

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

06.06.2008

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Contents

1 Description of the XML elements.....	6
1.1 ActivityChangeInfo.....	6
1.2 Address.....	6
1.3 CalibrationPurpose.....	6
1.4 CardActivityDailyRecord.....	7
1.5 CardActivityLengthRange.....	7
1.6 CardApprovalNumber.....	7
1.7 CardCertificate.....	7
1.8 CardChipIdentification.....	7
1.9 CardConsecutiveIndex.....	8
1.10 CardControlActivityDataRecord.....	8
1.11 CardCurrentUse.....	8
1.12 CardDriverActivity.....	8
1.13 CardDrivingLicenceInformation.....	9
1.14 CardEventData.....	9
1.15 CardEventRecord.....	9
1.16 CardFaultData.....	9
1.17 CardFaultRecord.....	10
1.18 CardIcclIdentification.....	10
1.19 CardIdentification.....	10
1.20 CardNumber.....	11
1.21 CardPlaceDailyWorkPeriod.....	11
1.22 CardPrivateKey.....	12
1.23 CardPublicKey.....	12
1.24 CardRenewalIndex.....	12
1.25 CardReplacementIndex.....	12
1.26 CardSlotNumber.....	12
1.27 CardSlotStatus.....	12
1.28 CardStructureVersion.....	12
1.29 CardVehicleRecord.....	12
1.30 CardVehiclesUsed.....	13
1.31 Certificate.....	13
1.32 CertificateContent.....	13
1.33 CertificateHolderAuthorisation.....	14
1.34 CertificateRequestID.....	14
1.35 CertificationAuthorityKID.....	14
1.36 CompanyActivityData.....	15
1.37 CompanyActivityRecord.....	15
1.38 CompanyActivityType.....	15
1.39 CompanyCardApplicationIdentification.....	15
1.40 CompanyCardHolderIdentification.....	16
1.41 ControlCardApplicationIdentification.....	16
1.42 ControlCardControlActivityData.....	16
1.43 ControlCardHolderIdentification.....	16
1.44 ControlType.....	17
1.45 CurrentDateTime.....	17
1.46 DailyPresenceCounter.....	17
1.47 Datef.....	17

1.48 Distance.....	18
1.49 DriverCardApplicationIdentification.....	18
1.50 DriverCardHolderIdentification.....	18
1.51 EntryTypeDailyWorkPeriod.....	18
1.52 EquipmentType.....	19
1.53 EuropeanPublicKey.....	19
1.54 EventFaultRecordPurpose.....	19
1.55 EventFaultType.....	19
1.56 ExtendedSerialNumber.....	19
1.57 FullCardNumber.....	19
1.58 HolderName.....	20
1.59 K_ConstantOfRecordingEquipment.....	20
1.60 KeyIdentifier.....	20
1.61 L_TyreCircumference.....	20
1.62 Language.....	20
1.63 LastCardDownload.....	20
1.64 ManualInputFlag.....	20
1.65 ManufacturerCode.....	21
1.66 MemberStateCertificate.....	21
1.67 MemberStatePublicKey.....	21
1.68 Name.....	21
1.69 NationAlpha.....	21
1.70 NationNumeric.....	21
1.71 NoOfCalibrationRecords.....	21
1.72 NoOfCalibrationsSinceDownload.....	21
1.73 NoOfCardPlaceRecords.....	22
1.74 NoOfCardVehicleRecords.....	22
1.75 NoOfCompanyActivityRecords.....	22
1.76 NoOfControlActivityRecords.....	22
1.77 NoOfEventsPerType.....	22
1.78 NoOfFaultsPerType.....	22
1.79 OdometerShort.....	22
1.80 OdometerValueMidnight.....	22
1.81 OverspeedNumber.....	22
1.82 PlaceRecord.....	23
1.83 PreviousVehicleInfo.....	23
1.84 PublicKey.....	23
1.85 RegionAlpha.....	23
1.86 RegionNumeric.....	24
1.87 RSAKeyModulus.....	24
1.88 RSAKeyPrivateExponent.....	24
1.89 RSAKeyPublicExponent.....	24
1.90 SensorApprovalNumber.....	24
1.91 SensorInstallationSecData.....	24
1.92 SensorPaired.....	24
1.93 SensorPairingDate.....	24
1.94 SensorSerialNumber.....	25
1.95 Signature.....	25
1.96 SimilarEventsNumber.....	25
1.97 SpecificConditionRecord.....	25

1.98 SpecificConditionType.....	25
1.99 Speed.....	25
1.100 SpeedAuthorised.....	25
1.101 SpeedAverage.....	25
1.102 SpeedMax.....	26
1.103 TDesSessionKey.....	26
1.104 TimeReal.....	26
1.105 TyreSize.....	26
1.106 VehicleIdentificationNumber.....	26
1.107 VehicleRegistrationIdentification.....	26
1.108 VehicleRegistrationNumber.....	27
1.109 VuActivityDailyData.....	27
1.110 VuApprovalNumber.....	27
1.111 VuCalibrationData.....	27
1.112 VuCalibrationRecord.....	27
1.113 VuCardIWData.....	28
1.114 VuCardIWRecord.....	29
1.115 VuCertificate.....	29
1.116 VuCompanyLocksData.....	29
1.117 VuCompanyLocksRecord.....	30
1.118 VuControlActivityData.....	30
1.119 VuControlActivityRecord.....	30
1.120 VuDataBlockCounter.....	31
1.121 VuDetailedSpeedBlock.....	31
1.122 VuDetailedSpeedData.....	31
1.123 VuDownloadablePeriod.....	31
1.124 VuDownloadActivityData.....	31
1.125 VuEventData.....	32
1.126 VuEventRecord.....	32
1.127 VuFaultData.....	32
1.128 VuFaultRecord.....	33
1.129 VuIdentification.....	33
1.130 VuManufacturerAddress.....	34
1.131 VuManufacturerName.....	34
1.132 VuManufacturerAddress.....	34
1.133 VuOverSpeedingControlData.....	34
1.134 VuOverSpeedingEventData.....	34
1.135 VuOverSpeedingEventRecord.....	34
1.136 VuPartNumber.....	35
1.137 VuPlaceDailyWorkPeriodData.....	35
1.138 VuPlaceDailyWorkPeriodRecord.....	35
1.139 VuPrivateKey.....	35
1.140 VuPublicKey.....	36
1.141 VuSerialNumber.....	36
1.142 VuSoftInstallationDate.....	36
1.143 VuSoftwareIdentification.....	36
1.144 VuSoftwareVersion.....	36
1.145 VuSpecificConditionData.....	36
1.146 VuTimeAdjustmentData.....	36
1.147 VuTimeAdjustmentRecord.....	37

1.148 W_VehicleCharacteristicConstant.....	37
1.149 WorkshopCardApplicationIdentification.....	37
1.150 WorkshopCardCalibrationData.....	38
1.151 WorkshopCardCalibrationRecord.....	38
1.152 WorkshopCardHolderIdentification.....	39

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*: String, encoded as ISO 8859-<codePage>

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
 - *embedderIcAssemblerId*: byte[]
 - *icIdentifier*: byte[]
- XML output types:
 - *clockStop*: hexstring
 - *cardExtendedSerialNumber*: ExtendedSerialNumber
 - *cardApprovalNumber*: cardApprovalNumber
 - *cardPersonaliserID*: hexstring
 - *embedderIcAssemblerId*: 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*: String, encoded as ISO 8859-*codePage*

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: String, date/time format: yyyy-MM-dd hh:mm:ss z

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*: String, encoded as ISO 8859-*<codePage>*

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