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| **Signalling Like for Like Renewal Work Instruction** | **WO No.**  |
| **Page 1 of 2** |
| **Scope:** |  | **Date:** |
| **Team Leader:** |  | **Axle Counter Type:** |  |
| **Activity:** | **SIEMENS EVALUATOR LIKE FOR LIKE RENEWAL** |
| **Reference:** PR S 4009, PR S 40051, MN S 41588 |
| **Activity No.** | **Task No.** | **WORK DESCRIPTION** | **Completed****Name/Sign** |
|  |  | **APPARATUS INSPECTION & PREPARATION** |  |
| **1** | **1A** | Ensure the new Evaluator is of correct type and version. |  |
|  | **1B** | Ensure the new Evaluator is free from damage. |  |
| **2** | **2A** | Confirm which Evaluator has failed via flashing red “OK” and “INFO” LED indications |  |
|  | **2B** | Alternatively, connect a laptop to view diagnostics via the web portal. |  |
|  | **2C** | Document the failed Evaluator on the circuit diagram. |  |
|  |  | **SAFEWORKING & DISCONNECTION FROM INTERLOCKING** |  |
| **3** | **3A** | Determine if the ACM250 Evaluator equipment and any associated signalling are required to be booked out of use. |  |
|  | **3B** | If required, disconnect the affected ACM250 evaluator equipment and associated signalling, in accordance with PR S 40009 – Disconnection of Signalling Apparatus. |  |
|  |  | **DISCONNECTION, REMOVAL AND INSTALLATION** |  |
| **4** | **4A** | Disconnect all Ethernet connections from the evaluator. |  |
|  | **4B** | Disconnect the process connector from the underside of the evaluator |  |
|  |  | Remove the ID Plug from the evaluator  |  |
| **NOTE** | The ID Plug shall be reinstalled within the new evaluator. |
|  | **4C** | Insert the ID Plug in the new evaluator. |  |
|  | **4D** | Unlatch the lower or upper ACM fixing from the mounting rail. |  |
|  | **4E** | Swing up the evaluator to remove from the mounting rail. |  |
| **5** | **5A** | Hook the new evaluator onto the mounting rail and latch into position |  |
|  | **5B** | Insert the process connector into the underside of the evaluator |  |
| **NOTE** | This shall restart the evaluator. The evaluator should be ready for calibration within approximately 90 seconds after its restart |
|  | **5C** | Insert the connectors for the Ethernet connections |  |

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| **SIEMENS EVALUATOR LIKE FOR LIKE RENEWAL** | **Page 2 of 2** |
| **6** | **6A** | Calibrate the ACM250 evaluator:1. Press the “CL” button on the ACM for approx. 3 seconds. The “CAL” LED should show a steady yellow light.
2. To calibrate the ACM for wheel detector DS1, press “DIR1” for approx. 3 seconds, alternatively
3. To calibrate the ACM for wheel detector DS2, press “DIR2” for approx. 3 seconds.

As soon as the “DIR1” or “DIR2” LED shows a steady yellow light, release the “DIR1” or “DIR2” button.After calibration has been completed, the result is indicated for 5 s:1. “DIR1/DIR2” LED briefly shows a steady green light: calibration successful

“DIR1/DIR2” LED shows a steady red light: calibration not successful. |  |
| **NOTE** | It may be the case that the ACM cannot save the calibration data immediately. Wait 90s until the “CAL” LED no longer shows a flashing green light. If the “CAL” LED continues to show a flashing green light after 90s, restart the ACM and recalibrate it. |
| **7** | **7A** | Perform occupancy detection test1. Place the Axle Counter Test Tool on the left edge of the wheel sensor and slide towards the track section slowly
2. Confirm the corresponding DS# LEDs of the associated evaluator illuminate in turn.
3. Confirm the associated TVDS track section illuminates (track occupied)
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|  | **7B** | Perform occupancy detection test1. Place the Axle Counter Test Tool on the right edge of the wheel sensor and slide away from the track section slowly.
2. Confirm the corresponding DS# LEDs of the associated evaluator illuminate in turn.
3. Confirm the associated TVDS track section LED extinguishes (track not occupied)
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| **8** | **8A** | Request the signaller to initiate a preparatory reset or to enable an unconditional reset. |  |
|  |  | **CERTIFICATION** |  |
| **9** | **9A** | Verify that the new evaluator has been installed in the correct position. |  |
| **10** | **10A** | If applicable, book the ACM250 axle counter back into use. |  |

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| **I certify \_\_\_\_\_\_ Evaluator at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ location has been inspected and tested and is fit for service.****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Print Name Position****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_****Signature Date** |