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## Independent Auditor's Report

Amstelveen, 19 August 2019

### **To the Management of DigiCert, Inc.**

KPN is an Affiliate of DigiCert, and as such has technical control and responsibility over the Sub-CAs that are hosted on a system that is licensed to KPN B.V. (hereafter: KPN) by DigiCert.

The following Trust Service Provider component services are being processed by KPN:

- Certificate Generation Service;
- Dissemination Service;
- Revocation Status Service.

We have been engaged, in a reasonable assurance engagement, to report on, for its Certification Authority (CA) operations at Apeldoorn, KPN's disclosure of its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices, the consistency of its Certification Practice Statement with the Symantec Trust Network (STN) Certificate Policy, the provision of services in accordance with the STN Certificate Policy and Certification Practice Statement, and the effectiveness of its controls over key and certificate integrity, over the continuity of key and certificate lifecycle management operations, and over development, maintenance and operation of CA systems integrity throughout the period 25 May 2018 – 24 May 2019 for its CAs as enumerated in Attachment A.

KPN makes use of external registration authorities for specific subscriber registration activities as disclosed in KPN's business practices. Our procedures did not extend to the controls exercised by these external registration authorities.

KPN does not escrow its CA keys, does not provide subscriber key generation services, and does not provide certificate suspension services. Accordingly, our procedures did not extend to controls that would address those criteria.

### **Certification authority's responsibilities**

KPN's management is responsible for its disclosures and controls, including the provision of its described services in accordance with the [WebTrust® Principles and Criteria for Certification Authorities, version 2.1 – September 2017](#).

### **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,



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which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm 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 responsibilities**

Our responsibility is to express an opinion on the conformity of KPN management's disclosures and controls with the WebTrust Principles and Criteria for Certification Authorities v2.1, based on our procedures.

We conducted our engagement in accordance with the Dutch Directive 3000A '*Attest-opdrachten*' (attestation engagements), as issued by NOREA, the IT Auditors Association in the Netherlands, and the International Standard on Assurance Engagements 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board.

This standard requires that we comply with ethical requirements and plan and perform our procedures to obtain reasonable assurance about whether, in all material respects, management's disclosures and controls conform to the WebTrust Criteria, and, accordingly, included:

- 1) obtaining an understanding of KPN's key and certificate lifecycle management business practices and its controls over key and certificate integrity, over the continuity of key and certificate lifecycle management operations and over development, maintenance and operation of systems integrity;
- 2) selectively testing transactions executed in accordance with disclosed key and certificate lifecycle 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 the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Relative effectiveness of controls**

The relative effectiveness and significance of specific controls at KPN 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.

### **Inherent limitations**

Because of the nature and inherent limitations of controls, KPN'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



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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, throughout the period 25 May 2018 – 24 May 2019, KPN has, in all material respects:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its:
  - [KPN Certification Practice Statement Symantec Trust Network, v3.6 April 1, 2016](#)
- maintained effective controls to provide reasonable assurance that:
  - KPN's Certification Practice Statement is consistent with the STN Certificate Policy
  - KPN provides its services in accordance with its Certification Practice Statement(s)
- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
  - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
- 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

in accordance with the WebTrust Principles and Criteria for Certification Authorities v2.1. This report does not include any representation as to the quality of KPN's services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities v2.1, nor the suitability of any of KPN's services for any customer's intended purpose.

On behalf of KPMG Advisory N.V.

*(original signed by)*

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



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## Appendix A – List of Subordinate CAs in Scope

CA Owner/Certificate Name	Certificate Serial Number	SHA256 Fingerprint
ABN AMRO CA – G2	411A8F246F9499C1B5A4F35AED3EA311	B91AF4B7FFC8DB435304212030724BECB2 F23686552149FD671339C9528A65F9
ABN AMRO CA – G2	6EA805BE07EAAAB36E5EE878BB88FE1D4	AF6BFC9FF646FA900FEA0D79B89932304E 27F84CC9E261BDE52B0EC04CF5AD85
ABN AMRO CA – G2	13DFD759C63ADEE0C0776BCA9193B844	4CD77909EC1CF5B03DFE1EF6310F29868 9EF18C7EF678D5C207767331938BA9A
ABN AMRO Test CA – G2	2D1201300A83FA74E8C871766BED453B	52D90CEF761E2458A8B51638EFOA051358 4EBA986E740C573AD2A73882818EE9
ABN AMRO Test CA – G2	32056153A6AC2A54C42F24BE1AACFB81	783425C5FF58BF45F267C5B68193E381382 29B4135A943818AA34A187C6CE65F
KPN Class 2 Managed PKI Individual Subscriber CA 2016	6463A535E8758F97622528A3192939CB	6F287CCC986473FEA29C558C25B8B2F4B D06AB14477EECC28390BFC1FC9BE4B4
Philips Extranet CA – G4	07314954129460BC7977A8EA6A8AA740	E20AFE72530C529D4046852144A267337 221C5BE303528C07EF640BCAD6F091
Shell Information Technology International CA – G3	57B6E0B91CED71D26C3389D2336F1566	91603DADB54CBCDEDD43805EA7A272EB 31DF8444775064A01821C2B650890DCE