

# E DIN EN 40000-10:2026-06 (E)

Erscheinungsdatum: 2026-05-22

**Essential cybersecurity requirements for products - Part 10: Products with digital elements used in identity management systems and privileged access management software and hardware, including authentication and access control readers, including biometric readers; English version prEN 40000-10:2026**

---

<b>Contents</b>	<b>Page</b>
European foreword .....	6
Introduction .....	7
1 Scope.....	8
2 Normative references.....	11
3 Terms, definitions, symbols and abbreviated terms .....	12
3.1 Terms and definitions.....	12
3.2 Symbols and abbreviated terms.....	17
4 Product context .....	18
4.1 Product functions.....	18
4.2 Product architecture .....	18
4.3 Operational environment.....	19
4.3.1 Introduction.....	19
4.3.2 General Description .....	19
4.3.3 Connectivity Aspects.....	19
4.4 Distribution of Security Functions.....	20
4.5 Users.....	20
4.6 Use Cases and security profiles.....	20
5 Requirements on Products.....	24
5.1 Introduction – Technical Guidance and Security Analysis.....	24
5.1.1 General.....	24
5.1.2 Requirement [REQ-TGSA-001].....	24
5.1.3 Requirement [REQ-TGSA-002].....	24
5.1.4 Requirement [REQ-TGSA-003].....	24
5.1.5 Requirement [REQ-TGSA-004].....	25
5.1.6 Requirement [REQ-TGSA-005].....	25
5.1.7 Requirement [REQ-TGSA-006].....	27
5.2 No known exploitable vulnerabilities .....	27
5.2.1 Requirement [REQ-KEV-001] .....	27
5.2.2 Requirement [REQ-KEV-002] .....	28
5.2.3 Requirement [REQ-KEV-003] .....	28
5.2.4 Requirement [REQ-KEV-004] .....	28
5.2.5 Requirement [REQ-KEV-005] .....	28
5.2.6 Requirement [REQ-KEV-006] .....	29
5.2.7 Requirement [REQ-KEV-007] .....	29
5.2.8 Requirement for the basic security profiles [REQ-KEV-008].....	29
5.2.9 Additional requirement for the substantial security profiles [REQ-KEV-009] .....	29
5.2.10 Additional requirement for the high security profiles [REQ-KEV-010] .....	29
5.2.11 Additional requirement for the high security profiles [REQ-KEV-011] .....	30
5.3 Secure by design.....	30
5.3.1 Requirement [REQ-SBD-001] .....	30
5.3.2 Requirement [REQ-SBD-002] .....	30
5.3.3 Requirement [REQ-SBD-003] .....	30

5.3.4	Requirement [REQ-SBD-004]	31
5.3.5	Requirement [REQ-SBD-005]	31
5.4	Secure updates - Requirement [REQ-SU-001]	31
5.5	Authentication and access control	31
5.5.1	Requirement [REQ-AC-001]	31
5.5.2	Requirement [REQ-AC-002]	31
5.6	Integrity and Confidentiality	32
5.6.1	Requirement [REQ-CON-001]	32
5.6.2	Requirement [REQ-CON-002]	32
5.6.3	Requirement [REQ-CON-003]	32
5.7	Data minimisation	32
5.7.1	Requirement [REQ-DM-001]	32
5.7.2	Requirement [REQ-DM-002]	33
5.7.3	Requirement [REQ-DM-003]	33
5.8	Availability protection	33
5.8.1	Requirement [REQ-AP-001]	33
5.8.2	Requirement [REQ-AP-002]	33
5.8.3	Requirement [REQ-AP-003]	33
5.9	Impact minimisation	34
5.9.1	Requirement [REQ-IM-001]	34
5.9.2	Requirement [REQ-IM-002]	34
5.10	Minimisation of attack surfaces	34
5.10.1	Requirement [REQ-MAS-001]	34
5.10.2	Requirement [REQ-MAS-002]	34
5.10.3	Requirement [REQ-MAS-003]	35
5.10.4	Requirement [REQ-MAS-004]	35
5.10.5	Requirement [REQ-MAS-005]	35
5.11	Exploitation mitigation mechanisms	35
5.11.1	Requirement [REQ-EMM-001]	35
5.11.2	Requirement [REQ-EMM-002]	35
5.12	Logging and monitoring	36
5.12.1	Requirement [REQ-LOG-001]	36
5.12.2	Requirement [REQ-LOG-002]	36
5.13	Data removal and transparency	36
5.13.1	Requirement [REQ-DRT-001]	36
5.13.2	Requirement [REQ-DRT-002]	36
5.13.3	Requirement [REQ-DRT-003]	37
5.13.4	Requirement [REQ-DRT-004]	37
5.14	Vulnerability handling	37
5.14.1	Requirement [REQ-VH-001]	37
5.14.2	Requirement [REQ-VH-002]	37
5.14.3	Requirement [REQ-VH-003]	38
5.14.4	Requirement [REQ-VH-004]	38
5.14.5	Requirement [REQ-VH-005]	38
5.14.6	Requirement [REQ-VH-006]	38
5.14.7	Requirement [REQ-VH-007]	38
6	Conformity assessment against the normative requirements	40
6.1	Introduction	40
6.2	Conformity assessment against the normative requirements	43
6.2.1	Technical Guidance Requirements (5.1)	43
6.2.2	Security Analysis and Security Profile Level Requirements (5.2)	52
6.2.3	Secure-by-Design Requirements (5.3)	56
6.2.4	Cybersecurity Analysis Requirements (5.4)	71

6.2.5	Vulnerability Management Requirements (5.5)	75
6.2.6	Security Profile Requirements (5.6)	81
	Annex A (informative) Hardware products	84
	Annex B (informative) Software products	87
	Annex C (informative) Physical access control system	90
C.1	General architecture of a PACS	90
C.2	Detailed description of subsystems containing products	90
C.2.1	Opening and locking devices including on/off-line connected locks	90
C.2.2	Reading modules	90
C.2.3	Local processing unit	91
C.2.4	Door and I/O modules	91
C.2.5	Centralized access management	91
C.2.6	User interfaces	92
	Annex D (informative) Identity management system	93
D.1	General architecture of an IDMS	93
D.2	Detailed description of subsystems containing Products	93
D.2.1	Identity repositories and directory services	93
D.2.2	Identity enrolment and provisioning components	93
D.2.3	Authentication services	94
D.2.4	Authorization and policy management services	94
D.2.5	Governance, audit, and compliance components	94
D.2.6	User interfaces and self-service tools	94
	Annex E (normative) Threat levels and severity levels of the security analysis	95
	Annex F (informative) Security problem definition	97
F.1	Synthesis	97
F.2	Rationale	97
F.3	Description of the technical operating environment	97
F.4	Assets to be protected	97
F.5	Threats	97
F.6	Security functions	97
F.7	Threats coverage	97
	Annex G (normative) Product interfaces	98
	Annex H (informative) Product communication protocols	101
	Annex I (normative) Attacks rating methodology	102
	Annex J (informative) Cryptographic specifications proposed document structure	105
J.1	General description of the product	105
J.2	Keys architecture	105
J.3	List of the cryptographic dependencies	105
J.4	Mapping between the security functions and the cryptographic mechanisms	105
J.5	Detail of the cryptographic mechanisms	105
	Annex K (normative) Cryptography	106

<b>K.1</b>	<b>State of the Art Cryptography (CRY-SOTA)</b> .....	<b>106</b>
<b>K.1.1</b>	<b>Requirement</b> .....	<b>106</b>
<b>K.1.2</b>	<b>Assessment criteria</b> .....	<b>106</b>
<b>K.2</b>	<b>Crypto agility</b> .....	<b>108</b>
<b>K.2.1</b>	<b>Requirement</b> .....	<b>108</b>
<b>K.2.2</b>	<b>Assessment criteria</b> .....	<b>109</b>
<b>Annex L (normative) Risk registry</b> .....		<b>111</b>
<b>Annex R (normative) Additional provisions for products relying on remote data processing solutions (RDPS)</b> .....		<b>124</b>
<b>R.1</b>	<b>Scope &amp; Applicability</b> .....	<b>124</b>
<b>R.2</b>	<b>RDPS as a product-boundary extension</b> .....	<b>124</b>
<b>R.X</b>	<b>Standard-specific identification of RDPS-dependent functions, RDPS interface(s), and RDPS</b> .....	<b>125</b>
<b>R.X.1</b>	<b>RDPS-dependent product functions</b> .....	<b>125</b>
<b>R.X.2</b>	<b>RDPS interface(s)</b> .....	<b>125</b>
<b>R.X.3</b>	<b>RDPS(s)</b> .....	<b>125</b>
<b>R.3</b>	<b>Threat Model</b> .....	<b>126</b>
<b>R.3.1</b>	<b>General</b> .....	<b>126</b>
<b>R.3.2</b>	<b>Assets</b> .....	<b>126</b>
<b>R.3.3</b>	<b>Threat catalogue</b> .....	<b>126</b>
<b>R.3.4</b>	<b>Assets ↔ Threats mapping</b> .....	<b>128</b>
<b>R.4</b>	<b>Security Requirements</b> .....	<b>128</b>
<b>R.4.1</b>	<b>General</b> .....	<b>128</b>
<b>R.4.2</b>	<b>Local product side requirements</b> .....	<b>129</b>
<b>R.4.3</b>	<b>RDPS side requirements</b> .....	<b>133</b>
<b>R.4.4</b>	<b>Threats ↔ Requirements mapping</b> .....	<b>137</b>
<b>R.4.5</b>	<b>Mapping of CRA Annex I to Annex R requirements</b> .....	<b>138</b>
<b>R.5</b>	<b>Security controls and mitigation guidance for RDPS requirements (informative)</b> .....	<b>141</b>
<b>R.5.1</b>	<b>General</b> .....	<b>141</b>
<b>R.5.2</b>	<b>Controls catalogue for REQ-RDPS-L-001</b> .....	<b>141</b>
<b>R.5.3</b>	<b>Controls catalogue for REQ-RDPS-L-002</b> .....	<b>141</b>
<b>R.6</b>	<b>Conformity assessment</b> .....	<b>141</b>
<b>R.6.1</b>	<b>General</b> .....	<b>142</b>
<b>R.6.2</b>	<b>Conformity assessment for REQ-RDPS-L-001</b> .....	<b>142</b>
<b>R.6.3</b>	<b>Conformity assessment for REQ-RDPS-R-001</b> .....	<b>143</b>
<b>R.6.4</b>	<b>Conformity assessment for REQ-RDPS-R-004</b> .....	<b>144</b>
<b>Annex ZA (informative) Relationship between this European Standard and the essential requirements of Regulation (EU) 2024/2847 (CRA) aimed to be covered</b> .....		<b>147</b>
<b>Bibliography</b> .....		<b>149</b>