INDEPENDENT ASSURANCE REPORT

To the management of GlobalSign NV/SA ("GlobalSign"):

Scope

We have been engaged, in a reasonable assurance engagement, to report on GlobalSign management's assertion that for its Certification Authority (CA) operations at its locations as detailed in Appendix C, throughout the period April 1, 2019 to March 31, 2020 for its CAs as enumerated in Appendix B, GlobalSign has:

► Disclosed its SSL certificate lifecycle management business practices in the applicable versions of the Certificate Practice Statements and Certificate Policies, as stipulated in Appendix A, including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Guidelines on the GlobalSign's website, and provided such services in accordance with its disclosed practices

► Maintained effective controls to provide reasonable assurance that:

 • The integrity of keys and SSL certificates it manages is established and protected throughout their lifecycles; and

 • SSL subscriber information is properly authenticated (for the registration activities performed by GlobalSign)

► Maintained effective controls to provide reasonable assurance that:

 • Logical and physical access to CA systems and data is restricted to authorized individuals; and

 • 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

► Maintained effective controls to provide reasonable assurance that it met the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum

in accordance with the WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with Network Security, Version 2.3.

Certification authority's responsibilities

GlobalSign's management is responsible for its assertion, including the fairness of its presentation, and the provision of its described services in accordance with the WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with Network Security, Version 2.3.

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 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 management's assertion based on our procedures. We conducted our procedures in accordance with 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 assertion is fairly stated, and, accordingly, included:

1. Obtaining an understanding of GlobalSign's SSL certificate lifecycle management business practices, including its relevant controls over the issuance, renewal, and revocation of SSL certificates, and obtaining an understanding of GlobalSign's network and certificate system security to meet the requirements set forth by the CA/Browser Forum;
2. Selectively testing transactions executed in accordance with disclosed SSL certificate lifecycle management 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.

GlobalSign's management has disclosed to us the attached comments (Appendix D) that have been posted publicly in the online forums of the Bugzilla site, as well as the online forums of individual internet browsers that comprise the CA/Browser Forum. We have considered the nature of these comments in determining the nature, timing and extent of our procedures.

Relative effectiveness of controls

The relative effectiveness and significance of specific controls at GlobalSign 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, GlobalSign'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, throughout the period April 1, 2019 to March 31, 2020, GlobalSign management's assertion, as referred to above, is fairly stated, in all material respects, in accordance with the WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with Network Security, Version 2.3.

This report does not include any representation as to the quality of GlobalSign's services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with Network Security, Version 2.3, nor the suitability of any of GlobalSign's services for any customer's intended purpose.

Use of the WebTrust seal

GlobalSign's use of the WebTrust for Certification Authorities – SSL Baseline with Network Security 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.

EY Bedrijfsrevisoren BV

Diegem, Belgium

Christel Weymeersch, Partner*

June 29, 2020

* Acting on behalf of a BV

Appendix A – Certification Practice Statements and Certificate Policies in Scope

Certification Practice Statement	Begin Effective Date	End Effective Date
Version 9	12-Mar-19	30-May-19
Version 9.1	31-May-19	24-Sept-19
Version 9.2	25-Sept-19	30-Mar-20
Version 9.3	31-Mar-20	

Certificate Policy	Begin Effective Date	End Effective Date
Version 6	12-Mar-19	30-May-19
Version 6.1	31-May-19	24-Sept-19
Version 6.2	25-Sept-19	30-Mar-20
Version 6.3	31-Mar-20	

Appendix B – In-Scope CAs

Root CAs	SHA256 Hash
CN = GlobalSign Root E46 O = GlobalSign nv-sa C = BE	CBB9C44D84B8043E1050EA31A69F514955D7BFD2E2C6B49301019AD61D9F5058
CN = GlobalSign Root R46 O = GlobalSign nv-sa C = BE	4FA3126D8D3A11D1C4855A4F807CBAD6CF919D3A5A88B03BEA2C6372D93C40C9
CN = GlobalSign Client Authentication Root E45 O = GlobalSign nv-sa C = BE	8B0F0FAA2C00FE0532A8A54E7BC5FD139C1922C4F10F0B16E10FB8BE1A634964
CN = GlobalSign Client Authentication Root R45 O = GlobalSign nv-sa C = BE	165C7E810BD37C1D57CE9849ACCD500E5CB01EEA37DC550DB07E598AAD2474A8
CN = GlobalSign Code Signing Root E45 O = GlobalSign nv-sa C = BE	26C6C5FD4928FD57A8A4C5724FDD279745869C60C338E262FFE901C31BD1DB2B
CN = GlobalSign Code Signing Root R45 O = GlobalSign nv-sa C = BE	7B9D553E1C92CB6E8803E137F4F287D4363757F5D44B37D52F9FCA22FB97DF86
CN = GlobalSign Document Signing Root E45 O = GlobalSign nv-sa C = BE	F86973BDD0514735E10C1190D0345BF89C77E1C4ADBD3F65963B803FD3C9E1FF
CN = GlobalSign Document Signing Root R45 O = GlobalSign nv-sa C = BE	38BE6C7EEB4547D82B9287F243AF32A9DEEB5DC5C9A87A0056F938D91B456A5A
CN = GlobalSign IoT Root E60 O = GlobalSign nv-sa C = BE	43ED443C1F0CD46C9914B4272C24DC42CF6FE62B4AAB37585878A26D882AE4CB
CN = GlobalSign IoT Root R60 O = GlobalSign nv-sa C = BE	36E80B78775DDA9D0BAC964AC29D5A5EC4F3684E0C74445E954A191C2939B8E0

CN = GlobalSign Secure Mail Root E45 O = GlobalSign nv-sa C = BE	5CBF6FB81FD417EA4128CD6F8172A3C9402094F74AB2ED3A06B4405D04F30B19
CN = GlobalSign Secure Mail Root R45 O = GlobalSign nv-sa C = BE	319AF0A7729E6F89269C131EA6A3A16FCD86389FDCAB3C47A4A675C161A3F974
CN = GlobalSign Timestamping Root R45 O = GlobalSign nv-sa C = BE	2BCBBFD66282C680491C8CD7735FDBBAB7A8079B127BEC60C535976834399AF7
CN = GlobalSign Root CA OU = Root CA O = GlobalSign nv-sa C = BE	EBD41040E4BB3EC742C9E381D31EF2A41A48B6685C96E7CEF3C1DF6CD4331C99
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	CBB522D7B7F127AD6A0113865BDF1CD4102E7D0759AF635A7CF4720DC963C53B
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	2CABEAFE37D06CA22ABA7391C0033D25982952C453647349763A3AB5AD6CCF69
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	179FBC148A3DD00FD24EA13458CC43BFA7F59C8182D783A513F6EBEC100C8924
CN = GlobalSign Root CA - R7 OU = Root CA O = GlobalSign nv-sa C = BE	E95B3125405E0D46042D55AC62154507C678EBC360765785FB204AF349BFE880
CN = GlobalSign Root CA - R8 OU = Root CA O = GlobalSign nv-sa C = BE	AE4851FF42039BADE058279151D82683041D2598E240683CC56D76FB8CF53D42

Other CAs	SHA256 Hash
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	118262C2088EE1528E20D836D2070854707C0D8F8E80FBE396F9ECD4B9141B5B
CN = Beame.io CA 1 O = Beame.io Ltd L = Tel Aviv-Jaffa ST = Tel Aviv C = IL	43263913B483EB6F0B020540F8F7BE0A1D7C9CE7652FE0FB4743D7213393551C
CN = Beame.io CA 2 O = Beame.io Ltd L = Tel Aviv-Jaffa ST = Tel Aviv C = IL	CF6E6B82C997CB5CC1A55066AF5F60CAAC77594EB106FB4D498BC50ECDEB8A3A
CN = GlobalSign CA for AATL - SHA384 - G4 O = GlobalSign nv-sa C = BE	AC0AB963BB5F3DA05FBC8687F98C2B6EA0BB499E6118C1A9136B1BC7C3C71A6B
CN = GlobalSign Domain Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	09BC1B137C031239EF788673E94EB17F5F3ECAB07D3ADBFB485E75ABFAAF3B9A
CN = GlobalSign Organization Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	699D54B7482A5D329331EA0415CC2EDCD60FDA01D19E71D054196BCE0677735C
CN = GlobalSign Partners Timestamping CA - SHA384 - G4 O = GlobalSign nv-sa C = BE	2A015531A5F3A4CE589BD853C71DD069587322F574D85C9C9B9F9DF8F86C075E

CN = GlobalSign PersonalSign 1 CA - G3 O = GlobalSign nv-sa C = BE	254BE91C1ABCB28DB5E4D675A29A1E788460B06591F1BA8497CBD17837E27ABE
CN = GlobalSign PersonalSign 2 CA - G3 O = GlobalSign nv-sa C = BE	64E71601F7050921DEE039C03493615E488F12FC3FCECBADF438AA467EE1D41A
CN = GlobalSign PersonalSign 3 CA - G3 O = GlobalSign nv-sa C = BE	C228D93DBE5536A120AC24ED934467BAD7292F8B7EB202634B17070A89C5FE9B
CN = GlobalSign Timestamping CA - SHA384 - G4 O = GlobalSign nv-sa C = BE	F642418E4D0C63DEC785C960EFA68BA745F38851744EF81F225CB89305314D50
CN = JCAN Public CA1 - G3 OU = JCAN Public CA1 - G3 O = JIPDEC C = JP	91E98D0947C125494EAAF2A38D087BE0781AF20D8A14EE8C39FECDC482CF5F82
CN = NAESB Issuing CA - SHA384 - G3 O = GMO GlobalSign Inc. L = Portsmouth ST = New Hampshire C = US	0986B5A1C7314EFB04FB648B9E2B57CF4842FD1D4345D28E52094C90A9FECBFE
CN = Prodrive Technologies B.V. OV SSL Issuing CA O = Prodrive Technologies B.V. OU = IT Services L = Son ST = Noord-Brabant C = NL	398B1499CE00A25F61CAC3D8BEE571601880823EF288BE9772A4D13398422595

CN = SHECA DV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	393B8B15CABC3886FB2E416495D63C8BADD8DCAF87552076C8A0A9637C24DE47
CN = SHECA EV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	147C447FEEB86202B503314FCAF0036BEAAEF437C39B56B358EC446A9D20387F
CN = SHECA OV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	77EAC476453CB732257FF166A5EBD1656CB1F673B68E28DF41774133979FA2A4
CN = Soluti CA - DV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi\C3\A2nia ST = Goi\C3\A1s C = BR	A74FFFF528471905385073ADF3997019B26F4FAF24BCE9102A272E7A4484E4BC
CN = Soluti CA - EV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi\C3\A2nia ST = Goi\C3\A1s C = BR	BB170B39784D02784325CEA938D92314C617DDE808C867E33E2AD161D54B3E8A

CN = Soluti CA - OV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi\C3\A2nia ST = Goi\C3\A1s C = BR	E6E929C8456C014E8DA733ACE4E9814552272B81176050A13EA45A823200B14B
CN = Valid Certificadora Digital AlphaSSL CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID AlphaSSL L = S\C3\83O PAULO ST = S\C3\83O PAULO C = BR	385135AB18DD190A03BCC0601ACA6F83CEA366642791EBE0A2FDB059C2F7750A
CN = Valid Certificadora Digital SSL DV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL DV L = S\C3\83O PAULO ST = S\C3\83O PAULO C = BR	62B48F51E5868676FD79B9DD9DB98BA928494BA734403C583393C42CE00AD448
CN = Valid Certificadora Digital SSL EV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL EV L = S\C3\83O PAULO ST = S\C3\83O PAULO C = BR	27FA1BE4F4B56A142A47A56A7E94B72502059B4022E4623E748CA1EF151CF222
CN = Valid Certificadora Digital SSL OV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL OV L = S\C3\83O PAULO ST = S\C3\83O PAULO C = BR	600E97601B0BBC5F056F04EEF671EF580F2A8583C6D2D3FAD401B9D820AA8836
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	8C2410F76B149CA062B420AB611B6BF0A06E6E799A29587E4D4EC16D0537B7EA

CN = AlphaSSL CA - G2 O = AlphaSSL	1DCA65B86A57336BA5AFB7214A36F7D6EDE698EB4F03387CB3AD6BBD3A93BAB6
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	EE793643199474ED60EFDC8CCDE4D37445921683593AA751BBF8EE491A391E97
CN = GlobalSign EC Administration CA2 O = GlobalSign nv-sa C = BE	C883B3ECC6AC0DEE75CDD585E73A209287BC0C9F9D79D488860F63E2EA8A7D2C
CN = ICPEdu O = Rede Nacional de Ensino e Pesquisa - RNP OU = Gerencia de Servicos (GSer) L = Rio de Janeiro ST = Rio de Janeiro C = BR	EACBA6C96598B4A41FD53D69AB9ED9FBBB1381154C453456720C174FFE576D1D
CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	AA89C466E9D06882C0DAAF72BE0F0FBCFE7C1EF2AAAD190640C4AD44F5517F34
CN = GlobalSign Timestamping CA - G2 O = GlobalSign nv-sa C = BE	C977923C771E1A66C925A2B6F501732E678DC9887AFE6BFAAC039D1D9A71F0EC
CN = GlobalSign Timestamping CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	9BF9496777D14425ED0086C1BB2C0707B62A61C194C5162E4F07637AFF166B76
CN = AlphaSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	4C013B8854689CB6626CC087B4D4FCCA45104E2D73BFADF33A6979ED124B7837
CN = ATT Organization Validated CA 2019 ST = Texas L = Austin OU = ATT Business Wi-Fi Services O = ATT Services Inc C = US	7AA45D6F5B14DAB1C6844C19C2804E14B5811E6EDE1F02B0AEF065A7B359C68F

CN = Cloudflare ECC DV CA O = Cloudflare, Inc. L = San Francisco ST = CA C = US	0F4517487FD0A8BA3194A6122450A7B32C987FFF16F2D4AF54E6EDB6FED68E08
CN = Cloudflare RSA DV CA O = Cloudflare, Inc. L = San Francisco ST = CA C = US	D439F88E8F2F80A306F910DCDE548D71BBFD99A85FC7034EFB610E3749550932
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	445EEC78BC61215044A0379656AA2D5DB5E42F76CB70B8D14C2077AA943D4EBB
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	E87EA2BED6C6203B2C55B00FE49D2876FBA64702105AEB748B865A918B5C7D27
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	BFDF4CF3F143AD0DB912D8AB3A7C12F617B9EA60CE8B1F4E44F74270FB21B19B
CN = DPDHL Global TLS CA - I4 ST = Nordrhein-Westfalen L = Bonn O = Deutsche Post AG C = DE	94C663E9EA5C27EE4F64127F9B425863E991A9E156C07DF1A00803AE31764162
CN = GlobalSign Root E46 O = GlobalSign nv-sa C = BE	33EF151EFB08D1C44FB85CC3F23EC6873014E9F881691BD4938B7F251580B694
CN = GlobalSign Root R46 O = GlobalSign nv-sa C = BE	A5E33C28E3013A71F5F760AE3B16595090043D2EC5209EC52903C4FBAD258DAD

CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	F349954E8FB6D44011BCB789D97D9A2CB2032BD5F0B598D1FB8A099F5848D523
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	C84E1378B974A991ACDCDD733421E3061E6FA21A0491C8902BAFDE3855E0063E
CN = GlobalSign Root E46 O = GlobalSign nv-sa C = BE	1DF6054D6641404633641BB5FA3742FDA7D075E2514840AB61E00CCBBB7D341D
CN = GlobalSign Root R46 O = GlobalSign nv-sa C = BE	A63C1398B5F8DD2D432FBE4C2C19142BEA6D5D0221FAE794718AE7597ACCA96D
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	3F319B2AFED4A0F75127BE59925550D0428E68763A09E273EB6A9FF8D18DBB5B
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	DDA8DA736187D76F4F0ED5A5F667B54D99A98AE06091D0E3A01714E9221695AD
CN = GlobalSign Root E46 O = GlobalSign nv-sa C = BE	0F1554C2FD591B0256A608E1C136A837E7A6E041561EE08A911B2AFDCD3C6C1B
CN = GlobalSign Root R46 O = GlobalSign nv-sa C = BE	45CB1D874CB03BD5C5B6E079C8FC29E51521EE5628486301964A41F94BA59F88
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	A13820A7387BDFAD204463EFA9216416639B7E73C31DC2F499F53FCD4D4D25C4
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	C01963059070CB2306F4B486CCF1503359209E98499C810C2B49E26E31A4BD74
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	4B7334E1D8999822BAFA8FF6888125389B18A4E5AB26FFA624C7F68FDC81F0CB

CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E0C2EBD1F6BAD4FEAAE31A3107E69ABEE902DB38B9DFBE33F0570BDA3494C20A
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	37D080A5E9A526663E56EE20DE4BD9F7952DACC341491439080167AD5DD18CAC
CN = GlobalSign ECC CloudSSL CA - SHA384 - G3 O = GlobalSign nv-sa C = BE	B0CD6AE7B9E20EC5F830FEE01F666D5D90E6E229D06BC46A30ACCEDFEC889648
CN = GlobalSign ECC EV SSL CA 2018 O = GlobalSign nv-sa C = BE	8F19FFE02FC795ED70765D1436ADDF772FE0F0773DA436EDBDB42A2E30E2E828
CN = GlobalSign ECC EV SSL CA 2019 O = GlobalSign nv-sa C = BE	0D3176C58F321AA34C57C8DF7C17D1F4E76C797EC116C9F1D697748ED1FCE7D9
CN = GlobalSign ECC OV SSL CA 2018 O = GlobalSign nv-sa C = BE	87C71553445EB3C33C3E0710711B99E9C7773F04D91AC38A9F4C082EE24101EA
CN = GlobalSign ECC384 EV SSL CA - G3 O = GlobalSign nv-sa C = BE	15549187490314F5177641F0BEB32634AA1230EB2CF2C28AD9C73914FB18ABA0
CN = GlobalSign ECC384 SSL CA - G3 O = GlobalSign nv-sa C = BE	DC6C44AC8A3CD5C3451273F4431526B2EF666062EE763258A928F60BD08E39FE
CN = GlobalSign Extended Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	AED5DD9A5339685DFB029F6D89A14335A96512C3CACC52B2994AF8B6B37FA4D2
CN = GlobalSign HV ECC DV SSL CA 2018 O = GlobalSign nv-sa C = BE	4B0D1392D39157353207A64CCB14683DDE9D2CED1FB58B16E038BE5707C27813

CN = GlobalSign HV RSA DV SSL CA 2018 O = GlobalSign nv-sa C = BE	54C37A8E853FD1D6378D378B939307EC321A31CC1A5A89E7180633BC13F18762
CN = GlobalSign Organization Validated CA - SHA256 - G4 O = GlobalSign nv-sa C = BE	1E1741A12EB8DA2BD76EA96C04F520359839710F620E80952F48DD0240A12CD8
CN = GlobalSign Organization Validated ECC CA - SHA256 - G4 O = GlobalSign nv-sa C = BE	65EEC0CC6C970CC1CD73659115DC8D904E6F12E6DC8FD4DDA39D54CB30224780
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	1C9737E968AD9DFF8D8D7FCF996A144BB97851A19011A0190C943CAE8D43CFE0
CN = GlobalSign Partners TSA CA for AATL O = GlobalSign nv-sa C = BE	7E8F914119BB1090D6204908E5AE1F40BE24C1491CD7D5CFB6A93618CBC00FD9
CN = GlobalSign R6 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	C5B679106958152F83FB5886DDC41F0785193EF67C6975BE3E509F17F29B7A86
CN = GlobalSign R6 RSA EV SSL CA 2019 O = GlobalSign nv-sa C = BE	57264B82A864DBA1C11EF3F80ABB94CAC3660662B0C22F571FF993B3FBCF76FB
CN = GlobalSign R7 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	D302FF3731D28C59A02D5885C5BA324BDC31BBD09A31CC916CF1B74AC277C07B
CN = GlobalSign R8 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	EA8C201C1F8EEF58067B297E6C87D2622AC3946527924BB6DE6A3D700BE81344
CN = GlobalSign RSA DV SSL CA 2018 O = GlobalSign nv-sa C = BE	9E898ED03FA46969690DAD73C7296675045FF9B5A0100A399BEB8435A98F5185

CN = GlobalSign RSA EV QWAC CA 2019 O = GlobalSign nv-sa C = BE	EDC734C501501DC7A27448FA02C74931F8578BF297B173F34B841E82C6691926
CN = GlobalSign RSA EV SSL CA 2019 O = GlobalSign nv-sa C = BE	0D6E46784F3B694E9C7506786417BC6F87F9D2F73D19B5E8081612B21137B766
CN = GlobalSign RSA OV SSL CA 2018 O = GlobalSign nv-sa C = BE	B676FFA3179E8812093A1B5EAFEE876AE7A6AAF231078DAD1BFB21CD2893764A
CN = GlobalSign TSA CA for AATL O = GlobalSign nv-sa C = BE	4D8EB49380EC72AC9FDF21FE1C6DB2E9490C76BEADD1F7B528C3CCD272C8FE28
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	A66422C4E449D465CB023A7FC7633DE8ED1816985CA41093FC96B3663ED7A43B
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	74EF335E5E18788307FB9D89CB704BEC112ABD23487DBFF41C4DED5070F241D9
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	0B339212D7CFF17A2C59E35669B58E77350133750A78DA9404770EDD470DEF76
CN = RNP ICPEdu OV SSL CA 2019 ST = Rio de Janeiro L = Rio de Janeiro OU = Gerencia de Servicos (GSer) O = Rede Nacional de Ensino e Pesquisa - RNP C = BR	42CFDDA6F660B8E5B4C1C411965A4519312559E3262F8DB69D2DAE17B26B3BA3
CN = Trusted Root CA G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	6E32A35B599E9087BB1AB35CE73022EC2E26AF34BE388919419C95700CD8E7FB

CN = Trusted Root CA SHA256 G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	01FD73EF5E70F526FC9C11F65FE2EE6F7125B3693949227FFD8E459E583C458A
CN = JCAN Sub Root CA0 OU = JCAN Sub Root CA0 O = JIPDEC C = JP	8FA602FFF590DF583A36D509C265F6C3EA8C34A9D56CFF86285FBFE9936BFC55
CN = AlphaSSL CA - SHA256 - G2 O = AlphaSSL	933E4A2D8DB1FF9FF0E508EA7F1637E074F660FE6F365A2233DFC2B52C889D98
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5A817EADA4AD78734EBB2CF674352D97F4352290C40EAF10E764B1EAC075B0E6
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5BB2382D20E09AE56B4F3A5157838F7BAE49E42E3CE53484D66EEB2C0747EF4A
CN = GlobalSign Timestamping CA O = GlobalSign OU = Timestamping CA	D0CAE6947BC77F0B495CA808D6CDE685FCD20225E1E530B635B113ED40728EF3
CN = GlobalSign Timestamping CA - R3 O = GlobalSign OU = Timestamping CA	61C1067083AE044EF1D649CE590BBF09D9D739E025DA8D195F71CFAAD6EBAE69
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	C94FEDDA4E8608908580BC7F87B434E03BB262E42F64C63820A8F50FB17C1CEC
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	4E153A588877688F1A0C103A084C2EDB3AD1D8C480CF03D8AB6FED47D9204370
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	BA0E2B6BF2C98ED2C3B1C1C08A1BBDCAF9270AC528A3194301DD2A0B6B67B9B3

CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	669E7727A92BE72D9718E16922DC1BC1492B1AF33FA4793E68D8778F19A2EBE0
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	C2E4236DB1B757B51B77921388EFA823E6A600FD4BDA30B63AB77886F25618B7
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E155EBF96334E79AE2E287D55CFC9185DE24935A653F13C5BA05AFF818771BC6
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	082B243047BF00F584401F538B504BAE9EC060E007FFF28B159C08417068654E
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	A6233ECB77053F72937E894372A601ED3ABEA90CC3B5D89512720BF3FFCBDC9D
CN = JCAN Public CA0 - G3 OU = JCAN Public CA0 - G3 O = JIPDEC C = JP	59B69B0DE73B0209A7CE146DBCEA01B096E92513477EBE60409DACE88B6DF7D9
CN = Liberty University External Issuing CA 01 O = Liberty University L = Lynchburg ST = VA C = US	1F91212C6BFC333C6EB52A685525E1E5B9E3AC1EF7A5A86649F5F95C721D8898
CN = Liberty University External Issuing CA 01 O = Liberty University L = Lynchburg ST = VA C = US	CA005AA75E33594BD1DEDC584E1E74E5198EBB1DE88929ED4F3E2E9FFCE3873B

CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	24F91C0705A0A5338641B365FB0D9D9709B56297CFF1857E73C02C1636D486AA
CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	3AAEB26CFCADB77814E34512616232A687D186A84303AA0C8DBBE492CEBD94A1
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	B2ABB9076EF203ADCB56B0ACB40C275262C6CFE9B7A12ABEA7C8FA57773B0D0A
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	C8F1D691B4152C26033C977FE77978D9C82143D46B243B9C9BA7228E000E15BB
CN = JCAN Public CA0 - G3 OU = JCAN Public CA0 - G3 O = JIPDEC C = JP	39883AFF3D0A0A401A9B84C0B830B95AFEC82AF371D9DC5D0219EA8A3DB4CF81
CN = ATT Wi-Fi Services Root Certificate Authority G3 OU = ATT Wi-Fi Services O = ATT Services Inc ST = Texas C = US	2713C7A32105C5E74018465D14D51A959C8AEFC2115E1C007A6A6B4C88313BC6
CN = ATT Wi-Fi Services Root Certificate Authority G3 OU = ATT Wi-Fi Services O = ATT Services Inc ST = Texas C = US	12F3C6423F95C7FFC9A97067FD2D953E70609A44299CA7D458C573C63A592E66

CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	BF5EDFBEEB85999C5169CBF3F4DB63B679AD2E1E2272FC3795F9F9921E6D0487
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	F164AD5E4CE9EFC0A144CA902EA2ED46C464D2D508CA919A23095CDF30D4DC68
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	A0133BE5B14E02310A2D4BEAB601094F1194EE8BD6FD29DDFE7B9347467C2EEC
CN = DPDHL TLS CT CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	9153E4420DDC7EB4E6E864AA0377DADF4082ECD35052113638E05D3C296BC006
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	25BACC40A5392B82AADEA04903905A467121F28220E6F2F7E0FE982AAFC14FA6
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	5A405535C112A0A81AF0D2ACCA3C3F9BC1A677586CDBC633CB4F5F778E1A3550

CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	23A74704D77A03CFD3FF19E62C500848214E6C60FD2AAEF7DCE7A8F9EE9F9232
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	1C942A22A016A1E5559DAE77EC5CE8671F98AE0BA4AC2DC259418E8E1E9F94AD
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	7525B1840C398E295FF3AEC5A45BD951B615E9AA26B890319C3BF5CBA95F2441
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	AB68685567BF68819CD163933CDEF86BCD447AEB21404B97D9DA7B57C8449179
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	236B8FF6CB17718D9C92440BD92C692D17381993E579118343C0A55C8DBE6C1A
CN = SignTrust Domain Verification CA - SHA256 - G2 O = SignTrust OU = SignTrust Domain Verification CA - SHA256 - G2	BECD7B1B8C6807A2963B3AEE9BE60A314EBEAF3EA4C30AF39B7AA6C082583CE0
CN = SignTrust Domain Verification CA - G2 O = SignTrust OU = SignTrust Domain Verification CA - G2	DAC1A51E6A44088E77020CA9704C361241FE2DDC42F8132677BA5EBBBA4D0C2C
CN = Southern Company External Issuing CA 1 O = Southern Company Services, Inc. L = Atlanta ST = GA C = US	FB953C4FC0045846D02491C8ECCF387BA34347C17ABB0EA6D59F6DE4D2F1EA04

CN = Touchtech Intermediate CA O = Touchtech Payments Limited L = Dublin C = IE	EF5CB9F6B52E79FCBC71937050D11B9D7E513654139B227D0FF251B250561F18
CN = Virginia Tech Global Qualified Server CA O = Virginia Polytechnic Institute and State University OU = Global Qualified Server CA L = Blacksburg ST = Virginia C = US	D4D03141ECA4190D93BCEE4781AF6F2FDF0F6534A11BEDCCF0614F4D4B175753
CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	C021E99BC4C86C35194B51A6731CB697AA0A2C0D332AB85DDE56F899910E3AA9
CN = GlobalSign PersonalSign 1 CA - G2 O = GlobalSign nv-sa C = BE	13CBF88815EF41E879BEDCB8B68E75E8051AA62FCE6799EEA34BD33D343BB32C
CN = GlobalSign PersonalSign 1 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	AEBE4DE9974A870A47876451CA3054C3B3C1C9C82090CDFF1EFF1425F2795574
CN = GlobalSign PersonalSign 2 CA - G2 O = GlobalSign nv-sa C = BE	16EF3B95DA74A072C2E494E3387749AB07451ED972C02BB8F8CA33020CC89055
CN = GlobalSign PersonalSign 2 CA - G2 O = GlobalSign nv-sa C = BE	CBE21D29171ABE3A64494981AF2824C077B0E43C93B29A6535AED3C7A5B0719D
CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5C0CA03AAA04D2CEFD57DB1F3B17313B200562175871E0D75331C08E2A56430C

CN = GlobalSign PersonalSign 3 CA - G2 O = GlobalSign nv-sa C = BE	2A84A5798BFBDE54086F00BDB68B0519238EE7F4FA86D13382D9B38BB5DE27A9
CN = GlobalSign PersonalSign 3 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	3B20D64ED7D2F43031DEE1AE847A489B6F33F5A28DB7FA2B09B7AEF5F77CA14A
CN = Virginia Tech Global Qualified Server CA O = Virginia Polytechnic Institute and State University OU = Global Qualified Server CA L = Blacksburg ST = Virginia C = US	B79E6378236BF5B6F0C277ECC080627EF3FE2871281A60AC427BDB6F6AE4F794
CN = DPDHL TLS SHA 2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	276F32C1EB6C5F855A7904FD0364B2150E87997FC8D0313DEF7E53AE0999DC1D
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	BE441EEA2B795000C1C133ADC32BCE6F8D3D201DA713F4533AE0F6A2AC96288E
CN = NSW-DEC-ISS-CA1 O = NSW Department of Education and Communities L = Sydney ST = NSW C = AU	C768213179F8071BFAB39415B3C0911297C2346E411E200AB67912948E4C99D7

| CN = Virginia Tech Global Qualified Server CA
O = Virginia Polytechnic Institute and State University
OU = Global Qualified Server CA
L = Blacksburg
ST = Virginia
C = US | 0B05933B6EC33152AA976B5165E9AFC13C6EACADC8E1BF6321E3584B6170EA55 |

Appendix C – Locations

Location Identifier	Country	State / Province
BE-01	Belgium	Vlaams-Brabant
CN-01	China	Shanghai
IN-01	India	Delhi
JP-01	Japan	Tokyo
JP-02	Japan	Yamaguchi
JP-03	Japan	Tokyo
JP-04	Japan	Tokyo
JP-05	Japan	Tokyo
PH-01	Philippines	National Capital Region
RU-01	Russia	Moscow
SG-01	Singapore	Central Singapore
SG-02	Singapore	Central Singapore
UK-01	United Kingdom	Kent
UK-02	United Kingdom	Greater London
UK-03	United Kingdom	Greater London
US-01	United States	New Hampshire

Appendix D - Publicly disclosed incidents

#	Disclosure	Publicly Disclosed Link
1	GlobalSign disclosed the misissuance of QWAC certificates.	Bugzilla Ticket Link
2	GlobalSign disclosed that there has been an issue with an OCSP responder status.	Bugzilla Ticket Link
3	GlobalSign disclosed that some SSL certificates with US country code and invalid State/Prov have been issued.	Bugzilla Ticket Link
4	GlobalSign disclosed that ICAs in CCADB, without EKU extension are listed in WTCA report but not in WTBR report.	Bugzilla Ticket Link
5	GlobalSign disclosed that OCSP responders found to respond signed by the default CA when passed an invalid issuer in request.	Bugzilla Ticket Link
6	GlobalSign disclosed that there has been a wrong business category on 3 EV SSL certificates.	Bugzilla Ticket Link
7	GlobalSign disclosed that an OCSP Responder returned invalid values for some precertificates.	Bugzilla Ticket Link
8	GlobalSign disclosed that a customer (AT&T) running an on-premise (technically-constrained) CA that chains to a GlobalSign root, issued certificates without AIA extension.	Bugzilla Ticket Link
9	GlobalSign disclosed that it misissued 4 certificates with invalid CN.	Bugzilla Ticket Link
10	GlobalSign disclosed that it issued certificates with Subject Public Key Info lacking the explicit NULL parameter.	Bugzilla Ticket Link
11	GlobalSign disclosed that it performed an untimely revocation of TLS certificate after submission of private key compromise.	Bugzilla Ticket Link
12	GlobalSign disclosed that it was not able to revoke 2 noncompliant QWACs within 5 days.	Bugzilla Ticket Link
13	GlobalSign disclosed that it was not able to revoke noncompliant ICA within 7 days	Bugzilla Ticket Link

GlobalSign Management's Assertion

GlobalSign NV/SA ("GlobalSign") operates the Certification Authority (CA) services as disclosed in Appendix B and provides SSL CA services.

The management of GlobalSign is responsible for establishing and maintaining effective controls over its SSL CA operations, including its network and certificate security system controls, its SSL CA business practices disclosure on its website, SSL key lifecycle management controls, and SSL 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's Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

GlobalSign management has assessed its disclosures of its certificate practices and controls over its SSL CA services. Based on that assessment, in providing its SSL Certification Authority (CA) operations at its locations as detailed in Appendix C, throughout the period April 1, 2019 to March 31, 2020, GlobalSign has:

- Disclosed its SSL certificate lifecycle management business practices in the applicable versions of the Certificate Practice Statements and Certificate Policies, as stipulated in Appendix A, including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Guidelines, and provided such services in accordance with its disclosed practices.

- Maintained effective controls to provide reasonable assurance that:
  - o The integrity of keys and SSL certificates it manages was established and protected throughout their lifecycles; and
  - o SSL subscriber information was properly authenticated (for the registration activities performed by GlobalSign)

- Maintained effective controls to provide reasonable assurance that:
  - o Logical and physical access to CA systems and data was restricted to authorized individuals; and
  - o The continuity of key and certificate management operations was maintained; and
  - o CA systems development, maintenance, and operations were properly authorized and performed to maintain CA systems integrity

- Maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum.

- Disclosed the attached comments (Appendix D) that have been posted publicly in the online forums of the Bugzilla site, as well as the online forums of individual internet browsers that comprise the CA/Browser Forum. We have considered the nature of these comments in determining the nature, timing and extent of our procedures.

In accordance with the [WebTrust Principles and Criteria for Certification Authorities - SSL Baseline with Network Security, Version 2.3.](#)

GlobalSign
Leuven, Belgium

Signed by: Arvid Vermote
Function: Chief Information Security Officer

June 5, 2020

Appendix A – Certification Practice Statements and Certificate Policies in Scope

Certification Practice Statement	Begin Effective Date	End Effective Date
Version 9	12-Mar-19	30-May-19
Version 9.1	31-May-19	24-Sept-19
Version 9.2	25-Sept-19	30-Mar-20
Version 9.3	31-Mar-20	

Certificate Policy	Begin Effective Date	End Effective Date
Version 6	12-Mar-19	30-May-19
Version 6.1	31-May-19	24-Sept-19
Version 6.2	25-Sept-19	30-Mar-20
Version 6.3	31-Mar-20	

Appendix B – In-Scope CAs

Root CAs	SHA256 Hash
CN = GlobalSign Root E46 O = GlobalSign nv-sa C = BE	CBB9C44D84B8043E1050EA31A69F514955D7BFD2E2C6B49301019AD61D9F5058
CN = GlobalSign Root R46 O = GlobalSign nv-sa C = BE	4FA3126D8D3A11D1C4855A4F807CBAD6CF919D3A5A88B03BEA2C6372D93C40C9
CN = GlobalSign Client Authentication Root E45 O = GlobalSign nv-sa C = BE	8B0F0FAA2C00FE0532A8A54E7BC5FD139C1922C4F10F0B16E10FB8BE1A634964
CN = GlobalSign Client Authentication Root R45 O = GlobalSign nv-sa C = BE	165C7E810BD37C1D57CE9849ACCD500E5CB01EEA37DC550DB07E598AAD2474A8
CN = GlobalSign Code Signing Root E45 O = GlobalSign nv-sa C = BE	26C6C5FD4928FD57A8A4C5724FDD279745869C60C338E262FFE901C31BD1DB2B
CN = GlobalSign Code Signing Root R45 O = GlobalSign nv-sa C = BE	7B9D553E1C92CB6E8803E137F4F287D4363757F5D44B37D52F9FCA22FB97DF86
CN = GlobalSign Document Signing Root E45 O = GlobalSign nv-sa C = BE	F86973BDD0514735E10C1190D0345BF89C77E1C4ADBD3F65963B803FD3C9E1FF
CN = GlobalSign Document Signing Root R45 O = GlobalSign nv-sa C = BE	38BE6C7EEB4547D82B9287F243AF32A9DEEB5DC5C9A87A0056F938D91B456A5A
CN = GlobalSign IoT Root E60 O = GlobalSign nv-sa C = BE	43ED443C1F0CD46C9914B4272C24DC42CF6FE62B4AAB37585878A26D882AE4CB
CN = GlobalSign IoT Root R60 O = GlobalSign nv-sa C = BE	36E80B78775DDA9D0BAC964AC29D5A5EC4F3684E0C74445E954A191C2939B8E0

CN = GlobalSign Secure Mail Root E45 O = GlobalSign nv-sa C = BE	5CBF6FB81FD417EA4128CD6F8172A3C9402094F74AB2ED3A06B4405D04F30B19
CN = GlobalSign Secure Mail Root R45 O = GlobalSign nv-sa C = BE	319AF0A7729E6F89269C131EA6A3A16FCD86389FDCAB3C47A4A675C161A3F974
CN = GlobalSign Timestamping Root R45 O = GlobalSign nv-sa C = BE	2BCBBFD66282C680491C8CD7735FDBBAB7A8079B127BEC60C535976834399AF7
CN = GlobalSign Root CA OU = Root CA O = GlobalSign nv-sa C = BE	EBD41040E4BB3EC742C9E381D31EF2A41A48B6685C96E7CEF3C1DF6CD4331C99
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	CBB522D7B7F127AD6A0113865BDF1CD4102E7D0759AF635A7CF4720DC963C53B
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	2CABEAFE37D06CA22ABA7391C0033D25982952C453647349763A3AB5AD6CCF69
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	179FBC148A3DD00FD24EA13458CC43BFA7F59C8182D783A513F6EBEC100C8924
CN = GlobalSign Root CA - R7 OU = Root CA O = GlobalSign nv-sa C = BE	E95B3125405E0D46042D55AC62154507C678EBC360765785FB204AF349BFE880
CN = GlobalSign Root CA - R8 OU = Root CA O = GlobalSign nv-sa C = BE	AE4851FF42039BADE058279151D82683041D2598E240683CC56D76FB8CF53D42

Other CAs	SHA256 Hash
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	118262C2088EE1528E20D836D2070854707C0D8F8E80FBE396F9ECD4B9141B5B
CN = Beame.io CA 1 O = Beame.io Ltd L = Tel Aviv-Jaffa ST = Tel Aviv C = IL	43263913B483EB6F0B020540F8F7BE0A1D7C9CE7652FE0FB4743D7213393551C
CN = Beame.io CA 2 O = Beame.io Ltd L = Tel Aviv-Jaffa ST = Tel Aviv C = IL	CF6E6B82C997CB5CC1A55066AF5F60CAAC77594EB106FB4D498BC50ECDEB8A3A
CN = GlobalSign CA for AATL - SHA384 - G4 O = GlobalSign nv-sa C = BE	AC0AB963BB5F3DA05FBC8687F98C2B6EA0BB499E6118C1A9136B1BC7C3C71A6B
CN = GlobalSign Domain Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	09BC1B137C031239EF788673E94EB17F5F3ECAB07D3ADBFB485E75ABFAAF3B9A
CN = GlobalSign Organization Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	699D54B7482A5D329331EA0415CC2EDCD60FDA01D19E71D054196BCE0677735C
CN = GlobalSign Partners Timestamping CA - SHA384 - G4 O = GlobalSign nv-sa C = BE	2A015531A5F3A4CE589BD853C71DD069587322F574D85C9C9B9F9DF8F86C075E
CN = GlobalSign PersonalSign 1 CA - G3 O = GlobalSign nv-sa C = BE	254BE91C1ABCB28DB5E4D675A29A1E788460B06591F1BA8497CBD17837E27ABE

CN = GlobalSign PersonalSign 2 CA - G3 O = GlobalSign nv-sa C = BE	64E71601F7050921DEE039C03493615E488F12FC3FCECBADF438AA467EE1D41A
CN = GlobalSign PersonalSign 3 CA - G3 O = GlobalSign nv-sa C = BE	C228D93DBE5536A120AC24ED934467BAD7292F8B7EB202634B17070A89C5FE9B
CN = GlobalSign Timestamping CA - SHA384 - G4 O = GlobalSign nv-sa C = BE	F642418E4D0C63DEC785C960EFA68BA745F38851744EF81F225CB89305314D50
CN = JCAN Public CA1 - G3 OU = JCAN Public CA1 - G3 O = JIPDEC C = JP	91E98D0947C125494EAAF2A38D087BE0781AF20D8A14EE8C39FECDC482CF5F82
CN = NAESB Issuing CA - SHA384 - G3 O = GMO GlobalSign Inc. L = Portsmouth ST = New Hampshire C = US	0986B5A1C7314EFB04FB648B9E2B57CF4842FD1D4345D28E52094C90A9FECBFE
CN = Prodrive Technologies B.V. OV SSL Issuing CA O = Prodrive Technologies B.V. OU = IT Services L = Son ST = Noord-Brabant C = NL	398B1499CE00A25F61CAC3D8BEE571601880823EF288BE9772A4D13398422595
CN = SHECA DV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	393B8B15CABC3886FB2E416495D63C8BADD8DCAF87552076C8A0A9637C24DE47

CN = SHECA EV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	147C447FEEB86202B503314FCAF0036BEAAEF437C39B56B358EC446A9D20387F
CN = SHECA OV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	77EAC476453CB732257FF166A5EBD1656CB1F673B68E28DF41774133979FA2A4
CN = Soluti CA - OV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goiânia,ST = Goiás C = BR	A74FFFF528471905385073ADF3997019B26F4FAF24BCE9102A272E7A4484E4BC
CN = Soluti CA - OV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goiânia,ST = Goiás C = BR	BB170B39784D02784325CEA938D92314C617DDE808C867E33E2AD161D54B3E8A
CN = Soluti CA - OV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goiânia,ST = Goiás C = BR	E6E929C8456C014E8DA733ACE4E9814552272B81176050A13EA45A823200B14B
CN = Valid Certificadora Digital SSL DV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL DV L = SÃO PAULO ST = SÃO PAULO C = BR	385135AB18DD190A03BCC0601ACA6F83CEA366642791EBE0A2FDB059C2F7750A

CN = Valid Certificadora Digital SSL DV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL DV L = SÃO PAULO ST = SÃO PAULO C = BR	62B48F51E5868676FD79B9DD9DB98BA928494BA734403C583393C42CE00AD448
CN = Valid Certificadora Digital SSL DV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL DV L = SÃO PAULO ST = SÃO PAULO C = BR	27FA1BE4F4B56A142A47A56A7E94B72502059B4022E4623E748CA1EF151CF222
CN = Valid Certificadora Digital SSL DV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL DV L = SÃO PAULO ST = SÃO PAULO C = BR	600E97601B0BBC5F056F04EEF671EF580F2A8583C6D2D3FAD401B9D820AA8836
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	8C2410F76B149CA062B420AB611B6BF0A06E6E799A29587E4D4EC16D0537B7EA
CN = AlphaSSL CA - G2 O = AlphaSSL	1DCA65B86A57336BA5AFB7214A36F7D6EDE698EB4F03387CB3AD6BBD3A93BAB6
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	EE793643199474ED60EFDC8CCDE4D37445921683593AA751BBF8EE491A391E97
CN = GlobalSign EC Administration CA2 O = GlobalSign nv-sa C = BE	C883B3ECC6AC0DEE75CDD585E73A209287BC0C9F9D79D488860F63E2EA8A7D2C
CN = ICPEdu O = Rede Nacional de Ensino e Pesquisa - RNP OU = Gerencia de Servicos (GSer) L = Rio de Janeiro ST = Rio de Janeiro C = BR	EACBA6C96598B4A41FD53D69AB9ED9FBBB1381154C453456720C174FFE576D1D

CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	AA89C466E9D06882C0DAAF72BE0F0FBCFE7C1EF2AAAD190640C4AD44F5517F34
CN = GlobalSign Timestamping CA - G2 O = GlobalSign nv-sa C = BE	C977923C771E1A66C925A2B6F501732E678DC9887AFE6BFAAC039D1D9A71F0EC
CN = GlobalSign Timestamping CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	9BF9496777D14425ED0086C1BB2C0707B62A61C194C5162E4F07637AFF166B76
CN = AlphaSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	4C013B8854689CB6626CC087B4D4FCCA45104E2D73BFADF33A6979ED124B7837
CN = ATT Organization Validated CA 2019 ST = Texas L = Austin OU = ATT Business Wi-Fi Services O = ATT Services Inc C = US	7AA45D6F5B14DAB1C6844C19C2804E14B5811E6EDE1F02B0AEF065A7B359C68F
CN = Cloudflare ECC DV CA O = Cloudflare, Inc. L = San Francisco ST = CA C = US	0F4517487FD0A8BA3194A6122450A7B32C987FFF16F2D4AF54E6EDB6FED68E08
CN = Cloudflare RSA DV CA O = Cloudflare, Inc. L = San Francisco ST = CA C = US	D439F88E8F2F80A306F910DCDE548D71BBFD99A85FC7034EFB610E3749550932
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	445EEC78BC61215044A0379656AA2D5DB5E42F76CB70B8D14C2077AA943D4EBB
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	E87EA2BED6C6203B2C55B00FE49D2876FBA64702105AEB748B865A918B5C7D27

CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	BFDF4CF3F143AD0DB912D8AB3A7C12F617B9EA60CE8B1F4E44F74270FB21B19B
CN = DPDHL Global TLS CA - I4 ST = Nordrhein-Westfalen L = Bonn O = Deutsche Post AG C = DE	94C663E9EA5C27EE4F64127F9B425863E991A9E156C07DF1A00803AE31764162
CN = GlobalSign Root E46 O = GlobalSign nv-sa C = BE	33EF151EFB08D1C44FB85CC3F23EC6873014E9F881691BD4938B7F251580B694
CN = GlobalSign Root R46 O = GlobalSign nv-sa C = BE	A5E33C28E3013A71F5F760AE3B16595090043D2EC5209EC52903C4FBAD258DAD
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	F349954E8FB6D44011BCB789D97D9A2CB2032BD5F0B598D1FB8A099F5848D523
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	C84E1378B974A991ACDCDD733421E3061E6FA21A0491C8902BAFDE3855E0063E
CN = GlobalSign Root E46 O = GlobalSign nv-sa C = BE	1DF6054D6641404633641BB5FA3742FDA7D075E2514840AB61E00CCBBB7D341D
CN = GlobalSign Root R46 O = GlobalSign nv-sa C = BE	A63C1398B5F8DD2D432FBE4C2C19142BEA6D5D0221FAE794718AE7597ACCA96D
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	3F319B2AFED4A0F75127BE59925550D0428E68763A09E273EB6A9FF8D18DBB5B
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	DDA8DA736187D76F4F0ED5A5F667B54D99A98AE06091D0E3A01714E9221695AD

CN = GlobalSign Root E46 O = GlobalSign nv-sa C = BE	0F1554C2FD591B0256A608E1C136A837E7A6E041561EE08A911B2AFDCD3C6C1B
CN = GlobalSign Root R46 O = GlobalSign nv-sa C = BE	45CB1D874CB03BD5C5B6E079C8FC29E51521EE5628486301964A41F94BA59F88
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	A13820A7387BDFAD204463EFA9216416639B7E73C31DC2F499F53FCD4D4D25C4
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	C01963059070CB2306F4B486CCF1503359209E98499C810C2B49E26E31A4BD74
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	4B7334E1D8999822BAFA8FF6888125389B18A4E5AB26FFA624C7F68FDC81F0CB
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E0C2EBD1F6BAD4FEAAE31A3107E69ABEE902DB38B9DFBE33F0570BDA3494C20A
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	37D080A5E9A526663E56EE20DE4BD9F7952DACC341491439080167AD5DD18CAC
CN = GlobalSign ECC CloudSSL CA - SHA384 - G3 O = GlobalSign nv-sa C = BE	B0CD6AE7B9E20EC5F830FEE01F666D5D90E6E229D06BC46A30ACCEDFEC889648
CN = GlobalSign ECC EV SSL CA 2018 O = GlobalSign nv-sa C = BE	8F19FFE02FC795ED70765D1436ADDF772FE0F0773DA436EDBDB42A2E30E2E828
CN = GlobalSign ECC EV SSL CA 2019 O = GlobalSign nv-sa C = BE	0D3176C58F321AA34C57C8DF7C17D1F4E76C797EC116C9F1D697748ED1FCE7D9

CN = GlobalSign ECC OV SSL CA 2018 O = GlobalSign nv-sa C = BE	87C71553445EB3C33C3E0710711B99E9C7773F04D91AC38A9F4C082EE24101EA
CN = GlobalSign ECC384 EV SSL CA - G3 O = GlobalSign nv-sa C = BE	15549187490314F5177641F0BEB32634AA1230EB2CF2C28AD9C73914FB18ABA0
CN = GlobalSign ECC384 SSL CA - G3 O = GlobalSign nv-sa C = BE	DC6C44AC8A3CD5C3451273F4431526B2EF666062EE763258A928F60BD08E39FE
CN = GlobalSign Extended Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	AED5DD9A5339685DFB029F6D89A14335A96512C3CACC52B2994AF8B6B37FA4D2
CN = GlobalSign HV ECC DV SSL CA 2018 O = GlobalSign nv-sa C = BE	4B0D1392D39157353207A64CCB14683DDE9D2CED1FB58B16E038BE5707C27813
CN = GlobalSign HV RSA DV SSL CA 2018 O = GlobalSign nv-sa C = BE	54C37A8E853FD1D6378D378B939307EC321A31CC1A5A89E7180633BC13F18762
CN = GlobalSign Organization Validated CA - SHA256 - G4 O = GlobalSign nv-sa C = BE	1E1741A12EB8DA2BD76EA96C04F520359839710F620E80952F48DD0240A12CD8
CN = GlobalSign Organization Validated ECC CA - SHA256 - G4 O = GlobalSign nv-sa C = BE	65EEC0CC6C970CC1CD73659115DC8D904E6F12E6DC8FD4DDA39D54CB30224780
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	1C9737E968AD9DFF8D8D7FCF996A144BB97851A19011A0190C943CAE8D43CFE0
CN = GlobalSign Partners TSA CA for AATL O = GlobalSign nv-sa C = BE	7E8F914119BB1090D6204908E5AE1F40BE24C1491CD7D5CFB6A93618CBC00FD9

CN = GlobalSign R6 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	C5B679106958152F83FB5886DDC41F0785193EF67C6975BE3E509F17F29B7A86
CN = GlobalSign R6 RSA EV SSL CA 2019 O = GlobalSign nv-sa C = BE	57264B82A864DBA1C11EF3F80ABB94CAC3660662B0C22F571FF993B3FBCF76FB
CN = GlobalSign R7 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	D302FF3731D28C59A02D5885C5BA324BDC31BBD09A31CC916CF1B74AC277C07B
CN = GlobalSign R8 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	EA8C201C1F8EEF58067B297E6C87D2622AC3946527924BB6DE6A3D700BE81344
CN = GlobalSign RSA DV SSL CA 2018 O = GlobalSign nv-sa C = BE	9E898ED03FA46969690DAD73C7296675045FF9B5A0100A399BEB8435A98F5185
CN = GlobalSign RSA EV QWAC CA 2019 O = GlobalSign nv-sa C = BE	EDC734C501501DC7A27448FA02C74931F8578BF297B173F34B841E82C6691926
CN = GlobalSign RSA EV SSL CA 2019 O = GlobalSign nv-sa C = BE	0D6E46784F3B694E9C7506786417BC6F87F9D2F73D19B5E8081612B21137B766
CN = GlobalSign RSA OV SSL CA 2018 O = GlobalSign nv-sa C = BE	B676FFA3179E8812093A1B5EAFEE876AE7A6AAF231078DAD1BFB21CD2893764A
CN = GlobalSign TSA CA for AATL O = GlobalSign nv-sa C = BE	4D8EB49380EC72AC9FDF21FE1C6DB2E9490C76BEADD1F7B528C3CCD272C8FE28
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	A66422C4E449D465CB023A7FC7633DE8ED1816985CA41093FC96B3663ED7A43B
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	74EF335E5E18788307FB9D89CB704BEC112ABD23487DBFF41C4DED5070F241D9

CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	0B339212D7CFF17A2C59E35669B58E77350133750A78DA9404770EDD470DEF76
CN = RNP ICPEdu OV SSL CA 2019 ST = Rio de Janeiro L = Rio de Janeiro OU = Gerencia de Servicos (GSer) O = Rede Nacional de Ensino e Pesquisa - RNP C = BR	42CFDDA6F660B8E5B4C1C411965A4519312559E3262F8DB69D2DAE17B26B3BA3
CN = Trusted Root CA G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	6E32A35B599E9087BB1AB35CE73022EC2E26AF34BE388919419C95700CD8E7FB
CN = Trusted Root CA SHA256 G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	01FD73EF5E70F526FC9C11F65FE2EE6F7125B3693949227FFD8E459E583C458A
CN = JCAN Sub Root CA0 OU = JCAN Sub Root CA0 O = JIPDEC C = JP	8FA602FFF590DF583A36D509C265F6C3EA8C34A9D56CFF86285FBFE9936BFC55
CN = AlphaSSL CA - SHA256 - G2 O = AlphaSSL	933E4A2D8DB1FF9FF0E508EA7F1637E074F660FE6F365A2233DFC2B52C889D98
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5A817EADA4AD78734EBB2CF674352D97F4352290C40EAF10E764B1EAC075B0E6
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5BB2382D20E09AE56B4F3A5157838F7BAE49E42E3CE53484D66EEB2C0747EF4A
CN = GlobalSign Timestamping CA O = GlobalSign OU = Timestamping CA	D0CAE6947BC77F0B495CA808D6CDE685FCD20225E1E530B635B113ED40728EF3

CN = GlobalSign Timestamping CA - R3 O = GlobalSign OU = Timestamping CA	61C1067083AE044EF1D649CE590BBF09D9D739E025DA8D195F71CFAAD6EBAE69
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	C94FEDDA4E8608908580BC7F87B434E03BB262E42F64C63820A8F50FB17C1CEC
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	4E153A588877688F1A0C103A084C2EDB3AD1D8C480CF03D8AB6FED47D9204370
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	BA0E2B6BF2C98ED2C3B1C1C08A1BBDCAF9270AC528A3194301DD2A0B6B67B9B3
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	669E7727A92BE72D9718E16922DC1BC1492B1AF33FA4793E68D8778F19A2EBE0
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	C2E4236DB1B757B51B77921388EFA823E6A600FD4BDA30B63AB77886F25618B7
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E155EBF96334E79AE2E287D55CFC9185DE24935A653F13C5BA05AFF818771BC6
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	082B243047BF00F584401F538B504BAE9EC060E007FFF28B159C08417068654E
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	A6233ECB77053F72937E894372A601ED3ABEA90CC3B5D89512720BF3FFCBDC9D
CN = JCAN Public CA0 - G3 OU = JCAN Public CA0 - G3 O = JIPDEC C = JP	59B69B0DE73B0209A7CE146DBCEA01B096E92513477EBE60409DACE88B6DF7D9

CN = Liberty University External Issuing CA 01 O = Liberty University L = Lynchburg ST = VA C = US	1F91212C6BFC333C6EB52A685525E1E5B9E3AC1EF7A5A86649F5F95C721D8898
CN = Liberty University External Issuing CA 01 O = Liberty University L = Lynchburg ST = VA C = US	CA005AA75E33594BD1DEDC584E1E74E5198EBB1DE88929ED4F3E2E9FFCE3873B
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	24F91C0705A0A5338641B365FB0D9D9709B56297CFF1857E73C02C1636D486AA
CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	3AAEB26CFCADB77814E34512616232A687D186A84303AA0C8DBBE492CEBD94A1
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	B2ABB9076EF203ADCB56B0ACB40C275262C6CFE9B7A12ABEA7C8FA57773B0D0A
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	C8F1D691B4152C26033C977FE77978D9C82143D46B243B9C9BA7228E000E15BB
CN = JCAN Public CA0 - G3 OU = JCAN Public CA0 - G3 O = JIPDEC C = JP	39883AFF3D0A0A401A9B84C0B830B95AFEC82AF371D9DC5D0219EA8A3DB4CF81
CN = ATT Wi-Fi Services Root Certificate Authority G3 OU = ATT Wi-Fi Services O = ATT Services Inc ST = Texas C = US	2713C7A32105C5E74018465D14D51A959C8AEFC2115E1C007A6A6B4C88313BC6

CN = ATT Wi-Fi Services Root Certificate Authority G3 OU = ATT Wi-Fi Services O = ATT Services Inc ST = Texas C = US	12F3C6423F95C7FFC9A97067FD2D953E70609A44299CA7D458C573C63A592E66
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	BF5EDFBEEB85999C5169CBF3F4DB63B679AD2E1E2272FC3795F9F9921E6D0487
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	F164AD5E4CE9EFC0A144CA902EA2ED46C464D2D508CA919A23095CDF30D4DC68
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	A0133BE5B14E02310A2D4BEAB601094F1194EE8BD6FD29DDFE7B9347467C2EEC
CN = DPDHL TLS CT CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	9153E4420DDC7EB4E6E864AA0377DADF4082ECD35052113638E05D3C296BC006
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	25BACC40A5392B82AADEA04903905A467121F28220E6F2F7E0FE982AAFC14FA6

CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	5A405535C112A0A81AF0D2ACCA3C3F9BC1A677586CDBC633CB4F5F778E1A3550
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	23A74704D77A03CFD3FF19E62C500848214E6C60FD2AAEF7DCE7A8F9EE9F9232
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	1C942A22A016A1E5559DAE77EC5CE8671F98AE0BA4AC2DC259418E8E1E9F94AD
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	7525B1840C398E295FF3AEC5A45BD951B615E9AA26B890319C3BF5CBA95F2441
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	AB68685567BF68819CD163933CDEF86BCD447AEB21404B97D9DA7B57C8449179
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	236B8FF6CB17718D9C92440BD92C692D17381993E579118343C0A55C8DBE6C1A
CN = SignTrust Domain Verification CA - SHA256 - G2 O = SignTrust OU = SignTrust Domain Verification CA - SHA256 - G2	BECD7B1B8C6807A2963B3AEE9BE60A314EBEAF3EA4C30AF39B7AA6C082583CE0
CN = SignTrust Domain Verification CA - G2 O = SignTrust OU = SignTrust Domain Verification CA - G2	DAC1A51E6A44088E77020CA9704C361241FE2DDC42F8132677BA5EBBBA4D0C2C

CN = Southern Company External Issuing CA 1 O = Southern Company Services, Inc. L = Atlanta ST = GA C = US	FB953C4FC0045846D02491C8ECCF387BA34347C17ABB0EA6D59F6DE4D2F1EA04
CN = Touchtech Intermediate CA O = Touchtech Payments Limited L = Dublin C = IE	EF5CB9F6B52E79FCBC71937050D11B9D7E513654139B227D0FF251B250561F18
CN = Virginia Tech Global Qualified Server CA O = Virginia Polytechnic Institute and State University OU = Global Qualified Server CA L = Blacksburg ST = Virginia C = US	D4D03141ECA4190D93BCEE4781AF6F2FDF0F6534A11BEDCCF0614F4D4B175753
CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	C021E99BC4C86C35194B51A6731CB697AA0A2C0D332AB85DDE56F899910E3AA9
CN = GlobalSign PersonalSign 1 CA - G2 O = GlobalSign nv-sa C = BE	13CBF88815EF41E879BEDCB8B68E75E8051AA62FCE6799EEA34BD33D343BB32C
CN = GlobalSign PersonalSign 1 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	AEBE4DE9974A870A47876451CA3054C3B3C1C9C82090CDFF1EFF1425F2795574
CN = GlobalSign PersonalSign 2 CA - G2 O = GlobalSign nv-sa C = BE	16EF3B95DA74A072C2E494E3387749AB07451ED972C02BB8F8CA33020CC89055
CN = GlobalSign PersonalSign 2 CA - G2 O = GlobalSign nv-sa C = BE	CBE21D29171ABE3A64494981AF2824C077B0E43C93B29A6535AED3C7A5B0719D

CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5C0CA03AAA04D2CEFD57DB1F3B17313B200562175871E0D75331C08E2A56430C
CN = GlobalSign PersonalSign 3 CA - G2 O = GlobalSign nv-sa C = BE	2A84A5798BFBDE54086F00BDB68B0519238EE7F4FA86D13382D9B38BB5DE27A9
CN = GlobalSign PersonalSign 3 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	3B20D64ED7D2F43031DEE1AE847A489B6F33F5A28DB7FA2B09B7AEF5F77CA14A
CN = Virginia Tech Global Qualified Server CA O = Virginia Polytechnic Institute and State University OU = Global Qualified Server CA L = Blacksburg ST = Virginia C = US	B79E6378236BF5B6F0C277ECC080627EF3FE2871281A60AC427BDB6F6AE4F794
CN = DPDHL TLS SHA 2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	276F32C1EB6C5F855A7904FD0364B2150E87997FC8D0313DEF7E53AE0999DC1D
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	BE441EEA2B795000C1C133ADC32BCE6F8D3D201DA713F4533AE0F6A2AC96288E
CN = NSW-DEC-ISS-CA1 O = NSW Department of Education and Communities L = Sydney ST = NSW C = AU	C768213179F8071BFAB39415B3C0911297C2346E411E200AB67912948E4C99D7

CN = Virginia Tech Global Qualified Server CA O = Virginia Polytechnic Institute and State University OU = Global Qualified Server CA L = Blacksburg ST = Virginia C = US	0B05933B6EC33152AA976B5165E9AFC13C6EACADC8E1BF6321E3584B6170EA55

Appendix C – Locations

Location Identifier	Country	State / Province
BE-01	Belgium	Vlaams-Brabant
CN-01	China	Shanghai
IN-01	India	Delhi
JP-01	Japan	Tokyo
JP-02	Japan	Yamaguchi
JP-03	Japan	Tokyo
JP-04	Japan	Tokyo
JP-05	Japan	Tokyo
PH-01	Philippines	National Capital Region
RU-01	Russia	Moscow
SG-01	Singapore	Central Singapore
SG-02	Singapore	Central Singapore
UK-01	United Kingdom	Kent
UK-02	United Kingdom	Greater London
UK-03	United Kingdom	Greater London
US-01	United States	New Hampshire

Appendix D – Publicly disclosed incidents

#	Disclosure	Publicly Disclosed Link
1	GlobalSign disclosed the misissuance of QWAC certificates.	Bugzilla Ticket Link
2	GlobalSign disclosed that there has been an issue with an OCSP responder status.	Bugzilla Ticket Link
3	GlobalSign disclosed that some SSL certificates with US country code and invalid State/Prov have been issued.	Bugzilla Ticket Link
4	GlobalSign disclosed that ICAs in CCADB, without EKU extension are listed in WTCA report but not in WTBR report.	Bugzilla Ticket Link
5	GlobalSign disclosed that OCSP responders found to respond signed by the default CA when passed an invalid issuer in request.	Bugzilla Ticket Link
6	GlobalSign disclosed that there has been a wrong business category on 3 EV SSL certificates.	Bugzilla Ticket Link
7	GlobalSign disclosed that an OCSP Responder returned invalid values for some precertificates.	Bugzilla Ticket Link
8	GlobalSign disclosed that a customer (AT&T) running an on-premise (technically-constrained) CA that chains to a GlobalSign root, issued certificates without AIA extension.	Bugzilla Ticket Link
9	GlobalSign disclosed that it misissued 4 certificates with invalid CN.	Bugzilla Ticket Link
10	GlobalSign disclosed that it issued certificates with Subject Public Key Info lacking the explicit NULL parameter.	Bugzilla Ticket Link
11	GlobalSign disclosed that it performed an untimely revocation of TLS certificate after submission of private key compromise.	Bugzilla Ticket Link
12	GlobalSign disclosed that it was not able to revoke 2 noncompliant QWACs within 5 days.	Bugzilla Ticket Link
13	GlobalSign disclosed that it was not able to revoke noncompliant ICA within 7 days	Bugzilla Ticket Link