ISO 12813:2024-02 (E)

Electronic fee collection - Compliance check communication for autonomous systems

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 2

3 Termsanddefinitions 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)CCCdatatypespecifications 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