

## 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 Belgium, Japan, Singapore, United Kingdom, throughout the period April 1, 2018 to March 31, 2019 for its CAs as enumerated in [Appendix B](#), GlobalSign has:

- ▶ Disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its Certification Practice Statements and Certificate Policies in [Appendix A](#).
- ▶ Maintained effective controls to provide reasonable assurance that:
  - GlobalSign's applicable versions of its Certification Practice Statements are consistent with its Certificate Policies as enumerated in [Appendix A](#)
  - GlobalSign provides its services in accordance with applicable versions of its Certificate Policies and Certification Practice Statements as enumerated in [Appendix A](#)
- ▶ 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); 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

in accordance with the [WebTrust Principles and Criteria for Certification Authorities, Version 2.1](#).

### 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, Version 2.1](#).

## **Our independence and quality control**

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

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 key and certificate lifecycle management business practices and its controls over key and certificate integrity, over the authenticity and confidentiality of subscriber and relying party information, over the continuity of key and certificate lifecycle management operations and over development, maintenance and operation of systems integrity;
2. selectively testing transactions executed in accordance with disclosed key and certificate lifecycle management business practices;
3. testing and evaluating the operating effectiveness of the controls; and
4. performing such other procedures as we considered necessary in the circumstances.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## **Relative effectiveness of controls**

The relative effectiveness and significance of specific controls at 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, 2018 to March 31, 2019, GlobalSign management's assertion, as referred to above, is fairly stated, in all material respects, in accordance

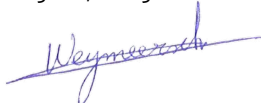
with the [WebTrust Principles and Criteria for Certification Authorities, Version 2.1](#).

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, Version 2.1](#), 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 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.

Ernst & Young Bedrijfsrevisoren cvba  
Diegem, Belgium



Christel Weymeersch, Partner

June 28, 2019

Appendix A – Certification Practice Statements and Certificate Policies in Scope

<b>Certification Practice Statement</b>	<b>Begin Effective Date</b>	<b>End Effective Date</b>
<a href="#">Version 8.6</a>	14-Dec-17	02-Apr-18
<a href="#">Version 8.7</a>	03-Apr-18	14-Jun-18
<a href="#">Version 8.8</a>	15-Jun-18	10-Oct-18
<a href="#">Version 8.9</a>	11-Oct-18	11-Mar-19
<a href="#">Version 9</a>	12-Mar-19	30-May-19

<b>Certificate Policy</b>	<b>Begin Effective Date</b>	<b>End Effective Date</b>
<a href="#">Version 5.6</a>	14-Dec-17	02-Apr-18
<a href="#">Version 5.7</a>	03-Apr-18	14-Jun-18
<a href="#">Version 5.8</a>	15-Jun-18	10-Oct-18
<a href="#">Version 5.9</a>	11-Oct-18	11-Mar-19
<a href="#">Version 6</a>	12-Mar-19	30-May-19

Appendix B – In-Scope CAs

Root CAs	SHA256 Hash
C = BE O = GlobalSign nv-sa OU = Root CA CN = GlobalSign Root CA	EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48: B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99
OU = GlobalSign Root CA - R3 O = GlobalSign CN = GlobalSign	CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E: 7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B
OU = GlobalSign ECC Root CA - R5 O = GlobalSign CN = GlobalSign	17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5: 9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24
OU = GlobalSign Root CA - R6 O = GlobalSign CN = GlobalSign	2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29: 52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69
C = BE O = GlobalSign nv-sa OU = Root CA CN = GlobalSign Root CA - R7	E9:5B:31:25:40:5E:0D:46:04:2D:55:AC:62:15:45:07:C6:78:E B:C3:60:76:57:85:FB:20:4A:F3:49:BF:E8:80
C = BE O = GlobalSign nv-sa OU = Root CA CN = GlobalSign Root CA - R8	AE:48:51:FF:42:03:9B:AD:E0:58:27:91:51:D8:26:83:04:1D:25 :98:E2:40:68:3C:C5:6D:76:FB:8C:F5:3D:42
C = BE O = GlobalSign nv-sa CN = GlobalSign Root E46	CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:B F:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58
C = BE O = GlobalSign nv-sa CN = GlobalSign Root R46	4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91: 9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9

Other CAs	SHA256 Hash
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	44:5E:EC:78:BC:61:21:50:44:A0:37:96:56:AA:2D:5D:B5:E4:2 F:76:CB:70:B8:D1:4C:20:77:AA:94:3D:4E:BB
CN = GlobalSign CA 5 for AATL O = GlobalSign nv-sa C = BE	30:6E:97:39:E3:45:8F:F4:54:68:77:B7:04:B2:E3:90:5E:58:B2: 35:D6:4E:32:F4:F0:26:AC:91:B7:29:5D:15
CN = DPDHL TLS CT CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	91:53:E4:42:0D:DC:7E:B4:E6:E8:64:AA:03:77:DA:DF:40:82: EC:D3:50:52:11:36:38:E0:5D:3C:29:6B:C0:06
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	1C:97:37:E9:68:AD:9D:FF:8D:8D:7F:CF:99:6A:14:4B:B9:78:5 1:A1:90:11:A0:19:0C:94:3C:AE:8D:43:CF:E0
CN = Accenture Federal Services External CA O = Accenture Federal Services LLC ST = DE C = US	A9:C8:E9:71:25:9A:2E:D6:E6:5F:72:1E:07:AA:96:7C:72:C7:C D:B4:7C:7B:E1:28:8D:87:BF:08:D2:F3:58:0D
CN = GlobalSign CA for AATL on HV O = GlobalSign nv-sa C = BE	1C:92:66:90:2A:31:C3:94:1B:50:6D:44:D0:D4:D0:6E:C9:DB:7 6:55:E6:5F:95:57:65:9F:AB:76:8B:29:0B:1B
CN = Valid Certificadora Digital SSL EV CA 2018 O = VALID CERTIFICADORA DIGITAL	27:FA:1B:E4:F4:B5:6A:14:2A:47:A5:6A:7E:94:B7:25:02:05:9 B:40:22:E4:62:3E:74:8C:A1:EF:15:1C:F2:22



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OU = VALID SSL EV L = S\C3\83O PAULO ST = S\C3\83O PAULO C = BR	
CN = GlobalSign HV ECC DV SSL CA 2018 O = GlobalSign nv-sa C = BE	4B:0D:13:92:D3:91:57:35:32:07:A6:4C:CB:14:68:3D:DE:9D:2C:ED:1F:B5:8B:16:E0:38:BE:57:07:C2:78:13
CN = Ford Motor Company - Enterprise Issuing CA01 ST = Michigan L = Dearborn O = Ford Motor Company C = US	4C:24:1C:FE:3D:3F:FB:60:CA:88:D6:B0:6A:55:2A:B1:CF:0E:F7:D8:D2:E0:8D:A1:52:82:B5:51:92:EB:BD:29
CN = GlobalSign AATL Partners CA 2019 O = GlobalSign nv-sa C = BE	83:FC:89:1B:35:0D:9E:0D:7E:BE:6D:D2:A6:BF:E3:D0:B0:F4:65:3F:CA:04:86:15:A5:DE:EB:BC:03:9A:3F:66
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	E8:7E:A2:BE:D6:C6:20:3B:2C:55:B0:0F:E4:9D:28:76:FB:A6:47:02:10:5A:EB:74:8B:86:5A:91:8B:5C:7D:27
CN = CareFirst SHA256 CA - G2 O = CareFirst\, Inc. ST = MD C = US	CF:9B:7E:F7:B4:37:F7:E4:70:9A:05:07:E5:C5:87:16:90:02:1D:64:F3:B8:FC:E7:03:EC:85:C8:5A:E8:FA:29
CN = GlobalSign Domain Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	09:BC:1B:13:7C:03:12:39:EF:78:86:73:E9:4E:B1:7F:5F:3E:CA:B0:7D:3A:DB:FB:48:5E:75:AB:FA:AF:3B:9A
CN = GlobalSign PersonalSign 2 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	B7:78:74:8A:79:2B:8F:91:F0:4B:01:BA:FC:31:A3:1E:D7:EF:6A:71:2A:FF:80:B6:61:0D:9A:AD:EE:20:7A:DF
CN = GlobalSign PersonalSign 2 CA - G3 O = GlobalSign nv-sa C = BE	64:E7:16:01:F7:05:09:21:DE:E0:39:C0:34:93:61:5E:48:8F:12:FC:3F:CE:CB:AD:F4:38:AA:46:7E:E1:D4:1A
CN = GlobalSign Partners TSA CA for AATL O = GlobalSign nv-sa C = BE	7E:8F:91:41:19:BB:10:90:D6:20:49:08:E5:AE:1F:40:BE:24:C1:49:1C:D7:D5:CF:B6:A9:36:18:CB:C0:0F:D9
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	EE:79:36:43:19:94:74:ED:60:EF:DC:8C:CD:E4:D3:74:45:92:16:83:59:3A:A7:51:BB:F8:EE:49:1A:39:1E:97
CN = GlobalSign PersonalSign 3 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	70:1B:43:2A:C0:CD:D4:D9:CF:95:B4:B8:84:C3:2B:F5:CC:A9:0D:44:E0:16:1A:BD:13:B9:34:D6:8E:38:04:72
CN = JCAN Sub Root CA0 OU = JCAN Sub Root CA0 O = JIPDEC C = JP	8F:A6:02:FF:F5:90:DF:58:3A:36:D5:09:C2:65:F6:C3:EA:8C:34:A9:D5:6C:FF:86:28:5F:BF:E9:93:6B:FC:55
CN = IHI-EC International Corporation O = IHI-EC International Corporation L = Houston ST = Texas C = US	57:57:92:53:27:40:80:58:5F:43:CF:DA:A3:D0:7A:28:A8:FB:C E:62:28:B5:2C:E3:A3:20:DE:CD:24:7C:F6:CE



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CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	C8:F1:D6:91:B4:15:2C:26:03:3C:97:7F:E7:79:78:D9:C8:21:4 3:D4:6B:24:3B:9C:9B:A7:22:8E:00:0E:15:BB
CN = GlobalSign PersonalSign 1 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	F5:D2:D2:BA:68:17:A7:A9:AA:0E:21:35:4B:BF:0E:6F:95:C5: E2:87:EE:88:CF:2F:27:9F:0F:FE:C4:ED:AC:15
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	38:51:35:AB:18:DD:19:0A:03:BC:C0:60:1A:CA:6F:83:CE:A3: 66:64:27:91:EB:E0:A2:FD:B0:59:C2:F7:75:0A
CN = GlobalSign Partners Timestamping CA - SHA384 - G4 O = GlobalSign nv-sa C = BE	2A:01:55:31:A5:F3:A4:CE:58:9B:D8:53:C7:1D:D0:69:58:73:2 2:F5:74:D8:5C:9C:9B:9F:9D:F8:F8:6C:07:5E
CN = Prodrive Technologies B.V. OV SSL Issuing CA O = Prodrive Technologies B.V. OU = IT Services L = Son ST = Noord-Brabant C = NL	39:8B:14:99:CE:00:A2:5F:61:CA:C3:D8:BE:E5:71:60:18:80:8 2:3E:F2:88:BE:97:72:A4:D1:33:98:42:25:95
CN = EY LLP SHA256 CA - G2 O = Ernst & Young LLP C = GB	15:57:F6:5B:A6:1C:95:8B:74:EF:A4:A5:82:BB:AE:BD:D6:2A: 6D:9B:65:FE:95:A8:0D:5E:D5:18:F4:6E:D8:7F
CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5C:0C:A0:3A:AA:04:D2:CE:FD:57:DB:1F:3B:17:31:3B:20:05: 62:17:58:71:E0:D7:53:31:C0:8E:2A:56:43:0C
CN = MSC Trustgate.com RSA AATL CA 2019 OU = MyTrust Gateway O = MSC Trustgate.com Sdn. Bhd. C = MY	3A:88:25:30:C0:3E:A6:15:E5:EF:4D:AD:BD:7C:86:60:91:2F: A9:3F:AF:50:88:71:6F:B4:6A:8E:1F:FA:92:18
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	C0:19:63:05:90:70:CB:23:06:F4:B4:86:CC:F1:50:33:59:20:9E :98:49:9C:81:0C:2B:49:E2:6E:31:A4:BD:74
CN = Trusted Root CA SHA256 G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	01:FD:73:EF:5E:70:F5:26:FC:9C:11:F6:5F:E2:EE:6F:71:25:B 3:69:39:49:22:7F:FD:8E:45:9E:58:3C:45:8A
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	F0:37:62:14:05:E0:F3:56:50:7E:23:9F:AD:D6:47:84:2D:3B:50 :85:7C:3C:FF:84:08:59:17:4F:72:F6:FD:18
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	D4:D0:31:41:EC:A4:19:0D:93:BC:EE:47:81:AF:6F:2F:DF:0F: 65:34:A1:1B:ED:CC:F0:61:4F:4D:4B:17:57:53



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CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	B2:AB:B9:07:6E:F2:03:AD:CB:56:B0:AC:B4:0C:27:52:62:C6: CF:E9:B7:A1:2A:BE:A7:C8:FA:57:77:3B:0D:0A
CN = Noble Energy SHA256 CA - G2 O = Noble Energy\, Inc. L = Houston ST = Texas C = US	FA:51:FE:39:F0:F3:16:E9:24:12:E1:17:01:18:E2:D6:2A:8E:4 A:DA:0F:88:EC:23:7F:3C:E6:31:F7:0B:E2:98
CN = NCDOR SHA256 CA - G2 O = NCDOR Department of Revenue ST = NC C = US	C6:47:C5:37:F7:E3:D2:80:94:8D:40:80:0A:EF:8F:53:42:54:F7 :4A:12:16:8E:36:30:E7:60:D7:16:75:BE:3B
CN = GlobalSign Qualified CA 1 O = GlobalSign nv-sa C = BE	F5:70:9A:2D:2F:68:B5:3B:F6:F6:45:BB:17:8A:DF:95:34:6F:8 9:FD:A5:C6:3B:FD:E0:80:42:A2:64:92:AA:B2
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	62:B4:8F:51:E5:86:86:76:FD:79:B9:DD:9D:B9:8B:A9:28:49:4 B:A7:34:40:3C:58:33:93:C4:2C:E0:0A:D4:48
CN = Cloudflare RSA DV CA O = Cloudflare\, Inc. L = San Francisco ST = CA C = US	D4:39:F8:8E:8F:2F:80:A3:06:F9:10:DC:DE:54:8D:71:BB:FD: 99:A8:5F:C7:03:4E:FB:61:0E:37:49:55:09:32
CN = GlobalSign Organization Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	69:9D:54:B7:48:2A:5D:32:93:31:EA:04:15:CC:2E:DC:D6:0F: DA:01:D1:9E:71:D0:54:19:6B:CE:06:77:73:5C
CN = Trafigura PTE DocuSign CA O = Trafigura PTE C = SG	0C:3B:69:67:2E:BA:BE:1F:96:CA:F3:CB:E5:98:F7:74:7C:01: F7:80:14:AF:65:11:91:95:0D:67:3F:D9:17:84
CN = Spirit AeroSystems SHA256 CA - G2 O = Spirit AeroSystems\, Inc. ST = KS C = US	86:09:BD:CE:F9:5E:4A:4D:42:64:97:B5:CD:8E:D4:B0:01:C9: 53:A5:C1:44:71:CA:AF:58:FB:65:0D:F8:AB:F0
CN = GlobalSign Organization Validated CA - SHA256 - G4 O = GlobalSign nv-sa C = BE	1E:17:41:A1:2E:B8:DA:2B:D7:6E:A9:6C:04:F5:20:35:98:39:7 1:0F:62:0E:80:95:2F:48:DD:02:40:A1:2C:D8
CN = Soluti CA - OV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi\C3\A2nia ST = Goi\C3\A1s C = BR	E6:E9:29:C8:45:6C:01:4E:8D:A7:33:AC:E4:E9:81:45:52:27:2 B:81:17:60:50:A1:3E:A4:5A:82:32:00:B1:4B
CN = GlobalSign ECC384 SSL CA - G3 O = GlobalSign nv-sa C = BE	DC:6C:44:AC:8A:3C:D5:C3:45:12:73:F4:43:15:26:B2:EF:66:6 0:62:EE:76:32:58:A9:28:F6:0B:D0:8E:39:FE
CN = Beame.io CA 1 O = Beame.io Ltd L = Tel Aviv-Jaffa ST = Tel Aviv C = IL	43:26:39:13:B4:83:EB:6F:0B:02:05:40:F8:F7:BE:0A:1D:7C:9 C:E7:65:2F:E0:FB:47:43:D7:21:33:93:55:1C





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CN = GlobalSign PersonalSign 3 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	3B:20:D6:4E:D7:D2:F4:30:31:DE:E1:AE:84:7A:48:9B:6F:33:F5:A2:8D:B7:FA:2B:09:B7:AE:F5:F7:7C:A1:4A
CN = Ford Motor Company - Enterprise Issuing CA01 ST = Michigan L = Dearborn O = Ford Motor Company C = US	38:02:E4:24:51:6F:78:EE:AC:32:9A:AE:9B:1F:60:A4:12:DB:E1:D5:B0:95:D7:AC:9D:C0:DC:DD:E3:C1:F5:FB
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	5A:40:55:35:C1:12:A0:A8:1A:F0:D2:AC:CA:3C:3F:9B:C1:A6:77:58:6C:DB:C6:33:CB:4F:5F:77:8E:1A:35:50
CN = Pos Digicert Issuing CA O = Pos Digicert Sdn Bhd OU = 457608-K L = Cyberjaya ST = Selangor C = MY	52:50:AB:D4:3D:51:DE:F9:D5:EE:62:85:FE:F4:F1:A9:08:41:E0:6B:F2:8E:2F:91:25:68:4D:3E:CC:A7:35:B2
CN = Beame.io CA 2 O = Beame.io Ltd L = Tel Aviv-Jaffa ST = Tel Aviv C = IL	CF:6E:6B:82:C9:97:CB:5C:C1:A5:50:66:AF:5F:60:CA:AC:77:59:4E:B1:06:FB:4D:49:8B:C5:0E:CD:EB:8A:3A
CN = GROB-WERKE GmbH und Co. KG SMIME CA O = GROB-WERKE GmbH und Co. KG L = Mindelheim ST = Bayern C = DE	16:08:BF:87:41:4C:DC:FA:B4:27:91:02:A1:97:02:D9:D5:99:6A:91:32:9E:3D:F2:F8:04:95:47:3A:AD:86:C6
CN = GlobalSign Qualified CA 2 O = GlobalSign nv-sa C = BE	FD:3A:0F:3D:D4:48:00:92:B6:D4:50:47:3D:EB:92:01:A0:B3:08:A8:80:78:33:A3:C7:38:F8:A0:7E:B8:1E:D3
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	37:D0:80:A5:E9:A5:26:66:3E:56:EE:20:DE:4B:D9:F7:95:2D:AC:C3:41:49:14:39:08:01:67:AD:5D:D1:8C:AC
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	EA:CB:A6:C9:65:98:B4:A4:1F:D5:3D:69:AB:9E:D9:FB:BB:13:81:15:4C:45:34:56:72:0C:17:4F:FE:57:6D:1D
CN = HERTZ SHA256 CA - G2 O = The HERTZ Corporation ST = Florida C = US	64:FD:7F:66:B8:05:EF:0F:AE:09:DA:C0:6E:AD:1A:9A:B5:C2:8E:6F:24:AD:07:59:99:6D:34:99:87:FE:E7:E2
CN = AlphaSSL CA - G2 O = AlphaSSL	1D:CA:65:B8:6A:57:33:6B:A5:AF:B7:21:4A:36:F7:D6:ED:E6:98:EB:4F:03:38:7C:B3:AD:6B:BD:3A:93:BA:B6
CN = GlobalSign PersonalSign 2 RSA CA SHA 384 - G4 O = GlobalSign nv-sa C = BE	5C:DD:80:9C:F4:4F:5F:86:65:EA:C1:50:55:50:4C:5B:06:B7:87:AC:18:29:45:05:BD:BA:B4:A7:7E:50:D7:76
CN = Giesecke and Devrient CA OU = Corporate CA	63:2F:D6:97:BA:CA:F1:ED:23:25:17:EC:9B:76:22:B7:C2:5E:14:48:B0:CC:62:6B:33:28:67:19:E3:51:CE:8A



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O = Giesecke and Devrient L = Munich C = DE	
CN = EmblemHealth SHA256 CA - G3 O = EmblemHealth, Inc. ST = New York C = US	4A:11:44:E6:B2:B1:E3:E2:B9:34:58:7B:07:42:1D:14:AF:3B:2 F:7F:79:25:4F:B0:2D:0A:D3:FE:67:D7:90:27
CN = GlobalSign Extended Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	AE:D5:DD:9A:53:39:68:5D:FB:02:9F:6D:89:A1:43:35:A9:65:1 2:C3:CA:CC:52:B2:99:4A:F8:B6:B3:7F:A4:D2
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	DD:A8:DA:73:61:87:D7:6F:4F:0E:D5:A5:F6:67:B5:4D:99:A9: 8A:E0:60:91:D0:E3:A0:17:14:E9:22:16:95:AD
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	24:F9:1C:07:05:A0:A5:33:86:41:B3:65:FB:0D:9D:97:09:B5:62 :97:CF:F1:85:7E:73:C0:2C:16:36:D4:86:AA
CN = InComm Agent Solutions Inc Root Certificate Authority O = InComm Agent Solutions Inc ST = Florida C = US	2A:5E:AD:8B:41:A7:CD:DC:12:6B:10:ED:24:8A:2E:EF:ED:A8 :55:66:03:42:F2:22:A3:8C:C6:60:5D:44:3E:22
CN = GlobalSign ECC EV SSL CA 2018 O = GlobalSign nv-sa C = BE	8F:19:FF:E0:2F:C7:95:ED:70:76:5D:14:36:AD:DF:77:2F:E0:F 0:77:3D:A4:36:ED:BD:B4:2A:2E:30:E2:E8:28
CN = GlobalSign R6 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	C5:B6:79:10:69:58:15:2F:83:FB:58:86:DD:C4:1F:07:85:19:3E :F6:7C:69:75:BE:3E:50:9F:17:F2:9B:7A:86
CN = SHECA OV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	77:EA:C4:76:45:3C:B7:32:25:7F:F1:66:A5:EB:D1:65:6C:B1:F 6:73:B6:8E:28:DF:41:77:41:33:97:9F:A2:A4
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	BF:DF:4C:F3:F1:43:AD:0D:B9:12:D8:AB:3A:7C:12:F6:17:B9: EA:60:CE:8B:1F:4E:44:F7:42:70:FB:21:B1:9B
CN = GlobalSign CA 4 for AATL O = GlobalSign nv-sa C = BE	EB:A3:4C:7B:10:96:71:61:4C:36:7E:1D:E0:75:12:4C:39:54:C E:19:F8:5F:AC:F6:10:90:EC:31:9F:7F:1A:7F
CN = GlobalSign SMIME CA 2018 O = GlobalSign nv-sa C = BE	C8:19:2C:32:F7:B4:9C:7F:32:A1:CA:00:15:95:A7:F9:E3:6C:9 E:72:05:8D:6E:AA:1B:AB:77:52:A8:C1:67:18
CN = NAESB Issuing CA - SHA384 - G3 O = GMO GlobalSign Inc. L = Portsmouth ST = New Hampshire C = US	09:86:B5:A1:C7:31:4E:FB:04:FB:64:8B:9E:2B:57:CF:48:42:F D:1D:43:45:D2:8E:52:09:4C:90:A9:FE:CB:FE
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	23:6B:8F:F6:CB:17:71:8D:9C:92:44:0B:D9:2C:69:2D:17:38:1 9:93:E5:79:11:83:43:C0:A5:5C:8D:BE:6C:1A
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa	8C:24:10:F7:6B:14:9C:A0:62:B4:20:AB:61:1B:6B:F0:A0:6E:6 E:79:9A:29:58:7E:4D:4E:C1:6D:05:37:B7:EA



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C = BE	
CN = JCAN Public CA1 - G3 OU = JCAN Public CA1 - G3 O = JIPDEC C = JP	91:E9:8D:09:47:C1:25:49:4E:AA:F2:A3:8D:08:7B:E0:78:1A:F2:0D:8A:14:EE:8C:39:FE:CD:C4:82:CF:5F:82
CN = GlobalSign CA for AATL - SHA384 - G4 O = GlobalSign nv-sa C = BE	AC:0A:B9:63:BB:5F:3D:A0:5F:BC:86:87:F9:8C:2B:6E:A0:BB:49:9E:61:18:C1:A9:13:6B:1B:C7:C3:C7:1A:6B
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	A1:38:20:A7:38:7B:DF:AD:20:44:63:EF:A9:21:64:16:63:9B:7E:73:C3:1D:C2:F4:99:F5:3F:CD:4D:4D:25:C4
CN = CBMM SMIME CA 2019,postalCode = 38183-903,street = RUA CORREGO DA MATA S/N ST = MINAS GERAIS L = ARAXA O = COMPANHIA BRASILEIRA DE METALURGIA E MINERACAO C = BR	16:CF:C3:31:B1:FB:63:AB:DB:D6:1B:AA:80:6C:5E:A9:F3:3C:98:F7:E4:F1:85:BB:C8:6A:98:03:59:41:74:F4
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	74:EF:33:5E:5E:18:78:83:07:FB:9D:89:CB:70:4B:EC:11:2A:BD:23:48:7D:BF:F4:1C:4D:ED:50:70:F2:41:D9
CN = GlobalSign Timestamping CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	9B:F9:49:67:77:D1:44:25:ED:00:86:C1:BB:2C:07:07:B6:2A:61:C1:94:C5:16:2E:4F:07:63:7A:FF:16:6B:76
CN = SHECA EV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	14:7C:44:7F:EE:B8:62:02:B5:03:31:4F:CA:F0:03:6B:EA:AE:F4:37:C3:9B:56:B3:58:EC:44:6A:9D:20:38:7F
CN = GlobalSign ECC OV SSL CA 2018 O = GlobalSign nv-sa C = BE	87:C7:15:53:44:5E:B3:C3:3C:3E:07:10:71:1B:99:E9:C7:77:3F:04:D9:1A:C3:8A:9F:4C:08:2E:E2:41:01:EA
CN = GlobalSign ECC CloudSSL CA - SHA384 - G3 O = GlobalSign nv-sa C = BE	B0:CD:6A:E7:B9:E2:0E:C5:F8:30:FE:E0:1F:66:6D:5D:90:E6:E2:29:D0:6B:C4:6A:30:AC:CE:DF:EC:88:96:48
CN = GlobalSign RSA DV SSL CA 2018 O = GlobalSign nv-sa C = BE	9E:89:8E:D0:3F:A4:69:69:69:0D:AD:73:C7:29:66:75:04:5F:F9:B5:A0:10:0A:39:9B:EB:84:35:A9:8F:51:85
CN = GlobalSign ECC384 EV SSL CA - G3 O = GlobalSign nv-sa C = BE	15:54:91:87:49:03:14:F5:17:76:41:F0:BE:B3:26:34:AA:12:30:EB:2C:F2:C2:8A:D9:C7:39:14:FB:18:AB:A0
CN = GlobalSign PersonalSign 1 CA - G3 O = GlobalSign nv-sa C = BE	25:4B:E9:1C:1A:BC:B2:8D:B5:E4:D6:75:A2:9A:1E:78:84:60:B0:65:91:F1:BA:84:97:CB:D1:78:37:E2:7A:BE
CN = Valid Certificadora Digital SSL OV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL OV L = S\C3\83O PAULO	60:0E:97:60:1B:0B:BC:5F:05:6F:04:EE:F6:71:EF:58:0F:2A:85:83:C6:D2:D3:FA:D4:01:B9:D8:20:AA:88:36



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ST = S\C3\83O PAULO C = BR	
CN = GlobalSign PersonalSign 1 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	AE:BE:4D:E9:97:4A:87:0A:47:87:64:51:CA:30:54:C3:B3:C1: C9:C8:20:90:CD:FF:1E:FF:14:25:F2:79:55:74
CN = RTI SHA256 CA - G2 O = RTI International ST = NC C = US	5F:7C:6E:60:41:DA:A5:13:CB:FE:3D:4E:07:FD:C8:4E:23:0D: A2:1A:F2:DE:18:64:60:C9:EC:04:81:51:6D:AB
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	4B:73:34:E1:D8:99:98:22:BA:FA:8F:F6:88:81:25:38:9B:18:A4 :E5:AB:26:FF:A6:24:C7:F6:8F:DC:81:F0:CB
CN = GlobalSign Organization Validated ECC CA - SHA256 - G4 O = GlobalSign nv-sa C = BE	65:EE:C0:CC:6C:97:0C:C1:CD:73:65:91:15:DC:8D:90:4E:6F: 12:E6:DC:8F:D4:DD:A3:9D:54:CB:30:22:47:80
CN = Hyperion SMIME CA 2018 O = Hyperion Services Ltd. L = London ST = London C = GB	DC:D7:7E:34:B4:6D:53:0A:EF:64:5A:51:33:89:CD:4F:FC:0F: 7D:19:6A:11:5B:8F:62:A5:FD:0D:55:7D:46:C6
CN = GlobalSign Qualified CA 3 O = GlobalSign nv-sa C = BE	0A:A9:F2:E7:D9:5C:71:8B:7D:1E:B7:CC:DB:D0:16:4E:86:05: 7A:E9:D6:69:22:BC:60:F9:90:3F:94:A0:F0:EF
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	A6:64:22:C4:E4:49:D4:65:CB:02:3A:7F:C7:63:3D:E8:ED:18:1 6:98:5C:A4:10:93:FC:96:B3:66:3E:D7:A4:3B
CN = GlobalSign PersonalSign 2 ECC CA SHA 384 - G4 O = GlobalSign nv-sa C = BE	46:03:8F:63:26:22:8C:DB:56:61:9C:52:26:66:13:DA:04:C8:C A:49:9E:0D:03:B0:ED:CF:FC:11:0D:5C:FC:70
CN = GlobalSign EC Administration CA2 O = GlobalSign nv-sa C = BE	C8:83:B3:EC:C6:AC:0D:EE:75:CD:D5:85:E7:3A:20:92:87:BC :0C:9F:9D:79:D4:88:86:0F:63:E2:EA:8A:7D:2C
CN = GlobalSign Timestamping CA - G2 O = GlobalSign nv-sa C = BE	C9:77:92:3C:77:1E:1A:66:C9:25:A2:B6:F5:01:73:2E:67:8D:C 9:88:7A:FE:6B:FA:AC:03:9D:1D:9A:71:F0:EC
CN = GlobalSign PersonalSign 3 CA - G3 O = GlobalSign nv-sa C = BE	C2:28:D9:3D:BE:55:36:A1:20:AC:24:ED:93:44:67:BA:D7:29:2 F:8B:7E:B2:02:63:4B:17:07:0A:89:C5:FE:9B
CN = Touchtech Intermediate CA O = Touchtech Payments Limited L = Dublin C = IE	EF:5C:B9:F6:B5:2E:79:FC:BC:71:93:70:50:D1:1B:9D:7E:51:3 6:54:13:9B:22:7D:0F:F2:51:B2:50:56:1F:18
CN = AlphaSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	4C:01:3B:88:54:68:9C:B6:62:6C:C0:87:B4:D4:FC:CA:45:10:4 E:2D:73:BF:AD:F3:3A:69:79:ED:12:4B:78:37
CN = JCAN Public CA1 - G4 OU = JCAN Public CA1 - G4 O = JIPDEC C = JP	7B:46:4D:C3:84:FD:B1:A5:25:C2:CC:27:9E:D0:C7:CF:AD:24: BE:CF:72:C4:6A:7D:70:93:D1:57:C2:17:60:7E
CN = GlobalSign PersonalSign 2 CA -	C0:21:E9:9B:C4:C8:6C:35:19:4B:51:A6:73:1C:B6:97:AA:0A:2



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SHA256 - G2 O = GlobalSign nv-sa C = BE	C:0D:33:2A:B8:5D:DE:56:F8:99:91:0E:3A:A9
CN = GlobalSign ECC HV S/MIME CA 1 O = GlobalSign nv-sa C = BE	E0:CE:5C:4E:F5:D2:18:69:63:D2:B0:4A:DE:46:12:BB:AF:78:7E:16:04:8A:5B:46:8F:73:67:77:6C:3A:03:DE
CN = GlobalSign TSA CA for AATL O = GlobalSign nv-sa C = BE	4D:8E:B4:93:80:EC:72:AC:9F:DF:21:FE:1C:6D:B2:E9:49:0C:76:BE:AD:D1:F7:B5:28:C3:CC:D2:72:C8:FE:28
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	3F:31:9B:2A:FE:D4:A0:F7:51:27:BE:59:92:55:50:D0:42:8E:68:76:3A:09:E2:73:EB:6A:9F:F8:D1:8D:BB:5B
CN = SHECA DV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	39:3B:8B:15:CA:BC:38:86:FB:2E:41:64:95:D6:3C:8B:AD:D8:DC:AF:87:55:20:76:C8:A0:A9:63:7C:24:DE:47
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	11:82:62:C2:08:8E:E1:52:8E:20:D8:36:D2:07:08:54:70:7C:0D:8F:8E:80:FB:E3:96:F9:EC:D4:B9:14:1B:5B
CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	AA:89:C4:66:E9:D0:68:82:C0:DA:AF:72:BE:0F:0F:BC:FE:7C:1E:F2:AA:AD:19:06:40:C4:AD:44:F5:51:7F:34
CN = Cloudflare ECC DV CA O = Cloudflare, Inc. L = San Francisco ST = CA C = US	0F:45:17:48:7F:D0:A8:BA:31:94:A6:12:24:50:A7:B3:2C:98:7F:FF:16:F2:D4:AF:54:E6:ED:B6:FE:D6:8E:08
CN = GlobalSign RSA OV SSL CA 2018 O = GlobalSign nv-sa C = BE	B6:76:FF:A3:17:9E:88:12:09:3A:1B:5E:AF:EE:87:6A:E7:A6:A A:F2:31:07:8D:AD:1B:FB:21:CD:28:93:76:4A
CN = Soluti CA - EV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi�C3A2nia ST = Goi�C3A1s C = BR	BB:17:0B:39:78:4D:02:78:43:25:CE:A9:38:D9:23:14:C6:17:D D:E8:08:C8:67:E3:3E:2A:D1:61:D5:4B:3E:8A
CN = Trusted Root CA G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	6E:32:A3:5B:59:9E:90:87:BB:1A:B3:5C:E7:30:22:EC:2E:26:A F:34:BE:38:89:19:41:9C:95:70:0C:D8:E7:FB
CN = GlobalSign HV S/MIME CA 1 O = GlobalSign nv-sa C = BE	0F:8E:EF:EC:0D:1F:DB:DA:33:BF:EB:41:45:51:10:61:3C:C5:68:1E:92:B4:BC:B9:56:10:DA:35:FE:1F:3C:66
CN = Trafigura PTE DocuSign CA O = Trafigura PTE C = SG	B5:3A:B0:BB:FF:07:E6:CD:1A:2C:4F:AB:6B:30:76:86:EA:5C:6C:82:1D:A8:46:70:72:7D:14:97:FE:BD:5A:6D
CN = JCAN Public CA0 - G3 OU = JCAN Public CA0 - G3 O = JIPDEC C = JP	39:88:3A:FF:3D:0A:0A:40:1A:9B:84:C0:B8:30:B9:5A:FE:C8:2 A:F3:71:D9:DC:5D:02:19:EA:8A:3D:B4:CF:81
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	0B:33:92:12:D7:CF:F1:7A:2C:59:E3:56:69:B5:8E:77:35:01:33 :75:0A:78:DA:94:04:77:0E:DD:47:0D:EF:76



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CN = Soluti CA - DV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi\C3\A2nia ST = Goi\C3\A1s C = BR	A7:4F:FF:F5:28:47:19:05:38:50:73:AD:F3:99:70:19:B2:6F:4F: AF:24:BC:E9:10:2A:27:2E:7A:44:84:E4:BC
CN = GlobalSign Timestamping CA - SHA384 - G4 O = GlobalSign nv-sa C = BE	F6:42:41:8E:4D:0C:63:DE:C7:85:C9:60:EF:A6:8B:A7:45:F3:8 8:51:74:4E:F8:1F:22:5C:B8:93:05:31:4D:50
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E0:C2:EB:D1:F6:BA:D4:FE:AA:E3:1A:31:07:E6:9A:BE:E9:02: DB:38:B9:DF:BE:33:F0:57:0B:DA:34:94:C2:0A
CN = VWFS CA for AATL O = Volkswagen Financial Services (UK) Limited C = GB	CF:89:A4:1D:FE:E5:F7:17:40:DE:F6:02:73:5D:DB:F1:DE:BE: 0C:B8:16:D7:39:80:D9:A5:83:C5:88:1C:E7:78
CN = GlobalSign HV RSA DV SSL CA 2018 O = GlobalSign nv-sa C = BE	54:C3:7A:8E:85:3F:D1:D6:37:8D:37:8B:93:93:07:EC:32:1A:3 1:CC:1A:5A:89:E7:18:06:33:BC:13:F1:87:62
CN = RISE Signing CA O = RISE Research Institutes of Sweden AB OU = IT L = Goteborg ST = Vastra Gotalands Lan C = SE	29:16:4F:9C:83:B4:80:C7:69:21:38:8D:2D:7A:35:D4:8C:49:6 5:F1:48:C2:30:3A:77:DE:55:33:04:53:14:31
CN = GlobalSign CA for AATL on HV O = GlobalSign nv-sa C = BE	BC:BD:04:D4:AE:D9:62:C9:D2:5A:FE:0C:FA:F8:63:8C:E1:43 :16:52:98:8E:C5:21:73:29:E7:55:9A:C3:C6:71
CN = JCAN Public CA0 - G3 OU = JCAN Public CA0 - G3 O = JIPDEC C = JP	59:B6:9B:0D:E7:3B:02:09:A7:CE:14:6D:BC:EA:01:B0:96:E9: 25:13:47:7E:BE:60:40:9D:AC:E8:8B:6D:F7:D9
CN = AlphaSSL CA - SHA256 - G2 O = AlphaSSL	93:3E:4A:2D:8D:B1:FF:9F:F0:E5:08:EA:7F:16:37:E0:74:F6:6 0:FE:6F:36:5A:22:33:DF:C2:B5:2C:88:9D:98
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5A:81:7E:AD:A4:AD:78:73:4E:BB:2C:F6:74:35:2D:97:F4:35:2 2:90:C4:0E:AF:10:E7:64:B1:EA:C0:75:B0:E6
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5B:B2:38:2D:20:E0:9A:E5:6B:4F:3A:51:57:83:8F:7B:AE:49:E 4:2E:3C:E5:34:84:D6:6E:EB:2C:07:47:EF:4A
CN = Noble Energy SHA256 CA - G2 O = Noble Energy, Inc. L = Houston ST = Texas C = US	AD:49:54:41:62:13:AD:01:9D:53:FD:95:9B:1F:22:61:30:F2:C C:74:9C:CF:D4:3C:07:99:51:D8:AF:C7:BB:41
CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	3A:AE:B2:6C:FC:AD:B7:78:14:E3:45:12:61:62:32:A6:87:D1:8 6:A8:43:03:AA:0C:8D:BB:E4:92:CE:BD:94:A1
CN = GlobalSign Timestamping CA O = GlobalSign OU = Timestamping CA	D0:CA:E6:94:7B:C7:7F:0B:49:5C:A8:08:D6:CD:E6:85:FC:D2: 02:25:E1:E5:30:B6:35:B1:13:ED:40:72:8E:F3
CN = GlobalSign Timestamping CA - R3	61:C1:06:70:83:AE:04:4E:F1:D6:49:CE:59:0B:BF:09:D9:D7:3



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O = GlobalSign OU = Timestamping CA	9:E0:25:DA:8D:19:5F:71:CF:AA:D6:EB:AE:69
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	C9:4F:ED:DA:4E:86:08:90:85:80:BC:7F:87:B4:34:E0:3B:B2:62:E4:2F:64:C6:38:20:A8:F5:0F:B1:7C:1C:EC
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	BA:0E:2B:6B:F2:C9:8E:D2:C3:B1:C1:C0:8A:1B:BD:CA:F9:27:0A:C5:28:A3:19:43:01:DD:2A:0B:6B:67:B9:B3
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	4E:15:3A:58:88:77:68:8F:1A:0C:10:3A:08:4C:2E:DB:3A:D1:D8:C4:80:CF:03:D8:AB:6F:ED:47:D9:20:43:70
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	66:9E:77:27:A9:2B:E7:2D:97:18:E1:69:22:DC:1B:C1:49:2B:1A:F3:3F:A4:79:3E:68:D8:77:8F:19:A2:EB:E0
CN = Ford Motor Company \E2\80\93 Enterprise Issuing CA01 ST = Michigan L = Dearborn O = Ford Motor Company C = US	36:25:D9:C4:82:CD:39:E0:DF:BE:8B:76:D7:54:4F:9F:C9:3B:78:23:4B:5F:86:C6:CE:DE:28:35:EA:A5:96:A0
CN = Ford Motor Company - Enterprise Issuing CA01 ST = Michigan L = Dearborn O = Ford Motor Company C = US	71:93:06:D8:FE:2D:9A:B7:BD:17:D5:E2:11:E4:39:E5:0C:E3:5B:47:1F:03:8B:7E:89:BA:09:8F:FA:5F:24:27
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	75:25:B1:84:0C:39:8E:29:5F:F3:AE:C5:A4:5B:D9:51:B6:15:E9:AA:26:B8:90:31:9C:3B:F5:CB:A9:5F:24:41
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	AB:68:68:55:67:BF:68:81:9C:D1:63:93:3C:DE:F8:6B:CD:44:7A:EB:21:40:4B:97:D9:DA:7B:57:C8:44:91:79
CN = GlobalSign CA 4 for AATL O = GlobalSign nv-sa C = BE	9D:DC:2E:0D:55:B4:61:E0:C7:32:28:28:2D:F5:6B:2B:EF:22:4C:A2:38:56:81:D1:7B:6E:8C:07:78:52:57:3C
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E1:55:EB:F9:63:34:E7:9A:E2:E2:87:D5:5C:FC:91:85:DE:24:93:5A:65:3F:13:C5:BA:05:AF:F8:18:77:1B:C6
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	C2:E4:23:6D:B1:B7:57:B5:1B:77:92:13:88:EF:A8:23:E6:A6:00:FD:4B:DA:30:B6:3A:B7:78:86:F2:56:18:B7
CN = Google S/MIME Authority ST = California O = Google Inc C = US	6A:17:45:B3:11:76:FA:C2:84:42:0A:2B:CE:F6:7B:59:E2:2A:1D:37:75:3A:BA:F2:CC:51:B2:F5:72:92:25:88
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	A6:23:3E:CB:77:05:3F:72:93:7E:89:43:72:A6:01:ED:3A:BE:A9:0C:C3:B5:D8:95:12:72:0B:F3:FF:CB:DC:9D
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	08:2B:24:30:47:BF:00:F5:84:40:1F:53:8B:50:4B:AE:9E:C0:60:E0:07:FF:F2:8B:15:9C:08:41:70:68:65:4E



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CN = SignTrust Domain Verification CA - SHA256 - G2 O = SignTrust OU = SignTrust Domain Verification CA - SHA256 - G2	BE:CD:7B:1B:8C:68:07:A2:96:3B:3A:EE:9B:E6:0A:31:4E:BE:AF:3E:A4:C3:0A:F3:9B:7A:A6:C0:82:58:3C:E0
CN = SignTrust Domain Verification CA - G2 O = SignTrust OU = SignTrust Domain Verification CA - G2	DA:C1:A5:1E:6A:44:08:8E:77:02:0C:A9:70:4C:36:12:41:FE:2D:DC:42:F8:13:26:77:BA:5E:BB:BA:4D:0C:2C
CN = GlobalSign Extended Validation CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	14:97:8C:01:FE:AD:5C:D6:45:74:40:AD:D9:D1:DD:BA:B7:7D:23:8C:9A:2F:E2:24:EE:87:2B:24:7B:CF:FB:3C
CN = GlobalSign R7 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	D3:02:FF:37:31:D2:8C:59:A0:2D:58:85:C5:BA:32:4B:DC:31:BB:D0:9A:31:CC:91:6C:F1:B7:4A:C2:77:C0:7B
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	BC:E3:A5:BD:8D:90:82:63:6C:5B:FE:3E:0B:71:AC:EE:55:1E:24:E3:BD:03:58:87:D2:66:1A:DA:65:AF:F4:84
CN = Liberty University External Issuing CA 01 O = Liberty University L = Lynchburg ST = VA C = US	CA:00:5A:A7:5E:33:59:4B:D1:DE:DC:58:4E:1E:74:E5:19:8E:BB:1D:E8:89:29:ED:4F:3E:2E:9F:FC:E3:87:3B
CN = GlobalSign CodeSigning CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	FB:54:EE:A9:BC:E8:E9:EA:97:82:15:4F:3D:41:42:77:FB:70:9F:49:B9:47:D7:39:78:AC:27:85:46:C2:CE:03
CN = ATT Wi-Fi Services Root Certificate Authority G3 OU = ATT Wi-Fi Services O = ATT Services Inc ST = Texas C = US	12:F3:C6:42:3F:95:C7:FF:C9:A9:70:67:FD:2D:95:3E:70:60:9A:44:29:9C:A7:D4:58:C5:73:C6:3A:59:2E:66
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	23:A7:47:04:D7:7A:03:CF:D3:FF:19:E6:2C:50:08:48:21:4E:6C:60:FD:2A:AE:F7:DC:E7:A8:F9:EE:9F:92:32
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	2E:01:91:75:1C:A0:CB:A8:1C:3A:63:38:DE:E1:A0:2B:8D:6B:CC:4F:1F:82:61:B8:09:BC:CE:7A:BA:F1:A4:3D
CN = NSW-DEC-ISS-CA1 O = NSW Department of Education and Communities L = Sydney ST = NSW C = AU	C7:68:21:31:79:F8:07:1B:FA:B3:94:15:B3:C0:91:12:97:C2:34:6E:41:1E:20:0A:B6:79:12:94:8E:4C:99:D7
CN = GlobalSign Primary SHA256 CA for Adobe OU = GlobalSign CDS	8B:8A:AA:67:E1:EB:06:73:03:F0:9E:17:A5:05:CE:7B:6C:A1:C8:DC:0E:1D:B5:9D:98:2B:57:9C:69:D6:44:E1





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O = GlobalSign nv-sa C = BE	
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	42:EC:AE:70:C8:1A:60:31:51:F1:C3:3C:1C:06:DE:DE:0A:CD: 6F:D2:3D:58:76:D4:D1:F6:B2:E8:76:71:A9:A0
CN = Southern Company External Issuing CA 1 O = Southern Company Services\, Inc. L = Atlanta ST = GA C = US	FB:95:3C:4F:C0:04:58:46:D0:24:91:C8:EC:CF:38:7B:A3:43:4 7:C1:7A:BB:0E:A6:D5:9F:6D:E4:D2:F1:EA:04
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	A0:13:3B:E5:B1:4E:02:31:0A:2D:4B:EA:B6:01:09:4F:11:94:E E:8B:D6:FD:29:DD:FE:7B:93:47:46:7C:2E:EC
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	2A:48:08:10:31:0E:A0:CB:65:90:31:A2:0D:4E:4A:3C:10:00:E F:34:52:62:34:96:4F:DF:E9:C6:56:C4:5B:CD
CN = Virginia Tech Global Software Token User CA O = Virginia Polytechnic Institute and State University OU = Global Software Token User CA L = Blacksburg ST = Virginia C = US	2F:B0:45:57:96:0B:E5:32:A3:14:C9:BC:35:22:1F:BE:DF:75:9 6:C3:4C:BC:67:3E:12:33:9E:FD:BE:DD:EB:F7
CN = Crown Prince Court CA for AATL O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	DF:45:EE:AE:D9:05:C5:8D:73:0E:C5:49:7B:59:B3:AB:4C:CE: 7C:64:59:95:3D:F9:CA:5C:1F:03:1A:C0:6D:D8
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	B6:BA:9C:02:A7:05:61:C3:99:4C:E0:94:AD:56:A7:87:EE:DD: 1A:61:A7:D4:AC:0C:D1:1B:64:B2:4E:F2:AE:13
CN = GlobalSign ECC EV SSL CA 2019 O = GlobalSign nv-sa C = BE	0D:31:76:C5:8F:32:1A:A3:4C:57:C8:DF:7C:17:D1:F4:E7:6C: 79:7E:C1:16:C9:F1:D6:97:74:8E:D1:FC:E7:D9
CN = GlobalSign OU = GlobalSign Root CA - R3 O = GlobalSign	25:10:E2:48:90:3F:01:B6:3F:93:98:17:9E:55:06:97:9F:0E:F5: 07:E4:17:4B:65:7A:F6:F7:70:A4:17:EC:94
CN = GlobalSign Extended Validation CodeSigning CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	DD:03:8E:87:E0:B4:D2:C3:69:68:0D:3D:E7:86:38:AB:39:FC: 1D:7E:50:63:29:96:92:11:01:76:8D:B8:D4:D8
CN = GlobalSign CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	DC:0C:F9:A9:28:8B:75:A0:7B:EB:FC:44:26:9C:27:DF:DB:CE :5E:AD:00:DC:13:37:68:6C:FC:D1:8A:9B:C9:40
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	EB:DF:04:E3:2D:D5:DC:5C:67:7C:4F:9B:43:0A:E0:A0:5A:B1: 0C:B9:BF:BB:E4:4D:7B:F8:B4:22:06:2E:7E:BF
CN = GlobalSign OU = GlobalSign Root CA - R6 O = GlobalSign	75:BF:B5:22:CC:4B:58:DA:22:EE:48:85:17:C5:F2:EF:F9:25:7 6:D2:0F:59:5F:9A:CE:48:3A:03:6F:C1:BB:6B
CN = GlobalSign SHA256 CA for Adobe	10:27:E1:0A:C0:85:B2:DE:4F:9B:9F:1C:6F:2A:A9:7C:1F:9A:



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OU = GlobalSign CDS O = GlobalSign nv-sa C = BE	B0:57:CD:1B:E2:73:05:73:3D:C3:D9:AA:58:16
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	50:CA:2C:8D:FD:CA:8F:B1:7F:5F:D4:47:A8:6B:24:E2:63:DD: 9F:1D:4F:C7:7E:89:9D:D8:CD:91:36:94:3F:CC
CN = Health Services Staffs Credit Union Issuing CA O = Health Services Staffs Credit Union Limited L = Dublin C = IE	07:E7:CE:06:75:65:F5:D4:A2:4C:67:21:4C:FE:DC:2A:4F:15:0 4:64:62:7E:A8:2E:D0:5C:26:82:42:6E:02:E1
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	BE:44:1E:EA:2B:79:50:00:C1:C1:33:AD:C3:2B:CE:6F:8D:3D: 20:1D:A7:13:F4:53:3A:E0:F6:A2:AC:96:28:8E
CN = GlobalSign Root CA OU = Root CA O = GlobalSign nv-sa C = BE	6A:DD:36:8D:A3:54:58:A0:9E:DF:88:0D:05:70:E8:63:AD:C8: 50:7D:49:40:6B:4D:97:E4:4E:53:BC:93:08:C9
CN = GlobalSign R8 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	EA:8C:20:1C:1F:8E:EF:58:06:7B:29:7E:6C:87:D2:62:2A:C3:9 4:65:27:92:4B:B6:DE:6A:3D:70:0B:E8:13:44
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	F6:73:F2:1F:1C:4B:CF:81:6A:96:F5:FD:61:41:66:B7:1F:48:F D:17:94:2D:9A:DF:62:7D:E4:90:10:FF:4D:C7
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	B7:9E:63:78:23:6B:F5:B6:F0:C2:77:EC:C0:80:62:7E:F3:FE:2 8:71:28:1A:60:AC:42:7B:DB:6F:6A:E4:F7:94
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	1C:94:2A:22:A0:16:A1:E5:55:9D:AE:77:EC:5C:E8:67:1F:98:A E:0B:A4:AC:2D:C2:59:41:8E:8E:1E:9F:94:AD
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	5E:29:7C:01:07:65:9C:80:68:CC:76:74:63:5E:56:F7:4D:05:B F:D6:E6:87:D3:07:5F:C4:8C:7E:8F:F7:0D:95
CN = GlobalSign CodeSigning CA - G3 O = GlobalSign nv-sa C = BE	40:47:C9:D6:92:60:C0:72:13:BC:B8:60:8A:7E:C5:E2:83:8A:5 6:B7:9F:67:84:78:12:EA:C0:77:8D:0D:27:F1
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E0:C2:EB:D1:F6:BA:D4:FE:AA:E3:1A:31:07:E6:9A:BE:E9:02: DB:38:B9:DF:BE:33:F0:57:0B:DA:34:94:C2:0A
CN = Intertek Document Signing Authority O = Intertek Group plc C = GB	31:0B:D0:C4:37:32:DC:8D:5A:15:14:C5:D9:9C:FE:1D:8B:79: BB:12:D4:1C:A4:0E:71:F6:D6:6F:60:09:B2:E5



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CN = Liberty University External Issuing CA 01 O = Liberty University L = Lynchburg ST = VA C = US	1F:91:21:2C:6B:FC:33:3C:6E:B5:2A:68:55:25:E1:E5:B9:E3:A C:1E:F7:A5:A8:66:49:F5:F9:5C:72:1D:88:98
CN = GlobalSign CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	A4:35:30:BE:A7:06:4D:E6:5A:8D:D1:F2:75:33:5D:3B:A2:32:2 D:9C:10:EC:68:20:D3:97:55:26:2D:03:F9:55
CN = ATT Wi-Fi Services Root Certificate Authority G3 OU = ATT Wi-Fi Services O = ATT Services Inc ST = Texas C = US	27:13:C7:A3:21:05:C5:E7:40:18:46:5D:14:D5:1A:95:9C:8A:E F:C2:11:5E:1C:00:7A:6A:6B:4C:88:31:3B:C6
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	F1:64:AD:5E:4C:E9:EF:C0:A1:44:CA:90:2E:A2:ED:46:C4:64: D2:D5:08:CA:91:9A:23:09:5C:DF:30:D4:DC:68
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	BF:5E:DF:BE:EB:85:99:9C:51:69:CB:F3:F4:DB:63:B6:79:AD: 2E:1E:22:72:FC:37:95:F9:F9:92:1E:6D:04:87
CN = Crown Prince Court CA for AATL O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	70:BD:B1:9C:31:F5:EF:10:5B:29:37:6E:35:EA:5E:D8:EE:BE: 13:CB:5C:07:58:C3:2D:FC:4C:5F:72:30:A1:73
CN = Crown Prince Court CA for AATL O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	D2:10:76:20:7F:79:A9:B0:41:37:D4:0A:4F:FE:6D:D0:89:21:C C:F4:9E:6E:B6:02:77:FF:45:93:E0:76:D5:38
CN = DPDHL TLS SHA 2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	27:6F:32:C1:EB:6C:5F:85:5A:79:04:FD:03:64:B2:15:0E:87:99 :7F:C8:D0:31:3D:EF:7E:53:AE:09:99:DC:1D
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	25:BA:CC:40:A5:39:2B:82:AA:DE:A0:49:03:90:5A:46:71:21:F 2:82:20:E6:F2:F7:E0:FE:98:2A:AF:C1:4F:A6
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	EB:E8:7B:B4:18:85:02:70:9F:44:40:55:25:9A:BB:22:BC:51:B 8:8C:90:84:19:A1:35:59:DF:C8:EF:66:30:D1
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	B6:47:69:4F:44:B0:1A:10:A8:6C:BB:72:D9:C6:0F:AA:7A:B1:1 3:F7:09:0D:FE:66:DE:8F:85:75:35:91:73:A5



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CN = Giesecke and Devrient CA OU = Corporate CA O = Giesecke and Devrient L = Munich C = DE	0F:7F:0A:51:DE:1E:5A:E3:E4:B3:66:47:AE:09:BA:59:E3:6C:7 7:3E:30:8D:C1:62:68:F4:22:8A:F5:27:D7:10
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**GlobalSign**  
GMO INTERNET GROUP

## GlobalSign's Management's Assertion

GlobalSign NV/SA ("GlobalSign") operates the Certification Authority (CA) services known as the Root and Subordinate CAs as disclosed in [Appendix B](#) and provides the following CA 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 is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its website, 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'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 CA services. Based on that assessment, in GlobalSign management's opinion, in providing its Certification Authority (CA) services at Belgium, Japan, Singapore, United Kingdom, throughout the period April 1, 2018 to March 31, 2019, GlobalSign 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's applicable versions of its Certification Practice Statements are consistent with its Certificate Policies as enumerated in [Appendix A](#)
  - GlobalSign provides its services in accordance with applicable versions of its Certificate Policies and Certification Practice Statements as enumerated in [Appendix A](#)
- Maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages was established and protected throughout their lifecycles;
  - the integrity of subscriber keys and certificates it manages was established and protected throughout their lifecycles;
  - subscriber information was properly authenticated (for the registration activities performed by GlobalSign); 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

For the Root Keys listed in [Appendix B](#), in accordance with the [WebTrust Principles and Criteria for Certification Authorities, Version 2.1](#), 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

#### Subscriber Key Lifecycle Management Controls

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



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#### 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

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Leuven, Belgium

Signed by: Arvid Vermote  
Function: Chief Information Security Officer

June 28, 2019





## Appendix A – Certification Practice Statements and Certificate Policies in Scope

Certification Practice Statement	Begin Effective Date	End Effective Date
<a href="#">Version 8.6</a>	14-Dec-17	02-Apr-18
<a href="#">Version 8.7</a>	03-Apr-18	14-Jun-18
<a href="#">Version 8.8</a>	15-Jun-18	10-Oct-18
<a href="#">Version 8.9</a>	11-Oct-18	11-Mar-19
<a href="#">Version 9</a>	12-Mar-19	30-May-19

Certificate Policy	Begin Effective Date	End Effective Date
<a href="#">Version 5.6</a>	14-Dec-17	02-Apr-18
<a href="#">Version 5.7</a>	03-Apr-18	14-Jun-18
<a href="#">Version 5.8</a>	15-Jun-18	10-Oct-18
<a href="#">Version 5.9</a>	11-Oct-18	11-Mar-19
<a href="#">Version 6</a>	12-Mar-19	30-May-19



## Appendix B – In-Scope CAs

Root CAs	SHA256 Hash
C = BE O = GlobalSign nv-sa OU = Root CA CN = GlobalSign Root CA	EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99
OU = GlobalSign Root CA - R3 O = GlobalSign CN = GlobalSign	CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B
OU = GlobalSign ECC Root CA - R5 O = GlobalSign CN = GlobalSign	17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24
OU = GlobalSign Root CA - R6 O = GlobalSign CN = GlobalSign	2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69
C = BE O = GlobalSign nv-sa OU = Root CA CN = GlobalSign Root CA - R7	E9:5B:31:25:40:5E:0D:46:04:2D:55:AC:62:15:45:07:C6:78:EB:C3:60:76:57:85:FB:20:4A:F3:49:BF:E8:80
C = BE O = GlobalSign nv-sa OU = Root CA CN = GlobalSign Root CA - R8	AE:48:51:FF:42:03:9B:AD:E0:58:27:91:51:D8:26:83:04:1D:25:98:E2:40:68:3C:C5:6D:76:FB:8C:F5:3D:42
C = BE O = GlobalSign nv-sa CN = GlobalSign Root E46	CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58
C = BE O = GlobalSign nv-sa CN = GlobalSign Root R46	4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:C F:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9

Other CAs	SHA256 Hash
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R3	44:5E:EC:78:BC:61:21:50:44:A0:37:96:56:AA:2D:5D:B5:E4:2F:76:CB:70:B8:D1:4C:20:77:AA:94:3D:4E:BB
CN = GlobalSign CA 5 for AATL O = GlobalSign nv-sa C = BE	30:6E:97:39:E3:45:8F:F4:54:68:77:B7:04:B2:E3:90:5E:58:B2:35:D6:4E:32:F4:F0:26:AC:91:B7:29:5D:15
CN = DPDHL TLS CT CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	91:53:E4:42:0D:DC:7E:B4:E6:E8:64:AA:03:77:DA:DF:40:82:EC:D3:50:52:11:36:38:E0:5D:3C:29:6B:C0:06
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	1C:97:37:E9:68:AD:9D:FF:8D:8D:7F:CF:99:6A:14:4B:B9:78:51:A1:90:11:A0:19:0C:94:3C:AE:8D:43:CF:E0
CN = Accenture Federal Services External CA	A9:C8:E9:71:25:9A:2E:D6:E6:5F:72:1E:07:AA:96:7C:72:C7:CD:B4:7C:7B:E1:28:8D:87:BF:08:D2:F3:58:0D



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O = Accenture Federal Services LLC ST = DE C = US	
CN = GlobalSign CA for AATL on HV O = GlobalSign nv-sa C = BE	1C:92:66:90:2A:31:C3:94:1B:50:6D:44:D0:D4:D0:6E:C9:DB:76:55:E6:5F:95:57:65:9F:AB:76:8B:29:0B:1B
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	27:FA:1B:E4:F4:B5:6A:14:2A:47:A5:6A:7E:94:B7:25:02:05:9B:40:22:E4:62:3E:74:8C:A1:EF:15:1C:F2:22
CN = GlobalSign HV ECC DV SSL CA 2018 O = GlobalSign nv-sa C = BE	4B:0D:13:92:D3:91:57:35:32:07:A6:4C:CB:14:68:3D:DE:9D:2C:ED:1F:B5:8B:16:E0:38:BE:57:07:C2:78:13
CN = Ford Motor Company - Enterprise Issuing CA01 ST = Michigan L = Dearborn O = Ford Motor Company C = US	4C:24:1C:FE:3D:3F:FB:60:CA:88:D6:B0:6A:55:2A:B1:C F:0E:F7:D8:D2:E0:8D:A1:52:82:B5:51:92:EB:BD:29
CN = GlobalSign AATL Partners CA 2019 O = GlobalSign nv-sa C = BE	83:FC:89:1B:35:0D:9E:0D:7E:BE:6D:D2:A6:BF:E3:D0:B0:F4:65:3F:CA:04:86:15:A5:DE:EB:BC:03:9A:3F:66
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	E8:7E:A2:BE:D6:C6:20:3B:2C:55:B0:0F:E4:9D:28:76:FB:A6:47:02:10:5A:EB:74:8B:86:5A:91:8B:5C:7D:27
CN = CareFirst SHA256 CA - G2 O = CareFirst, Inc. ST = MD C = US	CF:9B:7E:F7:B4:37:F7:E4:70:9A:05:07:E5:C5:87:16:90:02:1D:64:F3:B8:FC:E7:03:EC:85:C8:5A:E8:FA:29
CN = GlobalSign Domain Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	09:BC:1B:13:7C:03:12:39:EF:78:86:73:E9:4E:B1:7F:5F:3E:CA:B0:7D:3A:DB:FB:48:5E:75:AB:FA:AF:3B:9A
CN = GlobalSign PersonalSign 2 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	B7:78:74:8A:79:2B:8F:91:F0:4B:01:BA:FC:31:A3:1E:D7:EF:6A:71:2A:FF:80:B6:61:0D:9A:AD:EE:20:7A:DF
CN = GlobalSign PersonalSign 2 CA - G3 O = GlobalSign nv-sa C = BE	64:E7:16:01:F7:05:09:21:DE:E0:39:C0:34:93:61:5E:48:8F:12:FC:3F:CE:CB:AD:F4:38:AA:46:7E:E1:D4:1A



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CN = GlobalSign Partners TSA CA for AATL O = GlobalSign nv-sa C = BE	7E:8F:91:41:19:BB:10:90:D6:20:49:08:E5:AE:1F:40:BE:24:C1:49:1C:D7:D5:CF:B6:A9:36:18:CB:C0:0F:D9
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	EE:79:36:43:19:94:74:ED:60:EF:DC:8C:CD:E4:D3:74:45:92:16:83:59:3A:A7:51:BB:F8:EE:49:1A:39:1E:97
CN = GlobalSign PersonalSign 3 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	70:1B:43:2A:C0:CD:D4:D9:CF:95:B4:B8:84:C3:2B:F5:C C:A9:0D:44:E0:16:1A:BD:13:B9:34:D6:8E:38:04:72
CN = JCAN Sub Root CA0 OU = JCAN Sub Root CA0 O = JIPDEC C = JP	8F:A6:02:FF:F5:90:DF:58:3A:36:D5:09:C2:65:F6:C3:EA :8C:34:A9:D5:6C:FF:86:28:5F:BF:E9:93:6B:FC:55
CN = IHI-EC International Corporation O = IHI-EC International Corporation L = Houston ST = Texas C = US	57:57:92:53:27:40:80:58:5F:43:CF:DA:A3:D0:7A:28:A8: FB:CE:62:28:B5:2C:E3:A3:20:DE:CD:24:7C:F6:CE
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	C8:F1:D6:91:B4:15:2C:26:03:3C:97:7F:E7:79:78:D9:C8 :21:43:D4:6B:24:3B:9C:9B:A7:22:8E:00:0E:15:BB
CN = GlobalSign PersonalSign 1 CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	F5:D2:D2:BA:68:17:A7:A9:AA:0E:21:35:4B:BF:0E:6F:9 5:C5:E2:87:EE:88:CF:2F:27:9F:0F:FE:C4:ED:AC:15
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	38:51:35:AB:18:DD:19:0A:03:BC:C0:60:1A:CA:6F:83:C E:A3:66:64:27:91:EB:E0:A2:FD:B0:59:C2:F7:75:0A
CN = GlobalSign Partners Timestamping CA - SHA384 - G4 O = GlobalSign nv-sa C = BE	2A:01:55:31:A5:F3:A4:CE:58:9B:D8:53:C7:1D:D0:69:58 :73:22:F5:74:D8:5C:9C:9B:9F:9D:F8:F8:6C:07:5E
CN = Prodrive Technologies B.V. OV SSL Issuing CA O = Prodrive Technologies B.V. OU = IT Services L = Son ST = Noord-Brabant C = NL	39:8B:14:99:CE:00:A2:5F:61:CA:C3:D8:BE:E5:71:60:18 :80:82:3E:F2:88:BE:97:72:A4:D1:33:98:42:25:95
CN = EY LLP SHA256 CA - G2 O = Ernst & Young LLP C = GB	15:57:F6:5B:A6:1C:95:8B:74:EF:A4:A5:82:BB:AE:BD:D 6:2A:6D:9B:65:FE:95:A8:0D:5E:D5:18:F4:6E:D8:7F



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CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5C:0C:A0:3A:AA:04:D2:CE:FD:57:DB:1F:3B:17:31:3B:2 0:05:62:17:58:71:E0:D7:53:31:C0:8E:2A:56:43:0C
CN = MSC Trustgate.com RSA AATL CA 2019 OU = MyTrust Gateway O = MSC Trustgate.com Sdn. Bhd. C = MY	3A:88:25:30:C0:3E:A6:15:E5:EF:4D:AD:BD:7C:86:60:9 1:2F:A9:3F:AF:50:88:71:6F:B4:6A:8E:1F:FA:92:18
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	C0:19:63:05:90:70:CB:23:06:F4:B4:86:CC:F1:50:33:59: 20:9E:98:49:9C:81:0C:2B:49:E2:6E:31:A4:BD:74
CN = Trusted Root CA SHA256 G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	01:FD:73:EF:5E:70:F5:26:FC:9C:11:F6:5F:E2:EE:6F:71 :25:B3:69:39:49:22:7F:FD:8E:45:9E:58:3C:45:8A
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	F0:37:62:14:05:E0:F3:56:50:7E:23:9F:AD:D6:47:84:2D: 3B:50:85:7C:3C:FF:84:08:59:17:4F:72:F6:FD:18
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	D4:D0:31:41:EC:A4:19:0D:93:BC:EE:47:81:AF:6F:2F:D F:0F:65:34:A1:1B:ED:CC:F0:61:4F:4D:4B:17:57:53
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	B2:AB:B9:07:6E:F2:03:AD:CB:56:B0:AC:B4:0C:27:52:6 2:C6:CF:E9:B7:A1:2A:BE:A7:C8:FA:57:77:3B:0D:0A
CN = Noble Energy SHA256 CA - G2 O = Noble Energy\, Inc. L = Houston ST = Texas C = US	FA:51:FE:39:F0:F3:16:E9:24:12:E1:17:01:18:E2:D6:2A: 8E:4A:DA:0F:88:EC:23:7F:3C:E6:31:F7:0B:E2:98
CN = NCDOR SHA256 CA - G2 O = Department of Revenue ST = NC C = US	C6:47:C5:37:F7:E3:D2:80:94:8D:40:80:0A:EF:8F:53:42: 54:F7:4A:12:16:8E:36:30:E7:60:D7:16:75:BE:3B
CN = GlobalSign Qualified CA 1 O = GlobalSign nv-sa C = BE	F5:70:9A:2D:2F:68:B5:3B:F6:F6:45:BB:17:8A:DF:95:34 :6F:89:FD:A5:C6:3B:FD:E0:80:42:A2:64:92:AA:B2
CN = Valid Certificadora Digital SSL DV CA 2018 O = VALID CERTIFICADORA DIGITAL OU = VALID SSL DV	62:B4:8F:51:E5:86:86:76:FD:79:B9:DD:9D:B9:8B:A9:28 :49:4B:A7:34:40:3C:58:33:93:C4:2C:E0:0A:D4:48



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L = S\C3\83O PAULO ST = S\C3\83O PAULO C = BR	
CN = Cloudflare RSA DV CA O = Cloudflare\, Inc. L = San Francisco ST = CA C = US	D4:39:F8:8E:8F:2F:80:A3:06:F9:10:DC:DE:54:8D:71:B B:FD:99:A8:5F:C7:03:4E:FB:61:0E:37:49:55:09:32
CN = GlobalSign Organization Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	69:9D:54:B7:48:2A:5D:32:93:31:EA:04:15:CC:2E:DC:D 6:0F:DA:01:D1:9E:71:D0:54:19:6B:CE:06:77:73:5C
CN = Trafigura PTE DocuSign CA O = Trafigura PTE C = SG	0C:3B:69:67:2E:BA:BE:1F:96:CA:F3:CB:E5:98:F7:74:7 C:01:F7:80:14:AF:65:11:91:95:0D:67:3F:D9:17:84
CN = Spirit AeroSystems SHA256 CA - G2 O = Spirit AeroSystems\, Inc. ST = KS C = US	86:09:BD:CE:F9:5E:4A:4D:42:64:97:B5:CD:8E:D4:B0:0 1:C9:53:A5:C1:44:71:CA:AF:58:FB:65:0D:F8:AB:F0
CN = GlobalSign Organization Validated CA - SHA256 - G4 O = GlobalSign nv-sa C = BE	1E:17:41:A1:2E:B8:DA:2B:D7:6E:A9:6C:04:F5:20:35:98 :39:71:0F:62:0E:80:95:2F:48:DD:02:40:A1:2C:D8
CN = Soluti CA - OV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi\C3\A2nia ST = Goi\C3\A1s C = BR	E6:E9:29:C8:45:6C:01:4E:8D:A7:33:AC:E4:E9:81:45:52 :27:2B:81:17:60:50:A1:3E:A4:5A:82:32:00:B1:4B
CN = GlobalSign ECC384 SSL CA - G3 O = GlobalSign nv-sa C = BE	DC:6C:44:AC:8A:3C:D5:C3:45:12:73:F4:43:15:26:B2:E F:66:60:62:EE:76:32:58:A9:28:F6:0B:D0:8E:39:FE
CN = Beame.io CA 1 O = Beame.io Ltd L = Tel Aviv-Jaffa ST = Tel Aviv C = IL	43:26:39:13:B4:83:EB:6F:0B:02:05:40:F8:F7:BE:0A:1D: 7C:9C:E7:65:2F:E0:FB:47:43:D7:21:33:93:55:1C
CN = GlobalSign PersonalSign 3 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	3B:20:D6:4E:D7:D2:F4:30:31:DE:E1:AE:84:7A:48:9B:6 F:33:F5:A2:8D:B7:FA:2B:09:B7:AE:F5:F7:7C:A1:4A
CN = Ford Motor Company - Enterprise Issuing CA01 ST = Michigan L = Dearborn O = Ford Motor Company C = US	38:02:E4:24:51:6F:78:EE:AC:32:9A:AE:9B:1F:60:A4:12 :DB:E1:D5:B0:95:D7:AC:9D:C0:DC:DD:E3:C1:F5:FB
CN = DPDHL TLS SHA2 CA I3	5A:40:55:35:C1:12:A0:A8:1A:F0:D2:AC:CA:3C:3F:9B:C



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O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	1:A6:77:58:6C:DB:C6:33:CB:4F:5F:77:8E:1A:35:50
CN = Pos Digicert Issuing CA O = Pos Digicert Sdn Bhd OU = 457608-K L = Cyberjaya ST = Selangor C = MY	52:50:AB:D4:3D:51:DE:F9:D5:EE:62:85:FE:F4:F1:A9:08:41:E0:6B:F2:8E:2F:91:25:68:4D:3E:CC:A7:35:B2
CN = Beame.io CA 2 O = Beame.io Ltd L = Tel Aviv-Jaffa ST = Tel Aviv C = IL	CF:6E:6B:82:C9:97:CB:5C:C1:A5:50:66:AF:5F:60:CA:A C:77:59:4E:B1:06:FB:4D:49:8B:C5:0E:CD:EB:8A:3A
CN = GROB-WERKE GmbH und Co. KG SMIME CA O = GROB-WERKE GmbH und Co. KG L = Mindelheim ST = Bayern C = DE	16:08:BF:87:41:4C:DC:FA:B4:27:91:02:A1:97:02:D9:D5:99:6A:91:32:9E:3D:F2:F8:04:95:47:3A:AD:86:C6
CN = GlobalSign Qualified CA 2 O = GlobalSign nv-sa C = BE	FD:3A:0F:3D:D4:48:00:92:B6:D4:50:47:3D:EB:92:01:A0 :B3:08:A8:80:78:33:A3:C7:38:F8:A0:7E:B8:1E:D3
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	37:D0:80:A5:E9:A5:26:66:3E:56:EE:20:DE:4B:D9:F7:95 :2D:AC:C3:41:49:14:39:08:01:67:AD:5D:D1:8C:AC
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	EA:CB:A6:C9:65:98:B4:A4:1F:D5:3D:69:AB:9E:D9:FB: BB:13:81:15:4C:45:34:56:72:0C:17:4F:FE:57:6D:1D
CN = HERTZ SHA256 CA - G2 O = The HERTZ Corporation ST = Florida C = US	64:FD:7F:66:B8:05:EF:0F:AE:09:DA:C0:6E:AD:1A:9A:B 5:C2:8E:6F:24:AD:07:59:99:6D:34:99:87:FE:E7:E2
CN = AlphaSSL CA - G2 O = AlphaSSL	1D:CA:65:B8:6A:57:33:6B:A5:AF:B7:21:4A:36:F7:D6:E D:E6:98:EB:4F:03:38:7C:B3:AD:6B:BD:3A:93:BA:B6
CN = GlobalSign PersonalSign 2 RSA CA SHA 384 - G4 O = GlobalSign nv-sa C = BE	5C:DD:80:9C:F4:4F:5F:86:65:EA:C1:50:55:50:4C:5B:06 :B7:87:AC:18:29:45:05:BD:BA:B4:A7:7E:50:D7:76
CN = Giesecke and Devrient CA OU = Corporate CA O = Giesecke and Devrient L = Munich C = DE	63:2F:D6:97:BA:CA:F1:ED:23:25:17:EC:9B:76:22:B7:C 2:5E:14:48:B0:CC:62:6B:33:28:67:19:E3:51:CE:8A





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CN = EmblemHealth SHA256 CA - G3 O = EmblemHealth\, Inc. ST = New York C = US	4A:11:44:E6:B2:B1:E3:E2:B9:34:58:7B:07:42:1D:14:AF:3B:2F:7F:79:25:4F:B0:2D:0A:D3:FE:67:D7:90:27
CN = GlobalSign Extended Validation CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	AE:D5:DD:9A:53:39:68:5D:FB:02:9F:6D:89:A1:43:35:A9:65:12:C3:CA:CC:52:B2:99:4A:F8:B6:B3:7F:A4:D2
CN = GlobalSign O = GlobalSign OU = GlobalSign Root CA - R6	DD:A8:DA:73:61:87:D7:6F:4F:0E:D5:A5:F6:67:B5:4D:99:A9:8A:E0:60:91:D0:E3:A0:17:14:E9:22:16:95:AD
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	24:F9:1C:07:05:A0:A5:33:86:41:B3:65:FB:0D:9D:97:09:B5:62:97:CF:F1:85:7E:73:C0:2C:16:36:D4:86:AA
CN = InComm Agent Solutions Inc Root Certificate Authority O = InComm Agent Solutions Inc ST = Florida C = US	2A:5E:AD:8B:41:A7:CD:DC:12:6B:10:ED:24:8A:2E:EF:ED:A8:55:66:03:42:F2:22:A3:8C:C6:60:5D:44:3E:22
CN = GlobalSign ECC EV SSL CA 2018 O = GlobalSign nv-sa C = BE	8F:19:FF:E0:2F:C7:95:ED:70:76:5D:14:36:AD:DF:77:2F:E0:F0:77:3D:A4:36:ED:BD:B4:2A:2E:30:E2:E8:28
CN = GlobalSign R6 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	C5:B6:79:10:69:58:15:2F:83:FB:58:86:DD:C4:1F:07:85:19:3E:F6:7C:69:75:BE:3E:50:9F:17:F2:9B:7A:86
CN = SHECA OV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co.\, Ltd. C = CN	77:EA:C4:76:45:3C:B7:32:25:7F:F1:66:A5:EB:D1:65:6C:B1:F6:73:B6:8E:28:DF:41:77:41:33:97:9F:A2:A4
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	BF:DF:4C:F3:F1:43:AD:0D:B9:12:D8:AB:3A:7C:12:F6:17:B9:EA:60:CE:8B:1F:4E:44:F7:42:70:FB:21:B1:9B
CN = GlobalSign CA 4 for AATL O = GlobalSign nv-sa C = BE	EB:A3:4C:7B:10:96:71:61:4C:36:7E:1D:E0:75:12:4C:39:54:CE:19:F8:5F:AC:F6:10:90:EC:31:9F:7F:1A:7F
CN = GlobalSign SMIME CA 2018 O = GlobalSign nv-sa C = BE	C8:19:2C:32:F7:B4:9C:7F:32:A1:CA:00:15:95:A7:F9:E3:6C:9E:72:05:8D:6E:AA:1B:AB:77:52:A8:C1:67:18
CN = NAESB Issuing CA - SHA384 - G3 O = GMO GlobalSign Inc. L = Portsmouth ST = New Hampshire	09:86:B5:A1:C7:31:4E:FB:04:FB:64:8B:9E:2B:57:CF:48:42:FD:1D:43:45:D2:8E:52:09:4C:90:A9:FE:CB:FE



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C = US	
CN = GlobalSign PersonalSign Partners CA - G2 O = GlobalSign nv-sa C = BE	23:6B:8F:F6:CB:17:71:8D:9C:92:44:0B:D9:2C:69:2D:17:38:19:93:E5:79:11:83:43:C0:A5:5C:8D:BE:6C:1A
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	8C:24:10:F7:6B:14:9C:A0:62:B4:20:AB:61:1B:6B:F0:A0:6E:6E:79:9A:29:58:7E:4D:4E:C1:6D:05:37:B7:EA
CN = JCAN Public CA1 - G3 OU = JCAN Public CA1 - G3 O = JIPDEC C = JP	91:E9:8D:09:47:C1:25:49:4E:AA:F2:A3:8D:08:7B:E0:78:1A:F2:0D:8A:14:EE:8C:39:FE:CD:C4:82:CF:5F:82
CN = GlobalSign CA for AATL - SHA384 - G4 O = GlobalSign nv-sa C = BE	AC:0A:B9:63:BB:5F:3D:A0:5F:BC:86:87:F9:8C:2B:6E:A0:BB:49:9E:61:18:C1:A9:13:6B:1B:C7:C3:C7:1A:6B
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	A1:38:20:A7:38:7B:DF:AD:20:44:63:EF:A9:21:64:16:63:9B:7E:73:C3:1D:C2:F4:99:F5:3F:CD:4D:4D:25:C4
CN = CBMM SMIME CA 2019,postalCode = 38183-903,street = RUA CORREGO DA MATA S/N ST = MINAS GERAIS L = ARAXA O = COMPANHIA BRASILEIRA DE METALURGIA E MINERACAO C = BR	16:CF:C3:31:B1:FB:63:AB:DB:D6:1B:AA:80:6C:5E:A9:F3:3C:98:F7:E4:F1:85:BB:C8:6A:98:03:59:41:74:F4
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	74:EF:33:5E:5E:18:78:83:07:FB:9D:89:CB:70:4B:EC:11:2A:BD:23:48:7D:BF:F4:1C:4D:ED:50:70:F2:41:D9
CN = GlobalSign Timestamping CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	9B:F9:49:67:77:D1:44:25:ED:00:86:C1:BB:2C:07:07:B6:2A:61:C1:94:C5:16:2E:4F:07:63:7A:FF:16:6B:76
CN = SHECA EV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	14:7C:44:7F:EE:B8:62:02:B5:03:31:4F:CA:F0:03:6B:EA:AE:F4:37:C3:9B:56:B3:58:EC:44:6A:9D:20:38:7F
CN = GlobalSign ECC OV SSL CA 2018 O = GlobalSign nv-sa C = BE	87:C7:15:53:44:5E:B3:C3:3C:3E:07:10:71:1B:99:E9:C7:77:3F:04:D9:1A:C3:8A:9F:4C:08:2E:E2:41:01:EA
CN = GlobalSign ECC CloudSSL CA - SHA384 - G3 O = GlobalSign nv-sa C = BE	B0:CD:6A:E7:B9:E2:0E:C5:F8:30:FE:E0:1F:66:6D:5D:90:E6:E2:29:D0:6B:C4:6A:30:AC:CE:DF:EC:88:96:48
CN = GlobalSign RSA DV SSL CA	9E:89:8E:D0:3F:A4:69:69:69:0D:AD:73:C7:29:66:75:04:



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2018 O = GlobalSign nv-sa C = BE	5F:F9:B5:A0:10:0A:39:9B:EB:84:35:A9:8F:51:85
CN = GlobalSign ECC384 EV SSL CA - G3 O = GlobalSign nv-sa C = BE	15:54:91:87:49:03:14:F5:17:76:41:F0:BE:B3:26:34:AA:12:30:EB:2C:F2:C2:8A:D9:C7:39:14:FB:18:AB:A0
CN = GlobalSign PersonalSign 1 CA - G3 O = GlobalSign nv-sa C = BE	25:4B:E9:1C:1A:BC:B2:8D:B5:E4:D6:75:A2:9A:1E:78:84:60:B0:65:91:F1:BA:84:97:CB:D1:78:37:E2:7A:BE
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	60:0E:97:60:1B:0B:BC:5F:05:6F:04:EE:F6:71:EF:58:0F:2A:85:83:C6:D2:D3:FA:D4:01:B9:D8:20:AA:88:36
CN = GlobalSign PersonalSign 1 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	AE:BE:4D:E9:97:4A:87:0A:47:87:64:51:CA:30:54:C3:B3:C1:C9:C8:20:90:CD:FF:1E:FF:14:25:F2:79:55:74
CN = RTI SHA256 CA - G2 O = RTI International ST = NC C = US	5F:7C:6E:60:41:DA:A5:13:CB:FE:3D:4E:07:FD:C8:4E:23:0D:A2:1A:F2:DE:18:64:60:C9:EC:04:81:51:6D:AB
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	4B:73:34:E1:D8:99:98:22:BA:FA:8F:F6:88:81:25:38:9B:18:A4:E5:AB:26:FF:A6:24:C7:F6:8F:DC:81:F0:CB
CN = GlobalSign Organization Validated ECC CA - SHA256 - G4 O = GlobalSign nv-sa C = BE	65:EE:C0:CC:6C:97:0C:C1:CD:73:65:91:15:DC:8D:90:4E:6F:12:E6:DC:8F:D4:DD:A3:9D:54:CB:30:22:47:80
CN = Hyperion SMIME CA 2018 O = Hyperion Services Ltd. L = London ST = London C = GB	DC:D7:7E:34:B4:6D:53:0A:EF:64:5A:51:33:89:CD:4F:F C:0F:7D:19:6A:11:5B:8F:62:A5:FD:0D:55:7D:46:C6
CN = GlobalSign Qualified CA 3 O = GlobalSign nv-sa C = BE	0A:A9:F2:E7:D9:5C:71:8B:7D:1E:B7:CC:DB:D0:16:4E:86:05:7A:E9:D6:69:22:BC:60:F9:90:3F:94:A0:F0:EF
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	A6:64:22:C4:E4:49:D4:65:CB:02:3A:7F:C7:63:3D:E8:ED:18:16:98:5C:A4:10:93:FC:96:B3:66:3E:D7:A4:3B
CN = GlobalSign PersonalSign 2 ECC CA SHA 384 - G4 O = GlobalSign nv-sa	46:03:8F:63:26:22:8C:DB:56:61:9C:52:26:66:13:DA:04:C8:CA:49:9E:0D:03:B0:ED:CF:FC:11:0D:5C:FC:70



GlobalSign  
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C = BE	
CN = GlobalSign EC Administration CA2 O = GlobalSign nv-sa C = BE	C8:83:B3:EC:C6:AC:0D:EE:75:CD:D5:85:E7:3A:20:92:87:BC:0C:9F:9D:79:D4:88:86:0F:63:E2:EA:8A:7D:2C
CN = GlobalSign Timestamping CA - G2 O = GlobalSign nv-sa C = BE	C9:77:92:3C:77:1E:1A:66:C9:25:A2:B6:F5:01:73:2E:67:8D:C9:88:7A:FE:6B:FA:AC:03:9D:1D:9A:71:F0:EC
CN = GlobalSign PersonalSign 3 CA - G3 O = GlobalSign nv-sa C = BE	C2:28:D9:3D:BE:55:36:A1:20:AC:24:ED:93:44:67:BA:D7:29:2F:8B:7E:B2:02:63:4B:17:07:0A:89:C5:FE:9B
CN = Touchtech Intermediate CA O = Touchtech Payments Limited L = Dublin C = IE	EF:5C:B9:F6:B5:2E:79:FC:BC:71:93:70:50:D1:1B:9D:7E:51:36:54:13:9B:22:7D:0F:F2:51:B2:50:56:1F:18
CN = AlphaSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	4C:01:3B:88:54:68:9C:B6:62:6C:C0:87:B4:D4:FC:CA:45:10:4E:2D:73:BF:AD:F3:3A:69:79:ED:12:4B:78:37
CN = JCAN Public CA1 - G4 OU = JCAN Public CA1 - G4 O = JIPDEC C = JP	7B:46:4D:C3:84:FD:B1:A5:25:C2:CC:27:9E:D0:C7:CF:AD:24:BE:CF:72:C4:6A:7D:70:93:D1:57:C2:17:60:7E
CN = GlobalSign PersonalSign 2 CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	C0:21:E9:9B:C4:C8:6C:35:19:4B:51:A6:73:1C:B6:97:AA:0A:2C:0D:33:2A:B8:5D:DE:56:F8:99:91:0E:3A:A9
CN = GlobalSign ECC HV S/MIME CA 1 O = GlobalSign nv-sa C = BE	E0:CE:5C:4E:F5:D2:18:69:63:D2:B0:4A:DE:46:12:BB:AF:78:7E:16:04:8A:5B:46:8F:73:67:77:6C:3A:03:DE
CN = GlobalSign TSA CA for AATL O = GlobalSign nv-sa C = BE	4D:8E:B4:93:80:EC:72:AC:9F:DF:21:FE:1C:6D:B2:E9:49:0C:76:BE:AD:D1:F7:B5:28:C3:CC:D2:72:C8:FE:28
CN = GlobalSign O = GlobalSign OU = GlobalSign ECC Root CA - R5	3F:31:9B:2A:FE:D4:A0:F7:51:27:BE:59:92:55:50:D0:42:8E:68:76:3A:09:E2:73:EB:6A:9F:F8:D1:8D:BB:5B
CN = SHECA DV Secure Server CA ST = Shanghai L = Shanghai O = Shanghai Electronic Certificate Authority Center Co., Ltd. C = CN	39:3B:8B:15:CA:BC:38:86:FB:2E:41:64:95:D6:3C:8B:AD:D8:DC:AF:87:55:20:76:C8:A0:A9:63:7C:24:DE:47
CN = GlobalSign PersonalSign Partners CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	11:82:62:C2:08:8E:E1:52:8E:20:D8:36:D2:07:08:54:70:7C:0D:8F:8E:80:FB:E3:96:F9:EC:D4:B9:14:1B:5B
CN = GlobalSign CA for AATL - SHA256 - G2	AA:89:C4:66:E9:D0:68:82:C0:DA:AF:72:BE:0F:0F:BC:F5:7C:1E:F2:AA:AD:19:06:40:C4:AD:44:F5:51:7F:34



GlobalSign

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O = GlobalSign nv-sa C = BE	
CN = Cloudflare ECC DV CA O = Cloudflare\, Inc. L = San Francisco ST = CA C = US	0F:45:17:48:7F:D0:A8:BA:31:94:A6:12:24:50:A7:B3:2C: 98:7F:FF:16:F2:D4:AF:54:E6:ED:B6:FE:D6:8E:08
CN = GlobalSign RSA OV SSL CA 2018 O = GlobalSign nv-sa C = BE	B6:76:FF:A3:17:9E:88:12:09:3A:1B:5E:AF:EE:87:6A:E7: :A6:AA:F2:31:07:8D:AD:1B:FB:21:CD:28:93:76:4A
CN = Soluti CA - EV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi\C3\A2nia ST = Goi\C3\A1s C = BR	BB:17:0B:39:78:4D:02:78:43:25:CE:A9:38:D9:23:14:C6: 17:DD:E8:08:C8:67:E3:3E:2A:D1:61:D5:4B:3E:8A
CN = Trusted Root CA G2 O = GlobalSign nv-sa OU = Trusted Root C = BE	6E:32:A3:5B:59:9E:90:87:BB:1A:B3:5C:E7:30:22:EC:2 E:26:AF:34:BE:38:89:19:41:9C:95:70:0C:D8:E7:FB
CN = GlobalSign HV S/MIME CA 1 O = GlobalSign nv-sa C = BE	0F:8E:EF:EC:0D:1F:DB:DA:33:BF:EB:41:45:51:10:61:3 C:C5:68:1E:92:B4:BC:B9:56:10:DA:35:FE:1F:3C:66
CN = Trafigura PTE DocuSign CA O = Trafigura PTE C = SG	B5:3A:B0:BB:FF:07:E6:CD:1A:2C:4F:AB:6B:30:76:86:E A:5C:6C:82:1D:A8:46:70:72:7D:14:97:FE:BD:5A:6D
CN = JCAN Public CA0 - G3 OU = JCAN Public CA0 - G3 O = JIPDEC C = JP	39:88:3A:FF:3D:0A:0A:40:1A:9B:84:C0:B8:30:B9:5A:FE :C8:2A:F3:71:D9:DC:5D:02:19:EA:8A:3D:B4:CF:81
CN = GlobalSign Organization Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	0B:33:92:12:D7:CF:F1:7A:2C:59:E3:56:69:B5:8E:77:35: 01:33:75:0A:78:DA:94:04:77:0E:DD:47:0D:EF:76
CN = Soluti CA - DV O = SOLUTI - SOLUCOES EM NEGOCIOS INTELIGENTES S/A L = Goi\C3\A2nia ST = Goi\C3\A1s C = BR	A7:4F:FF:F5:28:47:19:05:38:50:73:AD:F3:99:70:19:B2: 6F:4F:AF:24:BC:E9:10:2A:27:2E:7A:44:84:E4:BC
CN = GlobalSign Timestamping CA - SHA384 - G4 O = GlobalSign nv-sa C = BE	F6:42:41:8E:4D:0C:63:DE:C7:85:C9:60:EF:A6:8B:A7:4 5:F3:88:51:74:4E:F8:1F:22:5C:B8:93:05:31:4D:50
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E0:C2:EB:D1:F6:BA:D4:FE:AA:E3:1A:31:07:E6:9A:BE: E9:02:DB:38:B9:DF:BE:33:F0:57:0B:DA:34:94:C2:0A
CN = VWFS CA for AATL	CF:89:A4:1D:FE:E5:F7:17:40:DE:F6:02:73:5D:DB:F1:D



GlobalSign

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O = Volkswagen Financial Services (UK) Limited C = GB	E:BE:0C:B8:16:D7:39:80:D9:A5:83:C5:88:1C:E7:78
CN = GlobalSign HV RSA DV SSL CA 2018 O = GlobalSign nv-sa C = BE	54:C3:7A:8E:85:3F:D1:D6:37:8D:37:8B:93:93:07:EC:32:1A:31:CC:1A:5A:89:E7:18:06:33:BC:13:F1:87:62
CN = RISE Signing CA O = RISE Research Institutes of Sweden AB OU = IT L = Goteborg ST = Vastra Gotalands Lan C = SE	29:16:4F:9C:83:B4:80:C7:69:21:38:8D:2D:7A:35:D4:8C:49:65:F1:48:C2:30:3A:77:DE:55:33:04:53:14:31
CN = GlobalSign CA for AATL on HV O = GlobalSign nv-sa C = BE	BC:BD:04:D4:AE:D9:62:C9:D2:5A:FE:0C:FA:F8:63:8C:E1:43:16:52:98:8E:C5:21:73:29:E7:55:9A:C3:C6:71
CN = JCAN Public CA0 - G3 OU = JCAN Public CA0 - G3 O = JIPDEC C = JP	59:B6:9B:0D:E7:3B:02:09:A7:CE:14:6D:BC:EA:01:B0:96:E9:25:13:47:7E:BE:60:40:9D:AC:E8:8B:6D:F7:D9
CN = AlphaSSL CA - SHA256 - G2 O = AlphaSSL	93:3E:4A:2D:8D:B1:FF:9F:F0:E5:08:EA:7F:16:37:E0:74:F6:60:FE:6F:36:5A:22:33:DF:C2:B5:2C:88:9D:98
CN = AlphaSSL CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5A:81:7E:AD:A4:AD:78:73:4E:BB:2C:F6:74:35:2D:97:F4:35:22:90:C4:0E:AF:10:E7:64:B1:EA:C0:75:B0:E6
CN = GlobalSign Extended Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	5B:B2:38:2D:20:E0:9A:E5:6B:4F:3A:51:57:83:8F:7B:AE:49:E4:2E:3C:E5:34:84:D6:6E:EB:2C:07:47:EF:4A
CN = Noble Energy SHA256 CA - G2 O = Noble Energy\, Inc. L = Houston ST = Texas C = US	AD:49:54:41:62:13:AD:01:9D:53:FD:95:9B:1F:22:61:30:F2:CC:74:9C:CF:D4:3C:07:99:51:D8:AF:C7:BB:41
CN = GlobalSign CA for AATL - SHA256 - G2 O = GlobalSign nv-sa C = BE	3A:AE:B2:6C:FC:AD:B7:78:14:E3:45:12:61:62:32:A6:87:D1:86:A8:43:03:AA:0C:8D:BB:E4:92:CE:BD:94:A1
CN = GlobalSign Timestamping CA O = GlobalSign OU = Timestamping CA	D0:CA:E6:94:7B:C7:7F:0B:49:5C:A8:08:D6:CD:E6:85:FC:D2:02:25:E1:E5:30:B6:35:B1:13:ED:40:72:8E:F3
CN = GlobalSign Timestamping CA - R3 O = GlobalSign OU = Timestamping CA	61:C1:06:70:83:AE:04:4E:F1:D6:49:CE:59:0B:BF:09:D9:D7:39:E0:25:DA:8D:19:5F:71:CF:AA:D6:EB:AE:69
CN = GlobalSign O = GlobalSign	C9:4F:ED:DA:4E:86:08:90:85:80:BC:7F:87:B4:34:E0:3B:B2:62:E4:2F:64:C6:38:20:A8:F5:0F:B1:7C:1C:EC



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OU = GlobalSign Root CA - R3	
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	BA:0E:2B:6B:F2:C9:8E:D2:C3:B1:C1:C0:8A:1B:BD:CA:F9:27:0A:C5:28:A3:19:43:01:DD:2A:0B:6B:67:B9:B3
CN = GlobalSign Domain Validation CA - G2 O = GlobalSign nv-sa C = BE	4E:15:3A:58:88:77:68:8F:1A:0C:10:3A:08:4C:2E:DB:3A:D1:D8:C4:80:CF:03:D8:AB:6F:ED:47:D9:20:43:70
CN = GlobalSign Domain Validation CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	66:9E:77:27:A9:2B:E7:2D:97:18:E1:69:22:DC:1B:C1:49:2B:1A:F3:3F:A4:79:3E:68:D8:77:8F:19:A2:EB:E0
CN = Ford Motor Company \\E2\80\93 Enterprise Issuing CA01 ST = Michigan L = Dearborn O = Ford Motor Company C = US	36:25:D9:C4:82:CD:39:E0:DF:BE:8B:76:D7:54:4F:9F:C9:3B:78:23:4B:5F:86:C6:CE:DE:28:35:EA:A5:96:A0
CN = Ford Motor Company - Enterprise Issuing CA01 ST = Michigan L = Dearborn O = Ford Motor Company C = US	71:93:06:D8:FE:2D:9A:B7:BD:17:D5:E2:11:E4:39:E5:0C:E3:5B:47:1F:03:8B:7E:89:BA:09:8F:FA:5F:24:27
CN = GlobalSign CA 2 for AATL O = GlobalSign nv-sa C = BE	75:25:B1:84:0C:39:8E:29:5F:F3:AE:C5:A4:5B:D9:51:B6:15:E9:AA:26:B8:90:31:9C:3B:F5:CB:A9:5F:24:41
CN = GlobalSign CA 3 for AATL O = GlobalSign nv-sa C = BE	AB:68:68:55:67:BF:68:81:9C:D1:63:93:3C:DE:F8:6B:C D:44:7A:EB:21:40:4B:97:D9:DA:7B:57:C8:44:91:79
CN = GlobalSign CA 4 for AATL O = GlobalSign nv-sa C = BE	9D:DC:2E:0D:55:B4:61:E0:C7:32:28:28:2D:F5:6B:2B:E F:22:4C:A2:38:56:81:D1:7B:6E:8C:07:78:52:57:3C
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E1:55:EB:F9:63:34:E7:9A:E2:E2:87:D5:5C:FC:91:85:D E:24:93:5A:65:3F:13:C5:BA:05:AF:F8:18:77:1B:C6
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	C2:E4:23:6D:B1:B7:57:B5:1B:77:92:13:88:EF:A8:23:E6 :A6:00:FD:4B:DA:30:B6:3A:B7:78:86:F2:56:18:B7
CN = Google S/MIME Authority ST = California O = Google Inc C = US	6A:17:45:B3:11:76:FA:C2:84:42:0A:2B:CE:F6:7B:59:E2 :2A:1D:37:75:3A:BA:F2:CC:51:B2:F5:72:92:25:88
CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	A6:23:3E:CB:77:05:3F:72:93:7E:89:43:72:A6:01:ED:3A: BE:A9:0C:C3:B5:D8:95:12:72:0B:F3:FF:CB:DC:9D



GlobalSign

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CN = GlobalSign Organization Validation CA - G2 O = GlobalSign nv-sa C = BE	08:2B:24:30:47:BF:00:F5:84:40:1F:53:8B:50:4B:AE:9E: C0:60:E0:07:FF:F2:8B:15:9C:08:41:70:68:65:4E
CN = SignTrust Domain Verification CA - SHA256 - G2 O = SignTrust OU = SignTrust Domain Verification CA - SHA256 - G2	BE:CD:7B:1B:8C:68:07:A2:96:3B:3A:EE:9B:E6:0A:31:4 E:BE:AF:3E:A4:C3:0A:F3:9B:7A:A6:C0:82:58:3C:E0
CN = SignTrust Domain Verification CA - G2 O = SignTrust OU = SignTrust Domain Verification CA - G2	DA:C1:A5:1E:6A:44:08:8E:77:02:0C:A9:70:4C:36:12:41 :FE:2D:DC:42:F8:13:26:77:BA:5E:BB:BA:4D:0C:2C
CN = GlobalSign Extended Validation CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	14:97:8C:01:FE:AD:5C:D6:45:74:40:AD:D9:D1:DD:BA: B7:7D:23:8C:9A:2F:E2:24:EE:87:2B:24:7B:CF:FB:3C
CN = GlobalSign R7 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	D3:02:FF:37:31:D2:8C:59:A0:2D:58:85:C5:BA:32:4B:D C:31:BB:D0:9A:31:CC:91:6C:F1:B7:4A:C2:77:C0:7B
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	BC:E3:A5:BD:8D:90:82:63:6C:5B:FE:3E:0B:71:AC:EE: 55:1E:24:E3:BD:03:58:87:D2:66:1A:DA:65:AF:F4:84
CN = Liberty University External Issuing CA 01 O = Liberty University L = Lynchburg ST = VA C = US	CA:00:5A:A7:5E:33:59:4B:D1:DE:DC:58:4E:1E:74:E5:1 9:8E:BB:1D:E8:89:29:ED:4F:3E:2E:9F:FC:E3:87:3B
CN = GlobalSign CodeSigning CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	FB:54:EE:A9:BC:E8:E9:EA:97:82:15:4F:3D:41:42:77:F B:70:9F:49:B9:47:D7:39:78:AC:27:85:46:C2:CE:03
CN = ATT Wi-Fi Services Root Certificate Authority G3 OU = ATT Wi-Fi Services O = ATT Services Inc ST = Texas C = US	12:F3:C6:42:3F:95:C7:FF:C9:A9:70:67:FD:2D:95:3E:70 :60:9A:44:29:9C:A7:D4:58:C5:73:C6:3A:59:2E:66
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	23:A7:47:04:D7:7A:03:CF:D3:FF:19:E6:2C:50:08:48:21: 4E:6C:60:FD:2A:AE:F7:DC:E7:A8:F9:EE:9F:92:32
CN = DPDHL User CA I3 O = Deutsche Post	2E:01:91:75:1C:A0:CB:A8:1C:3A:63:38:DE:E1:A0:2B:8 D:6B:CC:4F:1F:82:61:B8:09:BC:CE:7A:BA:F1:A4:3D





GlobalSign

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L = Bonn ST = Nordrhein-Westfalen C = DE	
CN = NSW-DEC-ISS-CA1 O = NSW Department of Education and Communities L = Sydney ST = NSW C = AU	C7:68:21:31:79:F8:07:1B:FA:B3:94:15:B3:C0:91:12:97:C2:34:6E:41:1E:20:0A:B6:79:12:94:8E:4C:99:D7
CN = GlobalSign Primary SHA256 CA for Adobe OU = GlobalSign CDS O = GlobalSign nv-sa C = BE	8B:8A:AA:67:E1:EB:06:73:03:F0:9E:17:A5:05:CE:7B:6C:A1:C8:DC:0E:1D:B5:9D:98:2B:57:9C:69:D6:44:E1
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	42:EC:AE:70:C8:1A:60:31:51:F1:C3:3C:1C:06:DE:DE:0A:CD:6F:D2:3D:58:76:D4:D1:F6:B2:E8:76:71:A9:A0
CN = Southern Company External Issuing CA 1 O = Southern Company Services, Inc. L = Atlanta ST = GA C = US	FB:95:3C:4F:C0:04:58:46:D0:24:91:C8:EC:CF:38:7B:A3:43:47:C1:7A:BB:0E:A6:D5:9F:6D:E4:D2:F1:EA:04
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	A0:13:3B:E5:B1:4E:02:31:0A:2D:4B:EA:B6:01:09:4F:11:94:EE:8B:D6:FD:29:DD:FE:7B:93:47:46:7C:2E:EC
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	2A:48:08:10:31:0E:A0:CB:65:90:31:A2:0D:4E:4A:3C:10:00:EF:34:52:62:34:96:4F:DF:E9:C6:56:C4:5B:CD
CN = Virginia Tech Global Software Token User CA O = Virginia Polytechnic Institute and State University OU = Global Software Token User CA L = Blacksburg ST = Virginia C = US	2F:B0:45:57:96:0B:E5:32:A3:14:C9:BC:35:22:1F:BE:DF:75:96:C3:4C:BC:67:3E:12:33:9E:FD:BE:DD:EB:F7
CN = Crown Prince Court CA for AATL O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	DF:45:EE:AE:D9:05:C5:8D:73:0E:C5:49:7B:59:B3:AB:4C:CE:7C:64:59:95:3D:F9:CA:5C:1F:03:1A:C0:6D:D8
CN = Statoil Qualified CA O = Statoil ASA - 923609016	B6:BA:9C:02:A7:05:61:C3:99:4C:E0:94:AD:56:A7:87:EE:DD:1A:61:A7:D4:AC:0C:D1:1B:64:B2:4E:F2:AE:13



**GlobalSign**  
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C = NO,DC = statoil,DC = com	
CN = GlobalSign ECC EV SSL CA 2019 O = GlobalSign nv-sa C = BE	0D:31:76:C5:8F:32:1A:A3:4C:57:C8:DF:7C:17:D1:F4:E7:6C:79:7E:C1:16:C9:F1:D6:97:74:8E:D1:FC:E7:D9
CN = GlobalSign OU = GlobalSign Root CA - R3 O = GlobalSign	25:10:E2:48:90:3F:01:B6:3F:93:98:17:9E:55:06:97:9F:0E:F5:07:E4:17:4B:65:7A:F6:F7:70:A4:17:EC:94
CN = GlobalSign Extended Validation CodeSigning CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	DD:03:8E:87:E0:B4:D2:C3:69:68:0D:3D:E7:86:38:AB:39:FC:1D:7E:50:63:29:96:92:11:01:76:8D:B8:D4:D8
CN = GlobalSign CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	DC:0C:F9:A9:28:8B:75:A0:7B:EB:FC:44:26:9C:27:DF:DB:CE:5E:AD:00:DC:13:37:68:6C:FC:D1:8A:9B:C9:40
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	EB:DF:04:E3:2D:D5:DC:5C:67:7C:4F:9B:43:0A:E0:A0:5A:B1:0C:B9:BF:BB:E4:4D:7B:F8:B4:22:06:2E:7E:BF
CN = GlobalSign OU = GlobalSign Root CA - R6 O = GlobalSign	75:BF:B5:22:CC:4B:58:DA:22:EE:48:85:17:C5:F2:EF:F9:25:76:D2:0F:59:5F:9A:CE:48:3A:03:6F:C1:BB:6B
CN = GlobalSign SHA256 CA for Adobe OU = GlobalSign CDS O = GlobalSign nv-sa C = BE	10:27:E1:0A:C0:85:B2:DE:4F:9B:9F:1C:6F:2A:A9:7C:1F:9A:B0:57:CD:1B:E2:73:05:73:3D:C3:D9:AA:58:16
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	50:CA:2C:8D:FD:CA:8F:B1:7F:5F:D4:47:A8:6B:24:E2:63:DD:9F:1D:4F:C7:7E:89:9D:D8:CD:91:36:94:3F:CC
CN = Health Services Staffs Credit Union Issuing CA O = Health Services Staffs Credit Union Limited L = Dublin C = IE	07:E7:CE:06:75:65:F5:D4:A2:4C:67:21:4C:FE:DC:2A:4F:15:04:64:62:7E:A8:2E:D0:5C:26:82:42:6E:02:E1
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	BE:44:1E:EA:2B:79:50:00:C1:C1:33:AD:C3:2B:CE:6F:8D:3D:20:1D:A7:13:F4:53:3A:E0:F6:A2:AC:96:28:8E
CN = GlobalSign Root CA OU = Root CA O = GlobalSign nv-sa C = BE	6A:DD:36:8D:A3:54:58:A0:9E:DF:88:0D:05:70:E8:63:AD:C8:50:7D:49:40:6B:4D:97:E4:4E:53:BC:93:08:C9
CN = GlobalSign R8 Admin CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	EA:8C:20:1C:1F:8E:EF:58:06:7B:29:7E:6C:87:D2:62:2A:C3:94:65:27:92:4B:B6:DE:6A:3D:70:0B:E8:13:44



GlobalSign

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CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	F6:73:F2:1F:1C:4B:CF:81:6A:96:F5:FD:61:41:66:B7:1F: 48:FD:17:94:2D:9A:DF:62:7D:E4:90:10:FF:4D:C7
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	B7:9E:63:78:23:6B:F5:B6:F0:C2:77:EC:C0:80:62:7E:F3: :FE:28:71:28:1A:60:AC:42:7B:DB:6F:6A:E4:F7:94
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	1C:94:2A:22:A0:16:A1:E5:55:9D:AE:77:EC:5C:E8:67:1 F:98:AE:0B:A4:AC:2D:C2:59:41:8E:8E:1E:9F:94:AD
CN = Statoil Qualified CA O = Statoil ASA - 923609016 C = NO,DC = statoil,DC = com	5E:29:7C:01:07:65:9C:80:68:CC:76:74:63:5E:56:F7:4D: 05:BF:D6:E6:87:D3:07:5F:C4:8C:7E:8F:F7:0D:95
CN = GlobalSign CodeSigning CA - G3 O = GlobalSign nv-sa C = BE	40:47:C9:D6:92:60:C0:72:13:BC:B8:60:8A:7E:C5:E2:83 :8A:56:B7:9F:67:84:78:12:EA:C0:77:8D:0D:27:F1
CN = GlobalSign CloudSSL CA - SHA256 - G3 O = GlobalSign nv-sa C = BE	E0:C2:EB:D1:F6:BA:D4:FE:AA:E3:1A:31:07:E6:9A:BE: E9:02:DB:38:B9:DF:BE:33:F0:57:0B:DA:34:94:C2:0A
CN = Intertek Document Signing Authority O = Intertek Group plc C = GB	31:0B:D0:C4:37:32:DC:8D:5A:15:14:C5:D9:9C:FE:1D:8 B:79:BB:12:D4:1C:A4:0E:71:F6:D6:6F:60:09:B2:E5
CN = Liberty University External Issuing CA 01 O = Liberty University L = Lynchburg ST = VA C = US	1F:91:21:2C:6B:FC:33:3C:6E:B5:2A:68:55:25:E1:E5:B9 :E3:AC:1E:F7:A5:A8:66:49:F5:F9:5C:72:1D:88:98
CN = GlobalSign CodeSigning CA - SHA256 - G2 O = GlobalSign nv-sa C = BE	A4:35:30:BE:A7:06:4D:E6:5A:8D:D1:F2:75:33:5D:3B:A 2:32:2D:9C:10:EC:68:20:D3:97:55:26:2D:03:F9:55
CN = ATT Wi-Fi Services Root Certificate Authority G3 OU = ATT Wi-Fi Services O = ATT Services Inc ST = Texas C = US	27:13:C7:A3:21:05:C5:E7:40:18:46:5D:14:D5:1A:95:9C: 8A:EF:C2:11:5E:1C:00:7A:6A:6B:4C:88:31:3B:C6
CN = Crown Prince Court CA O = Crown Prince Court	F1:64:AD:5E:4C:E9:EF:C0:A1:44:CA:90:2E:A2:ED:46: C4:64:D2:D5:08:CA:91:9A:23:09:5C:DF:30:D4:DC:68



GlobalSign

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L = Abu Dhabi ST = Abu Dhabi C = AE	
CN = Crown Prince Court CA O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	BF:5E:DF:BE:EB:85:99:9C:51:69:CB:F3:F4:DB:63:B6:79:AD:2E:1E:22:72:FC:37:95:F9:F9:92:1E:6D:04:87
CN = Crown Prince Court CA for AATL O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	70:BD:B1:9C:31:F5:EF:10:5B:29:37:6E:35:EA:5E:D8:EE:BE:13:CB:5C:07:58:C3:2D:FC:4C:5F:72:30:A1:73
CN = Crown Prince Court CA for AATL O = Crown Prince Court L = Abu Dhabi ST = Abu Dhabi C = AE	D2:10:76:20:7F:79:A9:B0:41:37:D4:0A:4F:FE:6D:D0:89:21:CC:F4:9E:6E:B6:02:77:FF:45:93:E0:76:D5:38
CN = DPDHL TLS SHA 2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	27:6F:32:C1:EB:6C:5F:85:5A:79:04:FD:03:64:B2:15:0E:87:99:7F:C8:D0:31:3D:EF:7E:53:AE:09:99:DC:1D
CN = DPDHL TLS SHA2 CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	25:BA:CC:40:A5:39:2B:82:AA:DE:A0:49:03:90:5A:46:71:21:F2:82:20:E6:F2:F7:E0:FE:98:2A:AF:C1:4F:A6
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	EB:E8:7B:B4:18:85:02:70:9F:44:40:55:25:9A:BB:22:BC:51:B8:8C:90:84:19:A1:35:59:DF:C8:EF:66:30:D1
CN = DPDHL User CA I3 O = Deutsche Post L = Bonn ST = Nordrhein-Westfalen C = DE	B6:47:69:4F:44:B0:1A:10:A8:6C:BB:72:D9:C6:0F:AA:7A:B1:13:F7:09:0D:FE:66:DE:8F:85:75:35:91:73:A5
CN = Giesecke and Devrient CA OU = Corporate CA O = Giesecke and Devrient L = Munich C = DE	0F:7F:0A:51:DE:1E:5A:E3:E4:B3:66:47:AE:09:BA:59:E3:6C:77:3E:30:8D:C1:62:68:F4:22:8A:F5:27:D7:10