

DENM Mapping

CAR 2 CAR Communication Consortium



About the C2C-CC

Enhancing road safety and traffic efficiency by means of Cooperative Intelligent Transport Systems and Services (C-ITS) is the dedicated goal of the CAR 2 CAR Communication Consortium. The industrial driven, non-commercial association was founded in 2002 by vehicle manufacturers affiliated with the idea of cooperative road traffic based on Vehicle-to-Vehicle Communications (V2V) and supported by Vehicle-to-Infrastructure Communications (V2I). The Consortium members represent worldwide major vehicle manufactures, equipment suppliers and research organisations.

Over the years, the CAR 2 CAR Communication Consortium has evolved to be one of the key players in preparing the initial deployment of C-ITS in Europe and the subsequent innovation phases. CAR 2 CAR members focus on wireless V2V communication applications based on ITS-G5 and concentrate all efforts on creating standards to ensure the interoperability of cooperative systems, spanning all vehicle classes across borders and brands. As a key contributor, the CAR 2 CAR Communication Consortium and its members work in close cooperation with the European and international standardisation organisations.

Disclaimer

The present document has been developed within the CAR 2 CAR Communication Consortium and might be further elaborated within the CAR 2 CAR Communication Consortium. The CAR 2 CAR Communication Consortium and its members accept no liability for any use of this document and other documents from the CAR 2 CAR Communication Consortium for implementation. CAR 2 CAR Communication Consortium documents should be obtained directly from the CAR 2 CAR Communication Consortium.

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| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|------------------|-------------------------------------|--|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 1_0 | trafficCondition | unavailable | abnormalTrafficType_other |
| 1_1 | trafficCondition | increasedVolumeOfTraffic | abnormalTrafficType_heavyTraffic |
| 1_2 | trafficCondition | trafficJamSlowlyIncreasing | abnormalTrafficType_queuingTraffic trafficTrendType_trafficBuildingUp |
| 1_3 | trafficCondition | trafficJamIncreasing | abnormalTrafficType_queuingTraffic trafficTrendType_trafficBuildingUp |
| 1_4 | trafficCondition | trafficJamStronglyIncreasing | abnormalTrafficType_queuingTraffic trafficTrendType_trafficBuildingUp |
| 1_5 | trafficCondition | trafficStationary | abnormalTrafficType_stationaryTraffic |
| 1_6 | trafficCondition | trafficJamSlightlyDecreasing | abnormalTrafficType_queuingTraffic trafficTrendType_trafficEasing |
| 1_7 | trafficCondition | trafficJamDecreasing | abnormalTrafficType_queuingTraffic trafficTrendType_trafficEasing |
| 1_8 | trafficCondition | trafficJamStronglyDecreasing | abnormalTrafficType_queuingTraffic trafficTrendType_trafficEasing |
| 1_9 | trafficCondition | trafficJamStable | abnormalTrafficType_queuingTraffic trafficTrendType_trafficStable |
| 2_0 | accident | unavailable | accidentType_accident |
| 2_1 | accident | multiVehicleAccident | accidentType_multipleVehicleAccident |
| 2_2 | accident | heavyAccident | accidentType_seriousInjuryOrFatalAccident |
| 2_3 | accident | accidentInvolvingLorry | accidentType_accidentInvolvingHeavyLorries |
| 2_4 | accident | accidentInvolvingBus | accidentType_accidentInvolvingPublicTransport |
| 2_5 | accident | accidentInvolvingHazardousMaterials | accidentType_accidentInvolvingHazardousMaterials |
| 2_6 | accident | accidentOnOppositeLane | |
| 2_7 | accident | unsecuredAccident | obstructionType_unprotectedAccidentArea |
| 2_8 | accident | assistanceRequested | accidentType_accident |
| 3_0 | roadworks | unavailable | roadMaintenanceType_roadworks |
| 3_1 | roadworks | majorRoadworks | roadMaintenanceType_roadworks roadworksScale_major |

| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|----------------------------------|------------------------------|---|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 3_2 | roadworks | roadMarkingWork | roadMaintenanceType_roadMarkingWork |
| 3_3 | roadworks | slowMovingRoadMaintenance | vehicleObstructionType_SlowMovingMaintenanceVehicle roadMaintenanceType_maintenanceWork roadworksDuration_shortTerm |
| 3_4 | roadworks | shortTermStationaryRoadworks | mobilityType_stationary |
| 3_5 | roadworks | streetCleaning | roadMaintenanceType_roadworks |
| 3_6 | roadworks | winterService | roadMaintenanceType_saltingInProgress |
| 4_0 | reserved for future usage | - | |
| 5_0 | impassability | unavailable | obstructionType_other |
| 5_1 | impassability | flooding | environmentalObstructionType_flooding |
| 5_2 | impassability | dangerOfAvalanches | environmentalObstructionType_avalanches |
| 5_3 | impassability | blastingOfAvalanches | environmentalObstructionType_avalanches |
| 5_4 | impassability | landslips | environmentalObstructionType_landslips |
| 5_5 | impassability | chemicalSpillage | obstructionType_spillageOnTheRoad |
| 5_6 | impassability | winterClosure | environmentalObstructionType_other |
| 5_7 | impassability | sinkhole | environmentalObstructionType_other |
| 5_8 | impassability | earthquakeDamage | environmentalObstructionType_earthquakeDamage |
| 5_9 | impassability | fallenTrees | environmentalObstructionType_fallenTrees |
| 5_10 | impassability | rockfalls | environmentalObstructionType_rockfalls |
| 5_11 | impassability | sewerOverflow | environmentalObstructionType_sewerOverflow |
| 5_12 | impassability | stormDamage | environmentalObstructionType_stormDamage |
| 5_13 | impassability | subsidence | environmentalObstructionType_subsidence |
| 5_14 | impassability | burstPipe | infrastructureDamageType_burstPipe |
| 5_15 | impassability | burstWaterMain | infrastructureDamageType_burstWaterMain |
| 5_16 | impassability | fallenPowerCables | infrastructureDamageType_fallenPowerCables |
| 5_17 | impassability | snowDrifts | environmentalObstructionType_other |
| 6_0 | adverseWeatherCondition-Adhesion | unavailable | weatherRelatedRoadConditionType_slippery |
| 6_1 | adverseWeatherCondition-Adhesion | heavyFrostOnRoad | weatherRelatedRoadConditionType_iceBuildUp |

| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|-------------------------------------|------------------|---|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 6_2 | adverseWeatherCondition-Adhesion | fuelOnRoad | nonWeatherRelatedRoadConditionType_petrolOnRoad |
| 6_3 | adverseWeatherCondition-Adhesion | mudOnRoad | nonWeatherRelatedRoadConditionType_mudOnRoad |
| 6_4 | adverseWeatherCondition-Adhesion | snowOnRoad | weatherRelatedRoadConditionType_snowOnTheRoad |
| 6_5 | adverseWeatherCondition-Adhesion | iceOnRoad | weatherRelatedRoadConditionType_ice |
| 6_6 | adverseWeatherCondition-Adhesion | blackIceOnRoad | weatherRelatedRoadConditionType_blackIce |
| 6_7 | adverseWeatherCondition-Adhesion | oilOnRoad | nonWeatherRelatedRoadConditionType_oilOnRoad |
| 6_8 | adverseWeatherCondition-Adhesion | looseChippings | nonWeatherRelatedRoadConditionType_looseChippings |
| 6_9 | adverseWeatherCondition-Adhesion | instantBlackIce | weatherRelatedRoadConditionType_blackIce |
| 6_10 | adverseWeatherCondition-Adhesion | roadsSalted | weatherRelatedRoadConditionType_roadSurfaceMelting |
| 7_0 | aquaplaning | unavailable | weatherRelatedRoadConditionType_surfaceWater |
| 8_0 | reserved for future usage | - | |
| 9_0 | hazardousLocation-SurfaceCondition | unavailable | nonWeatherRelatedRoadConditionType_roadSurfaceInPoorCondition |
| 9_1 | hazardousLocation-SurfaceCondition | rockfalls | environmentalObstructionType_rockfalls |
| 9_2 | hazardousLocation-SurfaceCondition | earthquakeDamage | environmentalObstructionType_earthquakeDamage |
| 9_3 | hazardousLocation-SurfaceCondition | sewerCollapse | infrastructureDamageType_collapsedSewer |
| 9_4 | hazardousLocation-SurfaceCondition | subsidence | environmentalObstructionType_subsidence |
| 9_5 | hazardousLocation-SurfaceCondition | snowDrifts | weatherRelatedRoadConditionType_snowDrifts |
| 9_6 | hazardousLocation-SurfaceCondition | stormDamage | environmentalObstructionType_stormDamage |
| 9_7 | hazardousLocation-SurfaceCondition | burstPipe | infrastructureDamageType_burstPipe |
| 9_8 | hazardousLocation-SurfaceCondition | volcanoEruption | environmentalObstructionType_other |
| 9_9 | hazardousLocation-SurfaceCondition | fallingIce | environmentalObstructionType_fallingIce |
| 9_10 | hazardousLocation-SurfaceCondition | fire | environmentalObstructionType_seriousFire |
| 10_0 | hazardousLocation-ObstacleOnTheRoad | unavailable | obstructionType_obstructionOnTheRoad |
| 10_1 | hazardousLocation-ObstacleOnTheRoad | shedLoad | obstructionType_shedLoad |
| 10_2 | hazardousLocation-ObstacleOnTheRoad | partsOfVehicles | obstructionType_debris |
| 10_3 | hazardousLocation-ObstacleOnTheRoad | partsOfTyres | obstructionType_debris |
| 10_4 | hazardousLocation-ObstacleOnTheRoad | bigObjects | obstructionType_objectOnTheRoad |
| 10_5 | hazardousLocation-ObstacleOnTheRoad | fallenTrees | environmentalObstructionType_fallenTrees |

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|--------------------------------------|-------------------------------------|-----------------------|--|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 10_6 | hazardousLocation-ObstacleOnTheRoad | hubCaps | obstructionType_debris |
| 10_7 | hazardousLocation-ObstacleOnTheRoad | waitingVehicles | vehicleObstructionType_other |
| 11_0 | hazardousLocation-AnimalOnTheRoad | unavailable | animalPresenceType_animalsOnTheRoad |
| 11_1 | hazardousLocation-AnimalOnTheRoad | wildAnimals | animalPresenceType_wildAnimalsOnTheRoad |
| 11_2 | hazardousLocation-AnimalOnTheRoad | herdOfAnimals | animalPresenceType_herdOfAnimalsOnTheRoad |
| 11_3 | hazardousLocation-AnimalOnTheRoad | smallAnimals | animalPresenceType_smallAnimalsOnTheRoad |
| 11_4 | hazardousLocation-AnimalOnTheRoad | largeAnimals | animalPresenceType_largeAnimalsOnTheRoad |
| 11_5 | hazardousLocation-AnimalOnTheRoad | wildAnimalsSmall | animalPresenceType_smallAnimalsOnTheRoad |
| 11_6 | hazardousLocation-AnimalOnTheRoad | wildAnimalsLarge | animalPresenceType_largeAnimalsOnTheRoad |
| 11_7 | hazardousLocation-AnimalOnTheRoad | domesticAnimals | animalPresenceType_animalsOnTheRoad |
| 11_8 | hazardousLocation-AnimalOnTheRoad | domesticAnimalsSmall | animalPresenceType_smallAnimalsOnTheRoad |
| 11_9 | hazardousLocation-AnimalOnTheRoad | domesticAnimalsLarge | animalPresenceType_largeAnimalsOnTheRoad |
| 12_0 | humanPresenceOnTheRoad | unavailable | obstructionType_peopleOnRoadway |
| 12_1 | humanPresenceOnTheRoad | childrenOnRoadway | obstructionType_childrenOnRoadway |
| 12_2 | humanPresenceOnTheRoad | cyclistOnRoadway | obstructionType_cyclistsOnRoadway |
| 12_3 | humanPresenceOnTheRoad | motorcyclistOnRoadway | obstructionType_peopleOnRoadway involvementRoles_motorcyclist |
| 12_4 | humanPresenceOnTheRoad | pedestrian | obstructionType_peopleOnRoadway involvementRoles_pedestrian |
| 12_5 | humanPresenceOnTheRoad | ordinary-pedestrian | obstructionType_peopleOnRoadway involvementRoles_pedestrian |
| 12_6 | humanPresenceOnTheRoad | road-worker | obstructionType_peopleOnRoadway |
| 12_7 | humanPresenceOnTheRoad | first-responder | obstructionType_peopleOnRoadway personCategory_medicalStaff |
| 12_8 | humanPresenceOnTheRoad | lightVruVehicle | obstructionType_peopleOnRoadway |
| 12_9 | humanPresenceOnTheRoad | bicyclist | obstructionType_cyclistsOnRoadway |
| 12_10 | humanPresenceOnTheRoad | wheelchair-user | obstructionType_peopleOnRoadway |
| 12_11 | humanPresenceOnTheRoad | horse-and-rider | obstructionType_peopleOnRoadway |
| 12_12 | humanPresenceOnTheRoad | rollerskater | obstructionType_peopleOnRoadway |

| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|---------------------------------|------------------------------|---|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 12_13 | humanPresenceOnTheRoad | e-scooter | obstructionType_peopleOnRoadway |
| 12_14 | humanPresenceOnTheRoad | personal-transporter | obstructionType_peopleOnRoadway |
| 12_15 | humanPresenceOnTheRoad | pedelec | obstructionType_cyclistsOnRoadway |
| 12_16 | humanPresenceOnTheRoad | speed-pedelec | obstructionType_cyclistsOnRoadway involvementRoles_motorcyclist |
| 12_17 | humanPresenceOnTheRoad | ptw | obstructionType_peopleOnRoadway involvementRoles_motorcyclist |
| 12_18 | humanPresenceOnTheRoad | moped | obstructionType_peopleOnRoadway involvementRoles_motorcyclist |
| 12_19 | humanPresenceOnTheRoad | motorcycle | obstructionType_peopleOnRoadway involvementRoles_motorcyclist |
| 12_20 | humanPresenceOnTheRoad | motorcycle-and-sidecar-right | obstructionType_peopleOnRoadway involvementRoles_motorcyclist |
| 12_21 | humanPresenceOnTheRoad | motorcycle-and-sidecar-left | obstructionType_peopleOnRoadway involvementRoles_motorcyclist |
| 13_0 | reserved for future usage | - | |
| 14_0 | wrongWayDriving | unavailable | vehicleObstructionType_vehicleOnWrongCarriageway |
| 14_1 | wrongWayDriving | wrongLane | vehicleObstructionType_vehicleOnWrongCarriageway |
| 14_2 | wrongWayDriving | wrongDirection | vehicleObstructionType_vehicleOnWrongCarriageway |
| 15_0 | rescueAndRecoveryWorkInProgress | unavailable | obstructionType_rescueAndRecoveryWork |
| 15_1 | rescueAndRecoveryWorkInProgress | emergencyVehicles | obstructionType_rescueAndRecoveryWork personCategory_emergencyServicesPerson |
| 15_2 | rescueAndRecoveryWorkInProgress | rescueHelicopterLanding | obstructionType_rescueAndRecoveryWork personCategory_emergencyServicesPerson |
| 15_3 | rescueAndRecoveryWorkInProgress | policeActivityOngoing | obstructionType_rescueAndRecoveryWork personCategory_policeman |
| 15_4 | rescueAndRecoveryWorkInProgress | medicalEmergencyOngoing | obstructionType_rescueAndRecoveryWork personCategory_medicalStaff |

| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|---|--------------------------|---|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 15_5 | rescueAndRecoveryWorkInProgress | childAbductionInProgress | obstructionType_rescueAndRecoveryWork personCategory_child |
| 15_6 | rescueAndRecoveryWorkInProgress | prioritizedVehicle | obstructionType_rescueAndRecoveryWork |
| 15_7 | rescueAndRecoveryWorkInProgress | rescueAndRecoveryVehicle | obstructionType_rescueAndRecoveryWork |
| 16_0 | reserved for future usage | - | |
| 17_0 | adverseWeatherCondition- ExtremeWeatherCondition | unavailable | poorEnvironmentType_badWeather |
| 17_1 | adverseWeatherCondition- ExtremeWeatherCondition | strongWinds | poorEnvironmentType_strongWinds |
| 17_2 | adverseWeatherCondition- ExtremeWeatherCondition | damagingHail | poorEnvironmentType_damagingHail |
| 17_3 | adverseWeatherCondition- ExtremeWeatherCondition | hurricane | poorEnvironmentType_hurricaneForceWinds |
| 17_4 | adverseWeatherCondition- ExtremeWeatherCondition | thunderstorm | poorEnvironmentType_thunderstorms |
| 17_5 | adverseWeatherCondition- ExtremeWeatherCondition | tornado | poorEnvironmentType_tornadoes |
| 17_6 | adverseWeatherCondition- ExtremeWeatherCondition | blizzard | poorEnvironmentType_blizzard |
| 18_0 | adverseWeatherCondition-Visibility | unavailable | poorEnvironmentType_visibilityReduced |
| 18_1 | adverseWeatherCondition-Visibility | fog | poorEnvironmentType_denseFog |
| 18_2 | adverseWeatherCondition-Visibility | smoke | poorEnvironmentType_smokeHazard |
| 18_3 | adverseWeatherCondition-Visibility | heavySnowfall | poorEnvironmentType_whiteOut |
| 18_4 | adverseWeatherCondition-Visibility | heavyRain | poorEnvironmentType_heavyRain |
| 18_5 | adverseWeatherCondition-Visibility | heavyHail | poorEnvironmentType_hail |
| 18_6 | adverseWeatherCondition-Visibility | lowSunGlare | poorEnvironmentType_lowSunGlare |
| 18_7 | adverseWeatherCondition-Visibility | sandstorms | poorEnvironmentType_sandStorms |
| 18_8 | adverseWeatherCondition-Visibility | swarmsOfInsects | poorEnvironmentType_swarmsOfInsects |
| 19_0 | adverseWeatherCondition-Precipitation | unavailable | poorEnvironmentType_precipitationInTheArea |

| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|---------------------------------------|---------------------------------|--|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 19_1 | adverseWeatherCondition-Precipitation | heavyRain | poorEnvironmentType_heavyRain |
| 19_2 | adverseWeatherCondition-Precipitation | heavySnowfall | poorEnvironmentType_heavySnowfall |
| 19_3 | adverseWeatherCondition-Precipitation | softHail | poorEnvironmentType_hail |
| 20_0 | violence | unavailable | |
| 20_1 | violence | reserved for future usage | |
| 20_2 | violence | reserved for future usage | |
| 20_3 | violence | stoneThrowingPersons | disturbanceActivityType_peopleThrowingObjectsOnTheRoad |
| 21_0 | reserved for future usage | - | |
| 22_0 | reserved for future usage | - | |
| 23_0 | reserved for future usage | - | |
| 24_0 | reserved for future usage | - | |
| 25_0 | reserved for future usage | - | |
| 26_0 | slowVehicle | unavailable | vehicleObstructionType_slowVehicle |
| 26_1 | slowVehicle | maintenanceVehicle | vehicleObstructionType_slowVehicle |
| 26_2 | slowVehicle | vehiclesSlowingToLookAtAccident | vehicleObstructionType_slowVehicle |
| 26_3 | slowVehicle | abnormalLoad | vehicleObstructionType_abnormalLoad |
| 26_4 | slowVehicle | abnormalWideLoad | vehicleObstructionType_vehicleWithOverwideLoad |
| 26_5 | slowVehicle | convoy | vehicleObstructionType_convoy |
| 26_6 | slowVehicle | snowplough | roadMaintenanceType_snowploughsInUse |
| 26_7 | slowVehicle | deicing | vehicleObstructionType_slowVehicle |
| 26_8 | slowVehicle | saltingVehicles | vehicleObstructionType_slowVehicle |
| 27_0 | dangerousEndOfQueue | unavailable | vehicleObstructionType_slowVehicle |
| 27_1 | dangerousEndOfQueue | suddenEndOfQueue | vehicleObstructionType_slowVehicle |
| 27_2 | dangerousEndOfQueue | queueOverHill | vehicleObstructionType_slowVehicle |
| 27_3 | dangerousEndOfQueue | queueAroundBend | vehicleObstructionType_slowVehicle |
| 27_4 | dangerousEndOfQueue | queueInTunnel | vehicleObstructionType_slowVehicle |
| 28_0 | reserved for future usage | - | |
| 90_0 | reserved for future usage | - | |

| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|------------------|--|--|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 91_0 | vehicleBreakdown | unavailable | vehicleObstructionType_brokenDownVehicle |
| 91_1 | vehicleBreakdown | lackOfFuel | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_fuelSystem |
| 91_2 | vehicleBreakdown | lackOfBatteryPower | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_battery |
| 91_3 | vehicleBreakdown | engineProblem | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_motorMechanics |
| 91_4 | vehicleBreakdown | transmissionProblem | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_gear |
| 91_5 | vehicleBreakdown | engineCoolingProblem | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_coolingSystem |
| 91_6 | vehicleBreakdown | brakingSystemProblem | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_brakingSystem |
| 91_7 | vehicleBreakdown | steeringProblem | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_other |
| 91_8 | vehicleBreakdown | tyrePuncture | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_flatTyre |
| 91_9 | vehicleBreakdown | tyrePressureProblem | vehicleObstructionType_brokenDownVehicle vehicleProblemCause_flatTyre |
| 91_10 | vehicleBreakdown | vehicleOnFire | vehicleObstructionType_vehicleOnFire vehicleStatus_brokenDown |
| 92_0 | postCrash | unavailable | accidentType_accident |
| 92_1 | postCrash | accidentWithoutECallTriggered | accidentType_accident |
| 92_2 | postCrash | accidentWithECallManuallyTriggered | accidentType_accident |
| 92_3 | postCrash | accidentWithECallAutomaticallyTriggered | accidentType_accident |
| 92_4 | postCrash | accidentWithECallTriggeredWithoutAccessToCellularNetwork | accidentType_accident obstructionType_incident |
| 93_0 | humanProblem | unavailable | injuryStatusType_unknown |

| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|----------------------------------|---|---|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 93_1 | humanProblem | glycemiaProblem | obstructionType_incident injuryStatusType_seriouslyInjured |
| 93_2 | humanProblem | heartProblem | obstructionType_incident injuryStatusType_seriouslyInjured |
| 94_0 | stationaryVehicle | unavailable | vehicleObstructionType_brokenDownVehicle vehicleType_anyVehicle mobilityType_stationary |
| 94_1 | stationaryVehicle | humanProblem | obstructionType_incident injuryStatusType_unknown mobilityType_stationary |
| 94_2 | stationaryVehicle | vehicleBreakdown | vehicleObstructionType_brokenDownVehicle mobilityType_stationary |
| 94_3 | stationaryVehicle | postCrash | accidentType_accident vehicleStatus_damagedAndImmobilized |
| 94_4 | stationaryVehicle | publicTransportStop | |
| 94_5 | stationaryVehicle | carryingDangerousGoods | vehicleObstructionType_vehicleCarryingHazardousMaterials mobilityType_stationary |
| 94_6 | stationaryVehicle | vehicleOnFire | vehicleObstructionType_vehicleOnFire mobilityType_stationary |
| 95_0 | emergencyVehicleApproaching | unavailable | |
| 95_1 | emergencyVehicleApproaching | emergencyVehicleApproaching | |
| 95_2 | emergencyVehicleApproaching | prioritizedVehicleApproaching | |
| 96_0 | hazardousLocation-DangerousCurve | unavailable | |
| 96_1 | hazardousLocation-DangerousCurve | dangerousLeftTurnCurve | |
| 96_2 | hazardousLocation-DangerousCurve | dangerousRightTurnCurve | |
| 96_3 | hazardousLocation-DangerousCurve | multipleCurvesStartingWithUnknownTurnin gDirection | |
| 96_4 | hazardousLocation-DangerousCurve | multipleCurvesStartingWithLeftTurn | |
| 96_5 | hazardousLocation-DangerousCurve | multipleCurvesStartingWithRightTurn | |

| Codes according to DENM/CDD standard | | | DATEXII (EN 16157-3:2018) |
|--------------------------------------|--------------------|---------------------------------|---------------------------|
| DENM index | CauseCode | SubCauseCode | [(Class:)attribute_Value] |
| 97_0 | collisionRisk | unavailable | |
| 97_1 | collisionRisk | longitudinalCollisionRisk | |
| 97_2 | collisionRisk | crossingCollisionRisk | |
| 97_3 | collisionRisk | lateralCollisionRisk | |
| 97_4 | collisionRisk | vulnerableRoadUser | |
| 98_0 | signalViolation | unavailable | |
| 98_1 | signalViolation | stopSignViolation | |
| 98_2 | signalViolation | trafficLightViolation | |
| 98_3 | signalViolation | turningRegulationViolation | |
| 99_0 | dangerousSituation | unavailable | |
| 99_1 | dangerousSituation | emergencyElectronicBrakeEngaged | |
| 99_2 | dangerousSituation | preCrashSystemEngaged | |
| 99_3 | dangerousSituation | espEngaged | |
| 99_4 | dangerousSituation | absEngaged | |
| 99_5 | dangerousSituation | aebEngaged | |
| 99_6 | dangerousSituation | brakeWarningEngaged | |
| 99_7 | dangerousSituation | collisionRiskWarningEngaged | |