**Test description for the color representation of supervision modes and statuses in Full Supervision**

Requirements see here:

European Railway Agency ERTMS/ETCS   
ETCS Driver Machine Interface Version: 3.4.0 Date: 12/05/2014  
**Pg. 34 “Speed and Distance Monitoring – Supervision Status”**

Overview of supervision monitoring:



Symbols LE04 and MO11 are permanently shown:

 

**8.2.1.2 Current train speed pointer (pp. 53 f)**

Overview on p.54, part “FS/OS”

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Supervision Status | | 0 km/h ≤ Pointer ≤ VPerm | 0 km/h ≤ Pointer ≤ Vrelease\*  (when Vrelease exists) | 0 km/h ≤ Pointer < VTarget | VTarget ≤ Pointer ≤ VPerm | Pointer  > VPerm (in CSM, PIM or TSM)  or > Vrelease (in RSM) |
| CSM | NoS | grey | - | - | - | - |
| OvS | - | - | - | - | orange |
| WaS | - | - | - | - | orange |
| IntS | grey | - | - | - | red |
| PIM | NoS | - | - | grey | white | - |
| OvS | - | - | - | - | orange |
| WaS | - | - | - | - | orange |
| IntS | - | - | grey | white | red |
| TSM | NoS | - | - | grey | white | - |
| IndS | - | - | - | yellow | - |
| OvS | - | - | - | - | orange |
| WaS | - | - | - | - | orange |
| IntS | - | - | grey | yellow | red |
| RSM | IndS | - | yellow | - | - | - |
| IntS | - | yellow | - | - | red |

**8.2.1.4 Circular Speed Gauge (CSG) (pp. 56 f)**

Overview on p.54, part “FS”

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Supervision Status | | 0 km/h ≤ CSG ≤ Vperm | 0 km/h ≤ CSG ≤ Vrelease\*  (when Vrelease exists) | 0 km/h ≤ CSG < Vtarget | Vtarget ≤ CSG ≤ Vperm | Vperm < CSG ≤ VSBI |
| CSM | NoS | dark grey | - | - | - | - |
| OvS | dark grey | - | - | - | orange |
| WaS | dark grey | - | - | - | orange |
| IntS | dark grey | - | - | - | red |
| PIM | NoS | - | medium grey | dark grey | white | - |
| OvS | - | medium grey | dark grey | white | orange |
| WaS | - | medium grey | dark grey | white | orange |
| IntS | - | medium grey | dark grey | white | red |
| TSM | NoS | - | medium grey | dark grey | white | - |
| IndS | - | medium grey | dark grey | yellow | - |
| OvS | - | medium grey | dark grey | yellow | orange |
| WaS | - | medium grey | dark grey | yellow | orange |
| IntS | - | medium grey | dark grey | yellow | red |
| RSM | IndS | - | medium grey | - | yellow | - |
| IntS | - | medium grey | - | yellow | - |

**Speed abbreviations**

P: permitted speed

I: Indication Speed

W: Warning Speed

SBI: Service Brake intervention speed

T: Target speed ( = 0 in case of existing R )

R: Release speed (not relevant in case of T > 0 (LoA))

v: current speed

**Status abbreviations**

NoS: Normal Status

IndS: Indication Status

OvS: Overspeed Status

WaS: Warning Status

IntS: Intervention Status

For more information on supervision mode and status see  
ERTMS/ETCS System Requirements Specification subset 26 Chapter 3 (Principles) Vers. 3.3.0 v. 07/03/12  
**3.13 Speed and distance monitoring**

**Ceiling Supervision Monitoring (CSM) (LOA)**

1. NoS: Drive below P (see in speed profile)
   1. CSG [0..P]: dark grey
   2. CSG ]P..SBI]: off
   3. Pointer: grey
   4. Additional Symbol: none
2. IndS: Wait until I < v (see in speed profile)
   1. CSG [0..P]: dark grey
   2. CSG ]P..SBI]: off
   3. Pointer: grey
   4. Additional Symbol: none
3. OvS : Accelerate beyond P
   1. CSG [0..P]: dark grey
   2. CSG ]P..SBI]: orange
   3. Pointer: orange
   4. Additional Symbol: none
4. NoS: Decelerate below P 🡺 see 1.
5. OvS : Accelerate beyond P 🡺 see 2.
6. WaS: Accelerate beyond W (Single Acoustic signal S1)
   1. CSG [0..P]: dark grey
   2. CSG ]P..SBI]: orange
   3. Pointer: orange
   4. Additional Symbol: none

(which means no optical change with respect to OvS)

1. WaS (**remains!**): Decelerate below W 🡺 see 2.
2. NoS: Decelerate below P 🡺 see 1.
3. OvS : Accelerate beyond P 🡺 see 2.
4. WaS: Accelerate beyond W (Single Acoustic signal S1) 🡺 see 6.
5. IntS: Accelerate beyond SBI (Permanent Acoustic signal S2)
   1. CSG [0..P]: dark grey
   2. CSG ]P..SBI]: red
   3. Pointer: red
   4. Additional Symbol:  (ST01)
6. IntS (**remains!**): Decelerate below SBI (**Permanent Acoustic signal S2 remains**) 🡺 see 11.
7. IntS (**remains!**): Decelerate below W (**Permanent Acoustic signal S2 remains**) 🡺 see 11.
8. NoS: Decelerate below P, EB still remains
   1. CSG [0..P]: dark grey
   2. CSG ]P..SBI]: red
   3. Pointer: grey
   4. Additional Symbol:  (ST01)
9. NoS: Wait for stop of EB 🡺 see 1.

**Pre Indication Monitoring (PIM), MA with no release speed (and target speed > 0) (LOA)**

1. NoS: Drive below T (see in speed profile)
   1. CSG [0..T[: dark grey
   2. CSG [T..P]: white
   3. CSG ]P..SBI]: off
   4. Pointer: grey
   5. Additional Symbol: none
2. NoS: Accelerate below P (see in speed profile)
   1. CSG [0..T[: dark grey
   2. CSG [T..P]: white
   3. CSG ]P..SBI]: off
   4. Pointer: white
   5. Additional Symbol: none
3. \*NoS: Decelerate below T 🡺 see 1.
4. \*NoS: Accelerate below P 🡺 see 2.
5. OvS : Accelerate beyond P
   1. CSG [0..T[: dark grey
   2. CSG [T..P]: white
   3. CSG ]P..SBI]: orange
   4. Pointer: orange
   5. Additional Symbol: none
6. \*NoS: Decelerate below P (beyond T) 🡺 see 2.
7. \*OvS : Accelerate beyond P 🡺 see 5.
8. WaS: Accelerate beyond W (Single Acoustic signal S1)
   1. CSG [0..T[: dark grey
   2. CSG [T..P]: white
   3. CSG ]P..SBI]: orange
   4. Pointer: orange
   5. Additional Symbol: none

(which means no optical change with respect to OvS)

1. \*WaS (**remains!**): Decelerate below W 🡺 see 8.
2. \*NoS: Decelerate below P (beyond T) 🡺 see 2.
3. \*OvS : Accelerate beyond P 🡺 see 5.
4. \*WaS: Accelerate beyond W (Single Acoustic signal S1) 🡺 see 8.
5. IntS: Accelerate beyond SBI (Permanent Acoustic signal S2)
   1. CSG [0..T[: dark grey
   2. CSG [T..P]: white
   3. CSG ]P..SBI]: red
   4. Pointer: red
   5. Additional Symbol:  (ST01)
6. IntS (**remains!**): Decelerate below SBI (**Permanent Acoustic signal S2 remains**) 🡺 see.
7. IntS (**remains!**): Decelerate below W (**Permanent Acoustic signal S2 remains**) 🡺 see.
8. IntS (**remains!**): Decelerate below P, EB still remains.
   1. CSG [0..T[: dark grey
   2. CSG [T..P]: white
   3. CSG ]P..SBI]: red
   4. Pointer: white
   5. Additional Symbol:  (ST01)
9. NoS: Wait for stop of EB 🡺 see 2.

\* may be skipped

**Pre Indication Monitoring (PIM), MA with a release speed (and target speed = 0) (EOA)**

1. NoS: Drive below R (see in speed profile)
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: white (overlap [0..R])
   3. CSG ]P..SBI]: off
   4. Pointer: grey
   5. Additional Symbol: none
2. NoS: Accelerate below P (see in speed profile)
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: white (overlap [0..R])
   3. CSG ]P..SBI]: off
   4. Pointer: white
   5. Additional Symbol: none
3. OvS : Accelerate beyond P
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: white (overlap [0..R])
   3. CSG ]P..SBI]: orange
   4. Pointer: orange
   5. Additional Symbol: none
4. \*NoS: Decelerate below P 🡺 see 2.
5. \*OvS : Accelerate beyond P 🡺 see 3.
6. WaS: Accelerate beyond W (Single Acoustic signal S1)
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: white (overlap [0..R])
   3. CSG ]P..SBI]: orange
   4. Pointer: orange
   5. Additional Symbol: none

(which means no optical change with respect to OvS)

1. \*WaS (**remains!**): Decelerate below W 🡺 see 3.
2. \*NoS: Decelerate below P 🡺 see 2.
3. \*OvS : Accelerate beyond P 🡺 see 3.
4. \*WaS: Accelerate beyond W (Single Acoustic signal S1) 🡺 see 6.
5. IntS: Accelerate beyond SBI (Permanent Acoustic signal S2)
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: white (overlap [0..R])
   3. CSG ]P..SBI]: red
   4. Pointer: red
   5. Additional Symbol:  (ST01)
6. IntS (**remains!**): Decelerate below SBI (**Permanent Acoustic signal S2 remains**) 🡺 see 11.
7. IntS (**remains!**): Decelerate below W (**Permanent Acoustic signal S2 remains**) 🡺 see 11.
8. IntS (**remains!**): Decelerate below P, EB still remains
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: white (overlap [0..R])
   3. CSG ]P..SBI]: red
   4. Pointer: white
   5. Additional Symbol:  (ST01)
9. IntS (**remains!**): Decelerate below R, EB still remains
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: white (overlap [0..R])
   3. CSG ]P..SBI]: red
   4. Pointer: grey
   5. Additional Symbol:  (ST01)
10. NoS: Wait for stop of EB 🡺 see 1.

\* may be skipped

**Target Speed Monitoring (TSM), MA with no release speed (and target speed > 0) (EOA)**

1. NoS: Drive below T (see in MA)
   1. CSG [0..T[: medium grey
   2. CSG [T..P]: white
   3. CSG ]P..SBI]: off
   4. Pointer: grey
   5. Additional Symbol: none
2. NoS: Accelerate below P (see in speed profile)
   1. CSG [0..T[: medium grey
   2. CSG [T..P]: white
   3. CSG ]P..SBI]: off
   4. Pointer: white
   5. Additional Symbol: none
3. IndS: Wait until I < v
   1. CSG [0..T[: medium grey
   2. CSG [T..P]: yellow
   3. CSG ]P..SBI]: off
   4. Pointer: yellow
   5. Additional Symbol: none
4. OvS : Wait until P < v
   1. CSG [0..T[: medium grey
   2. CSG [T..P]: yellow
   3. CSG ]P..SBI]: orange
   4. Pointer: orange
   5. Additional Symbol: none
5. WaS: Wait until W < v (Single Acoustic signal S1)
   1. CSG [0..T[: medium grey
   2. CSG [T..P]: yellow
   3. CSG ]P..SBI]: orange
   4. Pointer: orange
   5. Additional Symbol: none

(which means no optical change with respect to OvS)

1. IntS: Wait until SBI < v (Permanent Acoustic signal S2)
   1. CSG [0..T[: medium grey
   2. CSG [T..P]: yellow
   3. CSG ]P..SBI]: red
   4. Pointer: red
   5. Additional Symbol:  (ST01)
2. IntS (**remains!**): Decelerate below SBI (**Permanent Acoustic signal S2 remains**) 🡺 see 6.
3. IntS (**remains!**): Decelerate below W (**Permanent Acoustic signal S2 remains**) 🡺 see 6.
4. IntS (**remains!**): Decelerate below P, EB still remains
   1. CSG [0..T[: medium grey
   2. CSG [T..P]: yellow
   3. CSG ]P..SBI]: red
   4. Pointer: yellow
   5. Additional Symbol:  (ST01)
5. IntS (**remains!**): Decelerate below I, EB still remains
   1. CSG [0..T[: medium grey
   2. CSG [T..P]: yellow
   3. CSG ]P..SBI]: red
   4. Pointer: grey
   5. Additional Symbol:  (ST01)
6. NoS: Wait for stop of EB 🡺 see 1.

**Target Speed Monitoring (TSM), MA with a release speed (and target speed = 0) (EOA)**

1. NoS: Drive below P (see in speed profile)
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: white (overlap [0..R])
   3. CSG ]P..SBI]: off
   4. Pointer: white
   5. Additional Symbol: none
2. IndS: Wait until I < v
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: yellow (overlap [0..R])
   3. CSG ]P..SBI]: off
   4. Pointer: yellow
   5. Additional Symbol: none
3. OvS : Wait until P < v
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: yellow (overlap [0..R])
   3. CSG ]P..SBI]: orange
   4. Pointer: orange
   5. Additional Symbol: none
4. WaS: Wait until W < v (Single Acoustic signal S1)
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: yellow (overlap [0..R])
   3. CSG ]P..SBI]: orange
   4. Pointer: orange
   5. Additional Symbol: none

(which means no optical change with respect to OvS)

1. IntS: Wait until SBI < v (Permanent Acoustic signal S2)
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: yellow (overlap [0..R])
   3. CSG ]P..SBI]: red
   4. Pointer: red
   5. Additional Symbol:  (ST01)
2. IntS (**remains!**): Decelerate below SBI (**Permanent Acoustic signal S2 remains**) 🡺 see 6.
3. IntS (**remains!**): Decelerate below W (**Permanent Acoustic signal S2 remains**) 🡺 see 6.
4. IntS (**remains!**): Decelerate below P (**Permanent Acoustic signal S2 remains**), EB still remains
   1. CSG [0..R]: medium grey
   2. CSG [0..P]: yellow (overlap [0..R])
   3. CSG ]P..SBI]: red
   4. Pointer: yellow
   5. Additional Symbol:  (ST01)
5. NoS: Wait for stop of EB 🡺 see 1.

**Release Speed Monitoring (RSM), MA with a release speed (and target speed = 0) (EOA)**

1. IndS: Drive below R (see in movement authority)
   1. CSG [0..R]: yellow\* / medium grey\*
   2. CSG ]R.. \*]: off
   3. Pointer: yellow
   4. Additional Symbol: none
2. IntS: Accelerate beyond R (Permanent Acoustic signal S2)
   1. CSG [0..R]: yellow\* / medium grey\*
   2. CSG ]R..???\*]: red\* / yellow\*
   3. Pointer: red
   4. Additional Symbol:  (ST01)
3. IntS (**remains!**): Decelerate below P, (**Permanent Acoustic signal S2 remains**) EB still remains
   1. CSG [0..R]\*: yellow\* / medium grey\*?
   2. CSG ]R..???\*]: red\* / yellow\*?
   3. Pointer: yellow
   4. Additional Symbol:  (ST01)
4. IndS: Wait for stop of EB 🡺 see 1.

\* The standard here is ambiguous in this place.