

E DIN EN ISO 17575-3:2014-02 (E)

Electronic fee collection - Application interface definition for autonomous systems -
Part 3: Context data (ISO/DIS 17575-3:2013); English version prEN ISO 17575-3:2013

Contents		Page
Foreword		vi
Introduction		viii
1	Scope	1
2	Normative references	2
3	Terms and definitions	2
4	Abbreviated terms	4
5	General concept and overview	5
6	Procedural requirements and encoding rules	6
6.1	Communication services	6
6.2	Version and validity handling	6
6.2.1	Protocol versioning	6
6.2.2	Context data versioning	7
6.3	Encoding rules	7
7	Application data units	8
7.1	Application data unit structure	8
7.2	Application data unit header	8
7.3	Application data unit body	9
8	EFC Attributes	10
8.1	Rules with respect to support of context data	10
8.2	Attributes and data sets	10
8.3	EFC attributes data catalogue	10
8.3.1	General	10
8.3.2	Data set "Context Overview"	11
8.3.3	Data group "Tariff Information"	13
8.3.4	Data set "Context Layout"	32
8.3.5	Data set "Reporting rules"	42
Annex A (normative)	EFC data type specifications	55
A.1	General	55
A.2	Data specifications	58
Annex B (normative)	Protocol Implementation conformance Statements (PICS) proforma	71
B.1	Introduction	71
B.2	General	71
B.3	Guidance and structure	71
B.4	Instruction for completing the PICS proforma	71
B.4.1	Definition of support	71
B.4.2	Status column	72
B.4.3	Support column	72
B.4.4	Item reference numbers	72

B.5	PICS proforma for the Front End	73
B.5.1	Identification of the implementation	73
B.5.1.1	Identification of PICS	73
B.5.1.2	Identification of the implementation and/or system	73
B.5.1.3	Identification of the Front End supplier	73
B.5.1.4	Identification of the Front End	73
B.5.2	Identification of the standard	74
B.5.3	Global statement of conformance	74
B.5.4	PICS proforma tables	74
E	DIN EN ISO 17575-3:2014-02 ² (QWZXUI ² ISO/DIS 17575-3 B.5.4.1 ADU and ADU Header ..	74
B.5.4.2	Communication services support	74
B.5.4.3	EFC Attributes	75
B.5.4.4	Toll Context overview	75
B.5.4.5	Toll scheme types	75
B.5.4.6	Operational status	75
B.5.4.7	Tariff table and tariffs	76
B.5.4.8	Tariff class definitions and tariff classes	76
B.5.4.9	Currency conversion table	76
B.5.4.10	Local vehicle class definitions and local vehicle classes	76
B.5.4.11	Nominal vehicle parameters	77
B.5.4.12	Ordinal vehicle parameters	77
B.5.4.13	Diesel Emission Value Range	77
B.5.4.14	Exhaust Emission Value Range	78
B.5.4.15	Time class definitions and time classes	78
B.5.4.16	Nominal time class parameters	78
B.5.4.17	Ordinal time class parameters	78
B.5.4.18	User class definitions and user classes	79
B.5.4.19	Toll context layout	79
B.5.4.20	Supported context layout types	79
B.5.4.21	Section pricing layout description	79
B.5.4.22	Point	80
B.5.4.23	Link	80
B.5.4.24	Supporting Point	80
B.5.4.25	Area pricing layout description	80
B.5.4.26	Road network objects in area pricing layout descriptions	80
B.5.4.27	Cordon pricing layout description / Cordon border segment	80
B.5.4.28	Cordon entry location description	81
B.5.4.29	Cordon exit location description	81
B.5.4.30	Charge reporting events	81
B.5.4.31	Absolute time event	81
B.5.4.32	Relative time event	81
B.5.4.33	Location event	81
B.5.4.34	Charge report configuration	82
B.6	PICS proforma for the Back End	82
B.6.1	Identification of the implementation	82
B.6.1.1	Identification of PICS	82
B.6.1.2	Identification of the implementation and/or system	82
B.6.1.3	Identification of the Back End supplier	83
B.6.1.4	Identification of the Back End	83
B.6.2	Identification of the standard	83
B.6.3	Global statement of conformance	83
B.6.4	PICS proforma tables	83
B.6.4.1	ADU and ADU header	84
B.6.4.2	Communication services support	84
B.6.4.3	EFC Attributes	84
B.6.4.4	Toll context overview	84
B.6.4.5	Toll scheme types	85
B.6.4.6	Operational status	85
B.6.4.7	Tariff table and tariffs	85
B.6.4.8	Tariff class definitions and tariff classes	85

B.6.4.9	Currency conversion table	86
B.6.4.10	Local vehicle class definitions and local vehicle classes	86
B.6.4.11	Nominal vehicle parameters	86
B.6.4.12	Ordinal vehicle parameters	87
B.6.4.13	Diesel Emission Value Range	87
B.6.4.14	Exhaust Emission Value Range	87
B.6.4.15	Time class definitions and time classes	88
B.6.4.16	Nominal time class parameters	88
B.6.4.17	Ordinal time class parameters	88
E	DIN EN ISO 17575-3:2014-02 ² (QWZXUI ² ISO/DIS 17575-3 B.6.4.18 User class definitions and user classes	88
B.6.4.19	Toll context layout	88
B.6.4.20	Supported context types	89
B.6.4.21	Section pricing layout description	89
B.6.4.22	Point	89
B.6.4.23	Link	89
B.6.4.24	Supporting Point	89
B.6.4.25	Area pricing layout description	90
B.6.4.26	Road network objects in area pricing layout descriptions	90
B.6.4.27	Cordon pricing layout description / Cordon border segment	90
B.6.4.28	Cordon entry location description	90
B.6.4.29	Cordon exit location description	90
B.6.4.30	Charge reporting events	91
B.6.4.31	Absolute time event	91
B.6.4.32	Relative time event	91
B.6.4.33	Location event	91
B.6.4.34	Charge report configuration	92
	Annex C (informative) How to use context data defining the properties of an EFC regime	93
C.1	General	93
C.2	The evaluation process determining the basic fee	93
C.3	The definition of time classes	95
C.4	The time class evaluation algorithm	95
C.5	Example of a charge object recognition algorithm for sectioned roads	96
	Annex D (informative) Examples using EFC context data for scheme definitions	98
D.1	General	98
D.2	Example for a section tolling scheme	98
D.2.1	Introduction	98
D.2.2	Description of the rules of the EFC scheme	98
D.2.3	Coding of data elements	99
	Annex E (informative) Use of this standard for the EETS	103
E.1	General	103
E.2	Overall relationship between European standardisation and the EETS	103
E.3	European standardisation work supporting the EETS	103
E.4	Correspondence between this standard and the EETS	104
	Bibliography	106