

Programme of Requirements part 3e: Certificate Policy Server certificates – Organization Services Domain (G3)

Appendix to CP Organization (G2) Domain

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The Policy Authority (PA) of the PKI for the government supports the Minister of the Interior and Kingdom Relations in managing the PKI for the government.

The PKI for the government is an agreements system. This system enables generic and large-scale use of the electronic signature, and it also facilitates remote identification and confidential communication.

The tasks of the PA of PKIoverheid are:

- contributing towards the development and the maintenance of the framework of standards that underlies the PKI for the government, the Programme of Requirements (PoR);
- assisting in the process of admittance by Trust Service Providers (TSPs) to the PKI for the government and preparing the administration;
- supervising and monitoring the activities of TSPs that issue certificates under the root of the PKI for the government.

The purpose of the Policy Authority is:

Enforcement of a practicable and reliable framework of standards for PKI services that provides an established level of security for the government's communication needs that is transparent to users.

Revision control

Version	Date	Description
4.0	12-2014	Ratified by the Ministry of the Interior and Kingdom Relations December 2014
4.1	07-2015	Ratified by the Ministry of the Interior and Kingdom Relations July 2015
4.2	01-2016	Ratified by the Ministry of the Interior and Kingdom Relations January 2016
4.3	07-2016	Ratified by the Ministry of the Interior and Kingdom Relations July 2016
4.4	02-2017	Ratified by the Ministry of the Interior and Kingdom Relations February 2017
4.5	07-2017	Ratified by the Ministry of the Interior and Kingdom Relations July 2016
4.6	01-2018	Ratified by the Ministry of the Interior and Kingdom Relations January 2017
4.7	01-2019	Ratified by the Ministry of the Interior and Kingdom Relations January 2019

1 Introduction to the Certificate Policy

1.1 Overview

This is part 3e of the Programme of Requirements (PoR) for the PKI for the government and is known as the Certificate Policy (CP). Set out in the PoR are the standards for the PKI for the government. This section relates to the requirements laid down for the services of a Trust Service Provider (TSP) within the PKI for the government. Within the PKI for the government , a distinction is made between various domains. This document only relates to the server certificates issued by TSPs in the Government/Companies and Organization domains.

This chapter includes a brief explanation of the CP. A more detailed explanation regarding the background and structure of the PKI for the government, as well as the cohesion between the various parts within the PoR is included in part 1 of the PoR.

For a list of the definitions and abbreviations used in this section, please refer to part 4 of the PoR.

1.1.1 Design of the Certificate Policy

As stated in part 1 of the PoR, the requirements that form part of the CP consist of requirements ¹:

- that ensue from the Dutch legal framework in relation to the electronic signature;
- that ensue from the latest version of the ETSI EN 319 411-1 standard
 - where policy NCP in combination with OVCP, PTC-BR and Netsec are applicable for server certificates (extendedKeyUsage client and server authentication).;
- that are specifically drawn up by and for the PKIoverheid.

Incorporated in chapters 2 to 9 inclusive are references to the specific PKIoverheid requirements in the Additional Requirements. The table below shows the structure of the reference to the actualPKIoverheid requirement (PKIo requirement).

RFC 3647	Reference to the paragraph from the RFC 3647 structure to which the PKIo requirement relates. RFC 3647 is a PKIX framework of the Internet Engineering Task Force (IETF) and is the de facto standard for the structure of Certificate Policies and Certification Practice Statements ² .
Number	Unique number of the PKIo requirement. In each paragraph, consecutive numbering is used for the PKIo requirements. In combination with the RFC 3647 paragraph number, this forms a unique label for the PKIo requirement.

This CP also includes a number of provisions that are not formulated as PKIo requirements. These provisions do not make any demands on the TSPs within the PKI for the government, but do apply as a policy to the

¹ For an explanation regarding the positioning of the requirements applicable within the PKI for the government, please refer to part 1 of the PoR.

² Chapters 2 to 9 inclusive only include those paragraphs from RFC 3647 to which a PKIorequirement applies.

PKI for the government. This concerns provisions from paragraphs 1.1, 1.1.1, 1.1.2, 1.2, 1.3, 1.4, 1.5, 8, 9.12.1, 9.12.2, 9.14 and 9.17.

The profiles used within PKIoverheid relating to the services certificates are listed in appendix A. The status information is listed in the basic requirements.

1.1.2 Status

This is version 4.7 of part 3e of the PoR. The current version has been updated up to and including 8 February 2019.

The PA has devoted the utmost attention and care to the data and information incorporated in this CP. Nevertheless, it is possible that there are inaccuracies and imperfections. The PA accepts no liability for damage resulting from these inaccuracies or imperfections, nor is any liability assumed for damage caused by the use or distribution of this CP, if this CP is used for purposes other than for the use of certificates described in paragraph 1.4 of this CP.

1.2 References to this CP

Within the PKI for the government different structures or roots are used based on the SHA-256 algorithm (G2 and G3). Furthermore these structures are devided into different domains. The G2 root is devided into an Organization, a Citizen and a Autonomous Devices domain. Under the G3 root there are domains for Organization Person, Organization Services, Citizen, and Autonomous Devices.

Each CP is uniquely identified by an OID, in accordance with the following schedule.

Organization Domain:	
OID	СР
2.16.528.1.1003.1.2.5.6	for the server certificate for services within the Organization domain, that contains the public key for authenticity and confidentiality. Under this OID OCSP certificates may be issued for use within the context of this CP part.

The OID is structured as follows: {joint-iso-itu-t (2). country (16). the Netherlands (528). Dutch organization (1). Dutch government (1003). PKI for the government (1). CP (2). organization domain (5). server (6). version number}.

If requirements only apply to one or two types of certificates, this is expressly specified by stating the Object Identifier (OID) referencing the applicable CP or CPs.

1.3 User Community

Within the Government/Companies and Organization domains, the user community consists of subscribers who are organizational entities within the government and business community (see PKIo 3.2.2-pkio4) and of certificate holders, who also belong to these subscribers. In addition there

are relying parties, who act with a reliance on certificates of the relevant certificate holders.

The parties within the user community are subscribers, certificate managers, certificate holders and relying parties.

- A subscriber is a natural or legal personality who enters into an agreement with a TSP on behalf of one or more certificate holders for the certification of public keys.
- A certificate holder is an entity, characterized in a certificate as the holder of the private key that is linked to the public key provided in the certificate. The certificate holder is part of an organizational entity, for which a subscriber is the contracting party.

Within the Certificate Policy Services, the term certificate holder means:

- a device or a system (a non-natural person), operated by or on behalf of an organizational entity; or
- a function of an organizational entity.
 In this CP we use the name "service" for the foregoing certificate holders. To perform the actions in respect of the lifecycle of the certificate holder's certificate, intervention by a party other than the certificate holder is required.
 The subscriber is responsible for this and has to appoint a certificate manager to perform these actions.
- A certificate manager is a natural person who performs actions on behalf of the subscriber in respect of the certificate holder's certificate. The subscriber instructs the certificate manager to perform the relevant actions and records these in a certificate manager's testimony.
- A relying party is every natural or legal personality who is a recipient
 of a certificate and who acts with a reliance on that certificate.
 Other than for personal certificates, relying parties mainly derive
 security from the connection of a service (device or feature) to the
 organizational entity to which the service belongs. The CP Services
 therefore places the emphasis on providing certainty about the
 connection of a message sent by or a web service provided by a
 device, system or (staff) position with the relevant organization. In
 view of this, establishing the identity of the certificate holder (device or
 feature) is less important than establishing the certificate holder's
 connection to the organizational entity.

1.4 Certificate Usage

The use of certificates issued under this CP relates to communication from certificate holders who act on behalf of the subscriber.

[OID 2.16.528.1.1003.1.2.5.6]

Server certificates that are issued under this CP, can be used to secure a connection between a specific client and a server that is part of the organizational entity listed as the subscriber in the relevant certificate. Certificates issued with this OID are in accordance with the then current version of the Baseline Requirements. In the case of discrepancies between this PoR and the Baseline Requirements, the latter takes precedence over this document.

Under this OID OCSP responder certificates may be issued for use within the domain Organisation Services Server (G3). Said certificates can be

used to sign OCSP responses for use in the verification of the validity of the end user certificate. More information can be obtained in appendix A of the base requirements.

1.5 Contact Information Policy Authority

The PA is responsible for this CP. Questions relating to this CP can be put to the PA; the address can be found at: http://www.logius.nl/pkioverheid.

2 Publication and Repository Responsibilities

2.1 Electronic Repository

Contains no additional requirements.

2.2 Publication of TSP Information

RFC 3647	2.2 Publication of TSP information
Number	2.2-pkio3

RFC 3647	2.2 Publication of TSP information
Number	2.2-pkio155

RFC 3647	2.2 Publication of TSP information
Number	2.2-pkio156

RFC 3647	2.2 Publication of TSP information	
Number	2.2-pkio166	

3 Identification and Authentication

3.1 Naming

Contains no additional requirements.

3.2 Initial Identity Validation

RFC 3647	3.2.1. Method to prove possession of the private key
Number	3.2.1-pkio13

RFC 3647	3.2.2 Authentication of organizational entity	
Number	3.2.2-pkio4	

RFC 3647	3.2.2 Authentication of organizational entity
Number	3.2.2-pkio144

RFC 3647	3.2.3 Authentication of individual identity
Number	3.2.3-pkio22

RFC 3647	3.2.3 Authentication of individual identity	
Number	3.2.3-pkio24	

RFC 3647	3.2.3 Authentication of individual identity
Number	3.2.3-pkio26

RFC 3647	3.2.5 Validation of authority
Number	3.2.5-pkio30

RFC 3647	3.2.5 Validation of authority
Number	3.2.5-pkio33

RFC 3647	3.2.5 Authorization of the certificate holder
Number	3.2.5-pkio146

RFC 3647	3.2.5 Authorization of the certificate holder
Number	3.2.5-pkio170

3.3 Identification and Authentication for Re-key Requests

4 Certificate Life-Cycle Operational Requirements

4.1 Certificate Application

Contains no additional requirements.

4.4 Certificate Acceptance

Contains no additional requirements.

4.5 Key Pair and Certificate Usage

Contains no additional requirements.

4.8 Compliance, audit and assessement

Contains no additional requirements

4.9 Revocation and Suspension of Certificates

RFC 3647	4.9.9 On-line revocation/status checking availability
Number	4.9.9-pkio70

RFC 3647	4.9.9 On-line revocation/status checking availability
Number	4.9.9-pkio152

4.10 Certificate Status Services

5 Facility, Management and Operational Controls

5.2 Procedural Controls

Contains no additional requirements.

5.3 Personnel Controls

Contains no additional requirements.

5.4 Audit Logging Procedures

Contains no additional requirements.

5.5 Records Archival

RFC 3647	5.5.1 Types of events recorded
Number	5.5.1-pkio82

5.7 Compromise and Disaster Recovery

6 Technical Security Controls

6.1 Key Pair Generation and Installation

RFC 3647	6.1.1 Key pair generation for the certificate holders
Number	6.1.1-pkio89

RFC 3647	6.1.1 Key pair generation for the certificate holders
Number	6.1.1-pkio90

RFC 3647	6.1.1 Key pair generation for the certificate holders
Number	6.1.1-pkio91

RFC 3647	6.1.1 Key pair generation for the certificate holders	
Number	6.1.1-pkio92	

6.2 Private Key Protection and Cryptographic Module Engineering Controls

RFC 3647	6.2.11 Cryptographic module rating	
Number	6.2.11-pkio125	

RFC 3647	6.2.11 Cryptographic module rating	
Number	6.2.11-pkio105	

RFC 3647	6.2.11 Cryptographic module rating	
Number	6.2.11-pkio107	

6.3 Other Aspects of Key Pair Management

Contains no additional requirements.

6.4 Activation data

RFC 3647	6.4.1 Activation data generation and installation
Number	6.4.1-pkio112

RFC 3647	6.4.1 Activation data generation and installation	
Number	6.4.1-pkio113	

6.5 Computer Security Controls

Contains no additional requirements.

6.6 Life Cycle Technical Controls

Contains no additional requirements.

6.7 Network Security Controls

7 Certificate, CRL and OSCP profiles

7.1 Certificate Profile

RFC 3647	7.1 Certificate profile
Number	7.1-pkio163

RFC 3647	7.1 Certificate profile
Number	7.1-pkio171

RFC 3647	7.1 Certificate profile
Number	7.1-pkio172

RFC 3647	7.1 Certificate profile	
Number	7.1-pkio173	

7.2 CRL Profile

Contains no additional requirements.

7.3 OCSP Profile

8 Compliance Audit and Other Assessments

RFC 3647	8.6 Demonstration of BR conformity						
Number	8.6-pkio158						

All other subjects relating to the conformity assessment of the TSPs within the PKI for the government are covered in PoR part 2 and the Basic Requirements

9 Other Business and Legal Matters

9.1 Financial Responsibility

RFC 3647	9.2.1 Insurance coverage
Number	9.2.1-pkio124

9.5 Intellectual Property Rights

Contains no additional requirements.

9.6 Representations and Warranties

RFC 3647	9.6.1 CA Representations and Warranties by TSPs
Number	9.6.1-pkio128

RFC 3647	9.6.1 CA Representations and Warranties by TSPs	
Number	9.6.1-pkio132	

9.8 Limitations of Liability

J.0	Limitations of Liability
RFC 3647	9.8 Limitations of liability
Number	9.8pkio133

9.12 Amendments

Contains no additional requirements.

9.13 Dispute Resolution Procedures

Contains no additional requirements.

9.14 Governing Law

9.17 Other provisions

RFC 3647	9.17 Other provisions						
Number	9.17-pkio140						

If by judicial decision one or more provisions of this CP are declared to be invalid or not applicable, this does not affect the validity and applicability of all other provisions.

Appendix A Certificate

Profile of server certificates for the Organization and Organisation Services domains

Criteria

When defining the fields and attributes within a certificate, the following codes are used:

- V : Compulsory; indicates that the attribute is compulsory and MUST be used in the certificate.
- O : Optional; indicates that the attribute is optional and MAY be used in the certificate.
- A : Advised against; indicates that the attribute is advised against and SHOULD NOT be used in the certificate.

It is not allowed to use fields that are not specified in the certificate profiles.

For the extensions, fields/attributes are used that, in accordance with international standards, are critical, are marked in the 'Critical' column with 'yes' to show that the relevant attribute MUST be checked using a process by means of which a certificate is evaluated. Other fields/attributes are shown with 'no'.

Server certificates

Basic attributes

Field / Attribute	Criteria	Description	Standard reference	Туре	Explanation
Version	V	MUST be set at 2 (X.509v3).	RFC 5280	Integer	Describes the version of the certificate, the value 2 stands for X.509 version 3.
SerialNumber	V	A serial number that MUST uniquely identify the certificate within the publishing CA domain.	RFC 5280	Integer	All end user certificates have to contain at least 8 bytes of unpredictable random data in the certificate's serial number (SerialNumber).
Signature	V	See requirement 7.1-pkio171	RFC 5280, ETSI TS 119 312	OID	
Issuer	V	MUST contain a Distinguished Name (DN). The field has the following attributes:	PKIo, RFC3739, ETSI TS 102280		Attributes other than those mentioned below MUST NOT be used.
Issuer.countryName	V	See requirement 7.1-pkio174	ETSI TS101862, X520, ISO 3166	Printable String	
Issuer.OrganizationName	V	See requirement 7.1-pkio174	ETSI TS 102280	UTF8String	
Issuer. organizationalUnitName	0	See requirement 7.1-pkio174	ETSI TS 102280	UTF8String	
Issuer.serialNumber	0	See requirement 7.1-pkio174	RFC 3739	Printable String	
Issuer.commonName	V	See requirement 7.1-pkio174	PKIo, RFC 3739	UTF8String	The commonName attribute MUST NOT be needed to identify the issuing government body (no part of the Distinguished Name, requirement from RFC 3739)

Field / Attribute	Criteria	Description	Standard reference	Туре	Explanation
Issuer.organizationIdentifier	V	The organizationIdentifier field contains an identification of the issuing CA. This field MUST be present when the subject.organizationIdentifier field is present in the TSP certificate and MUST NOT be present when this field is not part of the corresponding TSP certificate.	EN 319 412-1	String	The syntax of the identification string is specified in paragraph 5.1.4 van ETSI EN 319 412-1 and contains: • 3 character legal person identity type reference; • 2 character ISO 3166 [2] country code; • hyphen-minus "-" (0x2D (ASCII), U+002D (UTF-8)); and • identifier (according to country and identity type reference).
Validity	V	MUST define the period of validity of the certificate according to RFC 5280.	RFC 5280	UTCTime	MUST include the start and end date for validity of the certificate in accordance with the applicable policy laid down in the CPS.
Subject	V	The attributes that are used to describe the subject (service) MUST mention the subject in a unique way and include information about the subscriber organization. The field has the following attributes:	PKIo, RFC3739, ETSI TS 102 280		MUST contain a Distinguished Name (DN). Attributes other than those mentioned below MUST NOT be used.
Subject.countryName	V	complete C with two-letter country code in accordance with ISO 3166-1. If an official alpha-2 code is missing, the TSP MAY use the user-assigned code XX.	RFC 3739, X520, ISO 3166, PKIo	PrintableString	The country code that is used in Subject.countryName MUST correspond with the subscriber's address in accordance with the accepted document or registry.
Subject.commonName	A	Name that identifies the server.	RFC 3739, ETSI TS 102 280, PKIo	UTF8String	See requirement 7.1-pkio163 for requirements for the contents of this field See requirement 3.2.5-pkio170 for validation requirements
Subject.organizationName	V	The full name of the subscriber's organization in accordance with the accepted document or Basic Registry.	PKIo	UTF8String	The subscriber organization is the organization with which the TSP has entered into an agreement and on behalf of which the certificate holder (server) communicates or acts.

Field / Attribute	Criteria	Description	Standard reference	Туре	Explanation
Subject.organizationalUnitName	0	Optional specification of an organizational entity. This attribute MUST NOT include a function indication or similar.	PKIo		This attribute MAY appear several times. The field MUST contain a valid name of an organizational entity of the subscriber in accordance with an accepted document or registry.
Subject.stateOrProvinceName	A	MUST include the province of the subscriber's branch, in accordance with the accepted document or Basic registry.	PKIo, RFC 3739	UTF8String	Name of the province MUST correspond with the address of the subscriber in accordance with the accepted document or registry.
Subject.localityName	V/A	MUST include the location of the subscriber, in accordance with the accepted document or Basic registry.	PKIo, RFC 3739	UTF8String	Name of the location MUST correspond with the address of the subscriber in accordance with the accepted document or registry.
Subject.postalAddress	A	The use is advised against. If present, this field MUST contain the postal address of the subscriber in accordance with an accepted document or Basic registry.	PKIo, RFC 3739	UTF8String	The address MUST correspond with the address of the subscriber in accordance with the accepted document or registry.
Subject.serialNumber	0	The TSP is responsible for safeguarding the uniqueness of the subject (service). The Subject.serialNumber MUST be used to identify the subject uniquely. The use of 20 positions is only allowed for OIN and HRN after additional arrangements with Logius.	RFC 3739, X 520, PKIo	Printable String	The number is determined by the TSP and/or the government. The number can differ for each domain and can be used for several applications.
subjectPublicKeyInfo	V	Contains, among other things, the public key.	ETSI TS 102 280, RFC 3279		Contains the public key, identifies the algorithm with which the key can be used.

Standard extensions

Field / Attribute			Description	Standard reference	Туре	Explanation
	Criteria	Critical?				
SignedCertificate-TimestampList (OID 1.3.6.1.4.1.11129.2.4.2)	V	No	The Signed Certificate Timestamp List contains one or more Signed Certificate Timestamps.	RFC 6962	OCTET STRING	See requirement 4.4.3-pkio154 for the usage of the SignedCertificateTimestampList
authorityKeyIdentifier	V	No	The algorithm to generate the AuthorityKey MUST be created on an algorithm determined by the PA.	ETSI TS 102 280, RFC 5280	BitString	The value MUST contain the SHA-1 hash from the authorityKey (public key of the TSP/CA).
SubjectKeyIdentifier	V	No	The algorithm to generate the subjectKey MUST be created on an algorithm determined by the PA.	RFC 5280	BitString	The value MUST contain the SHA-1 hash from the subjectKey (public key of the certificate holder).
KeyUsage	V	Yes	The attribute extension specifies the intended purpose of the key incorporated in the certificate. In the PKI for the government, for each certificate type various bits are incorporated in the keyUsage extension.	RFC 3739, RFC 5280, ETSI TS 102 280	BitString	
			In server certificates the digitalSignature and keyEncipherment bits MUST be incorporated and marked as being essential. Another keyUsage MUST NOT be combined with this.			
CertificatePolicies	V	No	MUST contain the OID of the certificate policy (CP), the OV OID of the CA/B Forum, the URI of the certification practice statement (CPS), and a user notice. The applicable PKI for the government OID scheme is described in the CP. The TSP	RFC 3739	OID, String, UTF8String or IA5String	For server certificates in the Government/Companies domain the OID is: 2.16.528.1.1003.1.2.2.6. For server certificates in the Organization and Organization Services domains the OID is: 2.16.528.1.1003.1.2.5.6

Field / Attribute	Criteria	Critical?	Description	Standard reference	Туре	Explanation
			SHOULD use UTF8String in the userNotice, but MAY use IA5String.			The mandatory CA/B Forum OV OID is: 2.23.140.1.2.2 Reference to the paragraph numbers of the PoR/CP in the user notice is advised against because the persistency of this cannot be guaranteed (unlike the OID number of the CP).
SubjectAltName	V	No	MUST be used and given a worldwide unique number that identifies the server.	RFC 4043, RFC 5280, PKIo, ETSI 102 280		MUST include a unique identifier in the dnsName attribute for server certificates. Attributes other than those mentioned below MUST NOT be used.
SubjectAltName.dNSName ³	V		Name that identifies the server.	RFC2818, RFC5280	IA5String	See requirement 7.1-pkio163 for requirements for the content of this field See requirement 3.2.5-pkio170 for validation requirements
SubjectAltName.iPAddress	А	No	Contains a public IP address	RFC 5280, RFC 791, RFC 2460	Octet string	See requirement 7.1-pkio163 for requirements for the content of this field See requirement 3.2.5-pkio170 for validation requirements
BasicConstraints	0	Yes	The "CA" field MUST be omitted (default value is then "FALSE").	RFC 5280		In a (Dutch language) browser can then be seen: Subjecttype = Eindentiteit", "Beperking voor padlengte = Geen ("Subjecttype = End Entity", "Path length constraint = None")
CRLDistributionPoints	V	No	MUST include the URI of a CRL distribution point.	RFC 5280, ETSI TS 102 280		The reference MUST be accessible through the http or LDAP protocol. The attribute Reason MUST NOT be used, reference MUST be made to 1 CRL for all types of reasons for revocation. In addition to CRL, other types of certificate status information service MAY be supported.

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 $^{^3}$ This field/attribute has to be included in certificates that are issued as from 1-7-2011.

Field / Attribute	Criteria	Critical?	Description	Standard reference	Туре	Explanation
ExtKeyUsage	V	Yes / No	Extension that indicates for which applications the certificate may be used.	RFC 5280	KeyPurposeId's	In server certificates this extension MUST be included, this extension MUST NOT be labelled "critical" and this extension MUST include the KeyPurposIds id-kp-serverAuth and id-kp-clientAuth. G2 certificates MAY additionally include every other KeyPurposeId defined in an open or accepted standard that is used to identify a service based on its FQDN and other KeyPurposeIds MUST NOT be included.
FreshestCRL	О	No	MUST contain the URI of a Delta CRL distribution point, if Delta CRLs are used.	RFC 5280, PKIo		Delta-CRLs are an optional extension. In order to fulfil the requirements of PKIoverheid a TSP MUST also publish full CRLs at the required release frequency.

Private extensions

Field / Attribute	Criteria	Critical?	Description	Standard reference	Туре	Explanation
authorityInfoAccess	V	No	See requirement 7.1-pkio172			
SubjectInfoAccess	0	No		RFC 5280	OID, Generalname	This field can be used to reference additional information about the subject.

10 Revisions

10.1 Amendments from version 4.6 to 4.7

10.1.1 New

- Requirement 6.1.1-pkio90 (effective date immediately after publication of the PoR 4.7)
- Requirement 7.1-pkio171 (effective date immediately after publication of the PoR 4.7)
- Requirement 7.1-pkio173 (effective date immediately after publication of PoR 4.7)
- Requirement 7.1-pkio163 (effective date immediately after publication of PoR 4.7)
- Requirement 3.2.5-pkio170 (effective date immediately after publication of PoR 4.7)

10.1.2 10.1.2 Modifications

- Exception provision removed for "any other ExtKeyUsage associated with the G2 keyusage" from the ExtKeyUsage field in the certificate profile. (effective date immediately after publication of PoR 4)
- Explicitly state that that TSP must comply with the BRG. Chapter 1.4 (effective date immediately after publication of PoR 4.7)
- Requirement 4.8-pkio158 transferred to requirement 8.6-pkio158 (effective date immediately after publication of PoR 4.7)
- Declared Netsec integrally applicable (effective date immediately after publication of PoR 4.7)
- Description of a number of certificate attributes replaced by reference to requirement 7.1-pkio174 (effective date 8 weeks after publication of PoR 4.7)
- Reference to CWA 14 169 amended to EN 419 211 for QSCDs. This
 also sets requirements for the issuance of QSCDs for requirements
 6.2.11-pkio105 and 6.4.1-pkio112 (effective date immediately after
 publication of PoR 4.7)

10.2 Amendments from version 4.5 to 4.6

10.2.1 New

 Requirement 4.8-pkio158 (effective date 1-9-2017, emergency change)

10.2.2 Modifications

 Prohibition of use of an email address in a server certificate under the fields subject.altName.rfc822Name and ExtKeyUsage (effective date no later than 4 weeks after publication of PoR 4.6)

10.3 Amendments from version 4.4 to 4.5

10.3.1 New

- Mandatory English CPS (requirement 2.2-pkio3, effective date 1-10-2017)
- Mandatory yearly renewal CPS (requirement 2.2-pkio156, effective date 1-1-2017)
- Mandatory mention Baseline Requirements domain validation method (2.2-pkio155)

10.3.2 Modifications

- Change in OID 2.16.528.1.1003.1.2.5.7 to also cover OCSP responder certificates (effective date 1-7-2017)
- Mandatory use of field "NextUpdate" in OCSP responses (requirement 4.9.9-pkio71, effective date 1-7-2017)

10.3.3 Editorial

- Changed a number of references from CSP to TSP
- Modified certificate profile issuer.organizationalIdentifier to issuer.organizationIdentifer.

10.4 Amendments from version 4.3 to 4.4

10.4.1 New

 Added requirement 4.4.3-pkio154 and modified certificate profile accordingly (mandatory use of Certificate Transparency, effective date 1-7-2017)

10.4.2 Modifications

- Clarification of issuer.organizationIdentifier field (effective date 1-2-2017)
- Tightening of use optional EKUs that conflict with the parent TSP CA certificate (effective date 1-2-2017)

10.4.3 Editorial

- Modified the field "ExtKeyUsage from critical to non-critical (solving conflict between the description and the field value)
- Replaced CSP (Certificate Service Provider) with TSP (Trust Service Provider) in accordance with eIDAS directive.

10.5 Amendments from version 4.2 to 4.3

10.5.1 New

 Addition of Issuer.organizationalIdentifier in the certificate profile (effective date 1-7-2016)

10.5.2 Modifications

- Description with attribute CertificatePolicies (effective date 1-7-2016)
- Removal of optional use KeyAgreement with Key Usage (effective date no later than 4 weeks after publication of PoR 4.3)
- ETSI TS 102 176-1 replaced by ETSI TS 119 312 (effective date no later than 4 weeks after publication of PoR 4.3)
- Removal of requirement pkio95 due to duplicate with ETSI EN 319 411-1
- Use of values in the BasicConstraints field no longer permitted in end entity certificates (effective date 1-7-2016)
- ETSI TS 102 042 replaced by ETSI EN 319 411-1 (effective date 1-7-2016 or when the accreditation to the certifying body has been granted with a final date of 30 June 2017)

10.5.3 Editorial

 Removed references to G1 Root (expired) and clarified reference to G3

10.6 Amendments from version 4.1 to 4.2

10.6.1 New

Requirement 7.1-pkio152 (effective date 1 juli 2016)

10.6.2 Modifications

• Added OID to Certificate Policies (effective date 1 april 2016)

10.6.3 Editorial

None

10.7 Amendments from version 4.0 to 4.1

10.7.1 New

Requirement 3.2.5-pkio146 (effective date no later than 31-12-2015);

10.7.2 Modifications

None

10.7.3 Editorial

None

10.8 Amendments from version 3.7 to 4.0

10.8.1 New

None

10.8.2 Modifications

- PoR requirements have been renumbered according to a new naming convention;
- The creation of a document containing the baseline and additional requirements;
- Changes to requirements can be found in the baseline and additional requirements documents respectively.

10.8.3 Editorial

Editorial changes to requirements can be found in the baseline and additional requirements documents respectively. These changes have no effect on the content of the information.