Audit Attestation for

E-TUGRA

EBG Bilişim Teknolojileri ve Hizmetleri A.Ş.

Headquarter: Ceyhun Atuf Kansu Cad. Gözde Plaza 130/58
06520, Ankara - TURKEY

Reference: No. 1646-257-AL-V2

Dublin, February 02, 2023

To whom it may concern,

This is an amended version of the AAL #1646-257-AL V1 issued on October 04, 2022

This is to confirm that LSTI has audited the CAs of the E-TUGRA without critical findings.

This present Audit Attestation Letter is registered under the unique identifier number 1646-257-AL-V2 and consist of 10 pages.

Kindly find here below the details accordingly.

In case of any question, please contact:

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10 Avenue Anita Conti
35400 Saint-Malo, France
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With best regards,

_____   _____

Philippe Bouchet C.T.O   Armelle Trotin C.E.O

Identification of the conformity assessment body (CAB) and assessment organization acting as ETSI auditor:	- LSTI SAS, 10 Avenue Anita Conti, 35400 Saint-Malo – France registered under n°453867863 - LSTI Worldwide Limited, Clifton House – Fitzwilliam street lower Dublin 2 – Ireland registered under n°582309 - Insurance carrier Hiscox SA 38 avenue de l'Opéra Paris France - Accredited by national_accreditation_body under registration accreditation_registration for the certification of trust services according to "EN ISO/IEC 17065:2012" and "ETSI EN 319 403 V2.2.2 (2015-08)" and/or "ETSI EN 319 403-1 V2.3.1 (2020-06)" respectively. Detailed scope at https://www.cofrac.fr/ - Attestation of accreditation link: https://tools.cofrac.fr/annexes/sect5/5-0546.pdf COFRAC 52 Rue Jacques Hillairet 75012 Paris FRANCE Phone: +33 144688220 - Third-party affiliate audit firms involved in the audit: none.

Identification and qualification of the audit team	• Number of team members: 2
	• Academic qualifications of team members:
	All team members have formal academic qualifications or professional training or extensive experience indicating general capability to carry out audits based on the knowledge given below and at least four years full time practical workplace experience in information technology, of which at least two years have been in a role or function relating to relevant trust services, public key infrastructure, information security including risk assessment/management, network security and physical security.
	• Additional competences of team members:
	All team members have knowledge of
	1) audit principles, practices and techniques in the field of CA/TSP audits gained in a training course of at least five days;
	2) the issues related to various areas of trust services, public key infrastructure, information security including risk assessment/management, network security and physical security;
	3) the applicable standards, publicly available specifications and regulatory requirements for CA/TSPs and other relevant publicly available specifications including standards for IT product evaluation; and
	4) the Conformity Assessment Body's processes.
	Furthermore, all team members have language skills appropriate for all organizational levels within the CA/TSP organization; note-taking, report-writing, presentation, and interviewing skills; and relevant personal attributes: objective, mature, discerning, analytical, persistent and realistic.
	• Professional training of team members:
	See "Additional competences of team members" above. Apart from that are all team members trained to demonstrate adequate competence in:
	a) knowledge of the CA/TSP standards and other relevant publicly available specifications;
	b) understanding functioning of trust services and information security including network security issues;
	c) understanding of risk assessment and risk management from the business perspective;
	d) technical knowledge of the activity to be audited;
	e) general knowledge of regulatory requirements relevant to TSPs; and
	f) knowledge of security policies and controls.
	• Types of professional experience and practical audit experience:
	The CAB ensures, that its personnel performing audits maintains competence on the basis of appropriate education, training or experience; that all relevant experience is current and prior to assuming responsibility for performing as an auditor, the candidate has gained experience in the entire process of CA/TSP auditing. This experience shall have been gained by participating under supervision of lead auditors in a minimum of four TSP audits for a total of at least 20 days, including documentation review, on-site audit and audit reporting.
	• Additional qualification and experience Lead Auditor:
	On top of what is required for team members (see above), the Lead Auditor
	a) has acted as auditor in at least three complete TSP audits;
	b) has adequate knowledge and attributes to manage the audit process; and
	c) has the competence to communicate effectively, both orally and in writing.

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	• Special skills or qualifications employed throughout audit: none. • Special Credentials, Designations, or Certifications: All members are qualified and registered assessors within the accredited CAB. • Auditors code of conduct incl. independence statement: Code of Conduct as of Annex A, ETSI EN 319 403 or ETSI EN 319 403-1 respectively

Identification and qualification of the reviewer performing audit quality management:	• Number of Reviewers/Audit Quality Managers involved independent from the audit team: 2 • The reviewer fulfils the requirements as described for the Audit Team Members above and has acted as an auditor in at least three complete CA/TSP audits.

Identification of the trust service provider (TSP):	E-TUGRA Ceyhun Atuf Kansu Cad. Gözde Plaza 130/58 06520, Ankara - TURKEY Registered under n° 53151
Type of audit:	☐ Point in time audit ☐ Period of time, after x month of CA operation ☒ Period of time, full audit
Audit period covered for all policies:	2021-08-07 until 2022-08-06
Point in time date:	None, as the audit was pot audit
Audit dates:	01/08/2022 to 04/08/2022
Audited sites:	**Main Center** – CA / RA - Ceyhun Atuf Kansu Cad. Gözde Plaza 130/58 – 06520 Ankara Turkey **Back-up data center** - Yıldız Teknik Üniv. Davutpaşa Kampüsü Teknoloji Geliştirme Bölgesi - 2. Faz C1 Blok No:C - 104 Esenler / İstanbul - Turkey

Standards considered:	European Standards: ☐ ETSI EN 319 411-2, V2.2.2 (2018-04) ☒ ETSI EN 319 411-1, V1.2.2 (2018-04) ☒ ETSI EN 319 401, V2.2.1 (2018-04) CA Browser Forum Requirements: ☒ EV SSL Certificate Guidelines, version 1.7.9 ☒ Baseline Requirements, version 1.8.4 For the Trust Service Provider Conformity Assessment: ☒ ETSI EN 319 403 V2.2.2 (2015-08) ☒ ETSI TS 119 403-2 V1.2.4 (2020-11)

The full annual audit was based on the following policy and practice statement documents of the TSP:
1. [CPS] e-Tuğra – CERTIFICATION PRACTICE STATEMENT
   (For SSL and CSC), Version 6.2, 16/03/2022
2. [PDS] (PKI Disclosure Statement) - Version 1.0

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No major non-conformities have been identified during the audit.

In the following areas, 12 minor non-conformities have been identified throughout the audit:

Findings with regard to ETSI EN 319 401:
- [REQ-6.1-03] Documentation shall be improved
- [REQ-6.1-06] Documentation shall be improved
- [REQ-7.3.1-02] Documentation shall be improved
- [REQ-7.9-03] Implementation shall be improved
- [REQ-7.7-06] Documentation shall be improved
- [REQ-7.11-02] Implementation shall be improved

Findings with regard to ETSI EN 319 411-1:
- [REG-6.2.2-04] Implementation shall be improved
- [REV-6.2.4-03] Documentation shall be improved
- [REV-6.3.9-01] Documentation shall be improved
- [GEN-6.4.5-07] Documentation shall be improved
- [GEN-6.6.1-02] Implementation shall be improved
- [OVR-6.6.2-01] Implementation shall be improved

For all non-conformities, remediation has been scheduled within three months after the onsite audit at latest and will be covered by a corresponding audit.

This Audit Attestation also covers the following incidents as documented under

Bug 1772414: Failure to Respond to May 2022 Survey	RESOLVED FIXED
https://bugzilla.mozilla.org/show_bug.cgi?id=1772414	
Bug 1770269: Enable EV Treatment for E-Tugra v3 Global root certificates	RESOLVED FIXED
[https://bugzilla.mozilla.org/show_bug.cgi?id=1770269]	
Bug 1770267: Add E-Tugra v3 Global root certificates to NSS	RESOLVED FIXED
https://bugzilla.mozilla.org/show_bug.cgi?id=1770267	
Bug 1716843: CA Certificate Missing from Audit Reports	RESOLVED FIXED
https://bugzilla.mozilla.org/show_bug.cgi?id=1716843	
Bug 1716902: Forbidden Domain Validation Method 3.2.2.4.6	RESOLVED FIXED
https://bugzilla.mozilla.org/show_bug.cgi?id=1716902	

The remediation measures taken by e-Tuğra as described on Bugzilla (see link above) have been checked by the auditors and properly addressed the incident. The long-term effectiveness of the measures will be rechecked at the next regular audit.

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Identification of the audited Root CA	E-TUGRA CERTIFICATION AUTHORITY	
	Distinguished Name	CN=E-Tugra Certification Authority, OU=E-Tugra Sertifikasyon Merkezi, O=E-Tuğra EBG Bilişim Teknolojileri ve Hizmetleri A.Ş., L=Ankara, C=TR
	SHA-256 fingerprint	B0BFD52BB0D7D9BD92BF5D4DC13DA255C02C542F378365EA893911F55E55F23C
	Certificate Serial number	6A683E9C519BCB53
	Applied policy	none

Identification of the audited Sub-CA	E-TUGRA DOMAIN VALIDATION CA	
	Distinguished Name	CN=E-Tugra Domain Validated CA, OU=E-Tuğra Sertifikasyon Merkezi, O=E-Tuğra EBG Bilişim Teknolojileri ve Hizmetleri A.Ş., L=Ankara, C=TR
	SHA-256 fingerprint	CB6FCEE41C55E24774DF02BE35DE6D418E94EF5811F7DB1373AF8809CF707F2A
	Certificate Serial number	3AEFB1B7FA55ADC0
	Applied policy	Policy DVCP of ETSI EN 319 411-1 v 1.2.2

Identification of the audited Sub-CA	E-TUGRA ORGANIZATIONAL VALIDATION CA	
	Distinguished Name	CN=E-Tugra Organization Validated CA, OU=E-Tuğra Sertifikasyon Merkezi, O=E-Tuğra EBG Bilişim Teknolojileri ve Hizmetleri A.Ş., L=Ankara, C=TR
	SHA-256 fingerprint	114753E88D000E7599615A9907E26B73B6D851317FF2B27ACA9DB8FC505692A7
	Certificate Serial number	60D6C12084607AF0
	Applied policy	Policy OVCP of ETSI EN 319 411-1 v 1.2.2

Identification of the audited Sub-CA	E-TUGRA EXTENDED VALIDATION CA	
	Distinguished Name	CN=E-Tugra Extended Validated CA,, OU=E-Tuğra Sertifikasyon Merkezi, O=E-Tuğra EBG Bilişim Teknolojileri ve Hizmetleri A.Ş., L=Ankara, C=TR
	SHA-256 fingerprint	CE7ADC197757A52E69A2014CCE03D980632502764742C2923D7380568E2100A6
	Certificate Serial number	7815C206C403B277
	Applied policy	Policy EVCP / EVCG of ETSI EN 319 411-1 v2.2.2

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Identification of the audited Sub-CA	TRUSTSAFE DOMAIN VALIDATION CA	
	Distinguished Name	CN=TrustSafe Domain Validated CA, OU=SSL Department, O=Isimtescil Bilisim Anonim Sirketi, L=Istanbul, C=TR
	SHA-256 fingerprint	3ED0AE67A1432C83D82101DE69B2EE5E7F20302709D9579073A302DA90F48533
	Certificate Serial number	5A1BDFDCB9826A12
	Applied policy	Policy DVCP of ETSI EN 319 411-1 v 1.2.2

Identification of the audited Sub-CA	TRUSTSAFE ORGANIZATIONAL VALIDATION CA	
	Distinguished Name	CN=TrustSafe Organization Validated CA, OU=SSL Department, O=Isimtescil Bilisim Anonim Sirketi, L=Istanbul, C=TR
	SHA-256 fingerprint	89E80A3ED72DF73E58DB23744E2CA3ECBC225F750A61D6BE268124F7C95E465B
	Certificate Serial number	2CB328C9D86A55C3
	Applied policy	Policy OVCP of ETSI EN 319 411-1 v 1.2.2

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Identification of the audited Root CA	**E-TUGRA GLOBAL ROOT CA ECC V3**	
	Distinguished Name	CN=E-Tugra Global Root CA ECC v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	873F4685FA7F563625252E6D36BCD7F16FC24951F264E47E1B954F4908CDCA13
	Certificate Serial number	2646197731E14F6F2836DE395186E6D4978822C1
	Applied policy	none

Identification of the audited Sub-CA	E-TUGRA DOMAIN VALIDATION CA ECC V3	
	Distinguished Name	CN=E-Tugra Domain Validated CA ECC v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	51101FAA963129319A4A07753FB3BAD3901CBACF6F19039FA0E05635AFAD58FC
	Certificate Serial number	4FEEB0CC9B2B77DB5420CD4D647509E3B3B32ADE
	Applied policy	Policy DVCP of ETSI EN 319 411-1 v 1.2.2

Identification of the audited Sub-CA	E-TUGRA ORGANIZATIONAL VALIDATION CA ECC V3	
	Distinguished Name	CN=E-Tugra Organization Validated CA ECC v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	87EC80B7062053FE5ACD4ABE84B01EBF3404A64C6B27CEAB531EA75090AA43F1
	Certificate Serial number	15533CF8967C68151E89AA3886BF4B927E3E167E
	Applied policy	Policy OVCP of ETSI EN 319 411-1 v 1.2.2

Identification of the audited Sub-CA	E-TUGRA EXTENDED VALIDATION CA ECC V3	
	Distinguished Name	CN=E-Tugra Extended Validated CA ECC v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	80D54EE54CA5648C0EA14FA5DF9535CA536155CE900267CBE9ACB39E182EDC59
	Certificate Serial number	7BF181E3251FABB74CB852A953628178DD7DD194
	Applied policy	Policy EVCP / EVCG of ETSI EN 319 411-1 v2.2.2

Identification of the audited Sub-CA	E-TUGRA EXTENDED VALIDATION CA ECC V3	
	Distinguished Name	CN=E-Tugra Extended Validated CA ECC v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	BD1145EAC873A03D3623457D9B121E9037607640F7363B4BD74E89871A202540
	Certificate Serial number	2324041AF29EF22BA9E7EA9FE746B89315514C15
	Applied policy	Policy EVCP / EVCG of ETSI EN 319 411-1 v2.2.2

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Identification of the audited Root CA	**E-TUGRA GLOBAL ROOT CA RSA V3**	
	Distinguished Name	CN=E-Tugra Global Root CA RSA v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	EF66B0B10A3CDB9F2E3648C76BD2AF18EAD2BFE6F117655E28C4060DA1A3F4C2
	Certificate Serial number	0D4DC5CD16229596087EB80B7F150634FB791034
	Applied policy	none

Identification of the audited Sub-CA	E-TUGRA DOMAIN VALIDATION CA RSA V3	
	Distinguished Name	CN=E-Tugra Domain Validated CA RSA v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	9DC946CD4662BE72B3597050EE3A317D837ACC7C0FCE5154D46885E0FEF48939
	Certificate Serial number	4928FE656597408D4D7A242C2E91BBE7FDCB0BD7
	Applied policy	Policy DVCP of ETSI EN 319 411-1 v 1.2.2

Identification of the audited Sub-CA	E-TUGRA ORGANIZATIONAL VALIDATION CA RSA V3	
	Distinguished Name	CN=E-Tugra Organization Validated CA RSA v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	D4C4CAF9A1B2E20AAF77E93951EFB6973A3BAC9D261D6746AAC4A49E0785AADD
	Certificate Serial number	55E1B4439DB2A1B7121348D635AA7712B6DF42B4
	Applied policy	Policy OVCP of ETSI EN 319 411-1 v 1.2.2

Identification of the audited Sub-CA	E-TUGRA EXTENDED VALIDATION CA RSA V3	
	Distinguished Name	CN=E-Tugra Extended Validated CA RSA v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	5F4F81D885653A503A9E4D23561949BEED9A5B7234985EEC230020BE3D791A81
	Certificate Serial number	3138FF98B1ACCC72BDFBC65D2BD8CBC83F35FECF
	Applied policy	Policy EVCP / EVCG of ETSI EN 319 411-1 v2.2.2

Identification of the audited Sub-CA	E-TUGRA EXTENDED VALIDATION CA RSA V3	
	Distinguished Name	CN=E-Tugra Extended Validated CA RSA v3, OU=E-Tugra Trust Center, O=E-Tugra EBG A.S., L=Ankara, C=TR
	SHA-256 fingerprint	2FA665D9FECB2D5B37AF57DAC187357E371A6307BD11E6DAE635D8C20447EC27
	Certificate Serial number	661FCE3F3C0F6BBE598045C7BAC4D0309A70929F
	Applied policy	Policy EVCP / EVCG of ETSI EN 319 411-1 v2.2.2

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Modifications record

Version	Issuing Date	Changes
Version 1	2022-10-05	Initial Audit Attestation
Version 2	2023-02-02	Add missing CA

End of the audit attestation letter.

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