DIN EN ISO 12813:2024-05 (E)

Electronic fee collection - Compliance check communication for autonomous systems (ISO 12813:2024); English version EN ISO 12813:2024

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **2**

3 Terms and definitions **3**

4 Abbreviated terms **5**

5 Application interface architecture **6**
5.1 General 6
5.2 Services provided 6
5.3 Attributes 7
5.4 Toll context 7
5.5 Use of lower layers 7
5.5.1 Supported DSRC communication stacks 7
5.5.2 Use of the CEN-DSRC stack 8

6 Conformance **8**
6.1 Conformance requirements 8
6.2 Conformance statement 8
6.3 Conformance evaluation and testing 8

7 Functions **8**
7.1 Functional requirements 8
7.1.1 Minimum supported functions 8
7.1.2 Initialise communication 9
7.1.3 Data retrieval 9
7.1.4 Authenticated data retrieval 9
7.1.5 Driver notification 9
7.1.6 Terminate communication 9
7.1.7 Test communication 10
7.2 Security 10
7.2.1 General 10
7.2.2 Authentication/non-repudiation 10
7.2.3 Access credentials 11

8 Data requirements **11**

9 Transaction model **12**
9.1 General 12
9.2 Initialisation phase 13
9.2.1 Initialisation request 13
9.2.2 CCC application-specific contents of BST 13
9.2.3 CCC application-specific contents of VST 13
9.3 Transaction phase 13

Annex A (normative) **CCC data type specifications** **14**

Annex B (normative) **Protocol implementation conformance statement proforma** **32**

Annex C (informative) **ETSI ES 200 674-1 communication stack usage for CCC applications** **41**

Annex D (informative) **Using the IR DSRC communication stack (CALM IR) for CCC applications** **44**

Annex E (informative) **Using the ARIB DSRC communication stack for CCC applications** **45**
Annex F (informative) **Using the WAVE communication stack for CCC applications** **47**
Annex G (informative) **Example CCC transaction** **50**
Annex H (informative) **Security considerations** **53**
Annex I (informative) **Use of this document for the European Electronic Toll Service (EETS)** **58**
Bibliography **60**