

E DIN EN ISO 17575-2:2014-02 (E)

Electronic fee collection - Application interface definition for autonomous systems -
Part 2: Communication and connection to the lower layers (ISO/DIS 17575-2:2013);
English version prEN ISO 17575-2:2013

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Abbreviations	4
5	EFC Front End communication architecture	4
5.1	General	4
5.2	Relations to the overall EFC architecture	5
6	Initialize transactions	5
6.1	General	5
6.2	Addressing requested parts of a hierarchical data element structure	6
6.3	Identifying payloads for transmission	6
7	EFC communication services (functions)	6
7.1	General concept	6
7.2	Initialization phase	7
7.2.1	General	7
7.2.2	Incoming (BE to FE Application) Session Request	8
7.2.3	Outgoing (FE Application to BE) session establishment	8
7.3	Point-to-point communication service primitives	8
7.3.1	General	8
7.3.2	Unstructured messages (ADUs)	9
7.3.3	Structured messages (ADUs)	9
7.4	Session ending	9
7.5	Session failure	9
7.6	Security considerations	9
7.7	Media selection options	10
8	The use of a communication stack	10
8.1	General	10
8.2	Requirements on a underlying communication technology	10
8.3	Mobile terminated calls	10
Annex A (normative) Abstract API definition		11
A.1	General	11
A.2	Down API (Front End Application to communications stack)	11
A.2.1	InitialiseInstance	11
A.2.2	SetParameter	11
A.2.3	GetParameter	11
A.2.4	DeleteParameter	12

A.2.5	StackAvail	12
A.2.6	DroplInstance	12
A.2.7	StartSession	12
A.2.8	EndSession	13
A.2.9	SendUnformattedADU	13
A.2.10	SendADUSetStart	13
A.2.11	SendADU	13
A.2.12	SendADUSetEnd	14
A.2.13	CommsQuery	14
E	DIN EN ISO 17575-2:2014-02 ² (QWZXUI ² ISO/DIS 17575-2 A.3 Up API (Communications Stack to Front End Application)	14
A.3.1	InstanceStateChange	14
A.3.2	UnformattedADUReceived	15
A.3.3	ADURequest	15
A.3.4	ADUReceived	15
A.3.5	ADUSent	15
A.3.6	ADUSendOK	15
A.3.7	SessionRequest	15
Annex B (normative) Protocol implementation conformance statement (PICS) proforma		16
B.1	Introduction	16
B.2	Transactions support	16
B.2.1	General	16
B.2.2	Support of the down API	16
B.2.3	Support of the Up API	18
B.3	Use of communication stacks	19
B.3.1	Supported communication stacks	19
B.4	Front End Storage capacity	20
B.4.1	Storage capacity for modules and contact details	20
B.4.2	Generic values	20
B.4.3	Security of communication	20
Annex C (informative) API requirements		21
C.1	Introduction	21
C.1.1	General	21
C.1.2	Non-functional requirements	21
C.1.3	Functional requirements	21
Annex D (informative) Examples of definitions for appropriate languages		22
D.1	General	22
D.2	API Definition in C	22
Annex E (informative) Example of message flow		25
Annex F (informative) Use of this standard for the EETS		26
F.1	General	26
F.2	Overall relationship between European standardisation and the EETS	26
F.3	European standardisation work supporting the EETS	26
F.4	Correspondence between this standard and the EETS	27
Bibliography		28