

DIN EN ISO 17575-1:2016-08 (E)

Electronic fee collection - Application interface definition for autonomous systems - Part 1: Charging (ISO 17575-1:2016); English version EN ISO 17575-1:2016

| Contents | | Page |
|--|--|-------------|
| Foreword | | v |
| Introduction | | vi |
| 1 Scope | | 1 |
| 2 Normative references | | 2 |
| 3 Terms and definitions | | 3 |
| 4 Abbreviated terms | | 5 |
| 5 Architectural considerations | | 5 |
| 5.1 Business architecture..... | | 5 |
| 5.2 Technical architecture..... | | 6 |
| 5.3 Location of the specification interface..... | | 7 |
| 6 Procedural requirements | | 8 |
| 6.1 General..... | | 8 |
| 6.2 Toll collection process..... | | 8 |
| 6.3 Charge report..... | | 8 |
| 6.4 Charge report response..... | | 9 |
| 7 Data elements | | 9 |
| 7.1 Overview of data elements..... | | 9 |
| 7.2 Reporting..... | | 10 |
| 7.2.1 ChargeReport..... | | 10 |
| 7.2.2 ChargeReportResponse..... | | 11 |
| 7.3 Data group General..... | | 11 |
| 7.3.1 timeOfReport..... | | 11 |
| 7.3.2 reportPeriod..... | | 11 |
| 7.3.3 sumVatForThisSession..... | | 12 |
| 7.3.4 chargeReportCounter..... | | 12 |
| 7.3.5 mileage..... | | 12 |
| 7.3.6 Distance..... | | 12 |
| 7.3.7 Position..... | | 12 |
| 7.3.8 Period..... | | 12 |
| 7.3.9 Duration..... | | 13 |
| 7.4 Data group Security..... | | 13 |
| 7.4.1 AuthenticatedChargeReport..... | | 13 |
| 7.4.2 AuthenticatedChargeReportResponse..... | | 13 |
| 7.4.3 AuthenticatedUsageStatement..... | | 13 |
| 7.4.4 AuthenticatedReloadAccount..... | | 13 |
| 7.4.5 AuthenticatedNewAccountLimit..... | | 14 |
| 7.4.6 AuthenticatedAddToAccount..... | | 14 |
| 7.4.7 MessageAuthenticator..... | | 14 |
| 7.4.8 MacMessageAuthenticator..... | | 14 |
| 7.4.9 MessageAuthenticatorEfc..... | | 14 |

| | | |
|---|---|-----------|
| 7.5 | Data group Contract | 14 |
| 7.5.1 | obeld..... | 14 |
| 7.5.2 | vehicleLPNr..... | 15 |
| 7.5.3 | paymentMeans..... | 15 |
| 7.5.4 | serviceProviderContract..... | 15 |
| 7.5.5 | tollContext..... | 15 |
| 7.5.6 | chargeReportFinalRecipient..... | 15 |
| 7.5.7 | obeStatusForDriver..... | 15 |
| 7.5.8 | ObeStatus..... | 16 |
| 7.5.9 | chargeReportRespSender..... | 16 |
| 7.6 | Data group Usage..... | 16 |
| 7.6.1 | usageStatementList..... | 16 |
| 7.6.2 | UsageStatement..... | 16 |
| 7.6.3 | usageStatementID..... | 17 |
| 7.6.4 | aggregatedFee..... | 17 |
| 7.6.5 | aggregatedSingleTariffClassSession..... | 17 |
| 7.6.6 | currentTariffClass..... | 18 |
| 7.6.7 | VehicleDescription..... | 18 |
| 7.6.8 | listOfChargeObjects and DetectedChargeObject..... | 18 |
| 7.6.9 | ChargeObjectId..... | 19 |
| 7.6.10 | ListOfRawUsageData, measuredRawData..... | 19 |
| 7.6.11 | NmeaData..... | 19 |
| 7.6.12 | additionalGnssData..... | 20 |
| 7.6.13 | ListOfDSRCUsageData..... | 20 |
| 7.6.14 | additionalUsageInformation..... | 21 |
| 7.6.15 | DataReceived..... | 21 |
| 7.7 | Data group Account..... | 21 |
| 7.7.1 | accountStatus..... | 21 |
| 7.7.2 | accountUpdate..... | 21 |
| 7.7.3 | reloadAccount..... | 22 |
| 7.7.4 | setAccount..... | 22 |
| 7.7.5 | addToAccount..... | 22 |
| 7.8 | Data group Versioning..... | 22 |
| 7.8.1 | protocolVersion..... | 22 |
| 7.8.2 | versionInfo..... | 22 |
| 7.8.3 | versionResponse..... | 23 |
| 7.9 | Data group Compliance Checking — listOfCCCAttributes and CCCAttributes..... | 23 |
| Annex A (normative) Data type specifications..... | | 24 |
| Annex B (normative) Protocol implementation conformance statement (PICS) proforma..... | | 25 |
| Annex C (informative) Hierarchical data structure illustration..... | | 33 |
| Annex D (informative) Use of this part of ISO 17575 for the EETS..... | | 36 |
| Bibliography..... | | 38 |