|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *TEST CASE DESCRIPTION* | | | | | | | |
|  | | Code | Version | | Title | | |
| Test Case | | 3.2.3 | 1 | | Braking supervision. Trains with Lambda percentage introduced. Worst percentage, max train length and the worst gradient conditions. | | |
|
| Baseline applicable | | Baseline 3 | | | | | |
| Test case author | | ADIF | | | | | |
| Test Objective(s) | | Verify that the EVC supervises the train speed to stop the train at the EoA. | | | | | |
| Diagram | |  | | | | | |
| Starting conditions | | Level | | | | 2 | |
| Mode | | | | FS | |
| Train Speed (km/h) | | | | NR | |
| Additional starting conditions | | | | The train is approaching a closed signal with the worst gradient conditions. The worst percentage and max train length are modified. | |
| Sequence of the Test Case | | Checkpoints | | | | | |
| Step | Step description | Interfaces | | Description of what to be tested at the interface | | | OK? |
| 1 | The train enters in the braking curve towards the EoA. | DMI (O) | | Braking curve with V\_target = 0 km/h | | |  |
| Vtrain < Vpermitted | | |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN < PERMITTED SPEED  SPEED AND DISTANCE MONITORING INFORMATION  M\_SDMTYPE=1 | | |  |
| V\_TARGET= 0  D\_TARGET = D1 | | |
| 2 | The train exceeds the permitted speed at high and medium speed (upon entering the braking curve and in the middle of the braking curve). | DMI (O) | | Vtrain > Vpermitted  Brake intervention symbol | | |  |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN > PERMITTED SPEED | | |  |
| (SERVICE or EMERGENCY) BRAKE COMMAND STATE = COMMANDED  SPEED AND DISTANCE MONITORING INFORMATION  M\_SDMSUPSTAT=4  DMI\_SYMB\_STATUS  ST01 | | |
| 3 | The system brakes until reaching a speed under the permitted one. | DMI (O) | | Vtrain ≤ Vpermitted | | |  |
| Stop showing brake intervention symbol | | |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN ≤ V\_PERM | | |  |
| (SERVICE or EMERGENCY) BRAKE COMMAND STATE = NOT COMMANDED SPEED AND DISTANCE MONITORING INFORMATION  M\_SDMSUPSTAT=0 | | |
| 4 | The train exceeds again the permitted speed (at the end of the braking curve, near the EoA). | DMI (O) | | Vtrain > Vpermitted  Brake intervention symbol | | |  |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN > PERMITTED SPEED | | |  |
| (SERVICE or EMERGENCY) BRAKE COMMAND STATE = COMMANDED  SPEED AND DISTANCE MONITORING INFORMATION  M\_SDMSUPSTAT=4  DMI\_SYMB\_STATUS  ST01 | | |
| 5 | The system brakes until train speed is under the permitted speed. | DMI (O) | | Vtrain ≤ Vpermitted | | |  |
| Stop showing brake intervention symbol | | |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN ≤ PERMITTED SPEED | | |  |
| (SERVICE or EMERGENCY) BRAKE COMMAND STATE = NOT COMMANDED SPEED AND DISTANCE MONITORING INFORMATION  M\_SDMSUPSTAT=0 | | |
| 6 | The EVC is in FS mode in the proximities of the end of the MA and the train stops before reaching the EoA. | DMI (O) | | D\_target > 0 | | |  |
| Vtrain =0 | | |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN=0  TARGET DISTANCE > 0 | | |  |
|  | | |
| Final state | | Level | | 2 | | |  |
| Mode | | FS | | |  |
| Train Speed (km/h) | | 0 | | |  |
| Other parameters | |  | | |  |
| Final Test Result | |  | | | | | |
| Field of Application | | Spain | | | | | |
| Briefing instructions | |  | | | | | |