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### INDEPENDENT AUDITOR'S REPORT

# To the Management of Electronic Transactions Development Agency (Public Organization) of Thailand

We have examined the assertion by the management Electronic Transactions Development Agency (Public Organization) ("ETDA"), that in providing its Certification Authority ("CA") services known as Thailand National Root CA - G1 ("Thailand NRCA"), during the period of 1 September 2015 through 31 August 2016 has:

- Disclosed its Certificate practices and procedures and its commitment to provide SSL Certificates in conformity with the applicable CA/Browser Forum Guidelines.
- Maintained effective controls to provide reasonable assurance that:
  - The integrity of keys and SSL certificates it managed is established and protected throughout their life cycles
- Maintained effective controls to provide reasonable assurance that:
  - Logical and physical access to CA systems and data was restricted to authorized individuals; and
  - o The continuity of key and certificate management operations was maintained; and
  - CA systems maintenance and operations were properly authorized and performed to maintain CA systems integrity; and
  - Network and Certificate System Security Requirements set forth by the CA/Browswer Forum were met

based on the WebTrust Principles & Criteria for Certification Authorities - SSL Baseline with Network Security - Version 2.

ETDA's management 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 Canadian Institute of Chartered Accountants ("CICA"), and accordingly, included (1) obtaining an understanding of ETDA's key and certification life cycle management business and information privacy practices and its controls over key and certificate integrity, over the authenticity and confidentiality of subscriber and relying party information, over the continuity of key and certificate life cycle management operations, and over the development, maintenance and operation of systems integrity; (2) selectively testing transactions executed in accordance with disclosed key and certificate life cycle management business and information privacy practices; (3) testing and evaluating the operating effectiveness of the controls; and (4) performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.



The relative effectiveness and significance of specific controls at ETDA 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 individual subscriber and relying party locations. We have performed no procedures to evaluate the effectiveness of controls at individual subscriber and relying party locations.

Because of the nature and inherent limitations of controls, ETDA's 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.

In our opinion, ETDA management's assertion for the period 1 September 2015 through 31 August 2016, as referred to above, is fairly stated, in all material respects, based on the WebTrust Principles & Criteria for Certification Authorities - SSL Baseline with Network Security - Version 2.0.

The WebTrust<sup>SM/TM</sup> seal of assurance for Certification Authorities on ETDA's Thailand NRCA 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.

This report does not include any representation as to the quality of ETDA's services beyond those covered by the WebTrust Principles & Criteria for Certification Authorities - SSL Baseline with Network Security - Version 2.0, nor the suitability of any of ETDA's services for any customer's intended purpose.

BDO Malaysia Certified Public Accountants Kuala Lumpur, Malaysia 1<sup>st</sup> November 2016 Electronic Transactions Development Agency (Public Organization)



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1<sup>st</sup> November 2016

Assertion by Management as to its Disclosure of Its Business Practices and its Controls Over Certification Authority Operations During the Period 1 September 2015 Through 31 August 2016.

Electronics Transactions Development Agency (Public Organization) ("ETDA") operates a Certification Authority ("CA") service known as Thailand National Root Certification Authority ("Thailand NRCA") - G1. As the National Root CA of Thailand, ETDA provides the following certification authority services:

- Subscriber Registration
- Certificate Issuance
- Certificate Distribution (using an online repository)
- Certificate Rekey
- Certificate Revocation
- Certificate Status Information Processing (using an online repository)

Management of ETDA is responsible for establishing and maintaining effective controls over its CA operation, including CA business practices disclosure, service integrity (including key and certificate life cycle management controls), and CA environmental controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

Controls have inherent limitation, including the possibility of human error and the circumvention or overriding of controls, accordingly, even effective controls can provide only reasonable assurance with respect to ETDA's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Management of ETDA has assessed the controls over its CA operations. Based on that assessment, ETDA Management asserts that in providing its CA services known as Thailand National Root Certification Authority - G1 in Bangkok, Thailand, during the period 1 September 2015 through 31 August 2016.

#### ETDA has:

- Disclosed its Certificate practices and procedures and its commitment to provide SSL Certificates in conformity with the applicable CA/Browser Forum Guidelines.
- Maintained effective controls to provide reasonable assurance that:
  - The integrity of keys and SSL certificates it managed is established and protected throughout their life cycles.



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in accordance with the WebTrust Principles & Criteria for Certification Authorities - SSL Baseline with Network Security - Version 2, which included the following:

# Principle 1: Baseline Requirements Business Practice Disclosure

## Principle 2: Service Integrity

**Key Generation Ceremony** 

Certificate Content and Profile

Certificate Request Requirements

**Verification Practices** 

Certificate Revocation and Status Checking

**Employee and Third Parties** 

**Data Records** 

Audit

Principle 3: CA Environmental Controls

Principle 4: Network and Certificate Systems Security Requirements

Yours Faithfully,

Mrs. Surangkana Wayuparb

Chief Executive Officer

Electronic Transactions Development Agency (Public Organization)