Independent Auditor’s Assurance Report

To the management of Telia Company AB:

Scope
We have examined the statement by the management of Telia Company AB (Telia) that in providing its Certification Authority (CA) services known as Telia CA in Finland and Sweden, Telia, during the period from April 1, 2016 through March 31, 2017:

► disclosed its business, key life cycle management, certificate life cycle management, and CA environmental control practices in its Certification Practice Statements and policies in its Certificate Policies:
  - Telia Root Certificate Policy and Certification Practice Statement v2.2;
  - Telia Server Certificate Policy and Certification Practice Statement v1.7;
  - Telia Gateway Certificate Policy and Certification Practice Statement v1.4;
  - Telia Organizational User Certificate Policy and Certification Practice Statement v1.3;
  - TeliaSonera Customer CA Certificate Policy and Certification Practice Statement v1.2; and
  - Telia Production Certification Practice Statement v2.5

► maintained effective controls to provide reasonable assurance that
  - Telia CA’s Certification Practice Statements were consistent with its Certificate Policies; and
  - Telia CA provided its services in accordance with its Certificate Policies and Certification Practice Statements

► 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 Telia ); 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

in accordance with the Trust Services Principles and Criteria for Certification Authorities v.2.0 for the following CAs:
<table>
<thead>
<tr>
<th>Distinguished name of the CA</th>
<th>Issuer</th>
<th>SHA1 fingerprint of the CA certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CN = Sonera Class2 CA O = Sonera, C = FI</td>
<td>Self-signed</td>
<td>37 17 6d e6 07 7c 90 c5 b1 3e 93 1a b7 41 10 b4 f2 e4 9a 27</td>
</tr>
<tr>
<td>CN = TeliaSonera Root CA v1 O = TeliaSonera</td>
<td>Self-signed</td>
<td>43 13 bb 96 f1 d5 86 9b c1 4e 6a 92 fc f6 3d 28 82 37 Sonera Class2 CA</td>
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</tr>
<tr>
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<td>TeliaSonera Root CA v1</td>
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</tr>
<tr>
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<td>TeliaSonera Root CA v1</td>
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</tr>
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<td>TeliaSonera Root CA v1</td>
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<td>TeliaSonera Root CA v1</td>
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<td>TeliaSonera Root CA v1</td>
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</tr>
<tr>
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<td>TeliaSonera Root CA v1</td>
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</tr>
<tr>
<td>CN = Ericsson NL Individual CA v3 O = Ericsson, C = SE</td>
<td>TeliaSonera Root CA v1</td>
<td>f5 d9 4b dd 46 fe 6f 7b 3b 29 d0 b0 a4 37 f1 47 96 65 4d e5</td>
</tr>
<tr>
<td>CN = Ericsson NL Individual CA v2 O = Ericsson</td>
<td>TeliaSonera Root CA v1</td>
<td>27 45 1f a5 c9 1d aa bf e4 2e b1 e5 49 07 df 32 a5 b1 58 b0</td>
</tr>
</tbody>
</table>

Telia CA makes use of external registration authorities for specific subscriber registration activities as disclosed in Telia CA’s business practice disclosures. Our examination did not extend to the controls of external registration authorities.

**Telia’s responsibility**

Telia’s management is responsible for preparing the accompanying statement, including the completeness, accuracy and method of presentation of the statement and designing and implementing controls mentioned in the statement.

**Our Independence and Quality Control**

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.
Ernst & Young Godkendt Revisionspartnerselskab applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

**Auditor’s responsibility**

Our responsibility is to express an opinion on whether Telia’s management statement, as referred to above, is fairly stated, in all material respects in accordance with the Trust Services Principles and Criteria for Certification Authorities v.2.0.

Our examination was conducted in accordance with International Standards on Assurance Engagements 3000 “Assurance Engagements Other Than Audits or Review of Historical Financial Information” in order to obtain reasonable assurance for our opinion, and accordingly included:

1. obtaining an understanding of Telia CA’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 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.

The standard requires that we plan and perform our procedures to obtain reasonable assurance about whether, in all material respects, Telia’s management statement, as referred to above, is fairly stated.

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

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

**Inherent limitations**

Because of the nature and inherent limitations of controls, Telia’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.

**Opinion**

In our opinion, for the period April 1, 2016 through March 31, 2017, Telia’s management statement, as referred to above, is fairly stated, in all material respects, in accordance with the Trust Services Principles and Criteria for Certification Authorities v.2.0.

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1 ISQC 1, Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements
Intended users and purpose

Telia’s use of the WebTrust seal of assurance for certification authorities 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 Telia’s certification services beyond those covered by the Trust Service Principles and Criteria for Certification Authorities, nor the suitability of any of these Telia’s services for any customer’s intended purpose.

Copenhagen June 30, 2017
Ernst & Young P/S
Godkendt Revisionspartnerselskab

Claus Thaudahl Hansen
Partner, State Authorised Public Accountant

Juha Sunila
Senior Manager, CISA, CISSP
Telia Company AB’s Management Statement Regarding its Disclosure of its Business Practices and its Controls Over its Certification Authority Operations during the Period from April 1, 2016 through March 31, 2017

Telia Company AB (Telia) operates as a Certification Authority (CA) known as Telia CA. Telia CA provides the following CA services:

- Subscriber registration
- Certificate renewal
- Certificate rekey
- Certificate issuance
- Certificate distribution
- Certificate revocation
- Certificate validation
- Subscriber key generation and management
- Subordinate CA certification

Telia CA uses external registration authorities for specific subscriber registration activities as disclosed in Telia CA’s business practices disclosure.

Management of Telia is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its website, CA business practices management, CA environmental controls, CA key lifecycle management controls, subscriber key lifecycle management controls, certificate lifecycle management controls, and subordinate CA certificate lifecycle management controls. These controls contain monitoring mechanisms, and actions to be taken to correct deficiencies identified.

There are inherent limitations in any controls, 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 Telia’s Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Management has assessed the disclosure of its certification practices and controls over its CA services. Based on that assessment, to best of our knowledge and belief, we confirm that in providing its Certification Authority (CA) services in Finland and Sweden, Telia, during the period from April 1, 2016 through March 31, 2017:

- disclosed its business, key life cycle management, certificate life cycle management, and CA environmental control practices in its Certification Practice Statements and policies in its Certificate Policies
  - Telia Root Certificate Policy and Certification Practice Statement v2.2;
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  - Telia Organizational User Certificate Policy and Certification Practice Statement v1.3;
  - TeliaSonera Customer CA Certificate Policy and Certification Practice Statement v1.2; and
- **Telia Production Certification Practice Statement v2.5**

- maintained effective controls to provide reasonable assurance that
  - Telia CA’s Certification Practice Statements were consistent with its Certificate Policies; and
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</tr>
<tr>
<td>O = Sonera, C = FI</td>
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<td>41 10 b4 f2 e4 9a 27</td>
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<tr>
<td>O = TeliaSonera</td>
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<td>68 66 d4 3b 92 24</td>
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<td>O = TeliaSonera, C = SE</td>
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<td>fb 4f 95 04 60 f5</td>
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<td>07 df 32 a5 b1 58 b0</td>
</tr>
</tbody>
</table>

in accordance with the Trust Services Principles and Criteria for Certification Authorities v.2.0 including the following:

**CA Business Practices Disclosure**
- Certification Practice Statement (CPS)
- 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

**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 Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

**Subordinate CA Certificate Life Cycle Management Controls**
- Subordinate CA Certificate Life Cycle Management

Stockholm, June 30, 2017

Telia Company AB

[Signature]

Patrik Skoglund
Head of Automation & Systems