

DIN EN 15876-1:2011-10 (E)

Electronic fee collection - Evaluation of on-board and roadside equipment for conformity to EN 15509 - Part 1: Test suite structure and test purposes; English version EN 15876-1:2010

Inhalt	Seite
Foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Abbreviations	9
5 Test Suite Structure	10
5.1 Structure	10
5.2 Reference to Conformance Specifications	10
5.3 Test Purposes	11
5.3.1 TP Definition Conventions	11
5.3.2 TP Naming Conventions	11
Annex A (normative) Test Purposes for On Board Units	13
A.1 Introduction	13
A.2 Physical Layer	13
A.2.1 BV Test Purposes	13
A.2.2 BI Test Purposes	14
A.3 MAC	15
A.3.1 BV Test Purposes	15
A.3.2 BI Test Purposes	16
A.4 LLC	20
A.4.1 BV Test Purposes	20
A.4.2 BI Test Purposes	21
A.5 Application Layer	22
A.5.1 Introduction and general conventions	22
A.5.2 Structure of BST and VST	23
A.5.3 PDUs Parameters	27
A.5.4 Application I-kernel test purposes for On Board Unit, security level 0 (AP-0BAS)	30
A.5.5 Application T-kernel test purposes for On Board Unit, security level 0 (AP-0FUN)	35
A.5.6 Application data attributes test purposes, security level 0 (AP-0DAT)	40
A.5.7 Application security test purposes, security level 0 (AP-0SEC)	56
A.5.8 Application transaction test purposes, security level 0 (AP-0TRA)	58
A.5.9 Application I-kernel test purposes, security level 1 (AP-1BAS)	59
A.5.10 Application T-kernel test purposes, security level 1 (AP-1FUN)	60
A.5.11 Application data attributes test purposes, security level 1 (AP-1DAT)	63
A.5.12 Application security test purposes, security level 1 (AP-1SEC)	66
A.5.13 Application transaction test purposes, security level 1 (AP-1TRA)	67
Annex B (normative) Test Purposes for Roadside Equipment	68
B.1 Introduction	68
B.2 Physical layer	68
B.2.1 BV test purposes	68
B.2.2 BI test purposes	70
B.3 MAC Sublayer	70
B.3.1 BV test purposes	70
B.3.2 BI test purposes	71
B.4 LLC Sublayer	75
B.4.1 BV test purposes	75

B.4.2	BI test purposes.....	76
B.5	Application Layer Test Purposes.....	77
B.5.1	Introduction and general conventions	77
B.5.2	Application initialization phase test purposes, security level 0 (AP-0BAS).....	78
B.5.3	Application GET-rq PDU test purposes, security level 0 (AP-0GET).....	80
B.5.4	Application SET-rq PDU test purposes, security level 0 (AP-0SET)	81
B.5.5	Application GET-STAMPED-rq PDU test purposes, security level 0 (AP-0STA).....	85
B.5.6	Application SET-MMI-rq PDU test purposes, security level 0 (AP-0MMI).....	88
B.5.7	Application ECHO-rq PDU test purposes, security level 0 (AP-0ECH)	89
B.5.8	Application EVENT-REPORT-rq PDU test purposes, security level 0 (AP-0REL).....	90
B.5.9	Application initialization phase test purposes, security level 1 (AP-1BAS).....	91
B.5.10	Application GET-rq PDU test purposes, security level 1 (AP-1GET).....	93
B.5.11	Application SET-rq PDU test purposes, security level 1 (AP-1SET)	94
B.5.12	Application GET-STAMPED-rq PDU test purposes, security level 1 (AP-1STA).....	95
B.5.13	Application SET-MMI-rq PDU test purposes, security level 1 (AP-1MMI).....	96
B.5.14	Application ECHO-rq PDU test purposes, security level 1 (AP-1ECH)	96
Annex C	(normative) PCTR Proforma for On Board Units.....	98
C.1	Identification summary	98
C.1.1	Protocol conformance test report.....	98
C.1.2	DUT identification	98
C.1.3	Testing environment	99
C.1.4	Limits and reservation	99
C.1.5	Comments	99
C.2	DUT Conformance status.....	100
C.3	Static conformance summary	100
C.4	Dynamic conformance summary	100
C.5	Static conformance review report.....	101
C.6	Test campaign report	102
C.7	Observations	106
Annex D	(normative) PCTR Proforma for Roadside Equipment	107
D.1	Identification summary	107
D.1.1	Protocol conformance test report.....	107
D.1.2	DUT identification	107
D.1.3	Testing environment	108
D.1.4	Limits and reservation	108
D.1.5	Comments	108
D.2	DUT Conformance status.....	109
D.3	Static conformance summary	109
D.4	Dynamic conformance summary	109
D.5	Static conformance review report.....	110
D.6	Test campaign report	111
D.7	Observations	113
Bibliography	114