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# **Report of Independent Accountant**

To the Management of Korea Electronic Certification Authority, Inc.:

We have examined the <u>assertion</u> by the management of Korea Electronic Certification Authority, Inc. ("CrossCert") that in providing its Certification Authority ("CA") services at Republic of Korea, CrossCert-CA, during the period July 1, 2013 through June 30, 2014, CrossCert, a subordinate CA of Symantec Corporation., has:

- disclosed its Business, Key Life Cycle Management, Certificate Life Cycle Management, and CA Environmental Control practices in its
  - Certification Practice Statement
- maintained effective controls to provide reasonable assurance that
  - CrossCert provides its services in accordance with its Certification Practice Statement
- maintained effective controls to provide reasonable assurance that
  - the integrity of keys and certificates it manages is established and protected throughout their life cycles;
  - the integrity of subscriber keys and certificates it manages is established and protected throughout their life cycles; and
  - the Subscriber information is properly authenticated for the registration activities performed by CrossCert
- maintained effective controls to provide reasonable assurance that
  - logical and physical access to CA systems and data is restricted to authorized individuals;
  - the continuity of key and certificate management operations is maintained; and
  - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

based on the AICPA/CICA Trust Services Criteria for Certification Authorities.

CrossCert'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 American Institute of Certified Public Accountants, and accordingly, included (1) obtaining an understanding of CrossCert's key and certificate life cycle management business practices and its controls over key and certificate integrity, over the authenticity and privacy 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 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 CrossCert 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, CrossCert'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, for the period July 1, 2013 through June 30, 2014, CrossCert management's assertion, as set forth in the first paragraph, is fairly stated, in all material respects, based on the AICPA/CICA *Trust Services Criteria for Certification Authorities*.

The WebTrust seal of assurance for Certification Authority on CrossCert's Web site 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 CrossCert's services beyond those covered by the *Trust Services Criteria for Certification Authorities*, nor the suitability of any of CrossCert's services for any customer's intended purpose.

Partner, Suk Jin Yun

Ernst & Young Han Young, Seoul, Republic of Korea

August 13, 2014



Assertion of Management as to its Disclosure of its Business Practices and its Controls Over its Certification Authority Operations during the period July 1, 2013 through June 30, 2014

August 13, 2014

Korea Electronic Certification Authority, Inc. ("CrossCert") operates as a Certification Authority ("CA") known as CrossCert-CA. CrossCert, a subordinate CA of Symantec Corporation., provides the following CA services:

- Subscriber key management services
- Subscriber registration
- Certificate rekey
- Certificate issuance
- Certificate distribution using an online repository
- · Certificate revocation, and
- Certificate status information processing using an online repository

Management of CrossCert is responsible for establishing and maintaining effective controls over its CA operations, including <u>CA business practices disclosure</u>, 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 limitations, 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 CrossCert's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Management has assessed the controls over its CA operations. Based on that assessment, in CrossCert Management's opinion, in providing its CA services at Republic of Korea during the period July 1, 2013 through June 30, 2014, CrossCert-CA has:

- disclosed its Business, Key Life Cycle Management, Certificate Life Cycle Management, and CA Environmental Control practices in its
  - Certification Practice Statement
- maintained effective controls to provide reasonable assurance that
  - CrossCert provides its services in accordance with its Certification Practice



#### Statement

- maintained effective controls to provide reasonable assurance that
  - the integrity of keys and certificates it manages is established and protected throughout their life cycles;
  - the integrity of subscriber keys and certificates it manages is established and protected throughout their life cycles; and
  - the Subscriber information is properly authenticated for the registration activities performed by CrossCert
- maintained effective controls to provide reasonable assurance that
  - logical and physical access to CA systems and data is restricted to authorized individuals:
  - the continuity of key and certificate management operations is maintained;
     and
  - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

based on the AICPA/CICA <u>Trust Services Criteria for Certification Authorities</u> including the following:

## **CA Business Practices Disclosure**

**CA Business Practices Management** 

**Certification Practice Statement Management** 

#### **Service Integrity**

## CA Key Life Cycle Management Controls

**CA Key Generation** 

CA Key Storage, Backup, and Recovery

CA Public Key Distribution

CA Key Usage

CA Key Archival and Destruction

CA Key Compromise

CA Cryptographic Hardware Life Cycle Management

#### Subscriber Key Life Cycle Management Controls

CA-Provided Subscriber Key Generation Services

CA-Provided Subscriber Key Storage and Recovery Services

## Certificate Life Cycle Management Controls

Subscriber Registration

**CROSSCERT**: Korea Electronic Certification Authority



Certificate Rekey
Certificate Issuance
Certificate Distribution
Certificate Revocation
Certificate Validation

# **CA Environmental Controls**

Security Management
Asset Classification and Management
Personnel Security
Physical and Environmental Security
Operations Management
System Access Management
Systems Development and Maintenance
Business Continuity Management
Monitoring and Compliance
Audit Logging

Richard H Shinn

CEO CrossCert