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Independent Auditor's Report

Amstelveen, 13 December 2019

## To the Management of Logius

We have examined the assertion by the management of Logius, regarding the disclosure of its key and certificate life cycle management business practices and the effectiveness of its controls over key and SSL certificate integrity, the authenticity of subscriber information, logical and physical access to CA systems and data, the continuity of key and certificate life cycle management operations, and development, maintenance and operation of systems integrity, based on the <a href="WebTrust® Principles and Criteria for Certification Authorities – SSL Baseline Requirements with Network Security – Version 2.2">WebTrust® Principles and Criteria for Certification Authorities – SSL Baseline Requirements with Network Security – Version 2.2</a>, during the period from 1 January 2018 through 31 December 2018, for the following CA's (referred to collectively as the Central Infrastructure of the Dutch Government PKI "PKIoverheid"):

Certificate Authority	SHA2-fingerprint
Root Certification Authority – G2 ("Staat der Nederlanden Root CA – G2")	66:8C:83:94:7D:A6:3B:72:4B:EC:E1:74: 3C:31:A0:E6:AE:D0:DB:8E:C5:B3:1B:E3: 77:BB:78:4F:91:B6:71:6F
Subordinate Domain-CA for Organisations – G2 ("Staat der Nederlanden Organisatie CA – G2")	85:A8:F5:86:6D:D7:8D:F1:73:B0:66:73: 17:C5:9B:2D:62:42:DE:59:EB:01:BB:2F: 2E:8B:9D:B7:14:B4:CA:27
Root Certification Authority – G3 ("Staat der Nederlanden Root CA – G3")	3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8: 6F:53:5F:E1:72:C1:85:D0:FD:39:86:58: 37:CF:36:18:7F:A6:F4:28
Subordinate Domain-CA for Organisations- Services – G3 ("Staat der Nederlanden Organisatie Services CA – G3")	D9:58:1D:BD:E9:9B:39:EE:FF:6C:E5:C8: 0D:E1:65:0D:A0:C1:C8:A1:09:70:5E:D2: 86:C5:3B:C9:5E:66:55:E4
Root Certificate Authority ("Staat der Nederlanden EV Root CA")	4D:24:91:41:4C:FE:95:67:46:EC:4C:EF: A6:CF:6F:72:E2:8A:13:29:43:2F:9D:8A: 90:7A:C4:CB:5D:AD:C1:5A



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Certificate Authority	SHA2-fingerprint
Subordinate CA ("Staat der Nederlanden EV Intermediair CA")	DC:86:2A:3F:02:5E:F7:F2:52:FA:94:13: CB:60:DE:25:E5:7E:6A:A7:E1:FB:1D:CA: 7B:59:D2:C2:21:71:06:EA
Subordinate Domain-CA for Organisations-	82:22:BC:4F:E7:A3:DD:CA:9E:F0:BF:0D:
Persons – G3 ("Staat der Nederlanden	68:2A:C8:88:79:9F:87:82:2D:15:33:2A:54:
Organisatie Persoon CA – G3")	C0:BF:DF:C6:85:4F:7B
Subordinate Domain-CA for Government-	2E:7A:0A:3B:0C:52:7E:B2:0C:52:25:3C:
Citizen – G3 ("Staat der Nederlanden Burger	8D:22:78:CA:10:81:36:A8:CA:3A:4E:A2:
CA – G3")	2D:A7:B5:9B:AC:90:65:0A
Subordinate Domain-CA for Autonomous	AD:49:3D:6E:85:EC:60:8A:B8:13:A8:87:
Devices – G3 ("Staat der Nederlanden	BD:C4:D4:19:6A:0B:C9:B3:3D:25:65:A7:
Autonome Apparaten CA – G3")	FA:8A:C4:30:F0:8A:99:A5
Subordinate Domain-CA for Government-	2F:2F:0C:84:4F:B3:36:A9:42:1A:B6:FA:
Citizen – G2 ("Staat der Nederlanden Burger	36:DC:DA:C3:BB:84:E0:38:4C:FF:5D:AD:
CA – G2")	51:11:3C:8C:A4:24:E6:A4
Subordinate Domain-CA for Autonomous	1B:17:10:02:64:24:7D:70:90:03:61:16:23:
Devices – G2 ("Staat der Nederlanden	8C:93:F4:58:53:ED:E5:AE:A6:F9:F1:A4:
Autonome Apparaten CA – G2")	52:4F:69:78:DD:89:54

The management of Logius is responsible for its assertion. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants, and accordingly, included:

- Obtaining an understanding of CA's key and SSL certificate life cycle management business
  practices and its controls over key and SSL certificate integrity, over the continuity of key and
  certificate life cycle management operations, and over the development, maintenance, and
  operation of systems integrity;
- Selectively testing transactions executed in accordance with disclosed SSL certificate life cycle management business practices;
- Testing and evaluating the operating effectiveness of the controls; and
- Performing such other procedures as we considered necessary in the circumstances.

We believe that our examination provides a reasonable basis for our opinion.

Through the Central Infrastructure of the Dutch Government PKI "PKIoverheid", Logius provides certificates to subordinate Certification Services Providers (CSPs) in order to become part of the



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Dutch Government PKI "PKloverheid". The relative effectiveness and significance of specific controls at the Central Infrastructure of the Dutch Government PKI "PKloverheid" and their effect on assessments of control risk for subscribers and relying parties are dependent on their interaction with the controls and other factors present at subordinate Certification Service Providers operating within the Dutch Government PKI and their individual subscriber and relying party locations. During our examination, we have performed no procedures to evaluate the effectiveness of controls at these locations.

Because of the nature and inherent limitations of controls, Logius' ability to meet the aforementioned criteria may be affected. For example, controls may not prevent, or detect and correct, error, fraud, unauthorized access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection of any conclusions based on our findings to future periods is subject to the risk that changes may alter the validity of such conclusions.

As stated by Logius in the Management Assertion, the Root Certification Authority – G2 ("Staat der Nederlanden Root CA – G2") and the Subordinate Domain-CA for Organisations – G2 ("Staat der Nederlanden Organisatie CA – G2") do not provide revocation information via an Online Certificate Status Protocol (OCSP) service (the G3 Root CA and Subordinate Domain-CA provide OCSP services).

In our opinion, for the period 1 January 2018 through 31 December 2018, Logius management's assertion, as set forth above, except for the effects of the matter discussed in the preceding paragraph, is fairly stated and in all material respects has:

- Disclosed its Certificate practices and procedures in its <u>Certification Practice Statement</u>, version 4.2, dated December 2018, including its commitment to provide SSL Certificates in conformity with the applicable CA/Browser Forum Guidelines and
- Maintained effective controls to provide reasonable assurance that:
  - subscriber information was properly collected, authenticated (for the registration activities performed by the CA, Registration Authority (RA) and subcontractor) and verified;
  - the integrity of keys and certificates it manages was established and protected throughout their life cycles;
  - logical and physical access to CA systems and data was restricted to authorized individuals:
  - the continuity of key and certificate management operations was maintained; and
  - CA systems development, maintenance and operations were properly authorized and performed to maintain CA systems integrity.

based on the WebTrust® Principles and Criteria for Certification Authorities – SSL Baseline Requirements with Network Security – Version 2.2.

The WebTrust seal of assurance for Certification Authorities on the Logius' website constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.



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This report does not include any representation as to the quality of the certification services of Logius beyond those covered by the WebTrust® for Certification Authorities – Baseline Requirements, nor the suitability of any services of Logius for any customer's intended purpose.

This WebTrust report has been re-issued due to an omission in the previous Logius management assertion regarding the scope of the WebTrust® for Certification Authorities – Baseline Requirements audit. Some of the intermediate CAs were omitted by accident in the management assertion, although at that time, were already audited against the relevant criteria and principles. No additional work has been performed since our independent auditor report (dated 29 January 2019) with respect to the scope and audit period covered by this report.

On behalf of KPMG Advisory N.V.

drs. ing. R.F. Koorn RE CISA Partner