

Report of Independent Accountants

To the Management of QuoVadis Limited

We have examined the accompanying [assertion](#) made by the management of QuoVadis Limited (QuoVadis), titled **Management's Assertion Regarding the Effectiveness of Its Controls Over its Code Signing Certification Authority Operations. Based on WebTrust Principles and Criteria for Certification Authorities - Publicly Trusted Code Signing Certificates v1.0.1** that provides Code Signing Certification Authority services at Bermuda, the Netherlands, Switzerland, the United Kingdom, Belgium and Germany, throughout the period 1 January 2019 to 31 December 2019 for Certification Authorities as enumerated in [Appendix A](#), QuoVadis has:

- ▶ Disclosed its Code Signing (CS) Certificate practices and procedures and its:
 - ▶ [QuoVadis Root Certification Authority Root CA 3 Certificate Policy/ Certification Practice Statement, version 4.28](#) dated 23 August 2019 for the QuoVadis Root CA, QuoVadis Root CA 1 G3, QuoVadis Root CA 3, and QuoVadis Root CA 3 G3; and
 - ▶ [QuoVadis Root CA 2 Certification Policy/ Certification Practice Statement, version 2.7](#) dated 20 June 2019 for the QuoVadis Root CA 2, QuoVadis Root CA 2 G3.

including its commitment to provide Code Signing Certificates in conformity with the applicable Minimum Requirements for Publicly-Trusted Code Signing, and provided such services in accordance with its disclosed practices

- ▶ Maintained effective controls to provide reasonable assurance that:
 - ▶ CS subscriber information was properly collected, authenticated (for the registration activities performed by the Certification Authority) and verified; and
 - ▶ The integrity of keys and CS certificates it manages is established and protected throughout their life cycles

based on the [WebTrust Principles and Criteria for Certification Authorities - Publicly Trusted Code Signing Certificates v1.0.1](#).

QuoVadis' management is responsible for its assertion and specifying the aforementioned criteria. 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 Chartered Professional Accountants of Canada ("CPA Canada"). Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management's assertion. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management's assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

The relative effectiveness and significance of specific controls at QuoVadis 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.



Our examination was not conducted for the purpose of evaluating QuoVadis' cybersecurity risk management program. Accordingly, we do not express an opinion or any other form of assurance on its cybersecurity risk management program.

There are inherent limitations in the effectiveness of any system of internal control, including the possibility of human error and the circumvention of controls. Because of inherent limitations in its internal control, QuoVadis may achieve reasonable, but not absolute assurance that all security events are prevented and, for those controls may provide reasonable, but not absolute assurance that its commitments and system requirements are achieved. 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.

Examples of inherent limitations of internal controls related to security include (a) vulnerabilities in information technology components as a result of design by their manufacturer or developer; (b) breakdown of internal control at a vendor or business partner; and (c) persistent attackers with the resources to use advanced technical means and sophisticated social engineering techniques specifically targeting the entity. Furthermore, the projection of any evaluations of effectiveness to future periods is subject to the risk that controls may become inadequate because of changes in conditions, that the degree of compliance with such controls may deteriorate, or that changes made to the system or controls, or the failure to make needed changes to the system or controls, may alter the validity of such evaluations.

In our opinion, QuoVadis management's assertion referred to above is fairly stated, in all material respects, based on the aforementioned criteria.

QuoVadis' use of the WebTrust Principles and Criteria for Certification Authorities - Publicly Trusted Code Signing 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.

This report does not include any representation as to the quality of QuoVadis' CA services beyond those covered by *WebTrust Principles and Criteria for Certification Authorities - Publicly Trusted Code Signing Certificates v1.0.1* criteria, or the suitability of any of QuoVadis' services for any customer's intended purpose.

A handwritten signature in black ink that reads 'Ernst & Young LLP'.

Ernst & Young LLP

31 March 2020

Management's Assertion Regarding the Effectiveness of Its Controls Over its Code Signing Certification Authority Operations. Based on WebTrust Principles and Criteria for Certification Authorities - Publicly Trusted Code Signing Certificates v1.0.1

31 March 2020

The management of QuoVadis Limited (QuoVadis) has assessed the disclosure of its certificate practices and its controls over its Code Signing Certification Authority services. Based on that assessment, in QuoVadis Management's opinion, in providing its Code Signing Certification Authority services at Bermuda, the Netherlands, Switzerland, the United Kingdom, Belgium and Germany, during the period from 1 January 2019 through 31 December 2019 has:

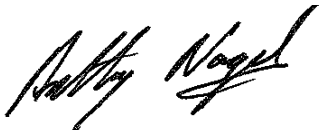
- Disclosed its Code Signing (CS) Certificate practices and procedures in its:
 - [QuoVadis Root Certification Authority Root CA 3 Certificate Policy/ Certification Practice Statement, version 4.28](#) dated 23 August 2019 for the QuoVadis Root CA, QuoVadis Root CA 1 G3, QuoVadis Root CA 3, and QuoVadis Root CA 3 G3; and
 - [QuoVadis Root CA 2 Certification Policy/ Certification Practice Statement, version 2.7](#) dated 20 June 2019 for the QuoVadis Root CA 2, QuoVadis Root CA 2 G3.

including its commitment to provide Code Signing Certificates in conformity with the applicable Minimum Requirements for Publicly-Trusted Code Signing, and provided such services in accordance with its disclosed practices,

- Maintained effective controls to provide reasonable assurance that:
 - CS subscriber information was properly collected, authenticated (for the registration activities performed by the Certification Authority) and verified; and
 - The integrity of keys and CS certificates it manages is established and protected throughout their life cycles

for the QuoVadis Root CA, QuoVadis Root CA 1 G3, QuoVadis Root CA 2, QuoVadis Root CA 2 G3, QuoVadis Root CA 3, QuoVadis Root CA 3 G3, the issuing CAs, and Time Stamping certificates in [Appendix A](#), based on the [WebTrust Principles and Criteria for Certification Authorities - Publicly Trusted Code Signing Certificates v1.0.1](#).

Very truly yours,



Anthony Nagel
Director
QuoVadis Limited

Appendix A to Assertion of Management

Distinguished name	Certificate Serial Number	SHA256 fingerprint
CN = QuoVadis Root Certification Authority OU = Root Certification Authority O = QuoVadis Limited C = BM	3ab6508b	A45EDE3BBBF09C8AE15C72EFC07268D693A21C996FD51E67CA079460FD6D8873
CN = QuoVadis Root CA 1 G3 O = QuoVadis Limited C = BM	78585f2ead2c194be3370735341328b596d46593	8A866FD1B276B57E578E921C65828A2BED58E9F2F288054134B7F1F4BFC9CC74
CN = QuoVadis Root CA 2 O = QuoVadis Limited C = BM	0509	85A0DD7DD720ADB7FF05F83D542B209DC7FF4528F7D677B18389FEA5E5C49E86
CN = QuoVadis Root CA 2 G3 O = QuoVadis Limited C = BM	445734245b81899b35f2ceb82b3b5ba726f07528	8FE4FB0AF93A4D0D67DB0BEBB23E37C71BF325DCBCDD240EA04DAF58B47E1840
CN = QuoVadis Root CA 3 O = QuoVadis Limited C = BM	05c6	18F1FC7F205DF8ADDDEB7FE007DD57E3AF375A9C4D8D73546BF4F1FED1E18D35
CN = QuoVadis Root CA 3 G3 O = QuoVadis Limited C = BM	2ef59b0228a7db7affd5a3a9eebd03a0cf126a1d	88EF81DE202EB018452E43F864725CEA5FBD1FC2D9D205730709C5D8B8690F46
CN = QuoVadis Code Signing CA G1 O = QuoVadis Limited C = BM	1ce6507ec1d9c0b16178feee058cae7a0b142858	DA0AFAF15CD300E34B520FB78A4FA68EB42C4601E939B903E0B1D71DF5965BFF
CN = QuoVadis Time-Stamping Authority CA G1 O = QuoVadis Trustlink B.V. 2.5.4.97 = NTRNL-30237459 C = NL	4335c24f7215311c1098838d7a0d5584cdbf517f	D2BA0BFEC43FA7803860CDE6B3377421B1F563EC124B51D908415B0E937323E6

Distinguished name	Certificate Serial Number	SHA256 fingerprint
Time Stamping Certificates		
CN = betsa01.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.6 OU = Time-stamp Authority O = QuoVadis Trustlink BVBA 2.5.4.97 = NTRBE-0537698318 C = BE	3a09853b026439cff22 38e569f1cd82383a4d6 45	ED8BDADD09356B5187920CFBDEEFFDCEDE9AD4048E6721E99C08F060B3DA506D
CN = betsa02.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.6 OU = Time-stamp Authority O = QuoVadis Trustlink BVBA 2.5.4.97 = NTRBE-0537698318 C = BE	06ed901728ebb49fdb e957910d05dac61423a 98	02BC927087B228EB75D793334FDE666924EA629C909E9129B6DB113EE487B867
CN = betsa03.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.6 OU = Time-stamp Authority O = QuoVadis Trustlink BVBA 2.5.4.97 = NTRBE-0537698318 C = BE	17e2d9c5314c1ee2ab6 7989a68e82696ea4c2f 4b	9EBF3643C1F8317EADC272C88AA9148D7910044E99EC68804A5D843F0B8EA532
CN = chtsa01.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.1 OU = Time-stamp Authority O = QuoVadis Trustlink Schweiz AG 2.5.4.97 = NTRCH-CHE-112.210.349 C = CH	45d5774dc332377a945 7da6eaf7de20b2f0314 3c	B373B2AAA63576BBF7E0D5D67D18B65C7C96E558FBFE915771EF97CBEFF165DA
CN = chtsa02.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.1 OU = Time-stamp Authority O = QuoVadis Trustlink Schweiz AG 2.5.4.97 = NTRCH-CHE-112.210.349 C = CH	23cb30b4162a086ce3f d2c58210432e15ec4ab 0d	C4043AF57C89FA1AB1064735412A6E8DD226C1B0E6A284888878F437645290E5
CN = chtsa03.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.1 OU = Time-stamp Authority O = QuoVadis Trustlink Schweiz AG 2.5.4.97 = NTRCH-CHE-112.210.349 C = CH	432a3f0a75a6126a622 f16e8a0bcda901e41f7 2d	F2CCAF539E598EF083E56535821118533E86870EFD5D3C1B4FA539B5115A118F

Distinguished name	Certificate Serial Number	SHA256 fingerprint
CN = eutsa01.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.7 OU = TSA O = QuoVadis Trustlink B.V. 2.5.4.97 = NTRNL-30237459 C = NL	7bd910c013569484dc1 22ee2e23ddf7254ac33 2e	0D88440354C719F9E3C3F2DB10F2065883742AAF55528ED5F338D698D204C0DF
CN = eutsa02.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.7 OU = TSA O = QuoVadis Trustlink B.V. 2.5.4.97 = NTRNL-30237459 C = NL	596ffe7150928e55b1c 9af892c67febe58779c 46	1BB0BDC8E11C326F86248D58E0C12E8C77914AD18EC39E0FBE8EBE61A845B2CB
CN = eutsa03.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.7 OU = TSA O = QuoVadis Trustlink B.V. 2.5.4.97 = NTRNL-30237459 C = NL	2677e0eb5e2390f823a f51b9d1c8c14ebc06ba 3b	BA98024D2A283CA8AFE909A2E5C88F2590C9201A80BA17FBF1A64249188F62E0
CN = tsa01.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.0 OU = nCipher DSE ESN:FBC9-3056- CE0A OU = Time-stamp Authority O = QuoVadis Limited C = CH	7ba9bf38ffc6c26b2b9 0747c333f0b26835e75 f8	A587A4DA6C655EE77EC9CE25552945F2610F81357AF660124D17E9B3554D9721
CN = tsa02.quovadisglobal.com OU = 1.3.6.1.4.1.8024.0.2000.6.3 OU = Thales TSS ESN:B87E-D107- 917F OU = Time-stamp Authority O = QuoVadis Limited C = CH	67403a2b46ee39db73d 2d8fa08d45e6b550a20 5d	A4CDC3C1D7C00F741F99E99696188845951F09C4DB96AF86B8ABC519F1BC692E

Distinguished name	Certificate Serial Number	SHA256 fingerprint
CN = chtsa01.quovadisglobal.com OU = Qualified TSA OU = 1.3.6.1.4.1.8024.0.2000.6.1 O = QuoVadis Trustlink Schweiz AG 2.5.4.97 = NTRCH-CHE-112.210.349 C = CH	50fe57881ac830eab3c b2f0f5142ccbab28865 c6	7663D593856C28DB39358453D90B9C1A342B15172CAD9F4F0EF87A38B7F9A880
CN = chtsa02.quovadisglobal.com OU = Qualified TSA OU = 1.3.6.1.4.1.8024.0.2000.6.1 O = QuoVadis Trustlink Schweiz AG 2.5.4.97 = NTRCH-CHE-112.210.349 C = CH	17bdf3e1d2ddf9892f9 8461dd662aedba5a21f 09	9BDB4A2BEC0D2ABA31A2787451DB79D09CAD9F188252B644E8813B9B89A725DD
CN = chtsa03.quovadisglobal.com OU = Qualified TSA OU = 1.3.6.1.4.1.8024.0.2000.6.1 O = QuoVadis Trustlink Schweiz AG 2.5.4.97 = NTRCH-CHE-112.210.349 C = CH	56510dc97fbcfe5c4a0 bdd313702c1be13e1da 45	F435058C1234EB48F78D1C6C4DF3D6A6FAC5ECECEA3EC3CAC2BCD763DBB67659