Federal Office
for Information Security

Certificate

according to Technical Guidelines of the Federal Office for Information Security

BSI-K-TR-0414-2020

EPSON USB TSE, version 1.1
EPSON micoSD TSE, version 1.1

from	Epson Europe BV
Conformity to:	**BSI TR-03153** – Technical security device for electronic record-keeping systems
Valid until:	11 December 2028

The conformity of the product EPSON USB TSE, version 1.1 / EPSON microSD TSE, version 1.1 to the Technical Guideline BSI TR-03153 has been evaluated by an evaluation facility recognized according to DIN ISO/IEC 17025 and was confirmed by the German Federal Office for Information Security (BSI).

The following Test Standards were applied for the performance of the conformity evaluation:

BSI TR-03153 – Technical security device for electronic record-keeping systems, version 1.0.1 of 20 December 2018

BSI TR-03153-TS – Technical security device for electronic record-keeping systems – Test specification, version 1.0.1 of 05 February 2019

This certificate is only valid in conjunction with the notification of conformity BSI-K-TR-0414-2020 and the complete conformity report. The validity is solely restricted to the evaluated version or configuration of the product specified in the conformity report.

The certification procedure was conducted in accordance with the provisions of the BSI scheme for Certification according to Technical Guidelines.

This certificate is not an endorsement of the IT product by the Federal Office for Information Security. No warranty of the product by the Federal Office for Information Security is either expressed or implied.

Bonn, 11 December 2020
For the Federal Office for Information Security

Sandro Amendola
Head of Department

DAkkS
Deutsche
Akkreditierungsstelle
D-ZE-19615-01-00

Federal Office for Information Security
(Bundesamt für Sicherheit in der Informationstechnik)
Godesberger Allee 185-189, 53175 Bonn, Germany • P. O. Box 20 03 63, 53113 Bonn, Germany
Tel.: +49 (0)228 9582-0 • Fax: +49 (0)228 9582-5400 • Internet: www.bsi.bund.de

Federal Office
for Information Security

Conformity Report

BSI-K-TR-0414-2020

EPSON USB TSE, version 1.1
EPSON microSD TSE, version 1.1

from

Epson Europe BV
Azie Building, Atlas ArenA, Hoogoorddreef 5,
1101 BA Amsterdam, Netherlands

Federal Office for Information Security
(Bundesamt für Sicherheit in der Informationstechnik)
Godesberger Allee 185-189, 53175 Bonn, Germany ♦ P. O. Box 20 03 63, 53113 Bonn, Germany
Tel.: +49 (0)228 9582-0 ♦ Fax: +49 (0)228 9582-5400 ♦ Internet: www.bsi.bund.de

Table of Contents

Index of Images

Index of Tables

1 Preliminary Remarks

The Certification of IT products or systems – in the following refered to as target of evaluation (TOE) – according to Technical Guidelines of BSI is carried out on the instigation of the manufacturer, hereinafter called the applicant.

Technical Guidelines developed and published by the Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik, BSI) provide a basis for conformity evaluations. Conformity evaluations ensure that a TOE fulfills the technical, functional or qualitative requirements specified by a Technical Guideline.

Conformity evaluations are carried out by evaluation facilities recognized by BSI according to DIN ISO/IEC 17025 or by "ISO 27001 auf der Basis von IT-Grundschutz" certifed auditors according to the test specifications provided by the respective Technical Guideline.

Every certification procedure according to Technical Guidelines is supervised by BSI to ensure uniform proceeding, uniform interpretation of the criteria and uniform ratings.

The results of each certification procedure according to Technical Guidelines are summarized in a concluding certification report.

The Certificate issued at the end of a successful certification procedure according to Technical Guidelines is not an endorsement of the TOE by BSI. No warranty of the specified TOE by the BSI is either expressed or implied.

2 Fundaments of the Certification Procedure

The Federal Office for Information Security conducted the procedure according to the criteria laid down in the following:

- BSI-Act – Act on the Federal Office for Information Security (BSI-Gesetz, BSIG) of 14 August 2009, Bundesgesetzblatt Part I No. 54, p. 2821, last amendment by article 13 of the law of 20 November 2019 (BGBl I p. 1626), [BSIG]
- BSI-Certification- and Recognition Regulation – Regulation on the Procedure for Issuance of Securitycertifcates recognition by the Federal Office for Information Security (BSIZertV), of 17 December 2014, Bundesgesetzblatt Part I No. 61, p. 2231, [BSIZertV]
- Special Schedule of Costs of the Federal Ministry of the Interior, Building and Community for individually attributable public services within its jurisdiction (Besondere Gebührenverordnung BMI, BMIBGebV) of 02 September 2019, Bundesgesetzblatt I, p. 1359 [BMIBGebV]
- Procedural description for product certification, version 2.4 of 09 September 2019, [VB-Produkte]
- Product certification: Program for the certification of products according to Technical Guidelines, version 1.4 of 17 October 2019, [TR-Produkte]

3 Information for the Applicant

1. The certification according to Technical Guideline issued by BSI is only valid in conjunction with the complete conformity report BSI-K-TR-0373-2019.
2. The validity of the certification only covers the evaluated version(s) of the TOE. All certified components of the TOE and their version(s) are specified in table 1 of this conformity report.
3. The validity of a certification according to Technical Guideline BSI TR-03153 is eight years.
4. In case of revisions, enhancements or the intended amendment of additional versions to the certified components of the TOE, BSI has to decide (if necessary involving the evaluation facility) if another conformity evaluation is required.
5. Only versions of the TOE that comply with the notification of conformity may be denoted or advertised as „Certified by BSI“. On detection of violation the applicant will be admonished by BSI. In addition BSI has the right to remove the entry of the concerned product from the list of products certified according to Technical Guidelines published on the BSI website.
6. At any time BSI has the right to call on the applicant to provide a sample of the TOE from the ongoing production series that complies to the notification of conformity for inspection. If the applicant does not fulfill the request within a set period of time, BSI is entitled to remove the entry of the concerned TOE from the list of products certified according to Technical Guidelines published on the BSI website.

4 Application

For the TOE named in chapter 7 the manufacturer

Epson Europe BV
Azie Building, Atlas ArenA, Hoogoorddreef 5
1101 BA Amsterdam

Netherlands

Point of contact:

Tim Froembgen (tim.froembgen@epson.de)

applied for a re-certification on 13 May 2020 at BSI (date of receipt at BSI: 19 May 2020).

Previous certifications of the TOE were issued with the following certification IDs:

BSI-K-TR-0373-2019

5 Area of Evaluation & Test Specification

The applicant applied for certification according to the Technical Guideline:

BSI TR-03153 – Technical security device for electronic record-keeping systems

The conformity evaluation according to the Technical Guideline BSI TR-03153 was performed in the following area of evaluation (AOE):

BSI TR-03153 – Technical security device for electronic record-keeping systems

The following test specifications were applied for the conformity evaluation in the area of evaluation specified above:

BSI TR-03153 – Technical security device for electronic record-keeping systems, Version 1.0.1 of 20 December 2018, [BSI TR-03153]

BSI TR-03153-TS – Technical security device for electronic record-keeping systems – Test specification, Version 1.0.1 of 05 February 2019, [BSI TR-03153-TS]

BSI TR-03151 – Secure Element API (SE API), Version 1.0.1 vom 20. Dezember 2018, [BSI TR-03151]

BSI TR-03116-5 – Kryptographische Vorgaben für Projekte der Bundesregierung, Teil 5: Anwendungen der Secure Element API, Stand 2019 vom 01. Februar 2019, [BSI TR-03116-5]

PP_SMAERS – Common Criteria Protection Profile – Security Module Application for Electronic Record-keeping Systems (SMAERS), BSI-CC-PP-0105-2019, Version 0.7.5, [PP_SMAERS]

PP_CSP – Common Criteria Protection Profile – Cryptographic Service Provider (CSP), BSI-CC-PP-0104-2019, Version 0.9.8, [PP_CSP]

6 Evaluation Facility

The following evaluation facility recognized according to DIN ISO/IEC 17025 by BSI was commissioned with the performance of the conformity evaluation:

Area of Evaluation: BSI TR-03153

MTG AG
Prüfstelle für IT-Sicherheit
Dolivostraße 11

64293 Darmstadt
Germany

www.mtg.de

7 Target of Evaluation

7.1 Identification of the TOE

The following product was defined as the target of evaluation:

EPSON USB TSE, version 1.1
EPSON microSD TSE, version 1.1

The TOE is a technical security device (Techniche Sicherheitseinrichtung, TSE) for electronic recordkeeping systems according to the Kassensicherungsverordnung [KassenSichV] in two variants – USB-token and microSD card.

7.2 Components of the TOE

The components of the TOE and their certified versions are specified in table 1.

Table 1: Components of the TOE

No	Type	Identifier	Release
EPSON USB TSE, version 1.0			
1	HW	EPSON TSE SMAERS Hardware[1]	V1.1.0
2	FW	EPSON TSE SMAERS Firmware[1]	V1.1.0
3	SW/ HW	CSP[2]	TCOS CSP Module Version 1.0 Release 1/P6022y
EPSON microSD TSE, version 1.0			
4	HW	EPSON TSE SMAERS Hardware[1]	V1.1.0
5	FW	EPSON TSE SMAERS Firmware[1]	V1.1.0
6	SW/ HW	CSP[2]	TCOS CSP Module Version 1.0 Release 1/P6022y

7.3 Implementation Conformance Statement

The implementation conformance statement (ICS) contains all information about the TOE required for the performance of the conformity evaluation in the relevant AOE and provides an overview of the TOE's functionality and electronic security mechanisms.

The following tables contain the ICS of the TOE for the conformity evaluation according to [BSI TR-03153-TS].

1 BSI certification-ID (Common Criteria, [PP_SMAERS]) for this component: BSI-DSZ-CC-1121-V2
2 BSI certification-ID (Common Criteria, [PP_CSP]) for this component: BSI-DSZ-CC-1118-2020

Table 2: Supported Profiles

Profile ID	Supported (Yes/No)	Comment
STORAGE_BASIC	Yes	Has local storage (6.5 GB)
STORAGE_REMOTE	No	
SM_BASIC	Yes	Has a local Secure Element (384 bit ECDSA, signature time <250ms)
SM_NOAGG	Yes	Supports signed transaction updates (saves 1 signature per receipt)
SM_AGG	No	
SM_MULTI	Yes	Supports managing multiple transactions in parallel (up to 512)
SM_REMOTE	No	
SDI	No	
SDI_RESTORE	No	
SDI_DELETE	Yes	Supports method deleteStoredData
CUSTOM_INTEGRATION_INTERFACE	Yes	Manufacture specific interface (Android, Linux, Windows, Java, embedded)
TIME_SYNC	No	
NO_TIME_SYNC	Yes	Time is set by host
MULTI_CLIENT	Yes	Supports multiple clients (up to 100)
NO_MULTI_CLIENT	No	

The TOE does not implement the standard integration interface according to [BSI TR-03151] (profile: SDI).

The custom integration interface (profile: CUSTOM_INTEGRATION_INTER-FACE) of the TOE however implements all functions according to [BSI TR-03153], chapter 5.2 exept:

- restoreFromBackup
- exportCertificates
- exportSerialNumbers

For the following functions restrictions apply:

- logOut – no implementation of a timed logout for *Admin* and *TimeAdmin*
- exportData – the number of records to be exported cannot be limited

Table 3: Supported signature algorithms

Supported crypto functions	Applicant declaration
Signature algorithm	ECDSA
Parameters for the signature algorithm (including hash function and key lengths)	bsiEcdsaWithSHA384 (Object Identifier 0.4.0.127.0.7.1.1.4.1.4) 384 bit ECC Key of the curve brainpoolP384r1 with SHA384 as hash algorithm

8 Conformity Evaluation

The conformity evaluation of the TOE was performed by the evaluation facility in November 2020.

The test report provided by the evaluation facility contains detailed descriptions of all tests performed during the conformity evaluation as well as the expected and achieved result for each test case.

Table 4 contains a summary of the achieved results of conformity testing.

Table 4: Conformity evaluation according to BSI TR-03153-TS

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
5.1 Modul Storage – Speichermedium (STO)			
5.1.1 Funktionale Prüfungen von Speichermedien (STO_FUN)			
STO_FUN_01	SM_AGG	n.a.	n.a.
STO_FUN_02	SM_NOAGG	Pass	Pass
STO_FUN_03	SM_AGG	n.a.	n.a.
STO_FUN_04	SM_NOAGG	Pass	Pass
STO_FUN_05	SM_AGG	n.a.	n.a.
STO_FUN_06	SM_NOAGG, SM_MULTI	Pass	Pass
STO_FUN_07	STORAGE_BASIC	Pass	Pass
STO_FUN_08	STORAGE_BASIC	Pass	Pass
STO_FUN_09	STORAGE_BASIC	Pass	Pass
STO_FUN_10	STORAGE_BASIC	Pass	Pass
STO_FUN_11	STORAGE_BASIC	Pass	Pass
5.1.2 Prüfungen der Speicherkapazität von Speichermedien (STO_CAP)			
STO_CAP_01	STORAGE_BASIC	Pass	Pass
5.1.3 Prüfungen der Zuverlässigkeit von Speichermedien (STO_REL)			
STO_REL_01	STORAGE_BASIC	Pass	Pass
5.1.4 Prüfungen für fernverbundene Speichermedien (STO_REM)			
STO_REM_01	STORAGE_REMOTE	n.a.	n.a.
5.2 Modul Security Module – Sicherheitsmodul (SM)			
5.2.1 Prüfungen zu Konkatenation und Signaturerstellung (SM_CON)			
SM_CON_01	SM_NOAGG	Pass	Pass
SM_CON_02	SM_AGG	n.a.	n.a.
SM_CON_03	SM_NOAGG	Pass	Pass
SM_CON_04	SM_AGG	n.a.	n.a.
SM_CON_05	SM_AGG	n.a.	n.a.
SM_CON_06	SM_NOAGG, SM_MULTI	Pass	Pass
SM_CON_07	SM_AGG, SM_MULTI	n.a.	n.a.
SM_CON_08	SM_NOAGG, SM_MULTI	Pass	Pass
SM_CON_09	SM_AGG, SM_MULTI	n.a.	n.a.

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
SM_CON_10	SM_AGG, SM_MULTI	n.a.	n.a.
SM_CON_11	SM_AGG, SM_MULTI	n.a.	n.a.
SM_CON_12	SM_NOAGG, SM_MULTI	Pass	Pass
SM_CON_13	SM_BASIC	Pass	Pass
SM_CON_14	SM_BASIC	Pass	Pass
SM_CON_15	SM_BASIC, SDI	Pass	Pass
SM_CON_16	SM_BASIC, SDI	Pass	Pass
SM_CON_17	SM_BASIC, SDI	Pass	Pass
SM_CON_18	SM_BASIC	Pass	Pass
5.2.2 Prüfungen zur Zeitführung im Sicherheitsmodul (SM_TME)			
SM_TME_01	SM_BASIC	Pass	Pass
SM_TME_02	SM_BASIC	Pass	Pass
SM_TME_03	SM_BASIC	Pass	Pass
SM_TME_04	SM_BASIC, NO_TIME_SYNC	Pass	Pass
SM_TME_05	SM_AGG, SM_MULTI	n.a.	n.a.
SM_TME_06	SM_NOAGG, SM_MULTI	Pass	Pass
SM_TME_07	SM_NOAGG	Pass	Pass
SM_TME_08	SM_AGG	n.a.	n.a.
SM_TME_09	SM_BASIC, SDI	Pass	Pass
SM_TME_10	SM_AGG	n.a.[3]	n.a.[3]
SM_TME_11	SM_BASIC	Pass	Pass
5.2.3 Prüfungen zum Signaturzähler im Sicherheitsmodul (SM_SIG)			
SM_SIG_01	SM_NOAGG	Pass	Pass
SM_SIG_02	SM_AGG	n.a.	n.a.
SM_SIG_03	SM_NOAGG, SM_MULTI	Pass	Pass
SM_SIG_04	SM_AGG	n.a.	n.a.
SM_SIG_05	SM_BASIC	Pass	Pass
SM_SIG_06	SM_NOAGG	Pass	Pass
SM_SIG_07	SM_AGG	n.a.	n.a.
SM_SIG_08	SM_BASIC, SDI	Pass	Pass
5.2.4 Prüfungen zur Transaktionsnummer im Sicherheitsmodul (SM_TRA)			
SM_TRA_01	SM_BASIC	Pass	Pass
SM_TRA_02	SM_MULTI	Pass	Pass
SM_TRA_03	SM_MULTI	Pass	Pass
SM_TRA_04	SM_BASIC	Pass	Pass
SM_TRA_05	SM_BASIC	Pass	Pass
SM_TRA_06	SM_BASIC	Pass	Pass
SM_TRA_07	SM_BASIC	Pass	Pass
5.2.5 Prüfungen zur Kryptographieanwendung im Sicherheitsmodul (SM_KRY)			
SM_KRY_01	SM_BASIC	Pass	Pass

3 Time is not cached in the SM.

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
SM_KRY_02	SM_BASIC	Pass	Pass
SM_KRY_03	SM_BASIC	Pass	Pass
SM_KRY_04	SM_BASIC	Pass	Pass
5.2.6 Prüfungen der PKI von Sicherheitsmodulen (SM_PKI)			
SM_PKI_01	SM_BASIC	Pass	Pass
SM_PKI_02	SM_BASIC	Pass	Pass
SM_PKI_03	SM_BASIC	Pass	Pass
5.2.7 Prüfungen für fernverbundene Sicherheitsmodule (SM_REM)			
SM_REM_01	SM_REMOTE	n.a.	n.a.
5.3 Modul Integration Interface - Einbindungsschnittstelle			
5.3.1 Basisprüfungen der Einbindungsschnittstelle			
5.3.1.1 Export des Archivs (II_EXP)			
II_EXP_01	SM_BASIC	Pass	Pass
II_EXP_02	SM_BASIC	Pass	Pass
II_EXP_03	SM_BASIC, STORAGE_REMOTE	n.a.	n.a.
5.3.1.2 Initialisierung der Technischen Sicherheitseinrichtung (II_INI)			
II_INI_01	SM_BASIC	n.a.[4]	n.a.[4]
II_INI_02	SM_BASIC	n.a.[4]	n.a.[4]
II_INI_03	SM_BASIC	Pass	Pass
II_INI_04	SM_BASIC	Pass	Pass
II_INI_05	SM_BASIC	Pass	Pass
II_INI_06	SM_BASIC	n.a.[4]	n.a.[4]
II_INI_07	SM_BASIC	Pass	Pass
II_INI_08	SM_BASIC	Pass	Pass
II_INI_09	SM_BASIC	Pass	Pass
II_INI_10	SM_BASIC	Pass	Pass
II_INI_11	SM_BASIC	Pass	Pass
II_INI_12	SM_BASIC	Pass	Pass
II_INI_13	SM_BASIC, SM_REMOTE	n.a.	n.a.
II_INI_14	SM_BASIC, STORAGE_REMOTE	n.a.	n.a.
5.3.1.3 Außerbetriebnahme des Sicherheitsmoduls (II_DSE)			
II_DSE_01	SM_BASIC	Pass	Pass
II_DSE_02	SM_BASIC	Pass	Pass
II_DSE_03	SM_BASIC	Pass	Pass
II_DSE_04	SM_BASIC	Pass	Pass
II_DSE_05	SM_BASIC	Pass	Pass
II_DSE_06	SM_BASIC, SM_REMOTE	n.a.	n.a.
II_DSE_07	SM_BASIC, STORAGE_REMOTE	n.a.	n.a.
5.3.1.4 Starten einer Transaktion (II_STA)			
II_STA_01	SM_BASIC	Pass	Pass

4 Description is set by the manufacturer.

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
II_STA_02	SM_BASIC	Pass	Pass
II_STA_03	SM_BASIC	Pass	Pass
II_STA_04	SM_BASIC	Pass	Pass
II_STA_05	SM_BASIC	Pass	Pass
II_STA_06	SM_BASIC, SM_REMOTE	n.a.	n.a.
II_STA_07	SM_BASIC, STORAGE_REMOTE	n.a.	n.a.
II_STA_08	SM_BASIC	Pass	Pass
II_STA_09	SM_BASIC	Pass	Pass
5.3.1.5 Aktualisierung einer Transaktion (II_UPD)			
II_UPD_01	SM_NOAGG	Pass	Pass
II_UPD_02	SM_NOAGG	Pass	Pass
II_UPD_03	SM_AGG	n.a.	n.a.
II_UPD_04	SM_NOAGG	Pass	Pass
II_UPD_05	SM_BASIC, SM_REMOTE	n.a.	n.a.
II_UPD_06	SM_BASIC, STORAGE_REMOTE	n.a.	n.a.
II_UPD_07	SM_AGG, STORAGE_REMOTE	n.a.	n.a.
II_UPD_08	SM_BASIC, SM_NOAGG	Pass	Pass
II_UPD_09	SM_BASIC, SM_AGG	n.a.	n.a.
II_UPD_10	SM_BASIC	Pass	Pass
II_UPD_11	SM_BASIC	Pass	Pass
II_UPD_12	SM_BASIC	Pass	Pass
5.3.1.6 Beenden einer Transaktion (II_FIN)			
II_FIN_01	SM_BASIC	Pass	Pass
II_FIN_02	SM_BASIC	Pass	Pass
II_FIN_03	SM_BASIC	Pass	Pass
II_FIN_04	SM_BASIC	Pass	Pass
II_FIN_05	SM_BASIC, SM_REMOTE	n.a.	n.a.
II_FIN_06	SM_BASIC, STORAGE_REMOTE	n.a.	n.a.
II_FIN_07	SM_BASIC	Pass	Pass
II_FIN_08	SM_BASIC	Pass	Pass
II_FIN_09	SM_BASIC	Pass	Pass
II_FIN_10	SM_BASIC	Pass	Pass
5.3.1.7 Verwendung der TSE durch mehrere Clients (II_MCU)			
II_MCU_01	MULTI_CLIENT, SM_NOAGG	Pass	Pass
II_MCU_02	MULTI_CLIENT, SM_AGG	n.a.	n.a.
II_MCU_03	MULTI_CLIENT, SM_NOAGG	Pass	Pass
II_MCU_04	MULTI_CLIENT, SM_AGG	n.a.	n.a.
II_MCU_05	MULTI_CLIENT, SM_BASIC	Pass	Pass
II_MCU_06	NO_MULTI_CLIENT, SM_BASIC	n.a.	n.a.
5.3.2 Prüfungen der Einbindungsschnittstellen gemäß BSI TR-03153			
5.3.2.1 Aktualisierung der Uhrzeit (SDI_UDT)			

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
SDI_UDT_01	SDI, NO_TIME_SYNC	Pass	Pass
SDI_UDT_02	SDI, TIME_SYNC	n.a.	n.a.
SDI_UDT_03	SDI, NO_TIME_SYNC	Pass	Pass
SDI_UDT_04	SDI, SM_REMOTE	n.a.	n.a.
SDI_UDT_05	SDI, STORAGE_REMOTE	n.a.	n.a.
SDI_UDT_06	SDI	Pass	Pass
SDI_UDT_07	SDI	Pass[5]	Pass[5]
5.3.2.2 Export des Archivs (SDI_EXP)			
SDI_EXP_01	SDI	Pass	Pass
SDI_EXP_02	SDI	Pass	Pass
SDI_EXP_03	SDI	Pass[5]	Pass[5]
SDI_EXP_04	SDI	Pass	Pass
SDI_EXP_05	SDI	Pass	Pass
SDI_EXP_06	SDI	Pass	Pass
SDI_EXP_07	SDI	Pass[5]	Pass[5]
SDI_EXP_08	SDI	Pass[5]	Pass[5]
SDI_EXP_09	SDI	Pass	Pass
SDI_EXP_10	SDI	Pass	Pass
SDI_EXP_11	SDI	Pass	Pass
SDI_EXP_12	SDI	Pass	Pass
SDI_EXP_13	SDI	Pass	Pass
SDI_EXP_14	SDI	Pass[5]	Pass[5]
SDI_EXP_15	SDI	Pass[5]	Pass[5]
SDI_EXP_16	SDI	n.a.[6]	n.a.[6]
SDI_EXP_17	SDI	n.a.[6]	n.a.[6]
SDI_EXP_18	SDI	n.a.[6]	n.a.[6]
SDI_EXP_19	SDI	Pass	Pass
SDI_EXP_20	SDI	Pass	Pass
SDI_EXP_21	SDI	Pass	Pass
SDI_EXP_22	SDI	Pass	Pass
SDI_EXP_23	SDI	Pass	Pass
SDI_EXP_24	SDI	Pass	Pass
SDI_EXP_25	SDI	Pass	Pass

5 See chapter 8.1.1
6 Parameter *maximumNumberRecords* <> 0

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
SDI_EXP_26	SDI	Pass	Pass
SDI_EXP_27	SDI	n.a.[6]	n.a.[6]
SDI_EXP_28	SDI	n.a.[6]	n.a.[6]
SDI_EXP_29	SDI	Pass	Pass
SDI_EXP_30	SDI	Pass[5]	Pass[5]
SDI_EXP_31	SDI	n.a.[6]	n.a.[6]
SDI_EXP_32	SDI	Pass	Pass
SDI_EXP_33	SDI	Pass	Pass
SDI_EXP_34	SDI	Pass	Pass
SDI_EXP_35	SDI	Pass	Pass
SDI_EXP_36	SDI	Pass	Pass
SDI_EXP_37	SDI	Pass	Pass
SDI_EXP_38	SDI	Pass	Pass
SDI_EXP_39	SDI	n.a.[7]	n.a.[7]
SDI_EXP_40	SDI	n.a.[7]	n.a.[7]
SDI_EXP_41	SDI	n.a.[7]	n.a.[7]
SDI_EXP_42	SDI	Pass	Pass
5.3.2.3 Zertifikatsabruf (SDI_EXC)			
SDI_EXC_01	SDI	n.a.[8]	n.a.[8]
5.3.2.4 Wiederherstellen durch ein Backup (SDI_RFB)			
SDI_RFB_01	SDI_RESTORE	n.a.[9]	n.a.[9]
SDI_RFB_02	SDI_RESTORE	n.a.[9]	n.a.[9]
SDI_RFB_03	SDI_RESTORE, STORAGE_REMOTE	n.a.[9]	n.a.[9]
SDI_RFB_04	SDI_RESTORE	n.a.[9]	n.a.[9]
SDI_RFB_05	SDI_RESTORE	n.a.[9]	n.a.[9]
5.3.2.5 Lesen einer Log-Nachricht (SDI_RLM)			
SDI_RLM_01	SDI, SM_NOAGG	Pass	Pass
SDI_RLM_02	SDI, SM_AGG	n.a.	n.a.
SDI_RLM_03	SDI, SM_REMOTE	n.a.	n.a.
5.3.2.6 Export von Seriennummern (SDI_ESN)			
SDI_ESN_01	SDI	n.a.[10]	n.a.[10]
SDI_ESN_02	SDI	n.a.[10]	n.a.[10]
SDI_ESN_03	SDI	n.a.[10]	n.a.[10]
5.3.2.7 Initialisierung der Sicherheitseinrichtung (SDI_INI)			
SDI_INI_01	SDI	Pass	Pass

7 Parameter *maximumNumberRecords* <> 0
8 exportCertificates not implemented
9 restoreFromBackup not implemented
10 ExportSerialNumber not implemented

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
SDI_INI_02	SDI	Pass	Pass
SDI_INI_03	SDI	Pass	Pass
SDI_INI_04	SDI	Pass[11]	Pass[11]
SDI_INI_05	SDI	Pass	Pass
5.3.2.8 Außerbetriebnahme des Sicherheitsmoduls (SDI_DSE)			
SDI_DSE_01	SDI	Pass	Pass
SDI_DSE_02	SDI	Pass[11]	Pass[11]
SDI_DSE_03	SDI	Pass	Pass
5.3.2.9 Abfrage der maximalen Anzahl von simultanen Clients der TSE (SDI_MNC)			
SDI_MNC_01	SDI, MULTI_CLIENT	Pass	Pass
5.3.2.10 Abfrage der aktuellen Anzahl von Clients der TSE (SDI_CNC)			
SDI_CNC_01	SDI, MULTI_CLIENT	Pass	Pass
SDI_CNC_02	SDI, MULTI_CLIENT	Pass	Pass
SDI_CNC_03	SDI, MULTI_CLIENT	Pass	Pass
SDI_CNC_04	SDI, MULTI_CLIENT	Pass	Pass
5.3.2.11 Abfrage der maximalen Anzahl von parallelen Transaktionen (SDI_MNT)			
SDI_MNT_01	SDI, SM_MULTI	Pass	Pass
5.2.3.12 Abfrage aktuelle Anzahl parallel geöffneter Transaktionen (SDI_CNT)			
SDI_CNT_01	SDI, SM_MULTI	Pass	Pass
SDI_CNT_02	SDI, SM_MULTI	Pass	Pass
SDI_CNT_03	SDI, SM_MULTI	Pass	Pass
SDI_CNT_04	SDI, SM_MULTI	Pass	Pass
5.3.2.13 Abfrage unterstützte Varianten der Aktualisierungen von Transaktionen (SDI_UTV)			
SDI_UTV_01	SDI	Pass	Pass
5.3.2.14 Löschen von gespeicherten Daten im Speichermedium (SDI_DSD)			
SDI_DSD_01	SDI_DELETE	Pass	Pass
SDI_DSD_02	SDI_DELETE	Pass	Pass
SDI_DSD_03	SDI_DELETE, STORAGE_REMOTE	n.a.	n.a.
SDI_DSD_04	SDI	Pass[12]	Pass[12]
SDI_DSD_05	SDI	Pass	Pass
5.3.2.15 Authentifizierung von Benutzern der TSE (SDI_AUT)			
SDI_AUT_01	SDI	Pass	Pass
SDI_AUT_02	SDI	Pass	Pass
SDI_AUT_03	SDI	Pass[12]	Pass[12]
SDI_AUT_04	SDI	Pass[12]	Pass[12]
SDI_AUT_05	SDI	Pass[12]	Pass[12]
SDI_AUT_06	SDI, SM_REMOTE	n.a.	n.a.
SDI_AUT_07	SDI, STORAGE_REMOTE	n.a.	n.a.

11 See chapter 8.1.1
12 See chapter 8.1.1

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
5.3.2.16 Abmeldung von Benutzern der TSE (SDI_LGO)			
SDI_LGO_01	SDI	Pass[12]	Pass[12]
SDI_LGO_02	SDI	Pass	Pass
SDI_LGO_03	SDI	Pass	Pass
SDI_LGO_04	SDI	n.a.[13]	n.a.[13]
SDI_LGO_05	SDI, SM_REMOTE	n.a.	n.a.
SDI_LGO_06	SDI, STORAGE_REMOTE	n.a.	n.a.
5.3.2.17 Entsperren von Benutzern(SDI_UBU)			
SDI_UBU_01	SDI	Pass	Pass
SDI_UBU_02	SDI	Pass	Pass
SDI_UBU_03	SDI	Pass	Pass
SDI_UBU_04	SDI	Pass	Pass
SDI_UBU_05	SDI, SM_REMOTE	n.a.	n.a.
SDI_UBU_06	SDI, STORAGE_REMOTE	n.a.	n.a.
5.3.3 Prüfungen für herstellerspezifische Einbindungsschnittstellen (CI)			
5.3.3.1 Aktualisierung der Zeit innerhalb des Sicherheitsmoduls (CI_UDT)			
CI_UDT_01	CUSTOM_INTEGRATION_INTERFACE, SM_BASIC	Pass	Pass
CI_UDT_02	CUSTOM_INTEGRATION_INTERFACE, SM_REMOTE	n.a.	n.a.
CI_UDT_03	CUSTOM_INTEGRATION_INTERFACE, STORAGE_REMOTE	n.a.	n.a.
5.4 Prüfung der Exportdaten gemäß BSI TR-03153			
5.4.1 TAR-Format (EXP_TAR)			
EXP_TAR_01	SM_BASIC	Pass	Pass
5.4.2 Initialisierungsdaten (EXP_INI)			
EXP_INI_01	SM_BASIC	Pass	Pass
EXP_INI_02	SM_BASIC	Pass	Pass
EXP_INI_03	SM_BASIC	n.a.[14]	n.a.[14]
EXP_INI_04	SM_BASIC	Pass	Pass
5.4.3 Log-Nachrichten (EXP_LOG)			
EXP_LOG_01	SM_BASIC	Pass	Pass
EXP_LOG_02	SM_BASIC	Pass	Pass
EXP_LOG_03	SM_BASIC, SDI	Pass	Pass
EXP_LOG_04	SM_BASIC, SDI	Pass	Pass
EXP_LOG_05	SM_BASIC	Pass	Pass
EXP_LOG_06	SM_BASIC	Pass	Pass
EXP_LOG_07	SM_NOAGG	Pass	Pass
EXP_LOG_08	SM_NOAGG	Pass	Pass
EXP_LOG_09	SM_AGG	n.a.	n.a.
EXP_LOG_10	SM_AGG	n.a.	n.a.
EXP_LOG_11	SM_NOAGG	Pass	Pass

13 No timed automatic logout.
14 Description is set by the manufacturer.

Testcase ID	Profile	Verdict	
		EPSON USB TSE	*EPSON microSD TSE*
EXP_LOG_12	SM_AGG	n.a.	n.a.
EXP_LOG_13	SM_BASIC	n.a.[14]	n.a.[14]
EXP_LOG_14	SM_BASIC	Pass	Pass
EXP_LOG_15	SM_BASIC	Pass	Pass
EXP_LOG_16	SM_BASIC	Pass	Pass
EXP_LOG_17	SM_BASIC	Pass	Pass
5.4.4 Zertifikatsexport (EXP_CER)			
EXP_CER_01	SM_BASIC	Pass	Pass

8.1 Deviations

8.1.1 Differing error codes

Identified Deviation: Conformity testing of the SE-API function according to the profile SDI showed, that for some testcases the TOE provides error codes that differ from the specification (→ table 5).

Table 5: Differing error codes

Testcase	Specified error code	Actual error code
SDI_UDT_07	ErrorUserNotAuthenticated	ERROR_USER_NOT_AUTHORIZED
SDI_EXP_03	ErrorTransactionNumberNot-Found	ERROR_NO_DATA_AVAILABLE
SDI_EXP_07	ErrorTransactionNumberNot-Found	ERROR_NO_DATA_AVAILABLE
SDI_EXP_08	ErrorIdNotFound	ERROR_NO_DATA_AVAILABLE
SDI_EXP_14	ErrorTransactionNumberNot-Found	ERROR_NO_DATA_AVAILABLE
SDI_EXP_15	ErrorIdNotFound	ERROR_NO_DATA_AVAILABLE
SDI_EXP_30	ErrorIdNotFound	ERROR_NO_DATA_AVAILABLE
SDI_INI_04	ErrorUserNotAuthenticated	ERROR_USER_NOT_AUTHORIZED
SDI_DSE_02	ErrorUserNotAuthenticated	ERROR_USER_NOT_AUTHORIZED
SDI_DSD_04	ErrorUserNotAuthenticated	ERROR_USER_NOT_AUTHORIZED
SDI_AUT_03	ErrorUserNotAuthenticated	ERROR_USER_NOT_AUTHORIZED
SDI_AUT_04	ErrorUserNotAuthenticated	ERROR_USER_NOT_AUTHORIZED
SDI_AUT_05	ErrorUserNotAuthenticated	ERROR_USER_NOT_AUTHORIZED
SDI_LGO_01	ErrorUserNotAuthenticated	ERROR_USER_NOT_AUTHORIZED

Assessment: As the TOE implements a custom integration interface the deviations have no impact regarding the conformity to [BSI TR-03153].

Required measures: -

9 Result of the Conformity Evaluation

The complete results of the conformity evaluation are contained in the following test report and its appendices:

MTG AG Prüfbericht zum Konformitätsrest nach
BSI TR-03153 / TR-03153-TS
EPSON USB TSE / EPSON microSD TSE
BSI-K-TR-0414
Version 1.0
Creation date: 09 November 2020

The completeness and consistency of the test report was verified and confirmed by BSI.

The results of the conformity evaluation can be summarized as follows:

- The result of all relevant test cases performed during the conformity evaluation of the module *Storage – Speichermedium (STO)* was „**Pass**“;
- the result of all relevant test cases performed during the conformity evaluation of the module *Security Module – Sicherheitsmodul (SM)* was „**Pass**“;
- the result of all relevant test cases performed during the conformity evaluation of the module *Integration Interface – Einbindungsschnittstelle* was „**Pass**“;
- the result of all relevant test cases performed during the conformity evaluation of the module *Prüfung der Exportdaten gemäß BSI TR-03153* was „**Pass**“.

The achieved result of the conformity evaluation is: Pass

10 Result of the Certification Procedure

The conformity of the TOE according to the Technical Guideline BSI TR-03153 is confirmed by the Federal Office for Information Security for the examined areas of evaluation with the issuance of the notification of conformity BSI-K-TR-0414-2020 of 11 December 2020.

The certificate according to Technical Guideline is valid until 11 December 2028.

Bibliography

BSIG	BSI-Act – Act on the Federal Office for Information Security (BSI-Gesetz, BSIG) of14 August 2009, Bundesgesetzblatt Part I No. 54, p. 2821, last amendment by article 13 of the law of 20 November 2019 (BGBl I p. 1626)
BSIZertV	BSI-Certification- and Recognition Regulation – Regulation on the Procedure for Issuance of Securitycertifcates recognition by the Federal Office for Information Security (BSIZertV), of 17 December 2014, Bundesgesetzblatt Part I No. 61, p. 2231
VB-Produkte	Procedural description for product certification, version 2.4 of 09 September 2019
BMIBGebV	Special Schedule of Costs of the Federal Ministry of the Interior, Building and Community for individually attributable public services within its jurisdiction (Besondere Gebührenverordnung BMI, BMIBGebV) of 02 September 2019, Bundesgesetzblatt I, p. 1359
KassenSichV	Verordnung zur Bestimmung der technischen Anforderungen an elektronische Aufzeichnungs- und Sicherungssysteme im Geschäftsverkehr (Kassensicherungsverordnung - KassenSichV) vom 26. September 2017, Bundesgesetzblatt I, S3515
PP_CSP	PP_CSP – Common Criteria Protection Profile – Cryptographic Service Provider (CSP), BSI-CC-PP-0104-2019, Version 0.9.8
PP_SMAERS	PP_SMAERS – Common Criteria Protection Profile – Security Module Application for Electronic Record-keeping Systems (SMAERS), BSI-CC-PP-0105-2019, Version 0.7.5
BSI TR-03116-5	BSI TR-03116-5 – Kryptographische Vorgaben für Projekte der Bundesregierung, Teil 5: Anwendungen der Secure Element API, Stand 2019 vom 01. Februar 2019
BSI TR-03151	BSI TR-03151 – Secure Element API (SE API), Version 1.0.1 vom 20. Dezember 2018
BSI TR-03153-TS	BSI TR-03153-TS – Technical security device for electronic record-keeping systems – Test specification, Version 1.0.1 of 05 February 2019
BSI TR-03153	BSI TR-03153 – Technical security device for electronic record-keeping systems, Version 1.0.1 of 20 December 2018
TR-Produkte	Product certification: Program for the certification of products according to Technical Guidelines, version 1.4 of 17 October 2019