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| **Test operator information** | |
| **Company** |  |
| **Test operator Name/E-mail** |  |
| **OBU identifier** |  |
| **Test date/time Start and end** |  |
| **Log file name/format** |  |

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| **InterCor Interoperability Test Case** | | | | |
| **Test Identifier** | Scenario5\_TC1 | | | |
| **Test Objective** | To test RWW and IVS in a complex traffic situation where carriage ways merge and diverge. | | | |
| **Test Scenario used** | **Scenario 5 RWW/IVS Weaving** *-* **Test Vehicle with RWW/IVS active**. The use case is of type known (i.e. planned in scope of tests) and of type virtual (i.e. received info on VMS signs are not visible on physical VMS on gantries and trailer for RWW is not present). | | | |
| **Pre-test Conditions** | * Test configuration as specified in <http://intercor-project.eu/wp-content/uploads/sites/15/2017/06/Plan-of-Action-Testfest-ITS-G5_v-1.0-Participants.pdf> is implemented. * Participants have been able to test their test vehicle (OBU) with DENM/IVI messages of scenario 6 (Site) and/or with PCAP files. * Test scenario is activated between A16L 32,4 and A16L 30,7.   + RSUs (e.g. at relative position A16R 28,315 and A16R 31,290) are active and send DENM and IVI messages for this scenario. 1 DENM message and 5 IVI messages for RWW content   + IVI and DENM messages for scenario 5 (Weaving with virtual DENM and IVI) can be identified by OBU as virtual, and can be separated from messages from scenario unknown-real-DENM and unknown-real-IVI messages. * Test vehicle is outside the radio transmission range of active RSU for this scenario, i.e. has not received/stored messages for this scenario. * Test vehicle drives from South to North on the **main** lane. | | | |
| **Test Sequence** | **Step** | **Type** | **Action: Description**  **Check: Expected behaviour** | **Observation** |
| 1 | action | Test vehicle (TV) enters test area (*A16L 33.0*) on the **main** lane.  TV receives messages from: 1 DENM with RWW, and 5 IVI of VMS of 5 individual gantries.  Information of individual gantries is displayed to the driver between km 32,8 and 30,7. | Information of individual gantries is displayed to the driver between km 32,8 and 30,7. The HMI should show  a) VMS signs with dynamic speed limits per lane (90, 70), dynamic lane management (merge left, blocked lane) and end-of-restrictions and  b) Presence of RWW trailer on right lane.  The location accuracy of the absolute position (traces, event history) must be accurate enough to identify the position of the trailer on the rightmost lane. |
| 2 | check | HMI display at km 32,8 |  |
| 3 | check | HMI display at km 32,4 |  |
| 4 | check | HMI display at km 31,8 |  |
| 5 | check | HMI display at km 31,7 |  |
| 6 | check | HMI display at km 31,4 |  |
| 7 | check | HMI display at km 30,7 |  |
| 8 | action | TV leaves test area. |  |
| 9 | check | No information is shown when the TV has left last relevance zone. |  |

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| **Test operator information** | |
| **Company** |  |
| **Test operator Name/E-mail** |  |
| **OBU identifier** |  |
| **Test date/time Start and end** |  |
| **Log file name/format** |  |

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| **InterCor Interoperability Test Case** | | | | |
| **Test Identifier** | Scenario5\_TC2 | | | |
| **Test Objective** | To test RWW and IVS in a complex traffic situation where carriage ways merge and diverge. | | | |
| **Test Scenario used** | **Scenario 5 RWW/IVS Weaving** *-* **Test Vehicle with RWW/IVS active**. The use case is of type known (i.e. planned in scope of tests) and of type virtual (i.e. received info on VMS signs are not visible on physical VMS on gantries and trailer for RWW is not present). | | | |
| **Pre-test Conditions** | * Test configuration as specified in <http://intercor-project.eu/wp-content/uploads/sites/15/2017/06/Plan-of-Action-Testfest-ITS-G5_v-1.0-Participants.pdf> is implemented. * Participants have been able to test their test vehicle (OBU) with DENM/IVI messages of scenario 6 (Site) and/or with PCAP files. * Test scenario is activated between A16L 32,4 and A16L 30,7.   + RSUs (e.g. at relative position A16R 28,315 and A16R 31,290) are active and send DENM and IVI messages for this scenario. 1 DENM message and 5 IVI messages for RWW content   + IVI and DENM messages for scenario 5 (Weaving with virtual DENM and IVI) can be identified by OBU as virtual, and can be separated from messages from scenario unknown-real-DENM and unknown-real-IVI messages. * Test vehicle is outside the radio transmission range of active RSU for this scenario, i.e. has not received/stored messages for this scenario. * Test vehicle drives from South to North on the **merging** lane. | | | |
| **Test Sequence** | **Step** | **Type** | **Action: Description**  **Check: Expected behaviour** | **Observation** |
| 1 | action | Test vehicle (TV) enters test area (*A16L 33.0*) on the **merging** lane.  TV receives messages from: 1 DENM with RWW, and 5 IVI of VMS of 5 individual gantries.  Information of individual gantries is displayed to the driver between km 32,8 and 30,7. | Information of individual gantries is displayed to the driver between km 32,8 and 30,7. The HMI should show  a) VMS signs with dynamic speed limits per lane (90, 70), dynamic lane management (merge left, blocked lane) and end-of-restrictions and  b) Presence of RWW trailer on right lane.  The location accuracy of the absolute position (traces, event history) must be accurate enough to identify the position of the trailer on the rightmost lane. |
| 2 | check | HMI display at km 32,4 |  |
| 3 | check | HMI display at km 31,8 |  |
| 4 | check | HMI display at km 31,7 |  |
| 5 | check | HMI display at km 31,4 |  |
| 6 | action | TV leaves test area. |  |
| 7 | check | No information is shown when the TV has left last relevance zone. |  |

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| **Test operator information** | |
| **Company** |  |
| **Test operator Name/E-mail** |  |
| **OBU identifier** |  |
| **Test date/time Start and end** |  |
| **Log file name/format** |  |

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| **InterCor Interoperability Test Case** | | | | |
| **Test Identifier** | Scenario5\_TC3 | | | |
| **Test Objective** | To test that the information related to scenario 5 is not shown when passing the test area in the opposite direction of the motorway. | | | |
| **Test Scenario used** | **Scenario 5 RWW/IVS Weaving** *-* **Test Vehicle with RWW/IVS active**. The use case is of type known (i.e. planned in scope of tests) and of type virtual (i.e. received info on VMS signs are not visible on physical VMS on gantries and trailer for RWW is not present). | | | |
| **Pre-test Conditions** | * Test configuration as specified in <http://intercor-project.eu/wp-content/uploads/sites/15/2017/06/Plan-of-Action-Testfest-ITS-G5_v-1.0-Participants.pdf> is implemented. * Participants have been able to test their test vehicle (OBU) with DENM/IVI messages of scenario 6 (Site) and/or with PCAP files. * Test scenario is activated between A16L 32,4 and A16L 30,7.   + RSUs (e.g. at relative position A16R 28,315 and A16R 31,290) are active and send DENM and IVI messages for this scenario. 1 DENM message and 5 IVI messages for RWW content   + IVI and DENM messages for scenario 5 (Weaving with virtual DENM and IVI) can be identified by OBU as virtual, and can be separated from messages from scenario unknown-real-DENM and unknown-real-IVI messages. * Test vehicle is outside the radio transmission range of active RSU for this scenario, i.e. has not received/stored messages for this scenario. * Test vehicle drives from North to South and passes by the relevance area for this scenario on the opposite side of the motorway. | | | |
| **Test Sequence** | **Step** | **Type** | **Action: Description**  **Check: Expected behaviour** | **Observation** |
| 1 | action | Test Vehicle (TV) drives in opposite direction (North to South) of test area for this scenario between A16L km 32,4 and 30,7).  TV receives messages from: 1 DENM with RWW, and 5 IVI of VMS of 5 individual gantries. |  |
| 2 | check | No information related to scenario 5 is shown. |  |
| 3 | action | TV leaves test area. |  |
| 4 | check | No information is shown when the TV has left last relevance zone. |  |