Scheme name

BE:Supervision/Accreditation Status List of certification services from Certification Service Providers, which are supervised/accredited by the referenced Member State for compliance with the relevant provisions laid down in Directive 1999/93/EC and its implementation in the referenced Member State's laws.

Legal Notice

The applicable legal framework for the present TSL implementation of the Trusted List of supervised/accredited Certification Service Providers for Belgium is the Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures and its implementation in Belgian laws. The applicable legal national framework is the Belgian CSP act of 9 July 2001 to create a legal framework for the usage of electronic signatures and certification services.

Scheme territory BE

Scheme status appropriate

determination approach

Scheme type community rules http://uri.etsi.org/TrstSvc/eSigDir-1999-93-EC-TrustedList/schemerules/common

http://uri.etsi.org/TrstSvc/eSigDir-1999-93-EC-TrustedList/schemerules/BE

 Issue date
 2012-09-01T00:00:00.000Z

 Next update
 2013-01-15T00:00:00.000Z

Historical information 10959 days

period

Sequence number 9

Scheme information

http://tsl.belgium.be/

Scheme Operator

Scheme operator FPS Economy, SMEs, Self-employed and Energy - Quality and Security -

NG III - Koning Albert II-laan 16

name Information Management

Scheme operator street address

street address

Scheme operator

postal code

1000

Scheme operator Brussels

locality

Scheme operator Brussels

state

Scheme operator BE

country

Scheme operator

contact

http://economie.fgov.be

mailto:be.sign@economie.fgov.be

Trust Service Providers

Certipost NV/SA

Service provider trade name

Certipost NV/SA

Information URI

http://repository.eid.belgium.be/

http://www.certipost.be/dpsolutions/en/e-certificates-legal-info.html

Service provider

Muntcentrum

street address

1000

Service provider postal code

Service provider

Brussels

locality

Service provider state Brussels

Service provider

BE

country

CN=Belgium Root CA, C=BE

Type CA/OC

Status undersupervision

2003-01-26T23:00:00.000Z Status starting time

Service digital identity (X509)

Version

Serial number 117029288888937864350596520176844645968

Signature algorithm SHA1withRSA

Issuer CN=Belgium Root CA, C=BE Valid from Mon Jan 27 00:00:00 CET 2003 Valid to Mon Jan 27 00:00:00 CET 2014 CN=Belgium Root CA, C=BE Subject Public key Sun RSA public key, 2048 bits

2532727247174242475310876111302551541350771290487408393990707355 3139389403581555633427000903307438065008396155423372038139338001 12922839738743756616914614756910113215373514757637257855001524459884908283374968661826239871065222401938973133495715806769163244 25612414624508684175386094854329316298060568772223745205611112189904505418533484099385023144445138975351025575749503679547226381 90266507753545893758022556650119414854675563337473296025894960416159860774175448506963241118776049541934983183035608916277217984

30948172071644141969017225065301229219951

public exponent: 65537

Subject key identifier 10f00c569b61ea573ab635976d9fddb9148edbe6 Authority key identifier

10f00c569b61ea573ab635976d9fddb9148edbe6

PDF document generated on Fri Aug 24 13:25:05 CEST 2012, page 2

Key usage keyCertSign

cRLSign

CA=true; PathLen=unlimited Basic constraints

SHA1 Thumbprint dfdfac8947bdf75264a9233ac10ee3d12833dacc

SHA256 Thumbprint 7c7ed4240bb253bb35c376e12e00b027f1659df9d8267422a93eed75edc7adfb

Extension (critical: true)

Qualifications

Qualifier: QCSSCDStatusAsInCert

Assert: atLeastOne

Policy OID: 2.16.56.1.1.1.2.1 Policy OID: 2.16.56.1.1.1.7.1

Additional service information

```
RootCA-QC
The decoded certificate:
Version: V3
Subject: CN=Belgium Root CA, C=BE
Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5
Key: Sun RSA public key, 2048 bits
77417544850696324111877604954193498318303560891627721798430948172071644141969017225065301229219951
public exponent: 65537
Validity: [From: Mon Jan 27 00:00:00 CET 2003,
To: Mon Jan 27 00:00:00 CET 2014]
Issuer: CN=Belgium Root CA, C=BE
SerialNumber: [ 580b056c 5324dbb2 5057185f f9e5a650]
Certificate Extensions: 6
[1]: ObjectId: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 10 F0 0C 56 9B 61 EA 57 \, 3A B6 35 97 6D 9F DD B9 \, ...V.a.W:.5.m...
0010: 14 8F DB F6
[2]: ObjectId: 2.5.29.19 Criticality=true
BasicConstraints:[
CA:true
PathLen:2147483647
[3]: ObjectId: 2.5.29.32 Criticality=false
CertificatePolicies [
[CertificatePolicyId: [2.16.56.1.1.1]
[PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.1
qualifier: 0000: 16 20 68 74 74 70 3A 2F 2F 72 65 70 6F 73 69 74 . http://reposit
. 0010: 6F 72 79 2E 65 69 64 2E 62 65 6C 67 69 75 6D 2E ory.eid.belgium.
0020: 62 65
[4]: ObjectId: 2.5.29.15 Criticality=true
KeyUsage [
Key CertSign
[5]: ObjectId: 2.16.840.1.113730.1.1 Criticality=false
NetscapeCertType [
 SSL CA
 Object Signing CA]
[6]: ObjectId: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0000: 10 F0 0C 56 9B 61 EA 57 3A B6 35 97 6D 9F DD B9 ...V.a.W:.5.m...
```

```
0010: 14 8E DB E6
Algorithm: [SHA1withRSA]
Signature:
0000: C8 6D 22 51 8A 61 F8 0F
                               96 6E D5 20 B2 81 F8 C6 .m"Q.a...n.
0010: DC A3 16 00 DA CD 6A E7
                               6B 2A FA 59 48 A7 4C 49
                                                       .....j.k*.YH.LI
0020: 37 D7 73 A1 6A 01 65 5E
                               32 BD E7 97 D3 D0 2E 3C 7.s.j.e^2.....<
0030: 73 D3 8C 7B 83 EF D6 42
                               C1 3F A8 A9 5D 0F 37 BA s.....B.?..].7.
0040: 76 D2 40 BD CC 2D 3F D3
                               44 41 49 9C FD 5B 29 F4 v.@..-?.DAI..[).
0050: 02 23 22 5B 71 1B BF 58
                               D9 28 4E 2D 45 F4 DA E7 .#"[q..X.(N-E...
0060: B5 63 45 44 11 0D 2A 7F
                               33 7F 36 49 B4 CE 6E A9 .cED..*.3.6I..n.
                               42 7B D7 F1 60 F2 D7 87 .1.\...B...`
0070: 02 31 AE 5C FD C8 89 BF
0080: F6 57 2E 7A 7E 6A 13 80
                               1D DC E3 D0 63 1E 3D 71 .W.z.j.....c.=q
0090: 31 B1 60 D4 9E 08 CA AB
                               F0 94 C7 48 75 54 81 F3 1.`.....HuT..
00A0: 18 AD 77 9C F8 B2 8F DB
                               83 AC 8F 34 6B E8 BF C3 ..w.....4k...
00B0: D9 F5 43 C3 64 55 EB 1A
                               BD 36 86 36 BA 21 8C 97 ..C.dU...6.6.!..
                               EC A7 1D AB BE B9 4A 9B
00C0: 1A 21 D4 EA 2D 3B AC BA
00D0: 35 2F 1C 5C 1D 51 A7 1F
                               54 ED 12 97 FF F2 6E 87 5/.\.Q..T....n.
                               7D E6 59 6E 06 94 04 E4 .F.t...=..Yn...
00E0: 7D 46 C9 74 D6 EF EB 3D
```

The certificate in PEM format:

----BEGIN CERTIFICATE-----

MIIDlDCCAnvaAwIBAaIOWAsFbFMk27JOVxhf+eWmUDANBakahkiG9w0BAOUFADAn MQswCQYDVQQGEwJCRTEYMBYGA1UEAxMPQmVsZ2l1bSBSb290IENBMB4XDTAzMDEy NjIzMDAwMFoXDTE0MDEyNjIzMDAwMFowJzELMAkGA1UEBhMCQkUxGDAWBgNVBAMT D0JlbGdpdW0aUm9vdCBDOTCCASIwDOYJKoZIhvcNAOEBBOADaaEPADCCAOoCaaEB AMihcekcRkJ5eHFvna6pqKsot03HIOswkVp19eLSz8hMFJhCWK3HEcVAQGpa+XQS J4fpn0VxTiIs0RIYqjBeoiG52bv/9nTrMQHn035YD5EWTXaJqAFPrSJmcPpLHZXB MFjqvNll2Jq0i0tJRlLf0lMVdssUXRlJsW9q09P9vMIt7EU/CT9YvvzU7wCMgTVy v/cY6pZifSsofxVsY9LKyn0FrMhtB20yvmi4BUCuVJhWPmbxM0jvxKuTXgfeMo8S dKpbNCNUwOpszv42kqgJF+qhLc9s44Qd3ocuMws8d0IhUDiVLlzg5cYx+dtA+mqh pIqTm6chBocdJ9PEoclMsG8CAwEAAa0BuzCBuDA0BgNVHQ8BAf8EBAMCAQYwDwYD VROTAQH/BAUwAwEB/zBCBgNVHSAEOzA5MDcGBWA4AQEBMC4wLAYIKwYBBQUHAgEW IGh0dHA6Ly9yZXBvc2l0b3J5LmVpZC5iZWxnaXVtLmJlMB0GA1UdDgQWBBQQ8AxWarder and the control of the cm2HqVzq2NZdtn925FI7b5jARBglghkgBhvhCAQEEBAMCAAcwHwYDVR0jBBgwFoAU EPAMVpth6lc6tjWXbZ/duRS02+YwDQYJKoZIhvcNAQEFBQADggEBAMhtIlGKYfgP lm7VILKB+MbcoxYA2s1q52sq+llIp0xJN9dzoWoBZV4yveeX09AuPHPTjHuD79ZC wT+ogV0PN7p20kC9zC0/00RBSZz9Wvn0AiMiW3Ebv1iZKE4tRfTa57ViRU0RDSp/ M382SbT0bqkCMa5c/ciJv0J71/Fg8teH9lcuen5qE4Ad30PQYx49cTGxYNSeCMqr 8JTHSHVUgfMbrXec6LKP240sjzRr6L/D2fVDw2RV6xq9NoY2uiGMlxoh10ot06y6 7Kcdq765Sps1LxxcHVGnH1TtEpf/8m6HfUbJdNbv6z195lluBpQE5KJVhzgoaiJe 4r50ErAEQyo=

----END CERTIFICATE----

CN=Belgium Root CA2, C=BE

Type CA/QC

Status undersupervision

Status starting time 2007-10-04T10:00:00.000Z

Service digital identity (X509)

Version 3

Serial number 3098404661496965511

Signature algorithm SHA1withRSA

Public key Sun RSA public key, 2048 bits

modulus:

2505202035897286929802442931365977782136110157856742564234839581 64367953802839672248769831300340203168205752163553604166050045334718830407023741150537135469000352360279650474826843696574001315 552436395329655960576829372646274868386780797947622304693692109500887975787577283413392923336546545109817976430306701793579151565262158435123606358334230710497624432217765218126527057253528859 3688668361490384043063624052887014382463758810568004079588144865 4643858460532713400822409146679502714797245542101554942867836639 3080491585356622044306227220916440412947986826263456222477031966

11536459503012648921426461410998536799349

public exponent: 65537

Subject key identifier 858aebf4c5bbbe0e590394ded6800115e3109c39 858aebf4c5bbbe0e590394ded6800115e3109c39

Authority key identifier Key usage

keyCertSign

cRLSign

Basic constraints CA=true; PathLen=unlimited

SHA1 Thumbprint 51cca0710af7733d34acdc1945099f435c7fc59f

SHA256 Thumbprint 9f9744463be13714754e1a3becf98c08cc205e4ab32028f4e2830c4a1b2775b8

Extension (critical: true)

Qualifications

Qualifier: QCSSCDStatusAsInCert

Assert: atLeastOne

[CertificatePolicyId: [2.16.56.9.1.1]

Policy OID: 2.16.56.9.1.1.2.1 Policy OID: 2.16.56.9.1.1.7.1

Additional service information

RootCA-QC

```
The decoded certificate:
Version: V3
 Subject: CN=Belgium Root CA2, C=BE
Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5
Key: Sun RSA public key, 2048 bits
modulus:
25052020358972869298024429313659777821361101578567425642348395816436795380283967224876983130034020316820575216355360416605904533471883040702374115053713546900035236027965047
10497624432217765218126527057253528859368866836149038404306362405288701438246375881056800407958814486546438584605327134008224091466795027147972455421015549428678366393080491
58535662204430622722091644041294798682626345622247703196611536459503012648921426461410998536799349
public exponent: 65537
Validity: [From: Thu Oct 04 12:00:00 CEST 2007
           To: Wed Dec 15 09:00:00 CET 20211
Issuer: CN=Belgium Root CA2, C=BE
SerialNumber: [
                2affbe9f a2f0e987]
Certificate Extensions: 6
[1]: ObjectId: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 85 8A EB F4 C5 BB BE 0E 59 03 94 DE D6 80 01 15 ......Y.....
0010: E3 10 9C 39
[2]: ObjectId: 2.5.29.19 Criticality=true
BasicConstraints:[
CA:true
 PathLen: 2147483647
[3]: ObjectId: 2.5.29.32 Criticality=false
CertificatePolicies [
```

```
[PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.1
qualifier: 0000: 16 20 68 74 74 70 3A 2F 2F 72 65 70 6F 73 69 74 . http://reposit
0010: 6F 72 79 2E 65 69 64 2E 62 65 6C 67 69 75 6D 2E ory.eid.belgium.
11 1
[4]: ObjectId: 2.5.29.15 Criticality=true
Key CertSign
Crl Sign
[5]: ObjectId: 2.16.840.1.113730.1.1 Criticality=false
NetscapeCertType [
 SSI CA
 S/MIME CA
 Object Signing CA]
[6]: ObjectId: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KevIdentifier [
0000: 85 8A EB F4 C5 BB BE 0E 59 03 94 DE D6 80 01 15 ......Y.....
Algorithm: [SHA1withRSA]
Signature:
0010: F3 4A 01 0C 74 BF 2B B3
                              9A 9A BA 18 F2 0B 88 AC .J..t.+....
0020: 1C B3 33 AF CE E5 13 01
                              27 92 84 58 9A 10 B9 F7
                                                     ..3.....'..X....
                              E8 51 EF BF FA 4A 25 A7 ...kt....Q...J%.
0030: CC 14 92 6B 74 16 8A 96
                              CF 11 72 B6 1E B9 39 41 ..c+1.X...r...9A
0040: 89 B6 63 2B 5D 94 58 D1
0050: 16 4D 29 BC 35 53 0B DA
                              DE 8E 0E CD A9 95 77 25 .M).5S......w%
0060: CA 94 5A E9 B2 69 AE D8
                              CO 13 BE 98 FC 96 9C 84
                              20 A4 A4 36 68 6B 4D 60 .U..<....6hkM
0070: 7F 55 13 E6 3C 87 E3 BC
0080: 66 1C F9 BF AC 80 94 66
                              2E B9 41 8A D3 65 D3 84 f.....f..A..e..
0090: 80 02 EF 50 1D 5E 46 DC
                              F7 C9 BA B5 34 7C 2A F3 ...P.^F....4.*.
                             CD 11 E7 FD 14 02 83 66 ..__T..M......f
CE 14 FE BB 1F A7 61 F7 ^...._a.
00A0: C6 D8 5F 5F 54 9D DB 4D
00B0: 5E C8 A6 00 12 A0 5F BE
00C0: AB 4A F1 06 14 9F CA 49
                              42 C2 A9 BC ED 85 B1 AB .J....IB.....
00D0: 81 41 E6 0D C5 42 69 53
                              87 39 9D 4C 1F 00 0E 3E .A...BiS.9.L...>
00E0: 07 0D 75 57 44 A8 53 B4
00F0: 46 6E 14 5D 5E 47 53 8D 78 4D E0 27 BB 8E 85 76 Fn.]^GS.xM.'...v
```

The certificate in PEM format:

---BEGIN CERTIFICATE----

MIIDjjCCAnagAwIBAgIIKv++n6Lw6YcwDQYJKoZIhvcNAQEFBQAwKDELMAkGA1UE WhcNMiExMiE1MDqwMDAwWiAoMOswCOYDVOOGEwJCRTEZMBcGA1UEAxMOOmVsZ2l1 bSBSb290IENBMjCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAMZzQh6S /3UPi790hqc/7bIYLS2X+an7mEoj39WN4IzGMhwWLQdCli22bi+n9fzGhYJdld61 IgDMqFNAn68KNaJ6x+HK92AQZw6nUHMXU5WfIp8MXW+2QbyM69odRr2nlL/zGsvU +400HiPIltfsiFPekx40HopOcSZYtF3CiInaYNKJIT/e1wEYNm7hLHADBGXvmAYr XR5i3FVr/mZkIV/4L+HXmymvb82fqgxG0YjFnaKVn6w/Fa7yYd/vw2uaItgscf1Y HewApDgglVrH1Tdjuk+bqv5WRi5j2Qsj1Yr6tSPwiRuhFA0m2kHw0I8w7QUmecFLine American AmeriTaG4flVSOmlGhHUCAwEAAa0BuzCBuDA0BaNVH08BAf8EBAMCA0YwDwYDVR0TA0H/ BAUWAWEB/zBCBgNVHSAE0zA5MDcGBWA4CQEBMC4wLAYIKwYBBQUHAgEWIGh0dHA6 Ly9yZXBvc2l0b3J5LmVpZC5iZWxnaXVtLmJlMB0GA1UdDgQWBBSFiuv0xbu+DlkD lN7WgAEV4xCcOTARBglahkaBhvhCAOEEBAMCAAcwHwYDVR0iBBgwFoAUhYrr9MW7 vg5ZA5Te1oABFeMQnDkwDQYJKoZIhvcNAQEFBQADggEBAFHYhd27V2/MoGy1oyCc JaeJtmMrXZRY0c8RcrYeuTlBFk0pvDVTC9reig7NgZV3JcgUWumvaa7YwB0+mPvW nIR/VRPmPIfjvCCkpDZoa01gZhz5v6yAlGYuuUGK02XThIAC71AdXkbc98m6tTR8 KvPG2F9fVJ3bTc0R5/0UAoNmXsimABKgX770FP67H6dh96tK8QYUn8pJQsKpv02F sauB0eYNxUJpU4c5nUwfAA4+Bw11V0SoU702dmSZ3G7rPUZuFF1eR10NeE3gJ7u0 ----END CERTIFICATE----

CN=Certipost E-Trust Primary Qualified CA, O=Certipost s.a./n.v., C=BE

Type CA/QC

Status undersupervision

Status starting time 2005-07-26T10:00:00.000Z

Service digital identity (X509)

Version

Serial number 4835703278459639067624485

Signature algorithm SHA1withRSA

CN=Certipost E-Trust Primary Qualified CA, O=Certipost s.a./n.v., C=BE Issuer

Valid from Tue Jul 26 12:00:00 CEST 2005 Valid to Sun Jul 26 12:00:00 CEST 2020

Subject CN=Certipost E-Trust Primary Qualified CA, O=Certipost s.a./n.v., C=BE

Sun RSA public key, 2048 bits Public key

modulus:

2198165027276639742335246370299919491834299685174947076499863829 710198451108362985094873473925989264451780406693419632454996429131929507801877488868263056625892314811981652410138907899996057327037799082855868763511239453871155320357733059447691386874174245 6351418525550214828297591584323227847019805029382183516476456072 1350350984913304723496042939229874921930931967750335049019790482 8017572130561815887751919653650932481620948873902322540903538293 2017480465444929903218227769334668958530404811571842689601047281 9175682817566553198501338089830997047280971197474917236039149732

00214236187812432050305807187505398614653

public exponent: 65537

Subject key identifier f078f9077710bbdc1ea1ae79fb3010dbc634f817

Key usage keyCertSign

cRLSign

Basic constraints CA=true; PathLen=unlimited

SHA1 Thumbprint 742cdf1594049cbf17a2046cc639bb3888e02e33

SHA256 Thumbprint 058a40323ec8c46262c3052a5d357b91ac24d3da26351b3ff4407e99f7a4e9b4

Extension (critical: true)

Qualifications

Qualifier: QCForLegalPerson

Assert: atLeastOne

Policy OID: 0.3.2062.7.1.1.112.1 Policy OID: 0.3.2062.7.1.1.140.1 Policy OID: 0.3.2062.7.1.1.111.1

Additional service information

RootCA-QC

The decoded certificate:

Subject: CN=Certipost E-Trust Primary Qualified CA, O=Certipost s.a./n.v., C=BE

Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5

Key: Sun RSA public key, 2048 bits

public exponent: 65537

Validity: [From: Tue Jul 26 12:00:00 CEST 2005, To: Sun Jul 26 12:00:00 CEST 2020]

Issuer: CN=Certipost E-Trust Primary Qualified CA, O=Certipost s.a./n.v., C=BE $\sim 10^{-5}$

SerialNumber: [04000000 00010552 64c425]

Certificate Extensions: 5

[1]: ObjectId: 2.5.29.19 Criticality=true

BasicConstraints:

```
CA:true
PathLen:2147483647
[2]: ObjectId: 2.5.29.32 Criticality=false
CertificatePolicies [
[CertificatePolicyId: [0.3.2062.7.1.0.1.2.0]
[PolicyQualifierInfo: [
qualifierID: 1.3.6.1.5.5.7.2.1
qualifier: 0000: 16 22 68 74 74 70 3A 2F 2F 77 77 77 2E 65 2D 74 ."http://www.e-t
0010: 72 75 73 74 2E 62 65 2F 43 50 53 2F 51 4E 63 65 rust.be/CPS/QNce
0020: 72 74 73 20
[3]: ObjectId: 2.5.29.15 Criticality=true
KevUsage [
Key CertSign
Crl_Sign
[4]: ObjectId: 2.16.840.1.113730.1.1 Criticality=false
NetscapeCertType [
 SSL CA
 Object Signing CA]
[5]: ObjectId: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KeyIdentifier [
0010: C6 34 F8 17
0000: 6C E1 D8 5F 74 58 E9 70
                            49 D6 CA 0D 2C 58 DA CA l., tX.pI...X..
0010: 64 B6 51 4F C3 06 64 01
                            E9 8A 73 1D 9E CF 46 78 d.QO..d...s...Fx
0020: BF 3B 85 86 E2 3D 4A 18
                            94 2A 81 77 6F 82 F8 6F .;...=J..*.wo..o
                            60 BB 18 80 82 95 FB F9 .."...!r`.....
0030: F4 EE 22 FC 9D 18 21 72
                            B5 D2 B6 76 8B 3B 81 5C ...$.f.....v.;.\
                            09 40 EE F8 60 4C 19 E4 ...+....@..`L.
0050: B8 A1 0E 2B 01 14 8B 80
                            A4 08 C9 B4 BF 9E 50 4E ..'..c.....PN
0060: 17 CD 27 01 B3 63 12 05
0070: B5 DE 0F 92 33 66 75 D0
0080: FE 3E 2E 36 79 A1 E5 29
                            50 23 35 05 95 78 BB 9F
                                                   .>.6y..)P#5..x.
                            5C 33 CD C2 BB 7E 68 77 yd.WH',.\3....hw
0090: 79 64 DC 57 48 27 2C E2
00A0: A7 2F A3 49 17 72 E1 00
                            84 6B 7D 7A AF 39 0B 2C ./.I.r...k.z.9.,
00B0: D5 D8 57 64 32 6C 84 0A
                            6A 76 3A D3 AC CD 9D B1 ..Wd2l..jv:..
00C0: E7 37 DC EC 0C 2F C5 57
                            60 DF 88 F5 43 B1 01 64 .7.../.W`...C..d
00D0: 26 B4 27 82 10 B2 A3 50
                            EF 97 E6 7F BF 91 87 B3 &.'....P.....
00E0: DB 90 A9 2A E2 7A 34 6C
                            73 49 F4 E8 8D 2E 6B 8A ...*.z4lsI....k.
```

The certificate in PEM format:

----BEGIN CERTIFICATE-----

 ${\tt MIID3jCCAsagAwIBAgILBAAAAAABBVJkxCUwDQYJKoZIhvcNAQEFBQAwXDELMAkG}$ A1UEBhMCOkUxHDAaBqNVBAoTE0NlcnRpcG9zdCBzLmEuL24udi4xLzAtBqNVBAMT JkNlcnRpcG9zdCBFLVRvdXN0IFBvaW1hcnkgUXVhbGlmaWVkIENBMB4XDTA1MDcv ${\tt NjEwMDAwMFoXDTIwMDcyNjEwMDAwMFowXDELMAkGA1UEBhMCQkUxHDAaBgNVBAoTMAkgA1UEBhMCQkUxHDAaBgNVBAoTMAkgA1UEBhMCQkUxHDAaBgNVBAOTMAkgA1UEBhMCQkUxHDAABgA1UEBhMCQkUxHDAABgNVBAOTMAkgA1UEBhMCQkUxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQkuxHDAABgA1UEBhMCQ$ E0NlcnRpcG9zdCBzLmEuL24udi4xLzAtBgNVBAMTJkNlcnRpcG9zdCBFLVRydXN0 IFBvaW1hcnkgUXVhbGlmaWVkIENBMIIBIiANBgkghkiG9w0BA0EFAA0CA08AMIIB CgKCAQEAriDSeNuaoHKcBFIlLG1S2NcniT0g4bLV+zBlay1/HGe0DucfEt8XeRi7 $\verb+tBtv+D11G55nN/Dx+g917YadAwShKHAtPLJroHNR4zWpdKUIPpSFJzYqqnJk/Hfu$ dpOccuu/Msd3A2olaakFr19aPH+sG7vS6Dx0Wc7xfFOtOK6W8KxvoTMMIVoBuiMa W6CGAtVT3EkfqDKzrztG07bvnzmz0Avneor2KPmnb1ApyHlYi0nSpdiFflbxaRV4 RBE116VUPqtmJdLb4xjxLivicSMJN2RDQnQylnfel6LploacJUQJ1AGdUX4ztwlEurope and the property of th5YCXDWRbdxiXpUupnhCdh/pWp88Kf0IDAOABo4GaMIGdMA4GA1UdDwEB/w0EAwIB BjAPBgNVHRMBAf8EBTADAQH/MB0GA1UdDgQWBBTwePkHdxC73B6hrnn7MBDbxjT4 FzBIBgNVHSAEQTA/MD0GCQ0QDgcBAAECADAwMC4GCCsGAQUFBwIBFiJodHRw0i8v d3d3LmUtdHJ1c30uYmUv01BTL1F0Y2VvdHMqMBEGCWCGSAGG+EIBA00EAwIABzAN BgkqhkiG9w0BAQUFAAOCAQEAbOHYX3RY6XBJ1soNLFjaymS2UU/DBmQB6YpzHZ7P Rni/04WG4j1KGJQqgXdvgvhv904i/J0YIXJguxiAgpX7+feVJIFmwbXDtdK2dos7 gVy4oQ4rARSLgAlA7vhgTBnkF80nAbNjEgWkCMm0v55QTrXeD5IzZnXQPecifOol cXz+Pi42eaHlKVAjNQWVeLufeWTcV0gnL0JcM83Cu35od6cvo0kXcuEAhGt9eq85 h7PbkKkq4no0bHNJ90iNLmuK3aGKf2PQv1ger8w/klAt0Q== ----END CERTIFICATE--

CN=Certipost Public CA for Qualified Signatures, O=Certipost n.v./s.a., C=BE

Type CA/QC

Status undersupervision

2012-01-11T19:45:06.000Z Status starting time

Service digital identity (X509)

Version Serial number 904

Signature algorithm SHA256withRSA

Issuer CN=Verizon Global Root CA, OU=OmniRoot, O=Verizon Business, C=US

Valid from Wed Jan 11 20:45:06 CET 2012 Valid to Tue Jan 11 20:44:34 CET 2022

CN=Certipost Public CA for Qualified Signatures, O=Certipost n.v./s.a., C=BE Subject

Public key Sun RSA public key, 2048 bits

modulus:

20583708081178068867195678561473200619452921905927961291793273671328005822028265845465542836756717140506081882114668638826442932 4840744781703307017746497136667158332106505285154357277431791645 6871430942741492265542773700746837231916763966290548158739950199 2029174676515494584699514099891322542890739713299134792579834056 6654074619687706565029583663340264770269856720101489447350341548966791713163396699033788554016153919715403847864063923111310679136635894864931180660425047376424983469143686703090472699223090766138772412256664686136790625895780242652401177074998149327839849

23682396679386042809154363424543342942381

public exponent: 65537

Subject key identifier 0e3733c7286ebfce5fe62ae698908bacc1e62844

CRL distribution

points

http://cdp1.public-trust.com/CRL/Omniroot2034.crl

Authority key

4c3811b898005b5a2b703eaa78e4d5676767a77e

identifier Key usage

keyCertSign

cRLSign

Basic constraints CA=true; PathLen=0

SHA1 Thumbprint 05e88c57c47c3b510aed61a8c9d427ffe2925c01

SHA256 Thumbprint 4671a19c0fb1e221aeda10c7d745b7e5bf4faaffafc63fc2e2f8add187adab69

```
The decoded certificate:
```

[2]: ObjectId: 2.5.29.19 Criticality=true

```
Subject: CN=Certipost Public CA for Qualified Signatures, O=Certipost n.v./s.a., C=BE
Signature Algorithm: SHA256withRSA, OID = 1.2.840.113549.1.1.11
Key: Sun RSA public key, 2048 bits
public exponent: 65537
Validity: [From: Wed Jan 11 20:45:06 CET 2012,
      To: Tue Jan 11 20:44:34 CET 2022]
Issuer: CN=Verizon Global Root CA, OU=OmniRoot, O=Verizon Business, C=US
SerialNumber: [
Certificate Extensions: 6
[1]: ObjectId: 2.5.29.35 Criticality=false
AuthorityKeyIdentifier [
KeyIdentifier [
0000: 4C 38 11 B8 98 00 5B 5A 2B 70 3E AA 78 E4 D5 67 L8....[Z+p>.x..g
0010: 67 67 A7 7E
```

```
BasicConstraints:
 CA:true
PathLen:0
[3]: ObjectId: 2.5.29.31 Criticality=false
CRLDistributionPoints [
[DistributionPoint:
    [URIName: http://cdp1.public-trust.com/CRL/Omniroot2034.crl]
[4]: ObjectId: 2.5.29.32 Criticality=false
CertificatePolicies [
 [CertificatePolicyId: [2.5.29.32.0]
[PolicvOualifierInfo: [
 qualifierID: 1.3.6.1.5.5.7.2.1
 qualifier: 0000: 16 24 68 74 74 70 73 3A 2F 2F 77 77 77 2E 63 65 .$https://www.ce
0010: 72 74 69 70 6F 73 74 2E 63 6F 6D 2F 73 68 6F 77 rtipost.com/show
0020: 70 6F 6C 69 63 79
                                                            policy
11 1
[5]: ObjectId: 2.5.29.15 Criticality=true
KeyUsage [
Key_CertSign
[6]: ObjectId: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
0000: 0E 37 33 C7 28 6E BF CE 5F E6 2A E6 98 90 8B AC .73.(n.._.*....
0010: C1 E6 28 44
                                                            ..(D
 Algorithm: [SHA256withRSA]
 Signature:
0000: 73 F0 57 07 07 F3 34 DE
                                 48 53 1E 3E 0A 88 33 07 s.W...4.HS.>..3.
0010: 6C 55 49 D2 75 85 54 92
                                 F2 80 19 1C 86 5D D7 F4 lUI.u.T.....].
0020: 10 35 18 31 AC 35 F8 8D
                                 4B 0F 6D 66 4B 15 4C 28 .5.1.5..K.mfK.L(
0030: 91 12 78 3B C4 B3 42 65
                                 A8 44 46 A2 10 8C F6 38 ..x;..Be.DF....8
0040: A0 AA EB 8D 42 18 10 E1
                                 21 AC 5B 2C 0D C9 7C 35
                                 22 36 B4 DC AF 2D F2 87
0050: 6A D2 0C 7E 9D 83 EC 5B
                                                           i.....["6...-
0060: 6B F9 7F 16 77 0B 25 7B
                                 A3 66 52 4B EA 44 BC 58
0070: 6F B9 FA 9D 65 49 60 67
                                 AE 3F 46 13 DC AB 56 55 o...eI`g.?F...VU
0080: EF 86 AC 26 E3 41 45 9E
                                 D2 E8 81 77 3F 1C C0 28 ...&.AE....w?..(
72 CD 51 A1 2F F4 08 9F 3.b...5r.Q./...
0090: 33 7D 62 DA 7C BC 9C 35
00A0: FA 68 94 BC 1E 30 5C F3
                                 AD D1 8F 7F 52 B1 C2 FF
                                 C3 69 F0 82 27 F1 4D B9 ...)...i..'.M.
9E 4D 59 8C 55 81 5A 5A .<.V#.a..MY.U.ZZ
00B0: CD 95 BE 29 A9 EF 2E FB
00C0: A0 3C D1 56 23 1D 61 EC
00D0: 62 6C 93 73 21 5A F6 52
                                 84 8A AF 97 01 96 7E B4 bl.s!Z.R.....
                                 27 B7 9A 29 AF A3 27 72 y...+..'..)..'r
E0 48 8F 9E B5 98 8A F8 (..s..?.H.....
00E0: 79 80 91 A5 E2 2B 7B 19
```

The certificate in PEM format:

GTAXBqNVBAoMEFZlcml6b24q0nVzaW5lc3MxETAPBqNVBAsMCE9tbmlSb290MR8w HQYDVQQDDBZWZXJpem9uIEdsb2JhbCBSb290IENBMB4XDTEyMDExMTE5NDUwNloX DTIyMDExMTE5NDQzNFowYjELMAkGA1UEBhMCQkUxHDAaBgNVBAoTE0NlcnRpcG9z dCBuLnYuL3MuYS4xNTAzBqNVBAMTLENlcnRpcG9zdCB0dWJsaWMq00EqZm9vIFF1 YWxpZmllZCBTaWduYXR1cmVzMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKC A QEAow 3 rmuZKZMnGhQRGeEzZK4THeq59CIqK6BseSxLmZ3sh8znY0FBNK40XmFEj0Y990nIvAJxnU5bcvSSBF0KPwtD5cFcmpcvP7BR0i6/MvJCE6BMD8wcS61CJfLlm 8/p/VRF9KsDfa6fMd/Wlghbq780wa22+UgXpFr27eqBCsUzEiZya5cILWXM0hmP+ ZE30i7pLZ/Dh+50tn/R+P0IVBBIypiycnx/u4Q/loEqMyy+DFliuMfCbCpE2Pbwz 0R+SCalFNeR09dlfmJ5XlpSr5K7dKXJP8DaoMw8Cu5fGLU8z2awax+3Zv0XdxDNF e2g8HHX4WdMymhSzbmnLjGVYrQIDAQABo4HyMIHvMBIGA1UdEwEB/wQIMAYBAf8C ${\tt AQAwRQYDVR0gBD4wPDA6BgRVHSAAMDIwMAYIKwYBBQUHAgEWJGh0dHBz0i8vd3d3}$ LmNlcnRpcG9zdC5ib20vc2hvd3BvbGlieTA0BqNVH08BAf8EBAMCA0YwHwYDVR0i BBgwFoAUTDgRuJgAWlorcD6qe0TVZ2dnp34wQgYDVR0fBDsw0TA3oDWgM4YxaHR0 c DovL2NkcDEucHVibGljLXRydXN0LmNvbS9DUkwvT21uaXJvb3QyMDM0LmNybDAdBqNVHQ4EFqQUDjczxyhuv85f5irmmJCLrMHmKEQwDQYJKoZIhvcNAQELBQADqqEB AHPwVwcH8zTeSFMePgqIMwdsVUnSdYVUkvKAGRyGXdf0EDUYMaw1+I1LD21mSxVM KJESeDvEs0JlqERGohCM9jigquuNQhgQ4SGsWywNyXwlatIMfp2D7FsiNrTcry3y

 $\label{local-problem} $$h2v5fxZ3CyV7o2ZSS+pEvFhvufqdZUlgZ64/RhPcq1ZV74asJuNBRZ7561F3PxzA$$KDN9Ytp8vJw1cs1Ro5/0CJ/6aJS8HjBc863Rj39SscL/zZw+KanvLvvDafCCJ/FNuaA80VYjHWHsnk1ZjFWBWlpibJNzIVr2UoSKr5cBln60eYCRpeIrexknt5opr6Mn$

MIIELTCCAxWgAwIBAgICA4gwDQYJKoZIhvcNAQELBQAwXDELMAkGA1UEBhMCVVMx

ciipCXObk6c/4EiPnrWYivg=
----END CERTIFICATE----

Trusted List Signer

```
Belgique/België (Belgium): Trusted List
Subject
                            OU=Ministry of Economic Affairs, O=Belgian Federal Government, C=BE,
                            CN=Belgian Trust List Scheme Operator
                            OU=Ministry of Economic Affairs, O=Belgian Federal Government, C=BE,
Issuer
                            CN=Belgian Trust List Scheme Operator
Not before
                            Fri Feb 26 11:42:04 CET 2010
                            Mon Feb 24 11:42:04 CET 2020
Not after
Serial number
                            15681248625855287085
Version
Public key SHA1
                            0e2b1b3ce368b11ae8b9221982ce69740e3dceb9
Thumbprint
Public key SHA256
                            2efdccbd9b768ea9654152816c48a53857f658c50462c12f66f5d56c0961616d
Thumbprint
The decoded certificate:
 Subject: OU=Ministry of Economic Affairs, O=Belgian Federal Government, C=BE, CN=Belgian Trust List Scheme Operator
Signature Algorithm: SHA1withRSA, OID = 1.2.840.113549.1.1.5
Key: Sun RSA public key, 2048 bits
72260024738022754521550978668073613848886314527876619695170205142182992106517625874476574000109694632025016183163606961399776610711940089307587500742164497411652253547139771
public exponent: 65537
 Validity: [From: Fri Feb 26 11:42:04 CET 2010,
          To: Mon Feb 24 11:42:04 CET 2020]
 Issuer: OU=Ministry of Economic Affairs, O=Belgian Federal Government, C=BE, CN=Belgian Trust List Scheme Operator
 SerialNumber: [
             d99efc8a daafcf2d]
Certificate Extensions: 4
[1]: ObjectId: 2.5.29.19 Criticality=false
BasicConstraints:
CA:false
PathLen: undefined
[2]: ObjectId: 2.5.29.37 Criticality=false
0.4.0.2231.3.0
[3]: ObjectId: 2.5.29.15 Criticality=false
KevUsage [
DigitalSignature
[4]: ObjectId: 2.5.29.14 Criticality=false
SubjectKeyIdentifier [
KevIdentifier [
0000: 95 B3 07 E5 F3 52 B0 CB 0F E9 6B 00 1F D0 B4 65 .....R....k....e
0010: 75 CC 6E 6C
 Algorithm: [SHA1withRSA]
Signature:
0000: A6 25 D0 FC 3F B8 08 E8 D5 9F E5 E2 BF DD FA E7 .%..?.....
0010: A9 C1 F0 5F 2E 7B FC 54
                       B8 1A 69 D0 2B 4F 2B BE ..._..T..i.+0+.
0020: 52 F0 D2 53 FF 11 C5 BD
                      1E 6B B5 A7 CD 58 B2 1B R..S....k...X..
0030: 1C 49 23 70 0C ED ED 1C
                       33 32 5F 2E 01 6D 43 CC .I#p....32_..mC.
                       59 77 11 4F 2B 01 22 9C
0040: D1 BF F2 A0 8C BC 6D 1A
                                          ....m.Yw.0+."
0050: 48 57 D5 E2 74 07 1F 51
                       9A C7 26 6C 1C 40 FC 41 HW..t..Q..&l.@.A
0060: 57 1E 9E F8 E4 41 03 7F
                       DF 7E E1 58 BB 68 6D 00 W....A....X.hm.
0070: 1B E4 B0 D7 03 9C 6B DC
                       17 EA 1E 49 93 16 23 B5 .....k...I..#.
0080: 82 0F 66 D2 F6 D6 BF 8D
                       1A 28 3B 4A 5A DB DF 9C
0090: 86 61 95 86 25 97 BD 40
                       09 70 9F B6 D7 C5 30 4D .a..%..@.p....0M
00A0: 24 CE F8 E4 12 30 EE 6C
                       1D 5D 47 DA 91 81 63 99 $....0.l.]G...c.
```

The certificate in PEM format:

00B0: 88 4F B7 8B 8D CF 9D 69

00C0: CC 26 B5 11 CC 1A 20 A0

00D0: 96 FC 16 6C BC B2 BC 64

00E0: E7 AF 6E BA 99 50 5B 0C

00F0: 92 43 1B 65 1D 49 51 D5

7D 74 B4 56 37 5B 58 DF .0....i.t.V7[X.

EB 95 53 C4 07 13 FE 01 ...l...d..S.....

75 D5 DB FC 69 22 9F 61 ..n..P[.u...i".a

51 1B 2C E1 36 BC D5 42 .C.e.IQ.Q.,.6..B

----BEGIN CERTIFICATE----

 ${\tt MIID3TCCAsWgAwIBAgIJANme/Irar88tMA0GCSqGSIb3DQEBBQUAMIGGMSswKQYD}$ VQQDEyJCZWxnaWFuIFRydXN0IExpc3QgU2NoZW1lIE9wZXJhdG9yMQswCQYDVQQG ${\tt EwJCRTEjMCEGA1UEChMaQmVsZ2lhbiBGZWRlcmFsIEdvdmVybm1lbnQxJTAjBgNV} \\$ BAs THE1 pbmlzdHJ5IG9mIEVjb25vbWljIEFmZmFpcnMwHhcNMTAwMjI2MTA0MjA0WhcNMjAwMjI0MTA0MjA0WjCBhjErMCkGAlUEAxMiQmVsZ2lhbiBUcnVzdCBMaXN0 IFNjaGVtZSBPcGVyYXRvcjELMAkGAlUEBhMCQkUxIzAhBgNVBAoTGkJlbGdpYW4g RmVkZXJhbCBHb3Zlcm5tZW50MSUwIwYDVQQLExxNaW5pc3RyeSBvZiBFY29ub21parter and the contraction of the contractiYyBBZmZhaXJzMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAviuMAu24 2Bg3jIlV+lKm1FNaAgBzjDDXtP9+zqI+0f0jzBacWXR67a5hUuPggpEgPt8yGe83 dQkjmhS8hpUwZbs7WcbDg0C6ewI7+LSEx4wq2sEU/9mXMbDTqyhmnxu5p0eM8fGV uBzQWWLj2ZsmRbeGEfZXbp37tT3X5ok289YbUp5ngyMrYZjlh75ncHT495JgaIVqV+y03zwJvTDHeBLZDvMucvPJX68lu7Pbfdw0pCrF/b04AzLAMARVsWv0olMvHUlF Fxh0enzVTEkduqtBzTicZNomw5qIdK0Lb6gWEcRbvBJzgcNauln30GgXuAlWMdVd3S0fAW0KvRb830IDA0ABo0wwSiAJBqNVHRMEAiAAMAsGA1UdDw0EAwIHqDAdBqNV HQ4EFgQUlbMH5fNSsMsP6WsAH9C0ZXXMbmwwEQYDVR0lBAowCAYGBACRNwMAMA0G CSqGSIb3DQEBBQUAA4IBAQCmJdD8P7gI6NWf5eK/3frnqcHwXy57/FS4GmnQK08r tYIPZtL21r+NGig7Slrb35yGYZWGJZe9QAlwn7bXxTBNJM745BIw7mwdXUfakYFj $\verb|mYhPt4uNz51pfXS0VjdbWN/MJrURzBogoK8ZANcEMw+MlvwWbLyyvGTrlVPEBxP+|\\$ AeevbrqZUFsMddXb/Gkin2GSQxtlHUlR1VEbL0E2vNVC

The public key in PEM format:

----BEGIN PUBLIC KEY--

MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAviuMAu242Bg3jIlV+lKm 1FNaAgBzjDDXtP9+zqI+0f0jzBacWXR67a5hUuPggpEgPt8yGe83dQkjmhS8hpUw Zbs7WcbDgOC6ewI7+L5Ex4wq2sEU/9mXMbDTqyhmnxu5pDeM8fGVuBzQWWLj2Zsm RbeGEfZXbp37tT3X5ok289YbUb5ngyMrYZjlh75ncHT495JgaIVqV+yO3zwJvTDH EBLZDvMucvPJX68lu7Pbfdw0pCrF/b04AzLAMARVsWv0olMvHUlFFxh0enzVTEkd uqtBzTicZNomw5qIdK0Lb6gWEcRbvBJzgcNauln30GgXuAlWMdVd3S0fAWQKvRb8 30IDAQAB

-----END PUBLIC KEY-----