

Description Of The
Output Types Of
Driver Card's / Vehicle Unit's
XML-Files

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1 Description of the XML elements

1.1 ActivityChangeInfo

- Java data types used:
 - *value*: byte[]
 - *slot*: boolean
 - *drivingStatus*: boolean
 - *cardStatus*: boolean
 - *activity*: byte
 - *time*: int
- XML output types:
 - *value*: hexstring
 - *slot*: boolean
 - *drivingStatus*: boolean
 - *cardStatus*: boolean
 - *activity*: hexstring
 - *time*: int

1.2 Address

- Java data types used:
 - *codePage*: short
 - *address*: byte[]
- XML output types:
 - *codePage*: short
 - *address*: hexstring

1.3 CalibrationPurpose

- Java data type used:
 - *calibrationPurpose*: byte
- XML output type:
 - *calibrationPurpose*: hexstring

1.4 CardActivityDailyRecord

- Java data types used:
 - *activityPreviousRecordLength*: CardActivityLengthRange
 - *activityRecordLength*: CardActivityLengthRange
 - *activityRecordDate*: TimeReal
 - *activityDailyPresenceCounter*: DailyPresenceCounter
 - *activityDayDistance*: Distance
 - *activityChangeInfo*: Vector<ActivityChangeInfo>
- XML output types:
 - *activityPreviousRecordLength*: CardActivityLengthRange
 - *activityRecordLength*: CardActivityLengthRange
 - *activityRecordDate*: TimeReal
 - *activityDailyPresenceCounter*: DailyPresenceCounter
 - *activityDayDistance*: Distance
 - *activityChangeInfo*: Vector<ActivityChangeInfo>

1.5 CardActivityLengthRange

- Java data type used: int
- XML output type: int

1.6 CardApprovalNumber

- Java data type used: String
- XML output type: String

1.7 CardCertificate

- Java data type used: Certificate
- XML output type: Certificate

1.8 CardChipIdentification

- Java data types used:
 - *icSerialNumber*: byte[]
 - *icManufacturingReferences*: byte[]
- XML output type:
 - *icSerialNumber*: hexstring
 - *icManufacturingReferences*: hexstring

1.9 CardConsecutiveIndex

- Java data type used: String
- XML output type: String

1.10 CardControlActivityDataRecord

- Java data types used:
 - *controlType*: controlType
 - *controlTime*: controlTime
 - *controlCardNumber*: FullCardNumber
 - *controlVehicleRegistration*: VehicleRegistrationIdentification
 - *controlDownloadPeriodBegin*: TimeReal
 - *controlDownloadPeriodEnd*: TimeReal
- XML output types:
 - *controlType*: controlType
 - *controlTime*: controlTime
 - *controlCardNumber*: FullCardNumber
 - *controlVehicleRegistration*: VehicleRegistrationIdentification
 - *controlDownloadPeriodBegin*: TimeReal
 - *controlDownloadPeriodEnd*: TimeReal

1.11 CardCurrentUse

- Java data types used:
 - *sessionOpenTime*: TimeReal
 - *sessionOpenVehicle*: VehicleRegistrationIdentification
- XML output types:
 - *sessionOpenTime*: TimeReal
 - *sessionOpenVehicle*: VehicleRegistrationIdentification

1.12 CardDriverActivity

- Java data types used:
 - *activityPointerOldestDayRecord*: int
 - *activityPointerNewestRecord*: int
 - *activityDailyRecords*: Vector<CardActivityDailyRecord>
- XML output types:
 - *activityDailyRecords*: Vector<CardActivityDailyRecord>

1.13 CardDrivingLicenceInformation

- Java data types used:
 - *drivingLicenceIssuingAuthority*: Name
 - *drivingLicenceIssuingNation*: NationNumeric
 - *drivingLicenceNumber*: String
- XML output types:
 - *drivingLicenceIssuingAuthority*: Name
 - *drivingLicenceIssuingNation*: NationNumeric
 - *drivingLicenceNumber*: String

1.14 CardEventData

- Java data types used:
 - *cardEventRecords*: Vector<Vector<CardEventRecord>
- XML output types:
 - *cardEventRecords*: Vector<Vector<CardEventRecord>

1.15 CardEventRecord

- Java data types used:
 - *eventType*: EventFaultType
 - *eventBeginTime*: TimeReal
 - *eventEndTime*: TimeReal
 - *eventVehicleRegistration*: VehicleRegistrationIdentification
- XML output types:
 - *eventType*: EventFaultType
 - *eventBeginTime*: TimeReal
 - *eventEndTime*: TimeReal
 - *eventVehicleRegistration*: VehicleRegistrationIdentification

1.16 CardFaultData

- Java data types used:
 - *cardFaultRecords*: Vector<Vector<CardFaultRecord>
- XML output types:
 - *cardFaultRecords*: Vector<Vector<CardFaultRecord>

1.17 CardFaultRecord

- Java data types used:
 - *faultType*: EventFaultType
 - *faultBeginTime*: TimeReal
 - *faultEndTime*: TimeReal
 - *faultVehicleRegistration*: VehicleRegistrationIdentification
- XML output types:
 - *faultType*: EventFaultType
 - *faultBeginTime*: TimeReal
 - *faultEndTime*: TimeReal
 - *faultVehicleRegistration*: VehicleRegistrationIdentification

1.18 CardIccIdentification

- Java data types used:
 - *clockStop*: byte
 - *cardExtendedSerialNumber*: ExtendedSerialNumber
 - *cardApprovalNumber*: cardApprovalNumber
 - *cardPersonaliserID*: byte
 - *embedderIccAssemblerId*: byte[]
 - *icIdentifier*: byte[]
- XML output types:
 - *clockStop*: hexstring
 - *cardExtendedSerialNumber*: ExtendedSerialNumber
 - *cardApprovalNumber*: cardApprovalNumber
 - *cardPersonaliserID*: hexstring
 - *embedderIccAssemblerId*: hexstring
 - *icIdentifier*: hexstring

1.19 CardIdentification

- Java data types used:
 - *cardIssuingMemberState*: NationNumeric
 - *cardNumber*: CardNumber
 - *cardIssuingAuthorityName*: Name
 - *cardIssueDate*: TimeReal
 - *cardValidityBegin*: TimeReal

- *cardExpiryDate*: TimeReal
- XML output types:
 - *cardIssuingMemberState*: NationNumeric
 - *cardNumber*: CardNumber
 - *cardIssuingAuthorityName*: Name
 - *cardIssueDate*: TimeReal
 - *cardValidityBegin*: TimeReal
 - *cardExpiryDate*: TimeReal

1.20 CardNumber

- Java data types used for driver cards:
 - *driverIdentification*: String
 - *cardReplacementIndex*: CardReplacementIndex
 - *cardRenewalIndex*: CardRenewalIndex
- XML output types used for driver cards:
 - *driverIdentification*: String
 - *cardReplacementIndex*: CardReplacementIndex
 - *cardRenewalIndex*: CardRenewalIndex
- Java data types used for workshop, control and company cards:
 - *ownerIdentification*: String
 - *cardConsecutiveIndex*: CardConsecutiveIndex
 - *cardReplacementIndex*: CardReplacementIndex
 - *cardRenewalIndex*: CardRenewalIndex
- XML output types used for workshop, control and company cards:
 - *ownerIdentification*: String
 - *cardConsecutiveIndex*: CardConsecutiveIndex
 - *cardReplacementIndex*: CardReplacementIndex
 - *cardRenewalIndex*: CardRenewalIndex

1.21 CardPlaceDailyWorkPeriod

- Java data types used:
 - *placeRecords*: Vector<PlaceRecord>
- XML output types:
 - *placeRecords*: Vector<PlaceRecord>

1.22 CardPrivateKey

- Java data type used: RSAKeyPrivateExponent
- XML output type: RSAKeyPrivateExponent

1.23 CardPublicKey

- Java data type used: PublicKey
- XML output type: PublicKey

1.24 CardRenewalIndex

- Java data type used: String
- XML output type: String

1.25 CardReplacementIndex

- Java data type used: String
- XML output type: String

1.26 CardSlotNumber

- Java data type used: short
- XML output type: short

1.27 CardSlotStatus

- Java data type used: byte
- XML output type: hexstring

1.28 CardStructureVersion

- Java data type used: byte[]
- XML output type: hexstring

1.29 CardVehicleRecord

- Java data types used:
 - *vehicleOdometerBegin*: OdometerShort
 - *vehicleOdometerEnd*: OdometerShort
 - *vehicleFirstUse*: TimeReal
 - *vehicleLastUse*: TimeReal
 - *vehicleRegistration*: VehicleRegistrationIdentification
 - *vuDataBlockCounter*: VuDataBlockCounter

- XML output types:
 - *vehicleOdometerBegin*: OdometerShort
 - *vehicleOdometerEnd*: OdometerShort
 - *vehicleFirstUse*: TimeReal
 - *vehicleLastUse*: TimeReal
 - *vehicleRegistration*: VehicleRegistrationIdentification
 - *vuDataBlockCounter*: VuDataBlockCounter

1.30 CardVehiclesUsed

- Java data types used:
 - *cardVehicleRecords*: Vector <CardVehicleRecord>
- XML output types:
 - *cardVehicleRecords*: Vector <CardVehicleRecord>

1.31 Certificate

- Java data type used: byte[]
- XML out type: hexstring

1.32 CertificateContent

- Java data types used:
 - *certificateProfileIdentifier*: short
 - *certificationAuthorityReference*: KeyIdentifier
 - *certificateHolderAuthorisation*: CertificateHolderAuthorisation
 - *certificateEndOfValidity*: TimeReal
 - *certificateHolderReference*: KeyIdentifier
 - *publicKey*: PublicKey
- XML output types:
 - *certificateProfileIdentifier*: short
 - *certificationAuthorityReference*: KeyIdentifier
 - *certificateHolderAuthorisation*: CertificateHolderAuthorisation
 - *certificateEndOfValidity*: TimeReal
 - *certificateHolderReference*: KeyIdentifier
 - *publicKey*: PublicKey

1.33 CertificateHolderAuthorisation

- Java data types used:
 - *tachographApplicationID*: byte[]
 - *equipmentType*: EquipmentType
- XML output types:
 - *tachographApplicationID*: hexstring
 - *equipmentType*: EquipmentType

1.34 CertificateRequestID

- Java data types used:
 - *requestSerialNumber*: long
 - *requestMonthYear*: byte[]
 - *crIdentifier*: byte
 - *manufacturerCode*: ManufacturerCode
- XML output types:
 - *requestSerialNumber*: long
 - *requestMonthYear*: BCDString
 - *crIdentifier*: hexstring
 - *manufacturerCode*: ManufacturerCode

1.35 CertificationAuthorityKID

- Java data types used:
 - *nationNumeric*: NationNumeric
 - *nationAlpha*: NationAlpha
 - *keySerialNumber*: short
 - *additionalInfo*: byte[]
 - *caIdentifier*: byte
- XML output types:
 - *nationNumeric*: NationNumeric
 - *nationAlpha*: NationAlpha
 - *keySerialNumber*: short
 - *additionalInfo*: hexstring
 - *caIdentifier*: hexstring

1.36 CompanyActivityData

- Java data types used:
 - *companyActivityRecords*: Vector<CompanyActivityRecords>
- XML output types:
 - *companyActivityRecords*: Vector<CompanyActivityRecords>

1.37 CompanyActivityRecord

- Java data types used:
 - *companyActivityType*: CompanyActivityType
 - *companyActivityTime*: TimeReal
 - *cardNumberInformation*: FullCardNumber
 - *vehicleRegistrationInformation*: VehicleRegistrationIdentification
 - *downloadPeriodBegin*: TimeReal
 - *downloadPeriodEnd*: TimeReal
- XML output types:
 - *companyActivityType*: CompanyActivityType
 - *companyActivityTime*: TimeReal
 - *cardNumberInformation*: FullCardNumber
 - *vehicleRegistrationInformation*: VehicleRegistrationIdentification
 - *downloadPeriodBegin*: TimeReal
 - *downloadPeriodEnd*: TimeReal

1.38 CompanyActivityType

- Java data types used: short
- XML output types: short

1.39 CompanyCardApplicationIdentification

- Java data types used:
 - *typeOfTachographCardId*: EquipmentType
 - *cardStructureVersion*: CardStructureVersion
 - *noOfCompanyActivityRecords*: NoOfCompanyActivityRecords
- XML output types:
 - *typeOfTachographCardId*: EquipmentType
 - *cardStructureVersion*: CardStructureVersion
 - *noOfCompanyActivityRecords*: NoOfCompanyActivityRecords

1.40 CompanyCardHolderIdentification

- Java data types used:
 - *companyName*: Name
 - *companyAddress*: Address
 - *cardHolderPreferredLanguage*: Language
- XML output types:
 - *companyName*: Name
 - *companyAddress*: Address
 - *cardHolderPreferredLanguage*: Language

1.41 ControlCardApplicationIdentification

- Java data types used:
 - *typeOfTachographCardId*: EquipmentType
 - *cardStructureVersion*: CardStructureVersion
 - *noOfControlActivityRecords*: NoOfControlActivityRecords
- XML output types:
 - *typeOfTachographCardId*: EquipmentType
 - *cardStructureVersion*: CardStructureVersion
 - *noOfControlActivityRecords*: NoOfControlActivityRecords

1.42 ControlCardControlActivityData

- Java data types used:
 - *controlActivityRecords*: Vector<ControlActivityRecord>
- XML output types:
 - *controlActivityRecords*: Vector<ControlActivityRecord>

1.43 ControlCardHolderIdentification

- Java data types used:
 - *controlBodyName*: Name
 - *controlBodyAddress*: Address
 - *cardHolderName*: HolderName
 - *cardHolderPreferredLanguage*: Language

- XML output types:
 - *controlBodyName*: Name
 - *controlBodyAddress*: Address
 - *cardHolderName*: HolderName
 - *cardHolderPreferredLanguage*: Language

1.44 ControlType

- Java data types used:
 - *value*: byte
 - *card_downloading*: boolean
 - *vu_downloading*: boolean
 - *display*: boolean
 - *printing*: boolean
- XML output types:
 - *value*: hexstring
 - *card_downloading*: boolean
 - *vu_downloading*: boolean
 - *display*: boolean
 - *printing*: boolean

1.45 CurrentDateTime

- Java data type used: TimeReal
- XML output type: TimeReal

1.46 DailyPresenceCounter

- Java data type used: byte[]
- XML output type: BCDString

1.47 Datef

- Java data types used:
 - *year*: byte[]
 - *month*: byte
 - *day*: byte
- XML output types:
 - *year*: BCDString
 - *month*: BCDString
 - *day*: BCDString

1.48 Distance

- Java data type used: int
- XML output type: int

1.49 DriverCardApplicationIdentification

- Java data types used:
 - *typeOfTachographCardId*: EquipmentType
 - *cardStructureVersion*: CardStructureVersion
 - *noOfEventsPerType*: NoOfEventsPerType
 - *noOfFaultsPerType*: NoOfFaultsPerType
 - *activityStructureLength*: CardActivityLengthRange
 - *noOfCardVehicleRecords*: NoOfCardVehicleRecords
 - *noOfCardPlaceRecords*: NoOfCardPlaceRecords
- XML output types:
 - *typeOfTachographCardId*: EquipmentType
 - *cardStructureVersion*: CardStructureVersion
 - *noOfEventsPerType*: NoOfEventsPerType
 - *noOfFaultsPerType*: NoOfFaultsPerType
 - *activityStructureLength*: CardActivityLengthRange
 - *noOfCardVehicleRecords*: NoOfCardVehicleRecords
 - *noOfCardPlaceRecords*: NoOfCardPlaceRecords

1.50 DriverCardHolderIdentification

- Java data types used:
 - *cardHolderName*: HolderName
 - *cardHolderBirthDate*: Datef
 - *cardHolderPreferredLanguage*: Language
- XML output types:
 - *cardHolderName*: HolderName
 - *cardHolderBirthDate*: Datef
 - *cardHolderPreferredLanguage*: Language

1.51 EntryTypeDailyWorkPeriod

- Java data type used: short
- XML output type: short

1.52 EquipmentType

- Java data type used: short
- XML output type: short

1.53 EuropeanPublicKey

- Java data type used: PublicKey
- XML output type: PublicKey

1.54 EventFaultRecordPurpose

- Java data type used: byte
- XML output type: hexstring

1.55 EventFaultType

- Java data type used: byte
- XML output type: hexstring

1.56 ExtendedSerialNumber

- Java data types used:
 - *serialNumber*: long
 - *monthYear*: byte[]
 - *type*: byte
 - *manufacturerCode*: short
- XML output type:
 - *serialNumber*: long
 - *monthYear*: BCDString
 - *type*: hexstring
 - *manufacturerCode*: short

1.57 FullCardNumber

- Java data types used:
 - *cardType*: EquipmentType
 - *cardIssuingMemberState*: NationNumeric
 - *cardNumber*: CardNumber
- XML output type:
 - *cardType*: EquipmentType
 - *cardIssuingMemberState*: NationNumeric
 - *cardNumber*: CardNumber

1.58 HolderName

- Java data types used:
 - *holderSurname*: Name
 - *holderFirstName*: Name
- XML output types:
 - *holderSurname*: Name
 - *holderFirstName*: Name

1.59 K_ConstantOfRecordingEquipment

- Java data type used: int
- XML output type: int

1.60 KeyIdentifier

- Java data types used:
 - *extendedSerialNumber*: ExtendedSerialNumber
 - *certificateRequestID*: CertificateRequestID
 - *certificationAuthorityKID*: CertificationAuthorityKID
- XML output type:
 - *extendedSerialNumber*: ExtendedSerialNumber
 - *certificateRequestID*: CertificateRequestID
 - *certificationAuthorityKID*: CertificationAuthorityKID

1.61 L_TyreCircumference

- Java data type used: int
- XML output type: int

1.62 Language

- Java data type used: String
- XML output type: String

1.63 LastCardDownload

- Java data type used: TimeReal
- XML output type: TimeReal

1.64 ManualInputFlag

- Java data type used: boolean
- XML output type: boolean

1.65 ManufacturerCode

- Java data type used: short
- XML output type: short

1.66 MemberStateCertificate

- Java data type used: Certificate
- XML output type: Certificate

1.67 MemberStatePublicKey

- Java data type used: PublicKey
- XML output type: PublicKey

1.68 Name

- Java data types used:
 - *codePage*: short
 - *name*: byte[]
- XML output types:
 - *codePage*: short
 - *name*: hexstring

1.69 NationAlpha

- Java data type used: String
- XML output type: String

1.70 NationNumeric

- Java data type used: short
- XML output type: short

1.71 NoOfCalibrationRecords

- Java data type used: short
- XML output type: short

1.72 NoOfCalibrationsSinceDownload

- Java data type used: int
- XML output type: int

1.73 NoOfCardPlaceRecords

- Java data type used: short
- XML output type: short

1.74 NoOfCardVehicleRecords

- Java data type used: int
- XML output type: int

1.75 NoOfCompanyActivityRecords

- Java data type used: int
- XML output type: int

1.76 NoOfControlActivityRecords

- Java data type used: int
- XML output type: int

1.77 NoOfEventsPerType

- Java data type used: short
- XML output type: short

1.78 NoOfFaultsPerType

- Java data type used: short
- XML output type: short

1.79 OdometerShort

- Java data type used: int
- XML output type: int

1.80 OdometerValueMidnight

- Java data type used: OdometerShort
- XML output type: OdometerShort

1.81 OverspeedNumber

- Java data type used: short
- XML output type: short

1.82 PlaceRecord

- Java data types used:
 - *entryTime*: TimeReal
 - *entryTypeDailyWorkPeriod*: EntryTypeDailyWorkPeriod
 - *dailyWorkPeriodCountry*: NationNumeric
 - *dailyWorkPeriodRegion*: RegionNumeric
 - *vehicleOdometerValue*: OdometerShort
- XML output types:
 - *entryTime*: TimeReal
 - *entryTypeDailyWorkPeriod*: EntryTypeDailyWorkPeriod
 - *dailyWorkPeriodCountry*: NationNumeric
 - *dailyWorkPeriodRegion*: RegionNumeric
 - *vehicleOdometerValue*: OdometerShort

1.83 PreviousVehicleInfo

- Java data types used:
 - *vehicleRegistrationIdentification*: VehicleRegistrationIdentification
 - *cardWithdrawalTime*: TimeReal
- XML output types:
 - *vehicleRegistrationIdentification*: VehicleRegistrationIdentification
 - *cardWithdrawalTime*: TimeReal

1.84 PublicKey

- Java data types used:
 - *rsaKeyModulus*: RSAKeyModulus
 - *rsaKeyPublicExponent*: RSAKeyPublicExponent
- XML output types:
 - *rsaKeyModulus*: RSAKeyModulus
 - *rsaKeyPublicExponent*: RSAKeyPublicExponent

1.85 RegionAlpha

- Java data type used: String
- XML output type: String

1.86 RegionNumeric

- Java data type used: byte
- XML output type: hexstring

1.87 RSAKeyModulus

- Java data type used: byte
- XML output type: hexstring

1.88 RSAKeyPrivateExponent

- Java data type used: byte
- XML output type: hexstring

1.89 RSAKeyPublicExponent

- Java data type used: byte
- XML output type: hexstring

1.90 SensorApprovalNumber

- Java data type used: String
- XML output type: String

1.91 SensorInstallationSecData

- Java data type used: TDesSessionKey
- XML output type: TdesSessionKey

1.92 SensorPaired

- Java data types used:
 - *sensorSerialNumber*: SensorSerialNumber
 - *sensorApprovalNumber*: SensorApprovalNumber
 - *sensorPairingDateFirst*: SensorPairingDate
- XML output types:
 - *sensorSerialNumber*: SensorSerialNumber
 - *sensorApprovalNumber*: SensorApprovalNumber
 - *sensorPairingDateFirst*: SensorPairingDate

1.93 SensorPairingDate

- Java data type used: TimeReal
- XML output type: TimeReal

1.94 SensorSerialNumber

- Java data type used: ExtendedSerialNumber
- XML output type: ExtendedSerialNumber

1.95 Signature

- Java data type used: byte[]
- XML output type: hexstring

1.96 SimilarEventsNumber

- Java data type used: short
- XML output type: short

1.97 SpecificConditionRecord

- Java data types used:
 - *entryTime*: TimeReal
 - *specificConditionType*: SpecificConditionType
- XML output types:
 - *entryTime*: TimeReal
 - *specificConditionType*: SpecificConditionType

1.98 SpecificConditionType

- Java data type used: short
- XML output type: short

1.99 Speed

- Java data type used: short
- XML output type: short

1.100 SpeedAuthorised

- Java data type used: Speed
- XML output type: Speed

1.101 SpeedAverage

- Java data type used: Speed
- XML output type: Speed

1.102 SpeedMax

- Java data type used: Speed
- XML output type: Speed

1.103 TDesSessionKey

- Java data types used:
 - *tDesKeyA*: byte[]
 - *tDesKeyB*: byte[]
- XML output types:
 - *tDesKeyA*: hexstring
 - *tDesKeyB*: hexstring

1.104 TimeReal

- Java data type used: long
- XML output type: long

1.105 TyreSize

- Java data type used: String
- XML output type: String

1.106 VehicleIdentificationNumber

- Java data type used: String
- XML output type: String

1.107 VehicleRegistrationIdentification

- Java data types used:
 - *vehicleRegistrationNation*: NationNumeric
 - *vehicleRegistrationNumber*: VehicleRegistrationNumber
- XML output types:
 - *vehicleRegistrationNation*: NationNumeric
 - *vehicleRegistrationNumber*: VehicleRegistrationNumber

1.108 VehicleRegistrationNumber

- Java data types used:
 - *codePage*: short
 - *vehicleRegNumber*: byte[]
- XML output types:
 - *codePage*: short
 - *vehicleRegNumber*: hexstring

1.109 VuActivityDailyData

- Java data type used:
 - *noOfActivityChanges*: int
 - *ActivityChangeInfos*: Vector<ActivityChangeInfo>
- XML output type:
 - *ActivityChangeInfos*: Vector<ActivityChangeInfo>

1.110 VuApprovalNumber

- Java data type used: String
- XML output type: String

1.111 VuCalibrationData

- Java data type used:
 - *noOfVuCalibrationRecords*: short
 - *vuCalibrationRecords*: Vector<VuCalibrationRecord>
- XML output type:
 - *vuCalibrationRecords*: Vector<VuCalibrationRecord>

1.112 VuCalibrationRecord

- Java data types used:
 - *calibrationPurpose*: CalibrationPurpose
 - *workshopName*: Name
 - *workshopAddress*: Address
 - *workshopCardNumber*: FullCardNumber
 - *workshopCardExpiryDate*: TimeReal
 - *vehicleIdentificationNumber*: VehicleIdentificationNumber
 - *vehicleRegistrationIdentification*: VehicleRegistrationIdentification
 - *wVehicleCharacteristicConstant*: W_VehicleCharacteristicConstant

- *kConstantOfRecordingEquipment*: K_ConstantOfRecordingEquipment
- *ITyreCircumference*: L_TyreCircumference
- *tyreSize*: TyreSize
- *authorisedSpeed*: SpeedAuthorised
- *oldOdometerValue*: OdometerShort
- *newOdometerValue*: OdometerShort
- *oldTimeValue*: TimeReal
- *newTimeValue*: TimeReal
- *nextCalibrationDate*: TimeReal
- XML output types:
 - *calibrationPurpose*: CalibrationPurpose
 - *workshopName*: Name
 - *workshopAddress*: Address
 - *workshopCardNumber*: FullCardNumber
 - *workshopCardExpiryDate*: TimeReal
 - *vehicleIdentificationNumber*: VehicleIdentificationNumber
 - *vehicleRegistrationIdentification*: VehicleRegistrationIdentification
 - *wVehicleCharacteristicConstant*: W_VehicleCharacteristicConstant
 - *kConstantOfRecordingEquipment*: K_ConstantOfRecordingEquipment
 - *ITyreCircumference*: L_TyreCircumference
 - *tyreSize*: TyreSize
 - *authorisedSpeed*: SpeedAuthorised
 - *oldOdometerValue*: OdometerShort
 - *newOdometerValue*: OdometerShort
 - *oldTimeValue*: TimeReal
 - *newTimeValue*: TimeReal
 - *nextCalibrationDate*: TimeReal

1.113 VuCardIWData

- Java data type used:
 - *noOfIWRecords*: int
 - *vuCardIWRecords*: Vector<VuCardIWRecord>
- XML output type:
 - *vuCardIWRecords*: Vector<VuCardIWRecord>

1.114 VuCardIWRecord

- Java data types used:
 - *cardHolderName*: HolderName
 - *fullCardNumber*: FullCardNumber
 - *cardExpiryDate*: TimeReal
 - *cardInsertionTime*: TimeReal
 - *vehicleOdometerValueAtInsertion*: OdometerShort
 - *cardSlotNumber*: CardSlotNumber
 - *cardWithdrawalTime*: TimeReal
 - *vehicleOdometerValueAtWithdrawal*: OdometerShort
 - *previousVehicleInfo*: PreviousVehicleInfo
 - *manualInputFlag*: ManualInputFlag
- XML output types:
 - *cardHolderName*: HolderName
 - *fullCardNumber*: FullCardNumber
 - *cardExpiryDate*: TimeReal
 - *cardInsertionTime*: TimeReal
 - *vehicleOdometerValueAtInsertion*: OdometerShort
 - *cardSlotNumber*: CardSlotNumber
 - *cardWithdrawalTime*: TimeReal
 - *vehicleOdometerValueAtWithdrawal*: OdometerShort
 - *previousVehicleInfo*: PreviousVehicleInfo
 - *manualInputFlag*: ManualInputFlag

1.115 VuCertificate

- Java data type used: Certificate
- XML output type: Certificate

1.116 VuCompanyLocksData

- Java data type used:
 - *noOfLocks*: short
 - *vuCompanyLocksRecords*: Vector<VuCompanyLocksRecord>
- XML output type:
 - *vuCompanyLocksRecords*: Vector<VuCompanyLocksRecord>

1.117 VuCompanyLocksRecord

- Java data types used:
 - *lockInTime*: TimeReal
 - *lockOutTime*: TimeReal
 - *companyName*: Name
 - *companyAddress*: Address
 - *companyCardNumber*: FullCardNumber
- XML output types:
 - *lockInTime*: TimeReal
 - *lockOutTime*: TimeReal
 - *companyName*: Name
 - *companyAddress*: Address
 - *companyCardNumber*: FullCardNumber

1.118 VuControlActivityData

- Java data type used:
 - *noOfControls*: short
 - *vuControlActivityRecords*: Vector<VuControlActivityRecord>
- XML output type:
 - *vuControlActivityRecords*: Vector<VuControlActivityRecord>

1.119 VuControlActivityRecord

- Java data types used:
 - *controlType*: ControlType
 - *controlTime*: TimeReal
 - *controlCardNumber*: FullCardNumber
 - *downloadPeriodBeginTime*: TimeReal
 - *downloadPeriodEndTime*: TimeReal
- XML output types:
 - *controlType*: ControlType
 - *controlTime*: TimeReal
 - *controlCardNumber*: FullCardNumber
 - *downloadPeriodBeginTime*: TimeReal
 - *downloadPeriodEndTime*: TimeReal

1.120 VuDataBlockCounter

- Java data type used: byte[]
- XML output type: BCDString

1.121 VuDetailedSpeedBlock

- Java data types used:
 - *speedBlockBeginDate*: TimeReal
 - *speedsPerSecond*: Speed[]
- XML output types:
 - *speedBlockBeginDate*: TimeReal
 - *speedsPerSecond*: Speed[]

1.122 VuDetailedSpeedData

- Java data types used:
 - *noOfSpeedBlocks*: int
 - *vuDetailedSpeedBlocks*: Vector<VuDetailedSpeedBlock>
- XML output types:
 - *vuDetailedSpeedBlocks*: Vector<VuDetailedSpeedBlock>

1.123 VuDownloadablePeriod

- Java data types used:
 - *minDownloadableTime*: TimeReal
 - *maxDownloadableTime*: TimeReal
- XML output types:
 - *minDownloadableTime*: TimeReal
 - *maxDownloadableTime*: TimeReal

1.124 VuDownloadActivityData

- Java data types used:
 - *downloadingTime*: TimeReal
 - *fullCardNumber*: FullCardNumber
 - *companyOrWorkShopName*: Name
- XML output types:
 - *downloadingTime*: TimeReal
 - *fullCardNumber*: FullCardNumber
 - *companyOrWorkShopName*: Name

1.125 VuEventData

- Java data types used:
 - *noOfVuEvents*: short
 - *vuEventRecords*: Vector<VuEventRecord>
- XML output types:
 - *vuEventRecords*: Vector<VuEventRecord>

1.126 VuEventRecord

- Java data types used:
 - *eventType*: EventFaultType
 - *eventRecordPurpose*: EventFaultRecordPurpose
 - *eventBeginTime*: TimeReal
 - *eventEndTime*: TimeReal
 - *cardNumberDriverSlotBegin*: FullCardNumber
 - *cardNumberCodriverSlotBegin*: FullCardNumber
 - *cardNumberDriverSlotEnd*: FullCardNumber
 - *cardNumberCodriverSlotEnd*: FullCardNumber
 - *similarEventsNumber*: SimilarEventsNumber
- XML output types:
 - *eventType*: EventFaultType
 - *eventRecordPurpose*: EventFaultRecordPurpose
 - *eventBeginTime*: TimeReal
 - *eventEndTime*: TimeReal
 - *cardNumberDriverSlotBegin*: FullCardNumber
 - *cardNumberCodriverSlotBegin*: FullCardNumber
 - *cardNumberDriverSlotEnd*: FullCardNumber
 - *cardNumberCodriverSlotEnd*: FullCardNumber
 - *similarEventsNumber*: SimilarEventsNumber

1.127 VuFaultData

- Java data types used:
 - *noOfVuFaults*: short
 - *vuFaultRecords*: Vector<VuFaultRecord>
- XML output types:
 - *vuFaultRecords*: Vector<VuFaultRecord>

1.128 VuFaultRecord

- Java data types used:
 - *faultType*: EventFaultType
 - *faultRecordPurpose*: EventFaultRecordPurpose
 - *faultBeginTime*: TimeReal
 - *faultEndTime*: TimeReal
 - *cardNumberDriverSlotBegin*: FullCardNumber
 - *cardNumberCodriverSlotBegin*: FullCardNumber
 - *cardNumberDriverSlotEnd*: FullCardNumber
 - *cardNumberCodriverSlotEnd*: FullCardNumber
- XML output types:
 - *faultType*: EventFaultType
 - *faultRecordPurpose*: EventFaultRecordPurpose
 - *faultBeginTime*: TimeReal
 - *faultEndTime*: TimeReal
 - *cardNumberDriverSlotBegin*: FullCardNumber
 - *cardNumberCodriverSlotBegin*: FullCardNumber
 - *cardNumberDriverSlotEnd*: FullCardNumber
 - *cardNumberCodriverSlotEnd*: FullCardNumber

1.129 Vuldentification

- Java data types used:
 - *vuManufacturerName*: VuManufacturerName
 - *vuManufacturerAddress*: VuManufacturerAddress
 - *vuPartNumber*: VuPartNumber
 - *vuSerialNumber*: VuSerialNumber
 - *vuSoftwareIdentification*: VuSoftwareIdentification
 - *vuManufacturingDate*: VuManufacturingDate
 - *vuApprovalNumber*: VuApprovalNumber
- XML output types:
 - *vuManufacturerName*: VuManufacturerName
 - *vuManufacturerAddress*: VuManufacturerAddress
 - *vuPartNumber*: VuPartNumber
 - *vuSerialNumber*: VuSerialNumber
 - *vuSoftwareIdentification*: VuSoftwareIdentification

- *vuManufacturingDate*: VuManufacturingDate
- *vuApprovalNumber*: VuApprovalNumber

1.130 VuManufacturerAddress

- Java data type used: Address
- XML output type: Address

1.131 VuManufacturerName

- Java data type used: Name
- XML output type: Name

1.132 VuManufacturerAddress

- Java data type used: TimeReal
- XML output type: TimeReal

1.133 VuOverSpeedingControlData

- Java data types used:
 - *lastOverspeedControlTime*: TimeReal
 - *firstOverspeedSince*: TimeReal
 - *numberOfOverspeedSince*: OverspeedNumber
- XML output types :
 - *lastOverspeedControlTime*: TimeReal
 - *firstOverspeedSince*: TimeReal
 - *numberOfOverspeedSince*: OverspeedNumber

1.134 VuOverSpeedingEventData

- Java data types used:
 - *noOfOverSpeedingEvents*: short
 - *vuOverSpeedingEventRecords*: Vector<VuOverSpeedingEventRecord>
- XML output types:
 - *vuOverSpeedingEventRecords*: Vector<VuOverSpeedingEventRecord>

1.135 VuOverSpeedingEventRecord

- Java data types used:
 - *eventType*: EventFaultType
 - *eventRecordPurpose*: EventFaultRecordPurpose
 - *eventBeginTime*: TimeReal
 - *eventEndTime*: TimeReal

- *maxSpeedValue*: SpeedMax
- *averageSpeedValue*: SpeedAverage
- *cardNumberDriverSlotBegin*: FullCardNumber
- *similarEventsNumber*: SimilarEventsNumber
- XML output types:
 - *eventType*: EventFaultType
 - *eventRecordPurpose*: EventFaultRecordPurpose
 - *eventBeginTime*: TimeReal
 - *eventEndTime*: TimeReal
 - *maxSpeedValue*: SpeedMax
 - *averageSpeedValue*: SpeedAverage
 - *cardNumberDriverSlotBegin*: FullCardNumber
 - *similarEventsNumber*: SimilarEventsNumber

1.136 VuPartNumber

- Java data type used: String
- XML output type: String

1.137 VuPlaceDailyWorkPeriodData

- Java data types used:
 - *noOfPlaceRecords*: short
 - *vuOverSpeedingEventRecords*: Vector<VuOverSpeedingEventRecord>
- XML output types:
 - *vuOverSpeedingEventRecords*: Vector<VuOverSpeedingEventRecord>

1.138 VuPlaceDailyWorkPeriodRecord

- Java data types used:
 - *fullCardNumber*: FullCardNumber
 - *placeRecord*: PlaceRecord
- XML output types:
 - *fullCardNumber*: FullCardNumber
 - *placeRecord*: PlaceRecord

1.139 VuPrivateKey

- Java data type used: RSAKeyPrivateExponent
- XML output type: RSAKeyPrivateExponent

1.140 VuPublicKey

- Java data type used: PublicKey
- XML output type: PublicKey

1.141 VuSerialNumber

- Java data type used: ExtendedSerialNumber
- XML output type: ExtendedSerialNumber

1.142 VuSoftInstallationDate

- Java data type used: TimeReal
- XML output type: TimeReal

1.143 VuSoftwareIdentification

- Java data types used:
 - *vuSoftwareVersion*: VuSoftwareVersion
 - *vuSoftInstallationDate*: VuSoftInstallationDate
- XML output types:
 - *vuSoftwareVersion*: VuSoftwareVersion
 - *vuSoftInstallationDate*: VuSoftInstallationDate

1.144 VuSoftwareVersion

- Java data type used: String
- XML output type: String

1.145 VuSpecificConditionData

- Java data types used:
 - *noOfSpecificConditionsRecords*: int
 - *specificConditionRecords*: Vector<SpecificConditionRecord>
- XML output types:
 - *specificConditionRecords*: Vector<SpecificConditionRecord>

1.146 VuTimeAdjustmentData

- Java data types used:
 - *noOfVuTimeAdjRecords*: short
 - *vuTimeAdjustmentRecords*: Vector<vuTimeAdjustmentRecord>
- XML output types:
 - *vuTimeAdjustmentRecords*: Vector<vuTimeAdjustmentRecord>

1.147 VuTimeAdjustmentRecord

- Java data types used:
 - *oldTimeValue*: TimeReal
 - *newTimeValue*: TimeReal
 - *workshopName*: Name
 - *workshopAddress*: Address
 - *workshopCardNumber*: FullCardNumber
- XML output types:
 - *oldTimeValue*: TimeReal
 - *newTimeValue*: TimeReal
 - *workshopName*: Name
 - *workshopAddress*: Address
 - *workshopCardNumber*: FullCardNumber

1.148 W_VehicleCharacteristicConstant

- Java data type used: int
- XML output type: int

1.149 WorkshopCardApplicationIdentification

- Java data types used:
 - *typeOfTachographCardId*: EquipmentType
 - *cardStructureVersion*: CardStructureVersion
 - *noOfEventsPerType*: NoOfEventsPerType
 - *noOfFaultsPerType*: NoOfFaultsPerType
 - *activityStructureLength*: ActivityStructureLength
 - *noOfCardVehicleRecords*: NoOfCardVehicleRecords
 - *noOfCardPlaceRecords*: NoOfCardPlaceRecords
 - *noOfCalibrationRecords*: NoOfCalibrationRecords
- XML output types:
 - *typeOfTachographCardId*: EquipmentType
 - *cardStructureVersion*: CardStructureVersion
 - *noOfEventsPerType*: NoOfEventsPerType
 - *noOfFaultsPerType*: NoOfFaultsPerType
 - *activityStructureLength*: ActivityStructureLength
 - *noOfCardVehicleRecords*: NoOfCardVehicleRecords

- *noOfCardPlaceRecords*: NoOfCardPlaceRecords
- *noOfCalibrationRecords*: NoOfCalibrationRecords

1.150 WorkshopCardCalibrationData

- Java data types used:
 - *calibrationTotalNumber*: int
 - *calibrationPointerNewestRecord*: short
 - *calibrationRecords*: Vector<WorkshopCardCalibrationRecord>
- XML output types:
 - *calibrationTotalNumber*: int
 - *calibrationPointerNewestRecord*: short
 - *calibrationRecords*: Vector<WorkshopCardCalibrationRecord>

1.151 WorkshopCardCalibrationRecord

- Java data types used:
 - *calibrationPurpose*: CalibrationPurpose
 - *vehicleIdentificationNumber*: VehicleIdentificationNumber
 - *vehicleRegistration*: VehicleRegistrationIdentification
 - *wVehicleCharacteristicConstant*: W_VehicleCharacteristicConstant
 - *lTyreCircumference*: L_TyreCircumference
 - *tyreSize*: TyreSize
 - *authorisedSpeed*: SpeedAuthorised
 - *oldOdometerValue*: OdometerShort
 - *newOdometerValue*: OdometerShort
 - *oldTimeValue*: TimeReal
 - *newTimeValue*: TimeReal
 - *nextCalibrationDate*: TimeReal
 - *vuPartNumber*: VuPartNumber
 - *vuSerialNumber*: VuSerialNumber
 - *sensorSerialNumber*: SensorSerialNumber
- XML output types:
 - *calibrationPurpose*: CalibrationPurpose
 - *vehicleIdentificationNumber*: VehicleIdentificationNumber
 - *vehicleRegistration*: VehicleRegistrationIdentification
 - *wVehicleCharacteristicConstant*: W_VehicleCharacteristicConstant
 - *lTyreCircumference*: L_TyreCircumference

- *tyreSize*: TyreSize
- *authorisedSpeed*: SpeedAuthorised
- *oldOdometerValue*: OdometerShort
- *newOdometerValue*: OdometerShort
- *oldTimeValue*: TimeReal
- *newTimeValue*: TimeReal
- *nextCalibrationDate*: TimeReal
- *vuPartNumber*: VuPartNumber
- *vuSerialNumber*: VuSerialNumber
- *sensorSerialNumber*: SensorSerialNumber

1.152 WorkshopCardHolderIdentification

- Java data types used:
 - *workshopName*: Name
 - *workshopAddress*: Address
 - *cardHolderName*: HolderName
 - *cardHolderPreferredLanguage*: Language
- XML output types:
 - *workshopName*: Name
 - *workshopAddress*: Address
 - *cardHolderName*: HolderName
 - *cardHolderPreferredLanguage*: Language