain | | | | | |
| Briefing instructions | | (\*) Depending the trackside implementation, the MA shortening could be performed by other means, like a shorter MA message (message 3) or a co-operative shortening of MA. | | | | | |