

KPMG LLP Mission Towers I Suite 100 3975 Freedom Circle Drive Santa Clara, CA 95054

## Independent Accountants' Report

To the Management of Wells Fargo Bank N.A:

We have examined the assertion by the management of Wells Fargo Bank N.A ("Wells Fargo") that in providing its Certification Authority (CA) services at Shoreview, Minnesota; Tempe, Arizona; Homewood, Alabama; and Silas, North Carolina during the period September 1, 2014 through August 31, 2015, Wells Fargo has –

- disclosed its Business, Key Life Cycle Management, Certificate Life Cycle Management, and CA Environmental Control practices in its WellsSecure PKI Certification Practice Statement version 13.3, August 2015 on the Wells Fargo website, and WellsSecure PKI Certificate Policy version 13.3, August 2015 (restricted to authorized users and provided upon request)
- maintained effective controls to provide reasonable assurance that
  - Wells Fargo's Certification Practice Statement was consistent with its Certificate Policy
  - Wells Fargo provided its services in accordance with its Certificate Policy and Certification Practice Statement
- maintained effective controls to provide reasonable assurance that
  - the integrity of keys and certificates it manages was established and protected throughout their life cycles;
  - the integrity of subscriber keys and certificates it manages was established and protected throughout their life cycles;
  - the Subscriber information was properly authenticated (for the registration activities performed by Wells Fargo); and
  - subordinate CA certificate requests were accurate, authenticated, and approved
- maintained effective controls to provide reasonable assurance that
  - 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 AICPA/CPA Canada WebTrust for Certification Authorities Criteria, for the WellsSecure Public Root Certificate Authority, WellsSecure Certificate Authority, WellsSecure Public Root Certification Authority 01 G2, and WellsSecure Certification Authority 01 G2 (collectively referred to as the "Wells Fargo CAs").

Wells Fargo'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 Wells Fargo's key and certificate life cycle management business practices and its controls over key and certificate integrity, over the authenticity and confidentiality of subscriber 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 Wells Fargo 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, Wells Fargo'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 from September 1, 2014 through August 31, 2015, Wells Fargo management's assertion, as set forth in the first paragraph, is fairly stated, in all material respects, based on the AICPA/CPA Canada WebTrust for Certification Authorities Criteria.

This report does not include any representation as to the quality of Wells Fargo's services beyond those covered by the WebTrust for Certification Authorities Principles and Criteria, nor the suitability of any of Wells Fargo's services for any customer's intended purpose.

Wells Fargo's use of WebTrust<sup>®</sup> for Certification Authorities Seal 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.

KPMG LLP

December 21, 2015

Santa Clara, CA



# Assertion by Management as to its Disclosure of Its Business Practices and its Controls Over Its Certification Authority Operations during the period from September 1, 2014 through August 31, 2015

December 21, 2015

Wells Fargo Bank N.A ("Wells Fargo") provides the following certification services through WellsSecure Public Root Certificate Authority, WellsSecure Certificate Authority, WellsSecure Public Root Certification Authority 01 G2, and WellsSecure Certification Authority 01 G2 (collectively referred to as the "Wells Fargo CAs"):

- Subscriber key management services
- Subscriber registration
- Certificate issuance
- Certificate distribution (using an online repository)
- Certificate revocation
- Certificate status information processing (using an online repository)

Management of Wells Fargo is responsible for establishing and maintaining effective controls over its Wells Fargo CA operations, 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.

There are inherent limitations in any control, 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 Wells Fargo's Certification Authority 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 Wells Fargo Management's opinion, in providing its Certification Authority (CA) services at Shoreview, Minnesota; Tempe, Arizona; Homewood, Alabama; and Silas, North Carolina during the period from September 1, 2014 through August 31, 2015 for the Wells Fargo CAs, Wells Fargo has –

- disclosed its Business, Key Life Cycle Management, Certificate Life Cycle Management, and CA Environmental Control practices in its WellsSecure PKI Certification Practice Statement version 13.3, August 2015 on the Wells Fargo website, and WellsSecure PKI Certificate Policy version 13.3, August 2015 (restricted to authorized users and provided upon request)
- maintained effective controls to provide reasonable assurance that
  - Wells Fargo's Certification Practice Statement was consistent with its Certificate Policy
  - Wells Fargo provided its services in accordance with its Certificate Policy and Certification Practice Statement
- maintained effective controls to provide reasonable assurance that



- the integrity of keys and certificates it manages was established and protected throughout their life cycles;
- the integrity of subscriber keys and certificates it manages was established and protected throughout their life cycles;
- the Subscriber information was properly authenticated (for the registration activities performed by Wells Fargo); and
- subordinate CA certificate requests were accurate, authenticated, and approved
- maintained effective controls to provide reasonable assurance that
  - 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 AICPA/CPA Canada WebTrust for Certification Authorities Criteria including the following:

### **CA Business Practices Disclosure**

- Certification Practice Statement
- Certificate Policy

### **CA Business Practices Management**

- Certificate Policy Management
- Certification Practice Statement Management
- CP and CPS Consistency

### **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

# 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
- Requirements for Subscriber Key Management

## Certificate Life Cycle Management Controls

- Subscriber Registration
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

### Subordinate CA Certificate Life Cycle Management Controls

• Subordinate CA Certificate Life Cycle Management

Wells Fargo Bank N.A

Patty O'Boyle

Senior Vice President