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REPORT OF THE INDEPENDENT ACCOUNTANT

To the management of GlobalSign NV/SA:

We have examined GlobalSign NV/SA management's assertion that for its Certification Authority ("CA") operations in Japan, Singapore, and the United Kingdom, throughout the period April 1, 2016 to March 31, 2017 for its CAs as enumerated in [Appendix B](#), GlobalSign NV/SA has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its Certification Practice Statement and Certificate Policy enumerated in [Appendix A](#)
- maintained effective controls to provide reasonable assurance that:
 - GlobalSign NV/SA's Certification Practice Statement is consistent with its Certificate Policy; and
 - GlobalSign NV/SA provides 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 is established and protected throughout their lifecycles;
 - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
 - subscriber information is properly authenticated for the registration activities performed by GlobalSign NV/SA; and
 - subordinate CA certificate requests are accurate, authenticated, and approved
- 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

based on the [Trust Service Principles and Criteria for Certification Authorities v2.0](#). GlobalSign NV/SA's management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion, based on our examination.

The relative effectiveness and significance of specific controls at GlobalSign NV/SA 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. Our examination did not extend to controls at individual subscriber and relying party locations and we have not evaluated the effectiveness of such controls.

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



GlobalSign NV/SA does not provide integrated circuit card lifecycle management. Accordingly, our examination did not extend to controls that would address those criteria.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. 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.

Because of the nature and inherent limitations of controls, GlobalSign NV/SA'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 management's assertion, as referred to above, is fairly stated, in all material respects.

This report does not include any representation as to the quality of GlobalSign NV/SA's services other than its CA operations in Japan, Singapore, and the United Kingdom, nor the suitability of any of GlobalSign NV/SA's services for any customer's intended purpose.

GlobalSign NV/SA's use of the WebTrust 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.

BDO USA, LLP

Certified Public Accountants
St. Louis, Missouri
July 26, 2017

Assertion of Management as to its Disclosure of its Business Practices and its Controls Over its Certification Authority Operations during the period of April 1, 2016 through March 31, 2017

July 26, 2017

Our Commitment to Security, Controls and Integrity:

GlobalSign NV/SA is committed to providing the highest level of security, controls, and integrity to support our certification authority branded “GlobalSign Certification Services” in accordance with its disclosed practices described in the Certification Practice Statement, enumerated in [Appendix A](#). To that end, we have subjected our certification authority business practices to the WebTrust for Certification Authorities program.

Our Assertion with Respect to WebTrust for Certification Authorities

GlobalSign NV/SA operates its Certification Authority (“CA”) services known as “GlobalSign Root CA” and “Adobe Certified Document Services CA” for the CAs enumerated in [Appendix B](#), and which provide the following services:

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

The management of GlobalSign NV/SA is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure in its [repository](#), 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 are 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 only provide reasonable assurance with respect to GlobalSign NV/SA’s Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

GlobalSign NV/SA management has assessed its disclosure of its certificate practices and its controls over its CA services. Based on that assessment, in GlobalSign NV/SA management's opinion, in providing its CA services known as GlobalSign Root CA and Adobe Certified Document Services, for the CAs enumerated in [Appendix B](#), in Japan, Singapore, the United Kingdom, during the period of April 1, 2016 through March 31, 2017, GlobalSign NV/SA has:

- disclosed its Business, Key Life Cycle Management, Certificate Life Cycle Management and CA Environment Control practices and provided such services in accordance with its disclosed practices in the applicable versions of its Certification Practice Statement and Certificate Policy, as enumerated in [Appendix A](#)
- maintained effective controls to provide reasonable assurance that:
 - GlobalSign NV/SA's applicable versions of its Certification Practice Statement is consistent with its Certificate Policy as enumerated in [Appendix A](#); and
 - GlobalSign NV/SA provides its services in accordance with applicable versions of its Certificate Policy and Certification Practice Statement as enumerated in [Appendix A](#)
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and certificates it managed was established and protected throughout their life cycles;
 - the integrity of subscriber keys and certificates it managed was established and protected throughout their life cycles;
 - subscriber information was properly authenticated for the registration activities performed by the CA; 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 [Trust Service Principles and Criteria for Certification Authorities, Version 2.0](#) including the following:

CA Business Practices Disclosure

- Certification Practice Statement (CPS)
- Certificate Policy (CP)

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 & Environmental Security
- Operations Management
- System Access Management
- System Development and Maintenance
- Business Continuity Management
- Monitoring and Compliance
- Audit Logging

CA Key Lifecycle 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 Lifecycle Management
- CA Key Escrow

Subscriber Key Lifecycle Management Controls

- CA-Provided Subscriber Key Generation Services
- CA-Provided Subscriber Key Storage and Recovery Services
- Requirements for Subscriber Key Management

Certificate Lifecycle Management Controls

- Subscriber Registration
- Certificate Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Suspension
- Certificate Validation

Subordinate CA Certificate Lifecycle Management Controls

- Subordinate CA Certificate Lifecycle Management



GlobalSign
GMO INTERNET GROUP

GlobalSign NV/SA does not provide integrated circuit card lifecycle management services.

GlobalSign
Leuven, Belgium

Koji Takenobu
Board Member



Appendix A - Certification Practice Statements and Certificate Policies in Scope

Certification Practice Statement	Begin Effective Date	End Effective Date
Version 8.0	August 20, 2015	May 1, 2016
Version 8.1	May 2, 2016	June 15, 2016
Version 8.2	June 16, 2016	August 21, 2017
Version 8.3	August 22, 2016	February 1, 2017
Version 8.4	February 2, 2017	Current

Certification Policy	Begin Effective Date	End Effective Date
Version 5.0	August 20, 2015	May 1, 2016
Version 5.1	May 2, 2016	June 15, 2016
Version 5.2	June 16, 2016	August 21, 2017
Version 5.3	August 22, 2016	February 1, 2017
Version 5.4	February 2, 2017	Current



Appendix B – In-Scope CAs

Root CAs	Serial Number	SHA1 Thumbprint
CN = GlobalSign Root CA OU = Root CA O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 15 4b 5a c3 94	b1 bc 96 8b d4 f4 9d 62 2a a8 9a 81 f2 15 01 52 a4 1d 82 9c
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R2 *	04 00 00 00 00 01 0f 86 26 e6 0d	75 e0 ab b6 13 85 12 27 1c 04 f8 5f dd de 38 e4 b7 24 2e fe
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	04 00 00 00 00 01 21 58 53 08 a2	d6 9b 56 11 48 f0 1c 77 c5 45 78 c1 09 26 df 5b 85 69 76 ad
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R4 *	2a 38 a4 1c 96 0a 04 de 42 b2 28 a5 0b e8 34 98 02	69 69 56 2e 40 80 f4 24 a1 e7 19 9f 14 ba f3 ee 58 ab 6a bb
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	60 59 49 e0 26 2e bb 55 f9 0a 77 8a 71 f9 4a d8 6c	1f 24 c6 30 cd a4 18 ef 20 69 ff ad 4f dd 5f 46 3a 1b 69 aa
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	45 e6 bb 03 83 33 c3 85 65 48 e6 ff 45 51	80 94 64 0e b5 a7 a1 ca 11 9c 1f dd d5 9f 81 02 63 a7 fb d1
CN = GlobalSign Root CA - R7 OU = Root CA O = GlobalSign nv-sa C = BE	48 1b 6a 06 a6 23 3b 90 a6 29 e6 d7 22 d5	c0 f6 29 8e 78 38 ca 4b f6 71 7c ef 2d de eb 57 e3 56 61 fc
CN = GlobalSign Root CA - R8 OU = Root CA O = GlobalSign nv-sa C = BE	48 1b 6a 09 f4 f9 60 71 3a fe 81 cc 86 dd	62 01 ff ce 4f 09 cd c7 e0 2f e1 10 f4 fd 67 f0 37 1a 2f 2a

* - Google Inc. assumed operations of the GlobalSign Root CA - R2 and GlobalSign ECC Root CA - R4 roots on August 11, 2016. GlobalSign NV/SA operated these roots prior to August 11, 2016 and was responsible for the key generation for these roots.

Other CAs	Serial Number	SHA1 Thumbprint
CN = GlobalSign SHA256 CA for Adobe OU = GlobalSign CDS O = GlobalSign nv-sa C = BE	11 21 c0 f1 f1 c5 e6 a7 c2 e2 dd 4c 1d 6a 78 3e 0e a9	97 e0 3d 40 7f 43 3b 67 79 d4 08 8b 52 e5 79 ee 67 51 2b 14
CN = AlphaSSL CA - G2 O = AlphaSSL	04 00 00 00 00 01 2f 4e e1 37 02	58 24 cf 32 c3 cc 2a 47 44 3d b1 0a 33 bb e3 ac 8d e5 24 e1
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 44 4e f0 36 31	4c 27 43 17 17 56 5a 3a 07 f3 e6 d0 03 2c 42 58 94 9c f9 ec



CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 44 4e f0 3a 38	92 80 01 ce 96 78 a6 87 9b 50 23 18 b7 7c 73 98 10 ce 75 77
CN = AlphaSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	47 07 b1 00 4c 72 89 07 cd 35 47 55 f7 22	c3 dd f3 b3 c8 10 10 41 70 4a c2 d3 d6 52 9a f8 4b 65 33 7c
CN = GlobalSign CloudSSL CA - SHA1 - G3 O = GlobalSign nv-sa C = BE	46 f0 8c da b0 f0 81 59 59 3b b3 36 d8 dc	a0 04 2b 9e dc 56 09 65 c8 21 6c 9d 61 78 0b db de 2b de 0a
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	46 f0 8c db cf 2c 54 66 ef 33 01 dd 5f 34	b4 18 b3 2d b3 b8 cf 9f df a1 9c c3 12 16 85 2f cc 82 86 e3
CN = GlobalSign CodeSigning CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 35 5c	90 00 40 17 77 dd 2b 43 39 3d 7b 59 4d 2f f4 cb a4 51 6b 38
CN = GlobalSign CodeSigning CA - G3 O = GlobalSign nv-sa C = BE	47 c3 0f fe fc 22 bb 28 0f 96 fe a7 52 51	f1 e7 b6 c0 c1 0d a9 43 6e cc 04 ff 5f c3 b6 91 6b 46 cf 4c
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 41 43	2a 3c f4 bd dc 74 cc aa 48 05 58 f9 d8 d1 d2 a0 84 f3 4b 31
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 e5 59 25	59 aa d2 4a 09 9d 25 d4 0d 41 bc d0 c3 00 a2 bd b0 44 12 44
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 3f 11	04 81 c8 ca 31 be 0f a9 40 c7 e0 cc d5 72 37 4e ad f5 2b 73
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 44 4e f0 3e 20	73 6a 4d c6 79 d6 82 da 32 15 63 64 7c 60 f6 99 f0 df c2 68
CN = GlobalSign Domain Validation CA - SHA256 - G3	47 07 b1 00 f4 18 22 43 4e c0 5b 8c 7b 7f	2b 74 91 52 1f b3 40 04 ab ae 31 94 19 a3 dc 79 1f 63 95 5e



O = GlobalSign nv-sa C = BE		
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 45 0c	b9 ee 85 a1 0f d4 95 d9 94 ed 63 48 8a b7 4a 18 cb 8e 6b fa
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 e5 5b f4	bf f1 25 8f 5e 1e 79 b6 0f 47 01 ff 26 5c 42 71 39 d9 8c 88
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 42 f9	04 00 00 00 00 01 2f 4e e1 42 f9
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 44 4e f0 42 47	90 2e f2 de eb 3c 5b 13 ea 4c 3d 51 93 62 93 09 e2 31 ae 55
CN = GlobalSign PersonalSign 1 CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 2c e1	f5 c9 e3 9d 3d 89 2d d0 98 59 45 cc ad 19 d9 4f 03 77 8c a7
CN = GlobalSign PersonalSign 1 CA - G3 O = GlobalSign nv-sa C = BE	47 c3 0f ff 8a 61 9a 37 f5 a8 2e f0 b5 75	a8 e1 93 75 a7 83 a7 4a 93 a4 45 dd e3 a4 90 6f 5a 8a bc d3
CN = GlobalSign PersonalSign 2 CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 31 46	d2 99 00 b3 9c 9f 22 ff 2d a8 49 7c a6 24 71 9d 64 a8 6b a9
CN = GlobalSign PersonalSign 2 CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 2f 52	81 ff c8 b4 32 26 09 65 53 ce db 47 98 04 61 bc 57 81 4b b2
CN = GlobalSign PersonalSign 2 CA - G3 O = GlobalSign nv-sa C = BE	47 c3 10 00 18 9d c0 41 1c 9f 3e 54 68 41	2c ee 3b 49 5b 49 20 82 06 4c 40 2e 70 b9 23 e4 8b 9c 8d ff
CN = GlobalSign PersonalSign 3 CA - G2	04 00 00 00 00 01 2f 4e e1 33 b7	1c a4 61 31 fa 66 20 8d 39 b2 fa d4 62 17 51 1f a6 89 35 3d



O = GlobalSign nv-sa C = BE		
CN = GlobalSign PersonalSign 3 CA - G3 O = GlobalSign nv-sa C = BE	47 c3 10 00 c0 4b fa 8a 26 54 b7 41 ec 2b	c1 87 b8 57 14 20 2a 29 41 e8 ea fb 84 6c 39 eb 1f 9c 60 9a
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 3b 58	79 ca 81 4d 71 e1 53 8e d3 ee f9 ed d8 a0 c8 1b 81 ff b5 e2
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 3d 6b	9e b5 4d f0 72 2b 3d 50 af c5 0a e8 cc 74 aa 36 96 d3 32 18
CN = GlobalSign Timestamping CA - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 2f 4e e1 52 d7	c0 e4 9d 2d 7d 90 a5 cd 42 7f 02 d9 12 56 94 d5 d6 ec 5b 71
CN = GlobalSign Timestamping CA O = GlobalSign OU = Timestamping CA	04 00 00 00 00 01 20 19 c1 90 66	95 8d 23 90 2d 54 48 31 4f 2f 81 10 34 35 6a 58 25 5c dc 9b
CN = SignTrust Domain Verification CA - G2 O = SignTrust OU = SignTrust Domain Verification CA - G2	04 00 00 00 00 01 2f 4e e1 39 16	4a 8c 78 cb c8 02 d9 9c 21 dc 14 ef 54 ff 92 df a1 46 e6 87
CN = Trusted Root CA G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	04 00 00 00 00 01 36 e9 3a 3a b3	e1 d3 50 85 bd 1e a8 a1 2f 43 73 bf 59 9b 66 4c e0 07 21 04
CN = GlobalSign Extended Validation CA - G2 O = GlobalSign nv-sa C = BE **	04 00 00 00 00 01 2f 4e e1 5b 63	06 45 6b 2c 4c 26 f3 7c 95 26 67 93 bb ed ff 61 e6 37 3d c2
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE **	04 00 00 00 00 01 44 4e f0 4a 55	65 be 10 2b e2 69 28 65 0e 0e f5 4d c8 f4 f1 5a f5 f9 8e 8b
CN = AlphaSSL CA - SHA256 - G2 O = AlphaSSL	04 00 00 00 00 01 31 89 c6 39 dc	ae bf 32 c3 c8 32 c7 d7 bc 55 99 b1 aa 05 fb 6c f4 d9 29 4c



CN = Beame.io CA 1 O = Beame.io Ltd L = Tel Aviv-Jaffa S = Tel Aviv C = IL	48 44 dc c1 dc 5e 09 85 5f 10 92 9a f2 63	31 31 8e 66 12 6a a2 ed 9e ff d1 8b bb 54 e5 a5 b2 36 7a 72
CN = Beame.io CA 2 O = Beame.io Ltd L = Tel Aviv-Jaffa S = Tel Aviv C = IL	48 44 dc d5 5b d0 28 0e 0b 6f 6a 11 68 81	41 9e b2 f2 96 ef 2f ad b4 76 31 a6 16 16 86 2f 00 8b 9f 29
CN = EmblemHealth SHA256 CA - G3 O = EmblemHealth, Inc. S = New York C = US	48 44 dc c6 29 57 99 e6 32 37 fd 92 4d 3b	60 14 2d d0 68 d4 a6 6e 37 f3 cb 83 24 2e 7c c1 89 e8 a0 c5
CN = Ford Motor Company - Enterprise Issuing CA01 S = Michigan L = Dearborn O = Ford Motor Company C = US	47 c3 10 54 76 63 60 3f fc 2e a1 ab a1 bf	6a b7 13 c1 16 7c 32 d3 2f 79 62 12 54 bb 74 16 f1 01 91 7b
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	45 d3 e5 c0 c2 bd aa 7a 9d f7 81 7a b6 c1	bc 06 e0 40 11 b7 e4 c6 a9 0d 8a 96 65 13 f4 ea 2d e4 37 47
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	45 d3 e5 c4 9a fc e8 83 4a 6e 40 e4 db 10	a9 0d 5a 48 c5 00 d1 b6 46 61 34 a2 9d f7 25 20 c8 a5 0a 2b
CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 44 4f 02 36 b6	dd 50 41 05 5a b5 b3 0c fc b1 12 a4 79 ce 42 93 0d 86 24 65
CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 33 a7 87 fe ac	5a c3 ab 2a 50 c2 42 e6 14 e9 5d 5a 0e 46 13 44 1b 90 a8 a9
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 ca 81 7a c6 dc 7f 56 b6 80 bb 43 36 25	fd 13 16 3b 2c d6 1a b3 82 e1 7e 73 c4 06 99 43 3f 9b eb 77
CN = GlobalSign CloudSSL CA - SHA256 - G3	48 ca 81 7a c6 dc 7f 56 b6 80 bb 43 36 25	fd 13 16 3b 2c d6 1a b3 82 e1 7e 73 c4 06 99 43 3f 9b eb 77



O = GlobalSign nv-sa C = BE		
CN = GlobalSign CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	47 2c cb a9 49 bb 94 24 e9 8f 41 6f ad 41	90 5f 59 6a ae 77 14 15 56 43 60 6e aa 5c 83 0b 0b 1b 43 9a
CN = GlobalSign CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 37 e8	4e 34 c4 84 10 80 d0 70 59 ef c1 f3 c5 de 4d 79 90 5a 36 ff
CN = GlobalSign CodeSigning CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 1b 6a 07 26 d2 e8 3f 26 02 d4 82 5a cd	09 0d 03 43 5e b2 a8 36 4f 79 b7 8c b1 73 d3 5e 8e b6 35 58
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 42 58	ba 60 74 c3 a2 5f 99 0b 9d 7a 11 a6 59 c4 f7 82 1c 92 ff 10
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 49 2e	ce 26 9f db 77 e3 88 4c 35 d5 97 fb dd 07 fc 3e ec e9 c6 22
CN = GlobalSign Extended Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 a4 02 dd 27 92 0d a2 08 34 9d d1 99 7b	60 23 19 2f e7 b5 9d 27 89 13 0a 9f e4 09 4f 9b 55 70 d4 a2
CN = GlobalSign Extended Validation CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 4d e1	4f 5e a6 a9 e4 ba 30 a4 57 5d ea d4 e4 e9 d3 b2 da 66 ea 7b
CN = GlobalSign Extended Validation CodeSigning CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 1b 6a 07 a9 42 4c 1e aa fe f3 cd f1 0f	87 a6 3d 9a db 62 7d 77 78 36 15 3c 68 0a 3d fc f2 7d e9 0c
CN = GlobalSign HV S/MIME CA 1 O = GlobalSign nv-sa C = BE	48 1b 6a 0e 6e 0f ff bd fd 44 fa b0 ff 07	e2 35 1f 9e 3d c0 93 35 04 60 dc 09 8b 37 a8 9e 5f 14 a0 ad



CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 44 c9	ef 90 b2 b8 6f 47 56 eb e7 d3 6f f3 01 5d 63 52 3a 00 76 e9
CN = GlobalSign PersonalSign 1 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 2d a7	ac 70 44 5c 6b ce 5b 0a 9f 3a bd 43 96 42 95 95 1b 14 b4 66
CN = GlobalSign PersonalSign 1 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 1b 6a 08 a2 44 88 d3 5c 9b 3d c9 48 0d	5e c2 8e d7 9e 8c e8 5d 8f 84 cd 7a a7 b8 6d 73 b1 71 de b9
CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 33 06	c8 88 84 52 ee 5b 32 e3 32 bf 39 98 b9 98 5d f3 b3 65 43 ab
CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 30 c4	7f 94 3f 17 d7 e2 d2 30 53 80 3f 7a e2 b8 1d 16 0f 5c e0 d1
CN = GlobalSign PersonalSign 2 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 1b 6a 09 13 bd 80 24 ca 5d 22 f0 14 f3	2b ff 7b b5 9e cd 71 4a 92 74 71 92 e8 a7 88 89 28 13 b6 85
CN = GlobalSign PersonalSign 3 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 36 13	33 48 3b 9e 81 fb e8 39 6c f6 c6 64 41 cb f4 25 48 89 fd 82
CN = GlobalSign PersonalSign 3 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 1b 6a 09 80 1b 74 91 45 55 53 1c d4 2d	4e 7b b1 74 99 36 a0 44 55 22 50 0a d4 7d eb 56 83 20 f0 e1
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 3e 80	da 8e 16 63 aa b9 92 6f 68 33 d9 dc 56 e2 84 6c 6f 3a 84 ab
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 40 b2	5d 90 a6 c8 fa 03 13 dc 7d 0e 6e eb e6 9b 42 c3 05 5f 3e 8a



CN = GlobalSign Timestamping CA - R3 O = GlobalSign OU = Timestamping CA	04 00 00 00 00 01 27 fb d2 23 64	6e 77 4a 3c 3b 8f 7b 99 cb 83 98 f0 af d6 d8 5a f4 55 7a 7f
CN = GlobalSign Timestamping CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	04 00 00 00 00 01 31 89 c6 50 04	91 84 3b bd 93 6d 86 ea fa 42 a3 af bf 33 e9 28 31 06 8f 99
CN = Google S/MIME Authority S = California O = Google Inc C = US	46 8e 75 8c 12 32 1d be 1e e8 c4 6e ea ea	f7 e4 98 ff 8b 61 1d bc 4a 1b 3b 52 c8 f3 67 4b 54 f3 c3 a8
CN = ICPEdu O = Rede Nacional de Ensino e Pesquisa - RNP OU = Gerencia de Servicos (GSer) L = Rio de Janeiro S = Rio de Janeiro C = BR	57 b0 9e ef 61 56 10 87 44 91 e9 2c 54 62 f4 61 96	47 31 fc 3e 37 f4 f4 99 49 73 9a cd 83 1f 56 2d d8 bc ab dc
CN = JCAN Public CA1 - G4 OU = JCAN Public CA1 - G4 O = JIPDEC C = JP	48 f5 b3 83 8f 08 60 a4 39 49 7f 00 01 0d	c4 43 a5 bb fd d0 d4 30 9e 47 b5 98 cd 50 26 29 f0 a6 28 a6
CN = NAESB Issuing CA - SHA256 - G2 O = GMO GlobalSign Inc. L = Portsmouth S = New Hampshire C = US	5c 76 b7 28 35 bb 87 1d 2a 81 b6 5e a0 1a e1 a8 32	e8 c9 d8 8a 11 d2 c2 76 92 d0 7f d1 c7 f0 51 cc d9 53 42 0e
CN = NAESB Issuing CA - SHA256 - G2 O = GMO GlobalSign Inc. L = Portsmouth S = New Hampshire C = US	05 b9 6b 0d e3 57 f8 7b 41 ac a1 b0 d0 1e 2b 6a 15	0e 18 0d f7 00 a8 cc 36 0c 85 b2 69 19 2d 2c 17 5f eb 3c 9b
CN = NAESB Issuing CA - SHA384 - G3 O = GMO GlobalSign Inc. L = Portsmouth S = New Hampshire C = US	47 c3 10 52 3d 53 49 cd dd e9 6b 8e f2 7f	79 29 0f cb 3a e8 c0 91 7c 10 3d c9 ed 4b 17 02 d2 00 2d 76



CN = Noble Energy SHA256 CA - G2 O = Noble Energy, Inc. L = Houston S = Texas C = US	46 17 c4 02 d0 cb a2 a0 46 06 e1 e5 a7 b6	9f 62 96 62 cc e6 31 c2 d9 36 f6 f3 ae 43 96 7a 5b 9e 64 49
CN = Noble Energy SHA256 CA - G2 O = Noble Energy, Inc. L = Houston S = Texas C = US	63 18 5d db 63 9a 93 79 81 22 fc 17 d0 15 53 49 fc	c6 dc ae 02 5b e2 c3 2d 40 ec df 51 7e 24 8b ef af 70 58 72
CN = RTI SHA256 CA - G2 O = RTI International S = NC C = US	01 e1 23 51 55 66 d2 83 48 b8 3a 7c b9	ae 8c 96 23 c1 7b e0 65 94 ef c1 9a 2b d9 61 0d ab 31 59 ba
CN = SignTrust Domain Verification CA - SHA256 - G2 O = SignTrust OU = SignTrust Domain Verification CA - SHA256 - G2	04 00 00 00 00 01 31 89 c6 3c 2e	45 8c cd 4f 97 ba dc a6 c7 cc 50 ad c6 8b bf 50 bc 7d f0 a9
CN = Soluti CA - DV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goiânia S = Goiás C = BR	47 c3 0f fc d4 02 01 81 25 ba 9f b6 e8 c9	f3 17 e9 44 62 4a 4a 10 bd 5b d4 5c e8 8d 21 6b 87 be 68 2b
CN = Soluti CA - EV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goiânia S = Goiás C = BR	47 c3 0f fd e9 ca 70 68 4b 88 7a 57 0d df	e0 29 5f a6 39 fe 2b 26 4d 37 6a c6 79 a9 e7 00 1d 3b 3f eb
CN = Soluti CA - OV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goiânia S = Goiás C = BR	47 c3 0f fd 59 d2 76 81 f6 6e f9 c5 a0 75	27 c0 69 9b 0b 19 14 61 3e 06 06 c0 22 d0 44 b1 99 28 b2 2f
CN = Touchtech Intermediate CA O = Touchtech Payments Limited L = Dublin C = IE	48 a4 02 df ed 62 3e 97 9b f3 3d 55 38 99	c1 cb 8e 19 c6 b9 d1 d0 42 8b de 81 fd 6f 1e 65 f9 2c 56 fc



CN = Trusted Root CA SHA256 G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	04 00 00 00 00 01 36 e9 82 39 5d	9a bb 55 a2 6f 9c 06 d5 00 c4 59 91 f0 2c 15 b5 5d 00 a7 02
CN = GlobalSign EC Administration CA2 O = GlobalSign nv-sa C = BE	24 f0 db b5 9c 08 a3 21 67 d7 66 4d 62 6a 5f e3 14	bf fa 2f db f1 bb ca e5 b4 0e 55 99 9c c4 50 de be 41 24 65
CN = GlobalSign ECC384 EV SSL CA - G3 O = GlobalSign nv-sa C = BE	46 74 37 78 16 26 1d 0e 7a db e2 cc b5 fc	a7 9e f0 d5 2e da 08 de fa b9 7e 2d 7c e1 68 45 f9 75 0e 19
CN = GlobalSign ECC384 SSL CA - G3 O = GlobalSign nv-sa C = BE	46 74 37 77 92 09 73 fa 48 2f e2 8d 94 62	30 57 5e 16 60 48 bd 86 4e f8 76 68 25 e7 56 fe 0d fd 8b 80
CN = GlobalSign 4096 Administration CA O = GlobalSign nv-sa C = BE	46 8e 75 7b 50 e9 9e 36 c7 dc b2 9d 82 16	31 99 92 5a fb c7 61 9e fa da b1 4a 82 9c 5f cd 7b 3c d9 3e
CN = GlobalSign R6 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 a4 02 dd b5 de fd 50 ac cf c0 fc f1 3f	71 8d 0c a5 30 df 17 83 07 ea 79 62 15 04 63 ff 8e 39 95 08
CN = GlobalSign R7 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 a4 02 de 98 e0 e2 b5 8c ad 36 4d 4a 25	4f 86 e5 ee 15 0f bd ab 93 a3 ac a5 72 81 0a 2e 0d af 48 6f
CN = GlobalSign R8 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	48 a4 02 df 34 b7 91 ca 84 d7 c9 af db 45	cf 01 af c2 d0 66 e7 ef 1e 0d 71 7f 2d b9 0b 9e bb 68 11 c9

** - On October 31, 2016, GlobalSign EV Certificate issuance was changed from GlobalSign Extended Validation CA - SHA256 - G2 CAs under GlobalSign Root CA - R2 to new CAs under GlobalSign Root CA - R3. Under the root sale agreement, between GlobalSign NV/SA and Google Inc., GlobalSign NV/SA was permitted to continue using the GlobalSign Extended Validation CA - SHA256 - G2 CAs under GlobalSign Root CA - R2 through the end of 2016.