|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *TEST CASE DESCRIPTION* | | | | | | | |
|  | | Code | Version | | Title | | |
| Test Case | | 1.3.1 | 1 | | Braking supervision. Normal conditions (without isolated bogies) and the worst gradient conditions. | | |
|
| Baseline applicable | | Baseline 2 (2.3.0.d) | | | | | |
| Test case author | | ADIF | | | | | |
| Test Objective(s) | | Verify that the EVC supervises the train speed in order to stop the train at the EoA. | | | | | |
| Diagram | |  | | | | | |
| Starting conditions | | Level | | | | 1 | |
| Mode | | | | FS | |
| Train Speed (km/h) | | | | NR | |
| Additional starting conditions | | | | The train is approaching the EoA (closed signal) in the place with worst gradient conditions of the line. | |
| Sequence of the Test Case | | Checkpoints | | | | | |
| Step | Step description | Interfaces | | Description of what to be tested at the interface | | | OK? |
| 1 | The EVC receives a MA from a BG. | DMI (O) | | FS symbol | | |  |
| DMI (I) | |  | | |  |
| JRU | | M\_MODE = 0  Packet 12  V\_MAIN ≠ 0  L\_SECTION (K) ≠ 0  L\_ENDSECTION ≠ 0 | | |  |
| 2 | The train enters in the braking curve towards the EoA. | DMI (O) | | Braking curve with Vtarget = 0 km/h  Vtrain < Vpermitted | | |  |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN < V\_PERMITTED  V\_TARGET= 0  V\_PERMITTED and D\_TARGET decrease | | |  |
| 3 | 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 > V\_PERMITTED  (SERVICE or EMERGENCY) BRAKE STATE = APPLICATION | | |  |
| 4 | The system brakes until the train speed is under the permitted speed. | DMI (O) | | Vtrain ≤ Vpermitted  Brake intervention symbol disappears | | |  |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN ≤ PERMITTED SPEED  (SERVICE or EMERGENCY) BRAKE STATE = REVOCATION | | |  |
| 5 | The train exceeds again the permitted speed (at the end of the braking curve, near the EoA). | DMI (O) | | D\_target  Vtrain > Vpermitted  Brake intervention symbol | | |  |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN > PERMITTED SPEED  (SERVICE or EMERGENCY) BRAKE STATE = APPLICATION | | |  |
| 6 | The system brakes until the train speed is under the permitted speed. | DMI (O) | | Vtrain ≤ Vpermitted  Brake intervention symbol disappears | | |  |
| DMI (I) | |  | | |  |
| JRU | | V\_TRAIN ≤ PERMITTED SPEED  (SERVICE or EMERGENCY) BRAKE STATE = REVOCATION | | |  |
| 7 | 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  D\_TARGET > 0 | | |  |
| Final state | | Level | | 1 | | |  |
| Mode | | FS | | |  |
| Train Speed (km/h) | | 0 | | |  |
| Other parameters | |  | | |  |
| Final Test Result | |  | | | | | |
| Field of Application | | Spain | | | | | |
| Briefing instructions | |  | | | | | |