

# DIN CEN/TS 419221-4:2016-10 (E)

## Protection Profiles for TSP cryptographic modules - Part 4: Cryptographic module for CSP signing operations without backup; English version CEN/TS 419221-4:2016

---

<b>Contents</b>	<b>Page</b>
European foreword.....	4
Introduction .....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions.....	6
4 PP Introduction.....	6
4.1 General.....	6
4.2 PP Reference.....	6
4.3 Protection Profile Overview.....	7
4.4 TOE Overview.....	8
4.4.1 TOE type.....	8
4.4.2 TOE Roles.....	9
4.4.3 Usage and major security features of the TOE.....	9
4.4.4 Available non-TOE hardware/software/firmware.....	11
5 Conformance Claim.....	11
5.1 CC Conformance Claim.....	11
5.2 PP Claim.....	11
5.3 Conformance Rationale.....	11
5.4 Conformance Statement.....	11
6 Security Problem Definition.....	12
6.1 Assets.....	12
6.1.1 General.....	12
6.1.2 TOE services.....	12
6.1.3 TOE Data.....	12
6.2 Threats.....	13
6.2.1 General.....	13
6.2.2 Threat agents.....	13
6.2.3 Threats description.....	14
6.3 Organizational Security Policies.....	17
6.4 Assumptions.....	17
7 Security Objectives.....	18
7.1 General.....	18
7.2 Security Objectives for the TOE.....	18
7.3 Security Objectives for the Operational Environment.....	20
8 Extended Components Definitions.....	21
8.1 Extended Component Definitions — Family FCS_RND.....	21
9 Security Requirements.....	22
9.1 General.....	22
9.2 Subjects, objects, security attributes and operations.....	22
9.2.1 General.....	22
9.2.2 Subjects.....	22
9.2.3 TOE Objects and security attributes.....	23
9.2.4 TOE Operations.....	23

<b>9.3</b>	<b>Security Functional Requirements</b> .....	<b>24</b>
<b>9.3.1</b>	<b>General</b> .....	<b>24</b>
<b>9.3.2</b>	<b>Security audit (FAU)</b> .....	<b>24</b>
<b>9.3.3</b>	<b>Cryptographic support (FCS)</b> .....	<b>25</b>
<b>9.3.4</b>	<b>User data protection (FDP)</b> .....	<b>27</b>
<b>9.3.5</b>	<b>Identification and authentication (FIA)</b> .....	<b>29</b>
<b>9.3.6</b>	<b>Security management (FMT)</b> .....	<b>30</b>
<b>9.3.7</b>	<b>Privacy (FPR) — Unobservability (FPR_UNO.1)</b> .....	<b>32</b>
<b>9.3.8</b>	<b>Protection of the TOE Security Functions (FPT)</b> .....	<b>32</b>
<b>9.3.9</b>	<b>Trusted path (FTP) — Trusted path (FTP_TRP.1)</b> .....	<b>35</b>
<b>9.4</b>	<b>Security Assurance Requirements</b> .....	<b>35</b>
<b>9.5</b>	<b>Security Requirements Rationale</b> .....	<b>36</b>
<b>9.5.1</b>	<b>Security Problem Definition coverage by Security Objectives</b> .....	<b>36</b>
<b>9.5.2</b>	<b>Security Objectives coverage by SFRs</b> .....	<b>41</b>
<b>9.5.3</b>	<b>SFR Dependencies</b> .....	<b>45</b>
<b>9.5.4</b>	<b>Rationale for SARs</b> .....	<b>46</b>
<b>9.5.5</b>	<b>AVA_VAN.5 Advanced methodical vulnerability analysis</b> .....	<b>46</b>
	<b>Bibliography</b> .....	<b>47</b>