



**KPMG Advisory N.V.**  
P.O. Box 74500  
1070 DB Amsterdam  
The Netherlands

Laan van Langerhuize 1  
1186 DS Amstelveen  
The Netherlands  
Telephone +31 (0)20 656 7890  
[www.kpmg.com/nl](http://www.kpmg.com/nl)

## Independent Auditor's Report

Amstelveen, 15 July 2019

### **To the Management of ABN AMRO Clearing Bank N.V.**

The Certificate Authorities as per appendix A are technically controlled by KPN B.V., but further operated by ABN AMRO Clearing Bank N.V. (hereafter: ABN). In this role, ABN acts as the sole Registration Authority (RA) for this CA and as such performs the authentication of subscriber information.

We have been engaged, in a reasonable assurance engagement, to report on, for its RA operations, ABN's disclosure and the effectiveness of its controls over the authenticity and confidentiality of subscriber and relying party information throughout the period 25 May 2018 – 24 May 2019 for the CA's as mentioned in Appendix A.

ABN makes use of KPN as technical operator of the CA and KPN as the issuing CA for ABN's subordinate CA for disclosure of its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices as well as for controls over key and certificate integrity, the continuity of key and certificate lifecycle management operations, and development, maintenance, and operation of CA systems. Our procedures did not extend to the activities and controls exercised by KPN.

ABN 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**

ABN'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](#).



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## 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.

We apply International Standard on Quality Control 1<sup>1</sup>, and accordingly maintain 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 ABN management's 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' (attest 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 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 ABN's key and certificate lifecycle management business practices and its controls over the authenticity and confidentiality of subscriber and relying party information;
- 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 ABN 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.

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<sup>1</sup> ISQC 1, Quality Control for firms that perform Audits and Reviews of Financial Statements, and other Assurance and related Services Engagements.



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### **Inherent limitations**

Because of the nature and inherent limitations of controls, ABN'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.

### **Basis for qualified opinion**

During our procedures, we noted that sufficient Certificate Revocation controls were not consistently implemented at ABN throughout the audit period. Specifically:

- Based on frequency and risk rating, we selected in total 25 samples of revocations for the period in scope. Based on our inspection, we noted 3 deviations. In all 3 cases, there is no request for revocation or documentation related to renewal or problems with the certificate. As such, we could not determine the reason for the revocation, whether the revocation request was authorized and validated nor whether the revocation was performed in-time.

As a result, WebTrust control objective 6.6, which reads:

#### *Certificate Revocation*

*The CA maintains controls to provide reasonable assurance that certificates are revoked, based on authorised and validated certificate revocation requests within the time frame in accordance with the CA's disclosed business practices*

is not met.



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### **Qualified opinion**

In our opinion, except for the matters described in the previous section “Basis for qualified opinion”, throughout the period 25 May 2018 – 24 May 2019, ABN has, in all material respects maintained effective controls to provide reasonable assurance that subscriber information is properly authenticated in accordance with the applicable WebTrust Principles and Criteria for Certification Authorities v2.1.

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

Amstelveen, 15 July 2019

On behalf of KPMG Advisory N.V.

*(original signed by)*

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



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## Appendix A: Certificate Authorities in scope

CA Owner/Certificate Name	Certificate Serial Number	SHA256 Fingerprint
ABN AMRO CA – G2	411A8F246F9499C1B5A4F35AED3EA311	B91AF4B7FFC8DB435304212030724BECB2F23686552149FD671339C9528A65F9
ABN AMRO CA – G2	6EA805BE07EAAAB36E5EE878BB88FE1D4	AF6BFC9FF646FA900FEA0D79B89932304E27F84CC9E261BDE52B0EC04CF5AD85
ABN AMRO CA – G2	13DFD759C63ADEE0C0776BCA9193B844	4CD77909EC1CF5B03DFE1EF6310F298689EF18C7EF678D5C207767331938BA9A
ABN AMRO Test CA – G2	2D1201300A83FA74E8C871766BED453B	52D90CEF761E2458A8B51638EF0A0513584EBA986E740C573AD2A73882818EE9
ABN AMRO Test CA – G2	32056153A6AC2A54C42F24BE1AACFB81	783425C5FF58BF45F267C5B68193E38138229B4135A943818AA34A187C6CE65F