

DIN EN 18031-3:2026-02 (E)

Common security requirements for radio equipment - Part 3: Internet connected radio equipment processing virtual money or monetary value

Contents		Page
European foreword		5
Introduction		6
1	Scope	7
2	Normative references	7
3	Terms and definitions	7
4	Abbreviations	12
5	Application of this document	13
6	Requirements	16
6.1	[ACM] Access control mechanism	16
6.1.1	[ACM-1] Applicability of access control mechanisms	16
6.1.2	[ACM-2] Appropriate access control mechanisms	21
6.2	[AUM] Authentication mechanism	25
6.2.1	[AUM-1] Applicability of authentication mechanisms	25
6.2.2	[AUM-2] Appropriate authentication mechanisms	36
6.2.3	[AUM-3] Authenticator validation	42
6.2.4	[AUM-4] Changing authenticators	46
6.2.5	[AUM-5] Password strength	49
6.2.6	[AUM-6] Brute force protection	57
6.3	[SUM] Secure update mechanism	61
6.3.1	[SUM-1] Applicability of update mechanisms	61
6.3.2	[SUM-2] Secure updates	64
6.3.3	[SUM-3] Automated updates	68
6.4	[SSM] Secure storage mechanism	72
6.4.1	[SSM-1] Applicability of secure storage mechanisms	72
6.4.2	[SSM-2] Appropriate integrity protection for secure storage mechanisms	76
6.4.3	[SSM-3] Appropriate confidentiality protection for secure storage mechanisms	81
6.5	[SCM] Secure communication mechanism	86
6.5.1	[SCM-1] Applicability of secure communication mechanisms	86
6.5.2	[SCM-2] Appropriate integrity and authenticity protection for secure communication mechanisms	91
6.5.3	[SCM-3] Appropriate confidentiality protection for secure communication mechanisms	97
6.5.4	[SCM-4] Appropriate replay protection for secure communication mechanisms	102
6.6	[LGM] Logging Mechanism	107
6.6.1	[LGM-1] Applicability of logging mechanisms	107
6.6.2	[LGM-2] Persistent storage of log data	110
6.6.3	[LGM-3] Minimum number of persistently stored events	113
6.6.4	[LGM-4] Time-related information of persistently stored log data	116
6.7	[CCK] Confidential cryptographic keys	119
6.7.1	[CCK-1] Appropriate CCKs	119
6.7.2	[CCK-2] CCK generation mechanisms	123
6.7.3	[CCK-3] Preventing static default values for preinstalled CCKs	127
6.8	[GEC] General equipment capabilities	131
6.8.1	[GEC-1] Up-to-date software and hardware with no publicly known exploitable vulnerabilities	131

6.8.2	[GEC-2] Limit exposure of services via related network interfaces	135
6.8.3	[GEC-3] Configuration of optional services and the related exposed network interfaces	139
6.8.4	[GEC-4] Documentation of exposed network interfaces and exposed services via network interfaces	143
6.8.5	[GEC-5] No unnecessary external interfaces	146
6.8.6	[GEC-6] Input validation	148
6.8.7	[GEC-7]	153
6.8.8	[GEC-8] Equipment Integrity	153
6.9	[CRY] Cryptography	157
6.9.1	[CRY-1] Best practice cryptography	157
Annex A (informative) Rationale		162
A.1	General	162
A.2	Rationale	162
A.2.1	Family of standards	162
A.2.2	Security by design	162
A.2.3	Threat modelling and security risk assessment	163
A.2.4	Functional sufficiency assessment	164
A.2.5	Implementation categories	164
A.2.6	Assets	165
A.2.7	Mechanisms	166
A.2.8	Assessment criteria	167
A.2.8.1	Decision trees	167
A.2.8.2	Technical documentation	167
A.2.8.3	Security testing	168
A.2.9	Interfaces	169
A.2.9.1	Example: Laptop with a built-in keyboard	170
A.2.9.2	Example: Equipment with a USB-keyboard	170
A.2.9.3	Example: User interface over a network	171
A.2.9.4	Example: USB-printer	171
A.2.9.5	Example: Network printer	171
Annex B (informative) Mapping with ENIEC 62443-4-2:2019		173
B.1	General	173
B.2	Mapping	173
Annex C (informative) Mapping with ETSI EN 303 645 (Cyber Security for Consumer Internet of Things: Baseline Requirements)		176
C.1	General	176
C.2	Mapping	176
Annex D (informative) Mapping with Security Evaluation Standard for IoT Platforms (SESIP)		180
D.1	General	180
D.2	Mapping	180
Annex ZA (informative) Relationship between this European Standard and the Delegated Regulation (EU) 2022/30 supplementing Directive 2014/53/EU of the European Parliament and of the Council with regard to the application of the essential requirements referred to in Article 3(3), points (d) (e) and (f), of that Directive aimed to be covered		183
Bibliography		184