



CIBG
*Ministerie van Volksgezondheid,
Welzijn en Sport*

Certification Practice Statement (CPS)

The UZI register

Version 9.6

Date	01-11-2019
Status	Final (UZ52.01)

Contents

1	Introduction—13
1.1	UZI register and products—13
1.1.1	Introduction to the UZI register—13
1.1.2	Types of cards and certificates—13
1.1.3	CA model—15
1.2	Purpose, name and identification of the Certification Practice Statement (CPS)—17
1.2.1	Purpose of the CPS—17
1.2.2	Relationship CP and CPS—17
1.2.3	Name and references—17
1.3	The parties involved—17
1.3.1	Certification Authority (CA)—17
1.3.2	Registration Authority (RA)—18
1.3.3	Publication service—18
1.3.4	Subscribers—18
1.3.5	Certificate holders and certificate managers—18
1.3.6	Trusting parties—18
1.4	Certificate use—19
1.4.1	Permitted use—19
1.4.2	Non-permitted use—19
1.5	Organisation CPS management—19
1.5.1	Contact details—19
1.5.2	Amendment and approval CPS—20
1.6	Definitions and abbreviations—20
2	Publication and responsibility for electronic storage location—21
2.1	Electronic storage location—21
2.2	Publication of TSP information—21
2.3	Publication frequency—22
2.4	Access to publication—22
3	Identification and authentication—23
3.1	Naming—23
3.1.1	Types of name formats—23
3.1.2	Need for meaningful name—23
3.1.3	Anonymity or pseudonymity of certificate holders—23
3.1.4	Guidelines for interpreting the various name types—24
3.1.5	Uniqueness of names—25
3.1.6	Recognition, authentication and the role of trademarks—25
3.2	Initial identity validation—25
3.2.1	Proof of ownership of 'private key belonging to the certificate to be issued'—25
3.2.2	Authentication of organisational identity—25
3.2.3	Authentication of personal identity—26
3.2.4	Unverified details—31
3.2.5	Certificate holder authorisation—31
3.3	Identification and authentication in the event of renewal of the certificate—31
3.3.1	Routine renewal of the certificate—31
3.3.2	Renewing keys after withdrawal of the certificate—32
3.4	Identification and authentication in the event of withdrawal requests—32
4	Operational requirements applicable to certificate life cycle—34
4.1	Certificate applications—34
4.2	Method used in relation to certificate applications—34
4.3	Turnaround time—35
4.4	Issuing certificates—35

4.5	Accepting certificates—37
4.6	Key pair and certificate use—37
4.6.1	Obligations of the subscriber and certificate holder—37
4.6.2	Obligations of the trusting party—38
4.7	Renewing certificates—39
4.8	Re-keying certificates—39
4.9	Amending certificates—39
4.10	Withdrawal and suspension of certificates—39
4.10.1	Circumstances which lead to withdrawal—39
4.10.2	Who is allowed to submit a withdrawal request?—40
4.10.3	Procedure for a withdrawal request—40
4.10.4	Postponement of withdrawal request—41
4.10.5	Time required to process a withdrawal request—41
4.10.6	Checking requirements when consulting certificate status information—42
4.10.7	CRL issue frequency—42
4.10.8	Time between generation and publication—42
4.10.9	Online withdrawal/status check—42
4.10.10	Requirements applicable to online check withdrawal status—42
4.11	Certificate status service—42
4.12	Termination of subscriber relationship—43
4.12.1	Transition period for a care provider subscriber [zorgverlener abonnee]—43
4.12.2	Transition period for an organisation subscriber—43
4.13	Key escrow and recovery—43
5	Physical, procedural and personnel security—44
5.1	Physical security—44
5.2	Procedural security—44
5.2.1	Confidentiality functions—44
5.2.2	Number of people required per task—45
5.2.3	Identification and authentication in relation to TSP functions—45
5.2.4	Functional separation—45
5.3	Personnel security—45
5.3.1	Job requirements—45
5.3.2	Background check—45
5.3.3	Training requirements—45
5.3.4	Training and education—45
5.3.5	Frequency of job circulation and career planning—45
5.3.6	Sanctions for unauthorised actions—46
5.3.7	Hiring personnel—46
5.3.8	Making documentation available to employees—46
5.4	Security audit procedures—46
5.4.1	Recording events—46
5.4.2	Loggings interval—47
5.4.3	Logging retention periods—47
5.4.4	Security of audit logs—47
5.4.5	Saving audit logs—47
5.4.6	Notification of logging event—47
5.4.7	Vulnerability analysis—47
5.5	Archiving documents—47
5.5.1	Events—47
5.5.2	Archive retention period—48
5.5.3	Archive security—48
5.5.4	Archiving backup procedures—48
5.5.5	Conditions and time indication of recorded events—48
5.5.6	Archiving system—48
5.5.7	The acquisition and verification of archived information—48
5.6	Renewing keys after CA re-key—48

5.7	Violations and continuity—48
5.8	TSP termination—49
6	Technical security—50
6.1	Generating and installing key pairs—50
6.1.1	Generating key pairs—50
6.1.2	Transfer of public keys to the CA—50
6.1.3	Transfer of the public key from the TSP to end users—50
6.1.4	Key lengths—50
6.1.5	Intended key use (as referred to in X.509 v3)—51
6.2	Private key protection—51
6.2.1	Standards for cryptographic modules—51
6.2.2	Functional separation management private keys—51
6.2.3	Escrow of private keys of certificate holders—51
6.2.4	Backup of the private keys of certificate holders—51
6.2.5	Archiving private keys of end users and TSP—51
6.2.6	Access to private keys in cryptographic module—51
6.2.7	Saving private keys—51
6.2.8	Activating private keys—51
6.2.9	Method for the deactivating private keys—51
6.2.10	Method for destroying private keys—52
6.2.11	Safe resources for generating electronic signatures—52
6.3	Other aspects of key pair management—52
6.3.1	Archiving public keys—52
6.3.2	Period of use of public/private key—52
6.4	Activation details—53
6.4.1	Generation and installation of activation details—53
6.4.2	Protection of activation details—53
6.5	TSP systems access security—54
6.5.1	General system security measures—54
6.5.2	Specific system security measures—54
6.5.3	Management and classification of resources—54
6.6	Technical life cycle control measures—54
6.6.1	System development control measures—54
6.6.2	Security management control measures—54
6.6.3	Life cycle of the security classification—55
6.7	Network security—55
6.8	Time-stamping—55
7	Certificate, CRL and OCSP profiles—56
7.1	Certificate profiles—56
7.1.1	Basic attributes—56
7.1.2	Extensions—58
7.1.3	Email addresses—60
7.1.4	UZI number—60
7.1.5	SubjectAltName.otherName—60
7.2	CRL profiles—62
7.2.1	Attributes—62
7.2.2	Extensions—63
7.2.3	CRL Distribution Points—63
7.2.4	TSP and CA certificates—63
7.3	OCSP profile—63
7.3.1	OCSP responder certificate—63
7.3.2	OCSP responses—64
8	Conformity assessment—65
8.1	Audit cycle—65

8.2	Certifying body—66
8.3	Relationship with the certifying body—66
8.4	Focus of the audit—66
8.5	Audit results—66
8.6	Availability of conformity certificates—66
9	General terms and conditions—67
9.1.1	Rate applicable to the issue of UZI certificates—67
9.1.2	Rate changes—67
9.1.3	Registration in the UZI register—67
9.1.4	Applying for UZI certificates—67
9.1.5	Production of UZI certificate—67
9.1.6	Invoicing and payment—67
9.1.7	Payment term—67
9.1.8	Validity of UZI certificate—68
9.1.9	Delivery and initial usage of UZI certificates—68
9.1.10	Replacement conditions—68
9.1.11	Risk, ownership and duty of care—68
9.2	Confidentiality of company data—69
9.3	Confidentiality of personal details—69
9.3.1	Confidential information—69
9.3.2	Non-confidential information—69
9.3.3	Release of information—69
9.4	Intellectual property rights—70
9.5	Liability and guarantees—70
9.5.1	Liability of the TSP—70
9.5.2	Liability of subscribers and certificate holders—71
9.5.3	Liability of trusted parties—73
9.6	Exclusion of guarantee—73
9.7	Limitation of liability—73
9.8	Compensation—74
9.9	Period of validity of the CPS—74
9.10	Internal communication by the parties involved—74
9.11	Changes—74
9.11.1	Change procedure—74
9.11.2	Change and classification requests—74
9.11.3	Publication of changes—74
9.12	Conflict resolution—74
9.13	Applicable law—75
9.14	Compliance with relevant legislation—75
9.15	Other stipulations—75

Annex 1: Definitions and abbreviations—76

Annex 2: Assessment criteria for organisations and care providers [zorgverleners]—84

Annex 3: Professional titles, qualification titles and specialisms—90

List of tables

Table 1 Version history CPS UZI register 11

Table 2 Field of application of certificates 19

Table 3 Overview of certificates with OID of applicable CP SHA-2 generation (G21) 21

Table 4 Overview of certificates with OID of applicable CP Public G3/Private G1 generation 22

Table 5 Name of certificate holder in UZI certificates (subject.DistinguishedName) 23

Table 6	validity CA Certificaten SHA-2 generation (G21)	52
Table 7	validity CA Certificaten Public G3/Private G1 hiërarchie	53
Table 8	Basic attributes of certificate profiles	57
Table 9	Standard extensions of certificate profiles	59
Table 10	Private extensions certificate profiles	59
Table 11	<OID CA> production environment UZI register	61
Table 12	Fields <Subject ID> in SubjectAltName.otherName	61
Table 13	Clarification of AGB code use	62
Table 14	CRL attributes	62
Table 15	CRL extensions	63
Table 16	CRL Distribution points user certificates UZI register (G21)	63
Table 17	CRL Distribution points user certificates UZI register (G3)	63
Table 18	Relationship between UZI card and authority	88
Table 19	Relationship between the subscriber and authority	88

List of diagrams

Figure 1	Cards model and certificates	14
Figure 2	CA-model SHA-2 generation (G21)	15
Figure 3	CA-model generatie Public G3/Private G1	16

Revision history

Version	Date	Status	Comment
1.0	17/01/2005	Final	External distribution.
2.0	11/01/2006	Final	Amendment in accordance with advisory memorandum dated 1 December 2005: <ul style="list-style-type: none"> - Restructuring of the Schedule of Requirements of the PKI for the government. - Legal consultation: clarification of obligations, merger and intellectual property. - Extension of CRL period of validity.
3.0	01/03/2007	Final	Amendments in accordance with advisory memorandum dated 9 February 2007: <ul style="list-style-type: none"> - 'Dying out' specialism method of working. - Restriction unnamed employee job name [functienaam medewerker niet op naam]. - Change UZI number following change to unique details. - Domain name not owned. - Request for withdrawal also via e-mail. - New user groups: indication bodies and addition to Article 34 professionals. - Textual changes. - New framework in accordance with RFC 3647.
3.1	08/03/2007	Internal	Public law version. This was not applicable.
3.2	01/10/2007	Final	<ul style="list-style-type: none"> - Amendment in accordance with advisory memorandum dated 9 February 2007 (part 1): - Assessment of pharmacies on the basis of pharmacy registration. - New specialism: dispensing GP [apothekhoudend huisarts]. - Establishment of identity server certificate possible on the basis of electronic signature. - Subscriber care provider [zorgverlener] can delegate applicant role. - Abbreviation of excessively long names. - Textual changes and update glossary.
3.3	06/12/2007	Final	<ul style="list-style-type: none"> - Second generation CA hierarchy.
4.0	01/06/2008	Final	<ul style="list-style-type: none"> - Amendment in accordance with advisory memorandum dated 9 February 2007 (part 2): - Coming into effect of the Use of Citizen Service Number in Healthcare Act [Wet gebruik BSN in de zorg]. - Clarification of meaning of the term 'subscriber'. - Disconnection of cardholder from application process. - Exclusion of driving licence when applying for a UZI card. - Requesting Chamber of Commerce excerpt by UZI register itself. - Supporting documents legal representative. - UZI register method in the case of compromitacion algorithm. - New version of schedule of requirements PKI government. - Textual changes and update glossary.
4.1	01/10/2008	Final	<ul style="list-style-type: none"> - Amendment in accordance with advisory memorandum dated 18/08/2008: - telephone withdrawal; - clarification of policy in relation to mergers;

			- textual changes and clarifications.
4.2	24/02/2011	Final	- SHA-2 release. - End of first generation CAs. - Textual changes and clarifications.
5.0	18/01/2012	Final	- Add specialisms: - Nurse specialist mental healthcare [verpl. spec. geestelijke gezondheidszorg] (069) - Youth healthcare doctor [jeugdarts] (070) - Emergency care doctor [spoedeisende hulp arts] (071) - Add profession: Clinical physicist [klinisch fysicus] (4). - Refer explicitly to telephone withdrawal during office hours. - Change procedure amendment section 9.12. - Textual changes. - Policy in the event of renewal and withdrawal specified in more detail (par. 4.1, 4.6 and 4.9.1). - Change liability trusting parties.
5.1	28/06/2012	Final	- CAB forum clause included (par. 1.1.1). - Preconditions routine renewal certificates (par. 3.3.1). - Method of submitting PKCS#10 files (par. 4.1). - Circumstance of withdrawal on initiative UZI register added (par. 4.9.1). - Textual changes.
5.2	15/04/2013	Final	- Identification document has to be valid when issuing UZI card (par. 3.2.3). - Clarification not permitted telephone withdrawal of server certificate (par. 3.4). - CRL issue frequency increased to every hour. - Passage decision period changed (par. 4.2). - Obligation subscriber with regard to a server certificate with a domain name (FQDN) which is addressable via the internet (par. 4.6.1). - Withdraw by post defined in more detail (par 4.9.5). - Transition period in the event of name change or termination subscriber organisation (par. 4.11). - Basic attributes StateOrProvinceName and LocalityName added (par. 7.1.1). - Framework CPS in accordance with RFC 3647. - Textual changes.
5.3	27/06/2013	Final	- Only electronic withdrawals are guaranteed withdrawn within 4 hours (par. 4.9.5). - Tariffing UZI certificates of (par. 9.1). Textual changes.
5.4	20/09/2013	Final	- Passport photo scrapped (par. 3.2.3). - Mobile issue certificates (par. 4.3). - Role certificate manager made consistent. - Textual changes in connection with new suppliers and changed issue process/identification.
5.5	24/01/2014	Final	- End of second generation CAs. - Termination of key escrow and recovery as of 1-10-2013 (par. 4.12). - Emphasise liability subscriber (par. 9.1.6).

5.6	09/09/2014	Final	<ul style="list-style-type: none"> - Various small changes and spelling corrections (entire CPS). - Publication service added (par. 1.3.3). - Care provider [zorgverlener] requirements clarified (par. 3.2.3). - Validation of job name and department aligned (par. 3.1.4 and 3.2.4). - Certificate renewal clarified (par. 3.3.1-2). - Withdrawal procedure clarified, 'e-mail in non-mutable form' requirement scrapped (par. 3.4 and 4.9.3). - Certificate application clarified, clause on cancellation of application added (par. 4.1). - Acceptance period of server certificates clarified (par. 4.4). - 'Defective card' clause scrapped, referred to par. 9.1.10 (par. 4.5.1). - Vulnerability analysis procedure modified (par. 5.4.7). - Period continuing certificate status service in the event of CSP termination modified (par. 5.8). - The offering of key escrow completely scrapped (par. 6.2.3-5, Annex 1). - Inaccuracy in CRL issue frequency modified (par. 7.2.1) - Legal entity certifying institution corrected (H8) - TTP.nl schedule referred to (par. 8.1). - Subject of audit extended (par. 8.4). - Invoicing procedure clarified (par. 9.1.6) - Guarantee scheme added (par. 9.1.10). - Unclear clause liability scrapped (par. 9.5.2) - Possibility for registration as subscriber added for organisations which fulfil the amended Wbsn (Annex 2). - Clarifies that public LDAP access is only possible via search page on the website (par. 1.3.3, 2.4, 9.3.2).
5.7	23/02/2015	Final	<ul style="list-style-type: none"> - Various small changes (entire CPS). - Unverified details clarified (par. 3.2.4). - Authorised applicant procedure clarified (par. 3.2.5). - Reasons for withdrawal deleted (par. 3.3), see par. 4.9.1. - Cancellation of applications clarified (par. 4.1). - Included that no Certification Authority Authorization DNS details are checked (par. 4.2). - Obligation for subscriber included with regard to accuracy and completeness of details (par. 4.6.1). - Subscriber agrees to withdrawal in the event of misuse (par. 4.10.1). - Key use must stop after withdrawal (par. 4.9.1). - Checks signature on withdrawal added (par. 4.9.3). - Subscriber termination transition period clarified (par. 4.11). - CRLs are archived on CSP termination (par 5.8). - Reprinting of PIN letter procedure added (par 6.4.2). - New ETSI standards and PKIo SoR names implemented (par. 2.2, 7.1, 7.2, H8, 8.4). - Trial period clarified (par. 9.1.9 and 9.1.10). - UZI register guarantees clarified (par. 9.5.1). - Procedure for suspension clarified (Annex 2 part D).

5.8	01/09/2015	Final	<ul style="list-style-type: none"> - The separate document entitled 'Trusting Party Conditions' has been combined with this CPS. Section 1.3 now refers to the obligations for all parties involved. - An email address can no longer be included in a server certificate (par. 3.2.3). - Description OSCP responder certificate added (par. 7.3). - Sports doctor [sportarts] (role code 074) added to Annex 3. - Annex 2 section C revised in connection with change BIG register.
5.9	01/01/2016	Final	<ul style="list-style-type: none"> - Various small changes (entire CPS). - Change register job name on unnamed employee card [medewerkerpas niet op naam] (par. 3.3.1 and 3.1.4). - Use of Citizen Service Number (BSN) added (par. 3.2.3). - Procedure for digital requesting of UZI cards added (par. 3.2.3). - Procedure for renewing certificates modified (par. 3.3.1.). - Paragraph relating to turnaround time added (par. 4.3). - Method of issuing certificates clarified (par. 4.4). - Archive storage time modified (par. 5.5.2). - Clarification of the term production date (par. 6.3.2 and 9.1.8).
6.0	01/04/2016	Final	<ul style="list-style-type: none"> - Various changes in relation to the change in the law - Healthcare Quality, Complaints and Disputes Act [Wet kwaliteit, klachten en geschillen zorg] (entire CPS). - References to including a (system) email address in the server certificate deleted (par 7.1.3). - Change UZI register contact details (par. 1.5.1). - Assessment registers Pharmacy Technicians Quality Register (KAA) and the Quality Register for Pharmacy Technicians in Public Pharmacies (KAOF) added (par. 3.2.3 and Annex 2). - Possibility of submission of a digital excerpt (pdf with certificate from DUO) added. (par. 3.2.3 and Annex 2). - Public pharmacist [openbaar apotheker] (role code 075) added to Annex 3.
6.1	20/03/2017	Final	<ul style="list-style-type: none"> - Period of validity certificates modified (entire CPS).
7.0	01/06/2017	Final	<ul style="list-style-type: none"> - New ETSI standard and the Regulation on electronic identification and trust services for electronic transactions (the eIDAS Regulation) - Term CSP (Certification Service Provider) replaced by TSP (Trust Service Provider) - Termination TSP clarified and reference made to the CA Termination Plan CIBG (par. 5.8) - Included that a new version of the CPS is to be reported to the Policy Authority (par. 9.11.1) - Reference to chapter 3.2.2.4.5 of the Baseline Requirements included (par. 3.2.3) - Withdrawal UZI resources after failure to pay (par. 4.10.1). - Invoicing of UZI resources by e-mail added (par. 9.1.6) - Various small changes (entire CPS)

7.1	01-08-2017	Final	<ul style="list-style-type: none"> - The law to use social security number in the care (Wbsn-z) is replaced by the Act supplementary provisions processing personal data in the care. - The 'employee card not in name' is temporarily unavailable (par. 1.1.2) - Care provider Other care (role code 99) added to attachment 3 - The Quality Register for Pharmacy Technicians in Public Pharmacies (KAOF) removed
8.0	04-01-2018	Final	<ul style="list-style-type: none"> - The Private G1 hierarchy of the State of the Netherlands release - Article 15 eIDAS
9.0	22-03-2018	Final	<ul style="list-style-type: none"> - The Public G3 hierarchy of the State of the Netherlands release
9.1	10-09-2018	Final	<ul style="list-style-type: none"> - Textual changes and clarifications - Change regarding Time required to process a withdrawal request modified (par. 4.10.5) - Physician Assistant added to article 3 of het Individual Health Care Professions Act [Wet op de beroepen in de individuele gezondheidszorg] (Wet BIG) - Limited liability with regard to the delivery of the UZI card added - Change regarding definition of care - General Data Protection Regulation (De Algemene verordening gegevensbescherming) - Retention periods included (par. 5.5.2) - Change procedure modified (par. 9.12)
9.2	04-11-2018	Final	<ul style="list-style-type: none"> - The 'employee card not in name' available.
9.3	23-11-2018	Final	<ul style="list-style-type: none"> - Textual changes and clarifications - The G2 hierarchy added - Reference to chapter 3.2.2.4. of the Baseline Requirements included. - Chapter 8 'Conformity assessment' updated
9.4	01-06-2019	Final	<ul style="list-style-type: none"> - Textual changes and clarifications - Right to check on compensating measures added (section 4.6.1.) - Update CaIssuer URL's after resigning of G3 CA's (par. 7.1.2)
9.5	01-08-2019	Final	<ul style="list-style-type: none"> - The UZI register will no longer withdraw old certificates 7 days after the renewed certificates have been issued.
9.6	01-11-2019	Concept	<ul style="list-style-type: none"> - Reference to chapter 3.2.2.4.2, 3.2.2.4.6 and 3.2.2.4.7 of the Baseline Requirements (3.2.3). - G2 hierarchy for server certificates removed

Table 1 Version history CPS UZI register

Copyright CIBG 2019 © in The Hague

Nothing in this publication may be copied and/or made public (for any purposes whatsoever) by means of printing, photocopying, microfilm, audiotape, electronically or in any other way, without the written permission of CIBG.

Accord TSP Management

Versie: 9.6

Datum: 31-10-2019

1 Introduction

1.1 UZI register and products

1.1.1 *Introduction to the UZI register*

In order to facilitate the safe communication and consultation of confidential information in the care sector, three domains have been distinguished: the care consumers, the care insurers and the care providers. The Unique Healthcare Provider Identification Register (the so-called UZI register) is the register of care providers designated by the Minister of Health, Welfare and Sport as referred to in Article 14 of the Act Additional provisions for the processing of personal data in the care [Wet aanvullende bepalingen verwerking persoonsgegevens in de zorg]. The UZI register is the certificate service provider (TSP)¹ that issues certificates for the unique identification and authentication of care providers and indication bodies in the care sector.

The aim of the UZI register is to identify care providers and indication bodies uniquely in the context of electronic communication and access to details. With this in mind the UZI register uniquely links the physical identity to an electronic identity and records these in certificates. The certificates and the accompanying cryptographic keys are located on a smart card². In general terms, this is referred to as the UZI card in this Certification Practice Statement (CPS)³.

The UZI register issues UZI cards to parties designated by the Minister of Health, Welfare and Sport based on legislation and regulations. A more detailed description of the user community of the UZI register is included in paragraph 1.3 'Parties involved'. The UZI register issues certificates for the government under the PKI hierarchy⁴.

TSP UZI register complies with the current version of the Baseline Requirements for Issuance and Management of Publicly-Trusted Certificates, as published on <http://www.cabforum.org>. In the event of any inconsistency between this CPS and the Requirements in question, which means that, as a minimum, the stipulated minimum requirements are not taken into account, such at the discretion of the PA, the stipulations in the Requirements will take precedence.

The UZI-register makes online services available, such as the content on the website, the online withdrawal page and the digital application facility accessible to persons with a disability, wherever possible⁵. hereby, changes to the aforementioned online services will be tested against ETSI EN 301 549.

1.1.2 *Types of cards and certificates*

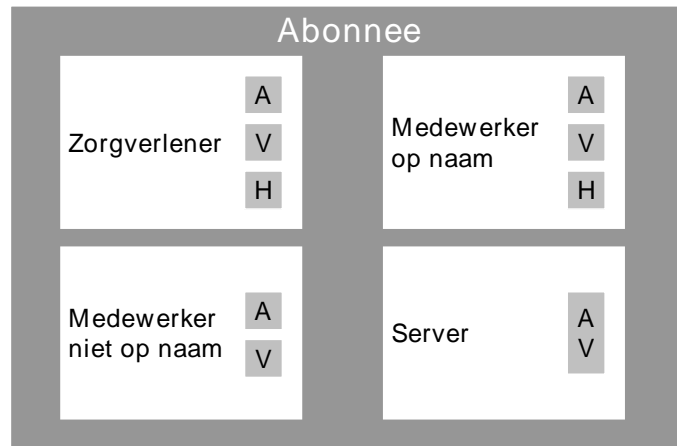
The UZI register issues various types of cards and certificates. *Figure 1 Cards model and certificates* provides a diagrammatic overview of the types of cards and the certificates per card type. The various types of cards are briefly clarified below.

¹ For an explanation of the terms and abbreviations used, please refer to Annex 1 which is entitled 'Definitions and abbreviations'.

² It relates to a so-called Secure Signature Creation Device (SSCD)

³ The term UZI card is used to refer to the certificates, keys and the corresponding bearer. ⁴ Artikel 15 eIDAS

⁴ <https://www.logius.nl/diensten/PKIoverheid/>



A=authenticiteit; V= Vertrouwelijkheid, H=Handtekening (onweerlegbaarheid)

Figure 1 Cards model and certificates

Abonnee	Subscriber
Zorgverlener	Care provider [zorgverlener]
Medewerker niet op naam	Unnamed Employee [medewerker niet op naam]
Medewerker op naam	Named Employee [medewerker op naam]
Server	Server
A	A
V	C
H	S
A=authenticiteit	A=Authenticity
V=Vertrouwelijkheid	C=Confidentiality
H=Handtekening (onweerlegbaarheid)	S=Signature (non-repudiation)

Care provider card [zorgverlenerpas]

The care provider card [zorgverlenerpas] is for a professional as referred to in Articles 3 and 34 of the Individual Health Care Professions Act [Wet op de beroepen in de individuele gezondheidszorg] (Wet BIG). The UZI card is issued on the basis of a face-to-face check and check of the legal identity, after a check has taken place to establish whether the intended cardholder actually is a care provider (see Annex 2). In addition to the identity, the UZI register also guarantees the 'care provider status' and the relationship to the subscriber⁶. Care providers receive a personalised card and three certificates and key pairs (authentication, confidentiality and non-repudiation).

Named employee card [medewerkerpas op naam]

An employee of a subscriber of the UZI register can receive an 'named employee card' [medewerkerpas op naam]. The card is issued on the basis of a face-to-face check and check of the legal identity of the certificate holder following a request by an authorised applicant. In addition to the identity, the UZI register also guarantees the relationship to the subscriber. Employees receive a personalised card and three certificates and key pairs (authentication, confidentiality and non-repudiation).

⁶ The UZI register guarantees the relationship to the subscriber by establishing that the legal representative, or a person authorised by the legal representative, has requested the card for the cardholder or certificate holder.

Unnamed employee card [medewerkerpas niet op naam]

An unnamed employee card cannot be obtained by a group of employees with a certain position as subscriber to the UZI register. The certificates of this UZI card indicate that the certificate holder is an official of the subscriber referred to in the certificates but cannot be directly traced back to a person. The UZI register guarantees the relationship to the subscriber and issues the card after a face-to-face check and check of the legal identity of the authorised applicant. For the 'unnamed employee card' [medewerkerpas niet op naam] the applicant also fulfils the role of certificate manager and is responsible for, among other things, registering the relationship to the specific employee(s) who are using the card. The 'unnamed employee card' [medewerkerpas niet op naam] is a non-personalised UZI card with two certificates and key pairs (authentication and confidentiality).

This UZI card can not be issued under a subscriber care provider registration.

Server Certificates

Server certificates can be obtained for a subscriber's systems. These certificates indicate that a system exchanges details and/or offers services on behalf of the subscriber. The subscriber is responsible for the accuracy of the details in the server certificates of his systems. The UZI register guarantees the relationship to the subscriber and issues the server certificate after a face-to-face check and check of the legal identity of the applicant. For a server certificate the applicant also fulfils the role of certificate manager and is therefore responsible, on behalf of the subscriber, for the operational management of the certificate. In the case of server certificates, the authenticity and confidentiality certificate are combined into a single certificate.

1.1.3

CA model

Certificates which are issued by the UZI register have been signed by the UZI register. With this in mind the signature of the Certification Authority (CA) of the UZI register is used. The UZI register has a number of CAs. The relationship between these CAs is outlined in

Figure 2 and **Figure 3**.

SHA-2 generation (G21)

As from 1 January 2011 the UZI register has issued certificates, which have been processed in the UZI card, under Root CA of the State of the Netherlands. This hierarchy uses a cryptographic algorithm SHA-2 when signing certificates and CRLs. This structure is shown in

Figure 2 CA-model SHA-2 generation (G21)

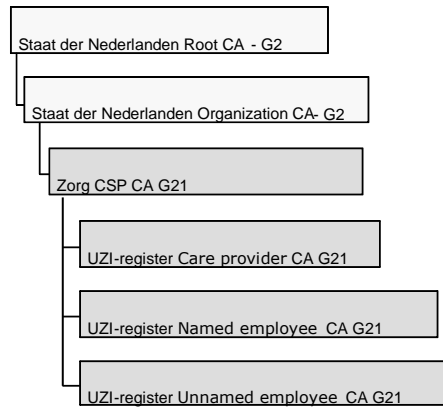


Figure 2 CA-model SHA-2 generation (G21)

Public G3/Private G1 generation

The end date of the SHA-2 (G21) hierarchy is 22 March 2020. Therefore, from 4 January 2018 (Server certificates) and 22 March 2018 (UZI cards) the UZI register issues certificates under two new CA hierarchies:

- UZI-cards, the public Root CA G3 of PKIoverheid (Public G3)
- Server certificates, the private Root CA G1 of PKIoverheid (Private G1)

Due to the decision to issue passes and server certificates under various new Root CA certificates, there are two completely new CA hierarchies that are separate from each other.

When introducing the G3 environment, Logius decided to create separate domain CAs for personal and service certificates. In addition, Logius has created a Private Root CA. This has as generation indication 'G1' since it is the first private environment.

With the introduction of the Public G3/Private G1 generation, the number of levels in de CA hierarchy is a maximum of 3.

The figure below shows the CA model for the generation Public G3 / Private G1.

- AUT: Authenticity certificate ;
- VRT: Confidentiality certificate;
- HND: Signature certificate (non-repudiation certificate);
- S: Server certificate (combined authentication and confidentiality)

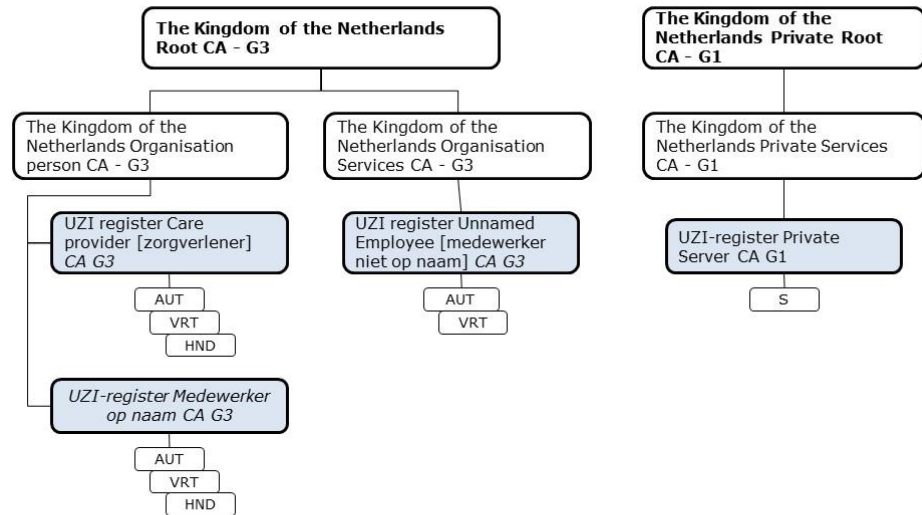


Figure 3 CA-model generatie Public G3/Private G1

1.2 **Purpose, name and identification of the Certification Practice Statement (CPS)**

1.2.1 *Purpose of the CPS*

The CPS of the UZI register describes how the services are interpreted. The CPS describes the processes, procedures and control measures for applying for, producing, issuing, managing and retracting of the certificates. The parties involved can use this CPS to determine their confidence in the services provided by the UZI register. The general framework of this CPS is based on the model as presented in Request for Comments 3647. The RFC 3647 applies internationally as the de facto standard.

1.2.2 *Relationship CP and CPS*

This CPS describes how the requirements in the Certificate Policies (CPs) have to be interpreted. The CPs contain descriptions of which requirements are being imposed on the services. The CPS describes how these requirements have been interpreted. **Table 3** and **Table 4** indicate in which PKIoverheid domain the different types of passes and certificates are issued and which part of the Program of Requirements of PKIoverheid contains the CP.

1.2.3 *Name and references*

This document is formally referred to as a 'Certification Practice Statement (CPS)', abbreviated to CPS. A paper version of the CPS can be obtained from the contact address included in paragraph 1.5.1.

The references to the CPS are included in the table below

CPS	Description
Naming	Certification Practice Statement, UZI-register vX.xx
Link	https://www.zorgcsp.nl/cps/uzi-register.html
Object Identifier (OID)	2.16.528.1.1007.1.1

1.3 **The parties involved**

The parties involved in the UZI register are the following:

- organisation that implements the UZI register, including suppliers of products and services;
- user community consisting of:
 - subscribers;
 - certificate holders/certificate managers;
 - trusting parties.

The CIBG fulfils the role of **TSP** and has final responsibility for supplying the certification services. The CIBG is an implementing body of the Ministry of Health, Welfare and Sport. The CIBG, in the role of TSP, is referred to in the rest of this CPS as 'the UZI register'.

Clauses about liability and guarantees of the TSP are included in sections 9.5, 9.5.1, 9.5.2 and 9.5.3.

1.3.1 *Certification Authority (CA)*

The CA produces and publishes certificates and certificate revocation lists (CRLs). The CA arranges the production and publication of requested certificates on the basis of an authenticated request from the RA. Certificates are published directly after they have been created by the CA. Certificates are published on a CRL after the CA has received a message of withdrawal of the certificate from an authorised person. After withdrawal, the CA publishes the unique certificate serial numbers on the CRL in question. The CIBG has subcontracted the role of CA to KPN Corporate Market B.V. which, together with ATOS Nederland B.V. (the Consortium), takes care of the physical production process. Multipost Services B.V. produces the UZI cards on behalf of the Consortium.

1.3.2 *Registration Authority (RA)*

The RA arranges the processing of certificate applications and all corresponding tasks. The RA physically collects the identification details, checks and registers these and carries out the verification checks described. After the checks, the RA instructs the CA to produce the UZI cards and publish the certificates. The CIBG fulfils the role of RA. The CIBG has subcontracted redistribution and issue of the UZI cards to the Consortium. Dynalogic issues the UZI card on behalf of the Consortium after the identity of the certificate holder has been verified. Dynalogic also checks the identity of certificate managers.

1.3.3 *Dissemination Service (publication service)*

The UZI register is responsible for the website on which, among other things, this CPS is published. The CRL is also placed on this website (generated by the CA). This

website also contains the online withdrawal page and provides a public search function for certificates.

1.3.4 *Subscribers*

The subscriber is the party on whose behalf the certificate holder acts when using the certificates.

The UZI register has two types of subscribers, namely people (care provider working alone) and organisations (institutions and indication bodies). Organisations and people that fulfil the criteria described in Annex 2 can register as subscriber of the UZI register. Only subscribers can apply for cards. If a subscriber is a care provider acting alone and has applied for the card for himself, this care provider will also be the certificate holder.

1.3.5 *Certificate holders and certificate managers*

A certificate holder is a natural person who is characterised in the certificate as the holder of the private key which is linked to the public key included in the certificate. For server certificates, no certificate holder is, in effect, included in the certificate. The applicant of the server certificate also fulfils the role of certificate manager. The certificate manager is related to the subscriber included in the certificate and carries out activities relating to the server certificate on behalf of the subscriber. The subscriber instructs the certificate manager to carry out the activities in question and records these in a proof of certificate management.

1.3.6 *Trusting parties*

A trusting party is the party that acts in confidence on a certificate for the possible purposes of authenticating care providers, verifying an electronic signature or encrypting communication with the party in question.

The obligations which are applicable to certificate holders and certificate managers are included in CPS sections 4.6.1

1.4 **Certificate use**

1.4.1 *Permitted use*

The field of application of certificates issued by the UZI register is limited to the user community as described in paragraph 1.3, section 3a of the Schedule of Requirements of the PKI for the government. This user community consists of subscribers of the UZI register, certificate holders that belong to these subscribers and trusting parties.

The products of the UZI register are intended for care providers and indication bodies in the context of electronic communication and access to details. The applicability of the certificates is detailed in *Table 2 Field of **application of certificates***.

Type of certificate	Purpose
Authenticity certificate	This certificate is used to authenticate the certificate holder and/or subscriber.
Confidentiality certificate	This certificate is used to encrypt the communication with the certificate holder of the care institution.
Signature certificate (non-repudiation certificate)	This certificate is used to verify an electronic signature by the certificate holder.
Server certificate (combined authentication and confidentiality)	This certificate is used for the authentication of systems and to protect communication.

Table 2 Field of application of certificates

1.4.2 *Non-permitted use*

Certificates may only be used for the purpose indicated. Otherwise there are no restrictions on the use of the certificates.

1.5 **Organisation CPS management**

1.5.1 *Contact details*

Information about this CPS or the services of the UZI register can be obtained via the contact details shown below. Comments on this CPS can be sent to the same address.

UZI register contact details:

Rijnstraat 50
2515 XP The Hague
Tel: 0900 - 232 4342
info@uzi-register.nl

PO Box 16114
2500 BC The Hague
www.uziregister.nl

1.5.2 *Amendment and approval CPS*

The UZI register is entitled to amend or supplement the CPS. Amendments apply as from the moment that the new CPS is published. The TSP management is responsible for correct compliance with the procedure as described in paragraph 9.12 and for the eventual approval of the CPS in accordance with this procedure.

1.6 **Definitions and abbreviations**

For an overview of the definitions and abbreviations used, please refer to Annex 1.

2 Publication and responsibility for electronic storage location

2.1 **Electronic storage location**

The UZI register publishes certificates, as part of the issue procedure. Trusting parties, certificate holders and subscribers can consult certificates via the directory service.

The directory service is adequately secured against manipulation and can be accessed online. Information about the status of a certificate can be consulted twenty-four hours a day and seven days a week by means of a Certificate Revocation List (CRL).

2.2 **Publication of TSP information**

The UZI register publishes TSP information on www.uzi-register.nl and www.zorgcsp.nl. Among other things, the locations offers access to the following documents and services:

- CPS,
- Certificate Revocation Lists (CRLs),
- TSP and CA certificates,
- Directory service.

For the Certificate Policies (CP) reference is made to www.logius.nl. In order to be able to identify the correct CP, the table below shows the relationship between the cards, the functions of the certificates, the applicable CP and the Object Identifier (OID) of the CP.

Type of certificate		Applicable CP	OID CP
UZI Card	Certificate (function)		
Care provider [zorgverlener]	authenticity	SoR section 3a, Certificate Policy – Organisation Domain	2.16.528.1.1003.1.2.5.1
Named employee [medewerker op naam]	signature (non-repudiation)	SoR section 3a, Certificate Policy – Organisation Domain	2.16.528.1.1003.1.2.5.2
	confidentiality	SoR section 3a, Certificate Policy – Organisation Domain	2.16.528.1.1003.1.2.5.3
Unnamed employee [medewerker niet op naam]	authenticity	SoR, section 3b, Certificate Policy – Services, Organisation Domain	2.16.528.1.1003.1.2.5.4
	confidentiality	SoR, section 3b, Certificate Policy – Services, Organisation Domain	2.16.528.1.1003.1.2.5.5

Table 3 Overview of certificates with OID of applicable CP SHA-2 generation (G21)

Type of certificate		Applicable CP	OID CP
UZI Card	Certificate (function)		
Care provider [zorgverlener]	authenticity	SoR section 3a, Certificate Policy – Organisation Domain (G3)	2.16.528.1.1003.1.2.5.1
Named employee [medewerker op naam]	signature (non-repudiation)	SoR section 3a, Certificate Policy – Organisation Domain (G3)	2.16.528.1.1003.1.2.5.2
	confidentiality	SoR section 3a, Certificate Policy – Organisation Domain(G3)	2.16.528.1.1003.1.2.5.3
Unnamed employee [medewerker niet op naam]	authenticity	SoR, section 3b, Certificate Policy – Services, Organisation Domain(G3)	2.16.528.1.1003.1.2.5.4
	confidentiality	SoR, section 3b, Certificate Policy – Services, Organisation Domain (G3)	2.16.528.1.1003.1.2.5.5
Server	authenticity and confidentiality	SoR, section 3h, Certificate Policy – Services, Organisation Domain(G1)	2.16.528.1.1003.1.2.5.6

Table 4 Overview of certificates with OID of applicable CP Public G3/Private G1 generation

2.3 Publication frequency

Certificates are published as part of the issue process. The CRL issue frequency is every hour.

2.4 Access to publication

Published information is public in nature and freely accessible. The published information can be consulted twenty-four hours a day and seven days per week.

The published certificates can only be accessed publicly via the search function on the website.

3 Identification and authentication

3.1 Naming

This paragraph describes how the certificate managers are identified and authenticated during the initial registration procedure and which criteria the UZI register imposes with regard to the names.

3.1.1 Types of name formats

All certificates issued by the UZI register have a 'subject' field (DistinguishedName) in which the holder's name can be found. This field consists of (X.500) attributes and is filled as follows:

Attribute	Care provider [zorgverlener]	Named employee [medewerker op naam]	Unnamed employee [medewerker niet op naam]	Server
Country (C)	'NL'	'NL'	'NL'	'NL'
Organization (O)	Subscriber's name	Subscriber's name	Subscriber's name	Subscriber's name
OrganizationalUnit (OU)	(field missing for this card type)	(field missing for this card type)	Department	Department (optional)
Title (T)	Title of address of care provider (professional title, qualification title or specialism)	Not applicable	Not applicable	Not applicable
givenName (G)	First names	First names	Not applicable	Not applicable
surname (SN)	prefix and birth name of care provider	prefix and birth name of employee	Not applicable	Not applicable
CommonName (CN)	First names, surname prefix and birth name of care provider	First names, surname prefix and birth name of employee	Name of employee's position	System name
SerialNumber	UZI number	UZI number	UZI number	UZI number

Table 5 Name of certificate holder in UZI certificates (subject.DistinguishedName)

Names of people included in the Certificate comply with the name format as defined in 'NEN 1888:2002 (nl), General personal details; Definitions, character sets and exchange formats' of the NEN.

No attributes are used other than those indicated above. A clarification of the other parts of the certificates is included in chapter 7.

3.1.2 Need for meaningful name

The name used in the issued certificates is unambiguous in such a way that is possible for the trusting party to establish irrefutably the identity of the certificate holder or subscriber.

3.1.3 Anonymity or pseudonymity of certificate holders

The UZI register does not allow the usage of pseudonyms in the subscriber registration or card applications.

3.1.4

Guidelines for interpreting the various name types

The following points are relevant for the interpretation of the name:

- For care providers [zorgverlener] and named employees [medewerkers op naam], the commonName contains the birth name including prefixes and first names and title of nobility, as included in the identification document from the Persons Database [Basisregistratie Personen] (BRP) submitted with the registration. The commonName refers to the title of nobility in accordance with the identification document submitted upon registration. The valid identification documents are those referred to in Article 1 of the Compulsory Identification Act [Wet op de identificatieplicht] (WID). All first names must be written out in full on the submitted identification document..
- In principle, the commonName refers to all the first names in full in accordance with the Persons Database (BRP) or the identification document submitted upon registration. If the resulting commonName contains more characters than is technically possible, one or more first names will be replaced by initials, starting with the last full first name, and continuing until the resulting commonName does fit.
- In the case of an institution, the subscriber's name will contain the name as shown on the document submitted upon registration in order to identify the organisation. If the subscriber is a care provider working alone, the commonName of the care provider working alone will be included.
- The employee job name may not contain any name which is (wholly or partially) equal to, similar to, or gives the impression of a protected professional title, qualification title or specialism. The UZI register has drawn up a list of job names, from which a choice can be made. These are: administrative employee [administratief medewerk(st)er], assistant [assistent(e)], healthcare assistant [dokersassistent(e)], manager, employee [medewerk(st)er], trainee [stagiair(e)], dentist's assistant [tandartsassistent(e)]. It is not possible to submit a self-chosen job name.
- Department contains the department name given by the subscriber. The UZI register also imposes the requirement that the department name may not contain any name which is (wholly or partially) equal to, similar to, all gives the impression of a protected professional title, qualification title or specialism. A list of protected professional titles, qualification titles and specialisms is included in Annex 3 of the CPS. An assessment will take place on, for example, the basis of this overview. No assessment will take place with regard to spelling and writing errors.
- System name (also referred to as full domain name) contains the fully qualified domain name (FQDN) of the system.

All names are, in principle, taken literally from the Persons Database (BRP) or from the identification document submitted. However, it may be the case that the name details contain special characters which are not part of the standard character set in accordance with ISO8859-1 (Latin-1)⁷. If the name contains characters which are not part of this character set, the UZI register will carry out a transition. If names are longer than permitted in the certificates, the UZI register will use the hyphenation rules in accordance with 'NEN 1888:2002 (nl), General personal details; Definitions, character sets and exchange formats' of the NEN. This means that the last position of a field is replaced by a hyphen.

The UZI register reserves the right to change the requested name upon registration if this is legally or technically necessary.

⁷ The character set used by the UZI register has the largest number of diacritic characters. This sentence does not include special characters, for example a Y with a diaeresis.

3.1.5 *Uniqueness of names*

The UZI register guarantees that the uniqueness of the 'subject' field will be maintained. This means that the distinctive name which is used in an issued certificate can never be allocated to another subject. This is done by using the UZI number that is included in the subject.serialNumber (see chapter 7 for a more detailed explanation).

For the 'care provider' [zorgverlener] and the 'named employee' [medewerker op naam] cards, the UZI number is uniquely linked to the natural person. Any new card application for the same natural person, will contain the same UZI number. If a 'care provider' [zorgverlener] or 'named employee' [medewerker op naam] applies for cards for various institutions, these cards will contain the same UZI number. A person will only be issued a new UZI number if the birth name including prefixes and/or first names change. In the card for an 'unnamed employee' [medewerker niet op naam] and in server certificates, the UZI number is linked to the UZI card. A new UZI number is generated each time a new card application is submitted. The UZI register generates the UZI number from the same series of numbers for all types of card.

In instances in which parties are unable to agree on the use of names, the TSP management will decide after weighing up the interests involved, insofar as this is not provided for in mandatory Dutch law or other applicable regulations.

3.1.6 *Recognition, authentication and the role of trademarks*

The name of an organisational association as referred to in the excerpt of a recognised register, a document of establishment, a notarial deed, an institution decision, a licence or in the law, will be used during registration and in the certificates.

The certificate managers bear full responsibility for any legal consequences of using the name they provide. In the event that brand names are used, the UZI register will take the necessary care, but is not obliged to initiate an investigation into possible violations of trademarks as a consequence of using a name which is part of the details included in the certificate. The UZI register reserves the right to change the requested name if it could be contrary to trademark law.

3.2 **Initial identity validation**

3.2.1 *Proof of ownership of 'private key belonging to the certificate to be issued'*

The key pairs are generated in a cryptographic module, in a controlled and protected environment, as part of the personalisation procedure, and then incorporated into the smart card via a secure communication session. The personal key cannot be removed from the smart card.

The key pairs for server certificates are not generated centrally, but by the subscriber's certificate manager. An application for certification of a public key of a server certificate is signed with the corresponding private key. In this way the certificate manager can demonstrate ownership of the private key.

3.2.2 *Authentication of organisational identity*

If an organisation submits an application to be registered as subscriber in the UZI register, the following must be considered:

- A completed application form signed by the legal representative of the registration containing:
 - the full name of the organisation;
 - the address details of the organisation;

- the full name (full first names, prefixes birth name, birth name, prefixes surname and surname) and contact details of the legal representative of the organisational identity.
- the full name and contact details of the authorised applicant/applicants that may apply for and withdraw UZI cards on behalf of the organisation.
- (optional) the AGB code (care institution code or practice code).
- Proof that the name of the organisational entity is up-to-date and correct. This proof can take the form of:
 - the registration number under which the organisational entity is listed in the Trade Register of the Chamber of Commerce and which shows the accuracy of the name;
- Proof that the legal representative is authorised to represent the organisation. This proof can take the form of:
 - the registration number under which the organisational entity is listed in the Trade Register of the Chamber of Commerce and which shows the authority;
 - copy of the document appointing the legal representative. Only when the legal representative does not appear from the Commercial Register of the Chamber of Commerce.
- Proof that the names of the people referred to in the application form are correct. This proof must be submitted in the form of a copy of an identification document as referred to in the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). All first names must be written out in full on the submitted identification document. The identification document submitted must be valid on the date of registration. The UZI register archives the copies of the submitted identification documents.
- Proof that the organisational entity belongs to the domain of the UZI register. Please refer to Annex 2 for a more detailed explanation. Organisations which are included in the register of accredited institutions within the framework of the Care Institutions (Accreditation) Act [Wet toelating zorginstellingen] (WTZi) or in the Pharmacies Register within the framework of the Medicines Act [Geneesmiddelenwet] belong to the domain and do not need to submit any proof. If the organisation is not included in the WTZi register or the Pharmacies Register, proof must be submitted in the form of:
 - a copy of a document of establishment or notarial deed;
 - a copy of a licence or decision;
 - a care agreement;
 - a signed personal statement by all parties involved (only to be submitted if the organisation does not have legal personality).

The UZI register checks the authenticity, completeness and accuracy of the submitted documents. The UZI register checks whether any AGB code submitted corresponds to the AGB code in the Vektis registration. The UZI register checks whether the organisation belongs to the domain of the UZI register (see Annex 2). If proof of this is submitted in the form of a personal statement, the UZI register will request the underlying evidence on a random basis before registration takes place. The UZI register informs the subscriber of the registration or rejection of the registration request. In the event of a rejection, the reason for the rejection will be stated.

3.2.3 *Authentication of personal identity*

The personal identity is authenticated upon registration as a subscriber and upon the issue of an UZI card.

Registration of a person as a subscriber

If a care provider working alone submits an application to be registered as a subscriber in the UZI register, the following must be submitted:

- A completed application form signed personally by the care provider containing:
 - the full name of the care provider (birth name, including prefixes and first names);
 - the contact details (email address and (mobile) telephone number) of the care provider;
 - the professional title or qualification title of the care provider and reference to the assessment criteria to be applied (see Annex 2);
 - (optional) the AGB code of the care provider;
 - the address details of the care provider.
- Proof that the name details of the person referred to in the application form are correct. This proof must be submitted in the form of a copy of an identification document as referred to in the WID. All first names must be written out in full on the submitted identification document.. The UZI register takes the first names, prefixes birth name, the birth name and the Citizen Service Number (BSN) from the identification document and will archive the copy of the identification document.
- Professionals as referred to in Article 34 of the Individual Healthcare Professions Act who are not registered with the Paramedics' Quality Register [Stichting Kwaliteitsregister Paramedici], the Oral Hygienists' Quality Register [Kwaliteitsregister Mondhygiënisten], the Pharmacy Technicians Quality Register [Kwaliteitsregister Apothekersassistenten] (KAA) must submit, as proof that they are allowed to use the qualification title, an original and validly authenticated copy of the diploma in question, or a digital excerpt (PDF with certificate from DUO).
- Professionals as referred to in Article 36a of the BIG Act must provide proof that they are entitled to receive the title of the program an original and validly certified copy of the relevant diploma or a digital excerpt (PDF with certificate from DUO).

The UZI register checks the authenticity, completeness and accuracy of the submitted documents. The UZI register checks whether the applicant can be designated as a care provider (see Annex 2). The UZI register checks whether any submitted AGB code corresponds to the AGB code of the person in the Vektis registration. The UZI register informs the subscriber of the registration or rejection of the registration request. In the event of a rejection, the reason for the rejection will be stated.

Applying for and issuing the UZI card

An application for UZI cards must be made by a card applicant. This is the legal representative or an applicant who is financially authorised on behalf of the subscriber. The application takes place digitally via the application on the website of the UZI register (www.uziregister.nl/aanvragen) or by using a paper application form.

The UZI register offers the digital application facility for the following types of card:

- Care Provider card [zorgverlenerpas] Article 3 of the Individual Healthcare Professions Act (with the exception of the specialisms of paediatrician [jeugdarts], dispensing GP [apothekhoudend huisarts] and A&E doctor [SEH-arts])
- Named employee card [medewerkerpas op naam]
- Unnamed employee card [medewerkerpas niet op naam]

For the above-mentioned card types, the UZI register can issue a paper application form (pdf format) at the request of the card applicant.

For the care provider card types [zorgverlenerpas] Article 34 and 36a of the Individual Healthcare Professions Act, server certificates and the exceptions referred to in conjunction with the care provider [zorgverlenerpas] card Article 3 of the Individual Healthcare Professions Act, the UZI register offers a paper application form via the website.

Access to the digital application facility on the website of the UZI-register

The digital application facility on the website of the UZI-register can be used by the legal representatives or financially authorised applicants with one or more active subscription registrations within the UZI register. The person provides proof of identity via DigiD or a personal UZI card. The UZI register then checks whether this person is registered as a legal representative or financially authorised applicant with one or more active subscribers. If this is the case, access will be granted to the digital application facility and one or more UZI cards can be applied for.

The facility displays the following details of the subscriber: the name of the subscriber, the subscription number, the name and contact details of the card applicant. If the card applicant is authorised for various subscribers, the card applicant first selects the desired subscriber.

Applications via the digital application facility on the website of the UZI-register

Automatic links with the Personal Records Database (BRP) and the BIG register are used. These links are used to validate details that have been filled in when the application was made or to retrieve details from the register in question.

An indication per card type is given below as to which details are necessary for the digital application and which documents have to be submitted for the UZI card to be issued.

Named employee card [medewerkerpas op naam]

- Digital application via www.uziregister.nl/aanvragen
 - Citizen Service Number (BSN) and date of birth of the intended cardholder. These details are used as a basis for verification in the Personal Records Database (BRP) and the birth name is retrieved and displayed.
 - Statement by the card applicant that the intended cardholder has granted explicit permission to use his/her personal details for the UZI card application.
 - The contact details (email address and mobile telephone number) of the intended cardholder. These details are needed for the issue of the UZI card.
 - As regards delivery of the PIN letter, the card applicant chooses the postal address of the subscriber or the home address of the intended cardholder. The home address is taken from the Personal Records Database (BRP) and is not displayed for reasons of privacy.
 - Use of name in correspondence. The card applicant chooses the partner name registered in the Personal Records Database (BRP) or the birth name of the intended cardholder referred to in the Personal Records Database (BRP).
- The card is issued personally to the intended cardholder, with the intended cardholder being required to submit a valid, legal identity document as referred to in the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). A driving licence is not acceptable. The UZI register is obliged to archive a copy of the document used to prove identity. The physical confirmation of the identity of the cardholder and the creation of the copy are carried out by Dynalogic courier company at the instruction of the UZI register.

Care Provider card [zorgverlenerpas] Article 3 of the Individual Healthcare Professions Act (with the exception of the specialisms of paediatrician, dispensing GP and A&E doctor)

Professionals as referred to in Article 3 of the Individual Healthcare Professions Act must be registered in the BIG register.

- Digital application via www.uziregister.nl/aanvragen
 - Citizen Service Number (BSN) and date of birth of the intended cardholder. These details are used as a basis for verification in the Personal Records Database (BRP) and the birth name is retrieved and displayed.
 - Statement by the card applicant that the intended cardholder has granted explicit permission to use his/her personal details for the UZI card application.
 - Individual Health Care Professions Act (BIG) registration The BIG register assessment is carried out on the basis of the filled-in BIG number and a set of previously obtained personal details. The professional title and any specialism are shown in accordance with the registration in the BIG register.
 - The contact details (email address and mobile telephone number) of the intended cardholder. These details are needed for the issue of the UZI card.
 - As regards delivery of the PIN letter, the card applicant chooses the postal address of the subscriber or the home address of the care provider. The home address is taken from the Personal Records Database (BRP) and is for reasons of privacy not displayed.
 - Use of name in correspondence. The card applicant chooses the partner name or the birth name of the intended cardholder, as registered in the Personal Records Database (BRP).
 - The card is issued personally to the intended cardholder, with the intended cardholder being required to submit a valid, legal identity document as referred to in the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). A driving licence is not acceptable. The UZI register is obliged to archive a copy of the document used to prove identity. The physical confirmation of the identity of the cardholder and the creation of the copy are carried out by Dynalogic courier company at the instruction of the UZI register.

Unnamed employee card [medewerkerpas niet op naam]

- Digital application via www.uziregister.nl/aanvragen
 - Job name for which the card is applied. A choice is made from a fixed selection of job names. See paragraph 3.1.4.
- The card is issued personally to the card applicant, with the card applicant being required to submit a valid, legal identity document as referred to in the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). A driving licence is not acceptable. The UZI register is obliged to archive a copy of the document used to prove identity. The physical confirmation of the identity of the card applicant and the creation of the copy are carried out by Dynalogic courier company on the instruction of the UZI register.

An indication is given below per card type as to which details are necessary for the application and which documents have to be submitted for the UZI card to be issued.

Care Provider card [zorgverlenerpas] Article 34 of the Individual Healthcare Professions Act and Article 3 of the Individual Healthcare Professions Act for the specialisms of dispensing GP [apotheekhoudend huisarts] , paediatrician [jeugdarts] and A&E doctor [SEH-arts])

- A completed application form signed by the subscriber's card applicant containing:
 - the name of the subscriber;

- the subscriber number;
- the name of the card applicant;
- the full name (birth name, including prefixes and first names) of the intended cardholder;
- the contact details (email address and mobile telephone number) of the intended cardholder;
- the professional title or qualification title and any specialism of the intended cardholder and the reference to the applicable assessment criteria;
- Proof that the name details of the intended cardholder are correct. This proof must be submitted in the form of a copy of an identification document as referred to in the WID. All first names must be written out in full on the submitted identification document. The UZI register takes the first names, prefixes birth name, the birth name and the Citizen Service Number (BSN) from the identification document and will archive the copy of the identification document.
- Professionals as referred to in Article 34 of the Individual Healthcare Professions Act must either be registered with the Paramedics' Quality Register [Kwaliteitsregister Paramedici], the Oral Hygienists' Quality Register [Kwaliteitsregister Mondhygiënisten], the Pharmacy Technicians Quality Register [Kwaliteitsregister Apothekersassistenten] (KAA) or must submit, as proof that they are allowed to use the qualification title, an original, authenticated copy of the diploma in question, or a digital excerpt (pdf with certificate from DUO).
- Professionals as referred to in Article 3 of the Individual Healthcare Professions Act that wish to include the specialism of dispensing GP [apotheehoudend huisarts] in the certificate, must be registered in the overview 'Valid APG licenses'. This overview is managed by pharmatec, <https://www.farmatec.nl/>.
- The card is issued personally to the intended cardholder, with the intended cardholder being required to submit a valid, legal identity document as referred to in the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). A driving licence is not acceptable. The UZI register is obliged to archive a copy of the document used to prove identity. The physical confirmation of the identity of the cardholder and the creation of the copy are carried out by Dynalogic courier company at the instruction of the UZI register.

Server certificate

- A completed application form signed by the subscriber's applicant/certificate manager containing:
 - the name of the subscriber;
 - the subscriber number;
 - the name of the applicant/certificate manager;
- the contact details (email address and mobile telephone number) of the applicant; the fully qualified domain name (FQDN) owned by the subscriber or which the holder has given permission to use. The domain name must be unique and may not be in use by another organisation. If the subscriber is not the owner of the domain name, the UZI-register checks if the subscriber can use the domain name. The methods used by the UZI-register are described in chapter 3.2.2.4.2, 3.2.2.4.6 and 3.2.2.4.7 of the Baseline Requirements.
- The PKCS#10 file (Certificate Signing Request(CRS)). PKCS#10 is the general standard for a certificate application and contains the public key which is included in the UZI server certificate. The PKCS#10 file must be added to the application via an upload functionality in the application form.

In the case of a digital application, the UZI register verifies personal details in, and retrieves personal details from, the Personal Records Database (BRP). In the other cases the UZI register checks the authenticity, completeness and accuracy of the submitted documents. In the case of an UZI card application for a care provider the UZI register also checks whether the intended certificate holder can be designated

as a care provider (see Annex 2). In the case of a server certificates application for a domain name, the UZI register checks with the recognised registers (Foundation for Internet Domain Registration in the Netherlands [Stichting Internet Domeinregistratie Nederland] (SIDN) or Internet Assigned Numbers Authority (IANA)) to determine whether the subscriber owns the domain name, or when it is not the owner if the subscriber has permission from the domain owner to use the domain name. The UZI register informs the subscriber of the issue of the card or the rejection of the card application. If the card application is rejected, the reason for the rejection will be stated.

3.2.4 *Unverified details*

The UZI register verifies all details included in the certificate, with the following exceptions:

- the 'department' field in unnamed employee cards [medewerkerpassen niet op naam]
- the 'department' field in Server Certificates.

Details which are issued for correspondence purposes by the card applicant, such as correspondence name, email addresses and telephone numbers are not verified.

3.2.5 *Certificate holder authorisation*

The subscriber's legal representative can, upon registration, record which people are allowed to apply for certificates for the subscriber. These applicants are also certificate managers and are entitled to receive a certificate for a certificate holder on behalf of the subscriber. The UZI register checks the authenticity of this application by the legal representative.

Only a legal representative can indicate who may apply for cards on behalf of the subscriber. The method used to authenticate the legal representative is described in paragraph 3.2.2. In the case of a digital application the UZI register checks, on the basis of the authentication via DigiD or the UZI card, whether the application has been made by an authorised card applicant. In the case of a paper application this is done on the basis of a copy of an identity document or the 'wet' signature on the application form.

3.3 **Identification and authentication in the event of renewal of the certificate**

3.3.1 *Routine renewal of the certificate*

The procedures and checks relating to identification and authentication in the event of renewal of the certificate are the same as those which apply to initial registration. A new key pair is always generated when a renewal request is executed. If applicable, a new smart card is issued.

The UZI register sends the subscriber a letter with information about renewing the certificate. This letter will be sent 70 days before the expiry date of the UZI card. UZI passes can be renewed on the UZI-register website. Data which is already known to the UZI register, including personal details and professions as referred to in the Individual Healthcare Professions Act, do not need to be resubmitted. The new certificate comes into effect at the moment at which the new UZI card is produced.

Please note: All types of UZI cards, with the exception of the specialisms referred to below, can be renewed on the UZI-register site. The UZI register can issue a paper application form (PDF format) at the request of the card applicant. In this form, details which are already known to the UZI register will not be preprinted.

For the Article 3 Individual Healthcare Professions Act professions of which the specialism, such as paediatrician [jeugdarts] and dispensing GP [apothekhoudend huisarts], are not registered under the cardholder's BIG number, no renewal can be

carried out via the digital application facility. A completed application form will be required, signed by the subscriber's card applicant.

An UZI server certificate can be renewed using a certificate renewal application form. The UZI register will enclose this application form with the renewal letter. Only original certificate renewal application forms which have been sent out by the UZI register will be processed. In this form, details which are already known to the UZI register will be preprinted.

When renewing certificates, a check must always be carried out in advance to see whether all the requirements of paragraphs 3.1 and 3.2 have been fulfilled.

3.3.2 *Renewing keys after withdrawal of the certificate*

The procedures and checks relating to renewing keys after withdrawal of the certificate are the same as those which apply to the initial registration. A new key pair is always generated when a renewal request is executed. If applicable, a new smart card is issued. See the procedure in section 3.3.1 'Routine renewal of the certificate'.

3.4 **Identification and authentication in the event of withdrawal requests**

The cardholder/certificate holder or a card applicant/certificate manager can submit withdrawal requests on behalf of the subscriber. Withdrawal requests can be made electronically, by telephone, by email or by post. It is not possible to withdraw server certificates by telephone⁸.

- In the case of electronic withdrawal, identification and authentication take place on the basis of smart card number and withdrawal code. The withdrawal code is made available to the certificate holder in writing when the card is issued.
- In the case of telephone withdrawal, identification and authentication take place on the basis of an assessment of the details present in the UZI register. The withdrawal applicant must at least be able to issue a number of predetermined details about the cardholder and the card involved. It is not possible to withdraw server certificates by telephone.
- In the case of withdrawal by normal email, identification and authentication will take place on the basis of:
 - A withdrawal request signed by an authorised person.
 - Proof of the identity of the party submitting the withdrawal request. This proof must be submitted in the form of a copy of an identification document as referred to in the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). The identification document must be valid on the date of the withdrawal request. The UZI register will archive a copy of the identification document.
- The following requirement applies in the case of withdrawal by electronically signed email:
 - The email is signed by the person authorised to withdraw with a qualified non-repudiation certificate (as on the UZI card for care providers and named employees or another PKI government card).
- The same requirements apply to a withdrawal by post as to a withdrawal by normal email.

The UZI register checks whether the party submitting the withdrawal request is authorised to submit the application. In the case of withdrawal requests by normal email or post, the UZI register also checks the identity of the party submitting the

⁸ This decision is taken after a risk analysis. The withdrawal of a server certificate can have consequences as regards connecting a subscriber to the care infrastructure. Because the possibility of a wrongful withdrawal is greater in the case of a telephone request than when other channels are used, the UZI register does not offer the option of withdrawing server certificates by telephone.

withdrawal request on the basis of the submitted identity document or a previously archived copy of the identity document.

4 Operational requirements applicable to certificate life cycle

4.1 **Certificate applications**

Applications for certificates can only be submitted by registered applicants. These applicants must themselves be subscribers to the UZI register or must be authorised to submit applications by the legal representative of the subscriber. Applications must always be submitted in writing. PKCS#10 files can only be sent via the website or via electronically signed mail.

It is not possible for a care provider to obtain several active cards with the same basic profession or specialism via a subscription registration. When renewing certificates, it is permitted for both certificates to be active for a limited period in order to ensure continuity. This period is set at 70 days. Once the application has been registered, the RA will issue instructions to produce the UZI card. The CA generates and publishes the certificates. The UZI register informs the intended certificate holder that the UZI card can be delivered and where and how.

It is not possible to cancel an application after submission to the UZI register. Exceptions are possible, at the discretion of the TSP management. These include, for example, the situation in which the applicant discovers an irregularity in the application immediately after submission, and the application is not yet being processed by the UZI register.

4.2 **Method used in relation to certificate applications**

Before certificates can be applied for, the care provider must be registered as a subscriber with the UZI register. The following steps have to be completed:

- The intended subscriber submits a completely filled in and signed application form, including the documents indicated in paragraph 3.2. The intended subscriber can fill in forms on the website of the UZI register. The subscriber can find out about all the applicable conditions via the CPS.
- The UZI register carries out the checks referred to in paragraph 3.2 and informs the subscriber of the result.

A subscriber to the UZI register can apply for certificates. The following steps have to be completed:

- As regards applying for a Care Provider card [zorgverlenerpas] Article 3 Individual Healthcare Professions Act (*with the exception of the specialisms of paediatrician, dispensing GP and A&E doctor*), a named employee card [medewerkerpas op naam] and an unnamed employee card [medewerkerpas niet op naam], the card applicant logs in to the digital application facility on the website. The card applicant then chooses the desired card type and fills in the application form and submits it digitally.
- For the above-mentioned card types, the UZI register can issue a paper application form (PDF format) at the request of the card applicant.
- For the other UZI resources the card applicant submits a completed and signed application form, including the documents indicated in paragraph 3.2.3. The applicant can obtain forms via the website of the UZI register.
- The card applicant and the intended cardholder can find out about all the relevant conditions via the CPS.
- The UZI register carries out the checks referred to in paragraph 3.2 and informs the subscriber of the issue or rejection of the card application. If the card application is rejected, the reason for the rejection will be stated.

The UZI register archives the submitted documents so that they can be used as proof in the event of reconstruction.

For server certificates, the UZI register does not check any Certification Authority Authorization DNS details on behalf of any 'certificate pinning' by the subscriber.

4.3 **Turnaround time**

In the case of a digital application via the web application the turnaround time from the submission of the application up until the moment at which the UZI card is made available for delivery is no more than threeweeks. The maximum turnaround time required for the UZI register to process a complete and properly filled in paper application form is eight weeks. The UZI register may require more time during extremely busy periods.

4.4 **Issuing certificates**

The issue method differs for the various types of card. The methods used by the UZI register are described below per card type.

Care Provider card [zorgverlenerpas] and named employee card [medewerkerpas op naam]

The card for the Care Provider and the named employee is issued as soon as the intended certificate holder appears.

- The intended cardholder must appear in person at the address indicated by the card applicant.
- The intended cardholder submits a valid identification document showing his/her full first name(s) and birth name. Valid identification documents are those designated as such in Article 1 of the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). All first names must be written out in full on the submitted identification document. The UZI register is obliged to archive a copy of the document used to prove identity.
- The physical confirmation of the identity of the intended cardholder and the creation of the copy are carried out by Dynalogic courier company on the instruction of the UZI register. Dynalogic is fully certified to do this (in accordance with ETSI EN 319411-2). Dynalogic checks the validity and authenticity of the identity document submitted. On the basis of this document and the physical appearance of the intended cardholder, Dynalogic carries out the identity check and also checks whether the person is the person authorised to hand over the UZI card in question.
- In the event of a positive result for all checks, the intended cardholder signs the confirmation of receipt. Dynalogic checks the signature on the basis of the submitted identification document.
- After signing, the UZI card is handed over and the date and time of handing over are recorded. Both parties will receive proof of this.
- In the case of a negative result for one of the checks, the UZI card will not be issued.

Unnamed employee card [medewerkerpas niet op naam]

The unnamed employee card [medewerkerpas niet op naam] is issued on the basis of indirect appearance. The certificate holder is represented by a certificate manager of the subscriber that submitted the application.

- The intended cardholder/certificate manager must appear in person at the address indicated by the card applicant.
- The cardholder/certificate manager submits a valid identification document showing his/her full birth name. Valid identification documents are those designated as such in Article 1 of the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). All first names must be written out in full on the

submitted identification document. The UZI register is obliged to archive a copy of the document used to prove identity.

- The physical confirmation of the identity of the card applicant/certificate manager and the creation of the copy are carried out by Dynalogic courier company on the instruction of the UZI register. Dynalogic is fully certified to do this (in accordance with ETSI EN 319411-2). Dynalogic checks the validity and authenticity of the submitted identity document. On the basis of this document and the physical appearance of the card applicant/certificate manager, Dynalogic carries out the identity check and also checks whether the person is the person authorised to hand over the UZI card in question.
- In the case of a positive result for all checks, the card applicant/certificate manager signs the confirmation of receipt. Dynalogic checks the signature on the basis of the submitted identification document.
- After signing, the UZI card is handed over and the date and time of handing over are recorded. Both parties will receive proof of this.
- In the case of a negative result for one of the checks, the UZI card will not be issued.

Server certificate

A Server Certificate can be issued in two ways. Both are clarified below.

The Server Certificates are issued on the basis of a request signed by the card applicant/certificate manager with an electronic signature:

- The card applicant/certificate manager sends the UZI register an email containing the completed application form. The card applicant/certificate manager signs this email with a qualified non-repudiation certificate (as on the UZI card for care providers and named employees).
- The employee of the UZI register checks the submitted details and carries out validity checks on the electronic signature. After carrying out the checks and recording the details, instructions are issued to produce the server certificate.
- After the certificate has been produced, the UZI register sends the certificate by email to the applicant/certificate manager. The UZI register also sends a withdrawal code to the subscriber's correspondence address for the attention of the applicant/certificate manager.

The server certificates are issued after the applicant/certificate manager of the subscriber has appeared in person:

- The card applicant/certificate manager must appear in person at the address indicated. The card applicant/certificate manager submits a valid identification document as referred to in the Compulsory Identification Act [Wet op de Identificatieplicht] (WID). All first names must be written out in full on the submitted identification document. The UZI register is obliged to archive a copy of the document used to prove identity.
- The physical confirmation of the identity of the card applicant/certificate manager and the creation of the copy are carried out by Dynalogic courier company on the instruction of the UZI register. Dynalogic is fully certified to do this (in accordance with ETSI EN 319411-2).
- The applicant/certificate manager signs the proof of identification. Both parties receive a signed copy of this.
- After the signed proof of identification has been processed by the UZI register, instructions will be given to produce the server certificate.
- After the certificate has been produced, the UZI register sends the certificate by email to the card applicant/certificate manager. The UZI register also sends a withdrawal code to the subscriber's correspondence address for the attention of the applicant.

4.5 **Accepting certificates**

The conditions for the use of certificates from the UZI register are published in this CPS.

By signing the confirmation of receipt, the certificate holder confirms receipt of the card to the UZI register. The UZI register records the time of issuing in accordance with the confirmation of receipt. By taking receipt of the card, the certificate holder indicates that he/she is conversant with, and agrees to, the rights and obligations as referred to in the CPS and agrees with the content of the certificate.

The UZI register asks the certificate manager of a server certificate to confirm receipt of the certificate by email. By confirming receipt of the certificate, the certificate manager indicates that he/she is conversant with, and agrees to, the rights and obligations as referred to in the CPS and agrees with the content of the certificate. If the UZI register does not receive the confirmation from the certificate manager, the UZI register will send a reminder to the certificate manager by email. If the UZI register does not receive a confirmation of receipt, the server certificate will be withdrawn after 8 weeks. The costs of any new server certificate will be for the subscriber's account.

The certificates are published in the directory service immediately after the certificate has been signed by the CA during the production process.

4.6 **Key pair and certificate use**

4.6.1 *Obligations of the subscriber and certificate holder*

- The subscriber guarantees that all submitted details are correct and complete. This concerns the details relating to the subscriber registration, the certificate application and other details.
- The subscriber guarantees explicitly that the subscriber's certificate holders will use the certificates applied for within the field of application as described in chapter 1.4 of the CPS and that the certificate holders will use the right certificate for the right purpose. The subscriber and the certificate holder are obliged to stop using the certificates and the corresponding private keys if instructed to do so by the UZI register. The UZI register can issue such an instruction in the event that a CA key is compromised. The subscriber and the certificate holder are obliged to inform the UZI register immediately and then withdraw the UZI card if an irregularity occurs as indicated in paragraph 4.9.1. This applies both to the circumstances observed or suspected by the subscriber, and the circumstances which the certificate holders within the organisation report to the subscriber themselves. If applicable the certificate holder must submit the withdrawal code to the subscriber at the latter's explicit request. The subscriber and the certificate holder are obliged to take suitable measures to prevent unauthorised use of the private keys. This means, as a minimum, that the UZI cards are protected against damage, loss and/or theft, are not loaned out to third parties and are generally protected in the same way as valuable personal property such as credit cards or passports. In addition, the subscriber will ensure that the certificate holders within the organisation always keep the PIN, PUK code and the withdrawal code separately from the UZI card.
- The subscriber confirms that the UZI register is entitled to withdraw the UZI resources if the subscriber violates the applicable conditions or if the CIBG establishes that the certificate is being used in conjunction with criminal activities, for example phishing attacks, fraud, or the distribution of malware.

- The subscriber and applicant of UZI resources confirms that the UZI register is entitled to issue personal data, such as name, address, email and telephone number to X-pact B.V. and Dynalogic.

Obligations in relation to server certificates

The following additional obligations apply if the subscriber applies for server certificates:

- The subscriber must confirm directly to the UZI register that the server certificates have been received and that their content is correct.
- The subscriber is obliged to save the keys which belong to server certificates in a Secure User Device (SUD). The subscriber must secure the SUD in which the private keys are saved in a manner suitable for securing critical company resources. The subscriber can deviate from this if compensatory measures are taken in the field of physical access security, logical access security, logging, audit and functional separation in the environment of the system that contains the keys of the server certificates. The keys can also be protected using software. The compensating measures must be of obsessive quality that it is practically impossible to steal or copy the keys without being noticed⁹.
- The subscriber must ensure that the key material of the certificate holders within the subscriber's organisation are exclusively generated in a safe resource that complies with EAL 4+ or equivalent security criteria.
- The subscriber is obliged to keep the activation details, which are used to obtain access to the private key(s) of the certificate holders within the organisation, separately from the SUD.
- If the fully qualified domain name (FQDN) as referred to in a server certificate is identifiable and addressable via the internet, the subscriber guarantees that the server certificate is only placed on a server that is at least accessible using one of the FQDNs in this server certificate.

The above obligations for the subscriber or certificate holder will be recorded and, insofar as they can be designated as too unspecific, will be developed into UZI register guidelines and/or more detailed regulations. Insofar as the provisions relate to UZI cards for which a subscriber has applied on behalf of the certificate holder within the subscriber's organisation, the rights and obligations between the subscriber and the certificate holder will have to be mutually recorded in writing.

4.6.2 *Obligations of the trusting party*

The obligations of the trusting party are applicable when trusting a certificate issued by the UZI register. The trusting party is obliged:

- to assess on a case-by-case basis whether it is justified to trust the certificate;
- to check the validity and authenticity of the hierarchy within which the certificate is issued, meaning the validity of certificates of the more superior CAs as well as of the master certificate of the State of the Netherlands;
- to verify the validity of the certificate by means of the most recently published Certificates Revocation List (CRL) or via the Online Certificate Status Protocol (OCSP);
- always to use the most recently published Certificates Revocation List (CRL) in the event of calamities and/or incidents whereby the Online Certificate Status Protocol (OCSP) is inaccessible;
- to take cognizance of all obligations regarding the use of the certificate as referred to in this CPS and the trusting party conditions, including explicitly all restrictions on the certificate's use;
- to take all other precautionary measures which can reasonably be taken by trusting parties;

⁹ The UZI register has the right to check the compensating measures

- to be aware that previous checks only authenticated the integrity of the details and the identity of the certificate holder and, therefore, did not constitute a judgement on the content of the details.

4.7 **Renewing certificates**

Certificate holders' keys will not be reused after the end of the period of validity or after the corresponding certificates have been withdrawn. Renewing certificates will also mean renewal of the key pair.

4.8 **Re-keying certificates**

If, after the (threatened) expiry of the period of validity or after an application for withdrawal, a new UZI card is applied for, new key pairs and new certificates will be generated. The procedures, checks and method of working used in relation to the application, production and issuing are the same as the procedures, checks and method of working relating to the first issue.

4.9 **Amending certificates**

If certificates have to be modified, the certificates will have to be withdrawn and new certificates with amended details applied for.

4.10 **Withdrawal and suspension of certificates**

Requests to withdraw certificates can be submitted as described below. The UZI register ensures that the date and time of withdrawal of certificates can be determined precisely. In the event of any doubt the time determined by the UZI register will apply as the moment of withdrawal. If a certificate is withdrawn, it cannot be declared valid again.

The UZI register does not permit the (temporary) suspension of certificates.

4.10.1 *Circumstances which lead to withdrawal*

The certificate holder or the subscriber are obliged to submit a request for withdrawal to the UZI register and stop using the certificate, including the corresponding keys, in the following circumstances:

- Loss, theft or failure of the bearer of the certificate (UZI card).
- Observed or suspected misuse or compromise.
- Definitive blocking of the smart card (if an incorrect PUK code has been entered three times).
- Termination of the subscriber's existence.
- Termination of the relationship between the subscriber and certificate holder.
- Inaccuracies in, or changes to, the details shown on the certificates.
- Failure to fulfil the assessment criteria as described in Annex 2.
- System/server no longer in use at the care institution.
- Permission to use the domain name is withdrawn.

Withdrawal on the initiative of the UZI register will take place in the following circumstances:

- The certificates of a subscriber or certificate holder can be withdrawn if the subscriber or certificate holder does not fulfil the obligations in the CPS.
- The certificates of a subscriber are withdrawn if the subscriber in question no longer fulfils the assessment criteria in Annex 2.
- A care provider card [zorgverlenerpas] is withdrawn if the holder is no longer permitted to use the professional title, qualification title or the specialism included in the certificate. In this context the UZI register may apply a transition period of one month for 'dying out' specialisms. A further clarification is included in the Annex 2.
- A server certificate is withdrawn if the owner of the domain name reports to the UZI register that the permission to use the domain name has been withdrawn.

- A server certificate is withdrawn if the owner does not confirm correct receipt after repeated requests by the UZI register.
- A server certificate is withdrawn if it is not paid for by the set deadline¹⁰.
- The certificates of an UZI card are withdrawn if the card has not been issued within the set deadline of 6 weeks.
- The certificates of an UZI card are withdrawn if it has not been paid for by the set deadline.
- The certificates of a subscriber or certificate holder are withdrawn if the UZI register observes inaccuracies in the details included in the certificate, for example in the event of a name change.
- The certificates of a subscriber or certificate holder are withdrawn if the private key belonging to the certificates, or the key of the TSP or PKI government has been compromised.
- The certificates of a subscriber or certificate holder are withdrawn if the technical content of the certificate implies an irresponsible risk for subscribers, trusting parties and third parties (for example browser parties).

The reasons for each withdrawal initiated by the UZI register are documented and archived.

4.10.2 *Who is allowed to submit a withdrawal request?*

A request to withdraw certificates may be submitted by:

- the certificate holder itself or the certificate manager;
- the legal representative or an authorised card applicant of the subscriber;
- the curator that acts if the subscriber or certificate holder itself is no longer authorised to perform legal actions with intended legal consequence;
- the UZI register.

A trusting party cannot make a withdrawal request but can report the suspicion of a circumstance which may cause the withdrawal of a certificate. The UZI register will investigate such a report and will, if necessary, withdraw the certificate.

4.10.3 *Procedure for a withdrawal request*

Requests to withdraw certificates can be made by an appropriately authorised person of the subscriber, or by the certificate holder electronically, by telephone, by email, or by post. It is explicitly pointed out that, in the event that the withdrawal serves an urgent interest, the withdrawal should take place electronically via the website of the UZI register (www.zorgcsp.nl). This form of withdrawal is available twenty-four hours a day, seven days a week.

In the case of an **electronic** withdrawal the applicant fills in the smart card number of the card to be withdrawn and the corresponding withdrawal code on the website of the UZI register. If the withdrawal code and smart card number are correct, the card will be withdrawn. The applicant will be notified on the website. If the withdrawal code and smart card number are incorrect, notification will be given that the withdrawal will not be carried out. The UZI register has taken measures to make it impossible to make unlimited (incorrect) withdrawal requests.

In the case of a **telephone**¹¹ withdrawal, no documents are submitted. The party submitting the withdrawal request must answer a number of predetermined questions. Based on these questions, the UZI register must obtain sufficient certainty about the identity of the withdrawal applicant and the card for which the withdrawal application is being submitted. After establishing the identity of the party submitting the withdrawal request and of the card, the UZI register checks whether the party submitting is authorised to make the withdrawal application. After

¹⁰ As stated in section 9.1.7, the deadline is set at six weeks after receipt of the reminder.

¹¹ As stated in section 3.4 it is not possible to withdraw server certificates by telephone.

performing the checks, the UZI register will withdraw the certificates. A confirmation that the withdrawal has been taken care of, or a notification that the withdrawal request has been rejected will be sent in writing to the certificate holder.

In the case of withdrawal **by not-electronically signed email, or by post** the following types of proof must be submitted:

- A withdrawal request signed by an appropriately authorised person, containing:
 - the name of the subscriber;
 - the name of the person making the withdrawal request;
 - the reference to the card or cards to which the request applies.

The UZI register checks whether the signature on the withdrawal request corresponds to the archived copy of an identification document as referred to in the WID.

- If the signature corresponds, the UZI register will carry out the withdrawal request.
- If the signature does not correspond, the UZI register will telephone the subscriber using the contact details registered with the UZI register. The applicant will then be requested to place the signature in accordance with the WID archived with the UZI register. If the signature on the WID is changed, the applicant will be asked to send a valid copy of the WID to the UZI register. After another check of the signature, the UZI register will carry out the withdrawal request. The UZI register archives the new copy of the WID.
- If no identification document is known to the UZI-register, it must be enclosed with the application.

The following requirement applies in the case of withdrawal by **electronically signed email**:

- The email is signed by the person authorised to withdraw with a qualified non-repudiation certificate (as on the UZI card for care providers and named employees or another PKI government card).

The UZI register checks whether the party submitting the withdrawal request is authorised to submit the application. The UZI register also checks the identity of the party submitting the withdrawal request on the basis of the submitted identity document or a previously archived copy of the identity document. After carrying out the checks the UZI register withdraws the certificates and then places them on the Certificate Revocation List (CRL). A confirmation that the withdrawal has been taken care of, or a notification that the withdrawal request has been rejected will be sent in writing to the certificate holder.

4.10.4 *Postponement of withdrawal request*

The certificate holder or the subscriber are obliged to submit a withdrawal request immediately and without delay to the UZI register in situations referred to in paragraph 4.9.1.

4.10.5 *Time required to process a withdrawal request*

Electronic requests are dealt with immediately online. The UZI register advises parties to use the electronic withdrawal facilities on the website of the UZI register. These facilities are available twenty-four hours a day and seven days per week. In the event of electronic and telephone withdrawal, the maximum delay between receiving a request and changing the revocation status information (CRL) is four hours.

4.10.6 *Checking requirements when consulting certificate status information*
Trusting parties are obliged to check the current status (withdrawn/not withdrawn) of a certificate by consulting the most recently published CRL or via the OCSP facility. Trusting parties are also obliged to check the CRL's electronic signature, including the corresponding certification path.

4.10.7 *CRL issue frequency*
The CRL issue frequency is every hour. In the event of system defects, service activities or other factors outside the control of the UZI register, the UZI register also ensures that withdrawal requests which are submitted via the registration website are carried out within four hours after submission. With this in mind a fallback scenario has been designed which is regularly tested.

If the processes which rely on the UZI certificates require the certificate status to be more up-to-date, we urgently advise using the facility for an online check of the withdrawal status (see paragraph 4.9.9).

Withdrawn certificates will remain on the CRL as long as their original date of validity has not expired.

4.10.8 *Time between generation and publication*
The CRL is published immediately after generation.

4.10.9 *Online withdrawal/status check*
In addition to the publication of CRLs, the UZI register also offers certificate status information via the Online Certificate Status Protocol (OCSP) facility. The OCSP is structured in accordance with IETF RFC 2560.

OCSP validation is an online validation method whereby the UZI register sends the trusting party an electronically signed message (OCSP response) after the trusting party has sent a specific request for status information (OCSP request) to the OCSP service (OCSP responder) of the UZI register. The OCSP response will include the requested status of the certificate in question. The status can be expressed as one of the following values: good, withdrawn or unknown. If an OCSP response is not forthcoming for whatever reason, no conclusion can be drawn in relation to the certificate's status. The URL of the OCSP responder with which the withdrawal status of a certificate can be validated is stated in the AuthorityInfoAccess.uniformResourceIndicator attribute of the certificate.

An OCSP response is always sent and signed by the OCSP responder. A trusting party must verify the signature under the OCSP response with the system certificate which accompanies the OCSP response. This system certificate is issued by the same Certification Authority (CA) as the CA that has issued the certificate of which the status is being requested.

The information issued via the OCSP responder may be more up-to-date than the information communicated via the CRL. This is only the case if a withdrawal has taken place and the regular renewal of the CRL has not yet occurred.

4.10.10 *Requirements applicable to online check withdrawal status*
This service is freely available to all trusting parties who want to validate the withdrawal status of a certificate issued by the UZI register.

4.11 **Certificate status service**
The UZI register issues a new CRL every hour. OCSP can be used to request the current status information.

In the event of a disruption, the UZI register will ensure that the services become available again within four hours of the disruption being discovered. This only applies to the CRL. In the event of disruptions the CRL must always be used and not the OCSP.

4.12 **Termination of subscriber relationship**

Subscriber registration has no end date. If the relationship between the subscriber and the UZI register is terminated, the subscriber will be deleted from the UZI register.

With a request to delete the registration the subscriber indicates that he no longer wishes to use the services of the UZI register. The subscriber is then removed from the UZI register. A request for deletion of a subscriber's registration (and therefore withdrawal of the certificates issued to the subscriber) must be submitted in writing to the UZI register. The UZI register authenticates the applicant in accordance with the authentication procedure which applies to the registration applications.

4.12.1 *Transition period for a care provider subscriber [zorgverlener abonnee]*

A transition period of three months will come into effect in the event of the death, unconditional suspension or deletion from the BIG register of a care provider [zorgverlener] who is also a subscriber. This transition period implies the following:

- all named cards (care provider card [zorgverlenerpas] and named employee cards [medewerkerpassen op naam]) will be withdrawn in accordance with the applicable rules. This also applies to named cards which have been applied for and/or issued just before or during the transition period.
- Unnamed employee cards [medewerkerpassen niet op naam] and Server Certificates will continue to be active.
- the subscriber registration will remain active.
- no new products may be applied for.

After the transition period, unnamed employee cards [medewerkerpassen niet op naam] and Server Certificates will be withdrawn and the subscriber registration deleted. If under the subscriber registration none or only UZI passes by name (the healthcare provider card and employee pass by name) are active, the subscriber registration is immediately withdrawn. The UZI register does not provide any refund for the remaining period of validity of withdrawn UZI certificates.

4.12.2 *Transition period for an organisation subscriber*

A transition period of three months will come into effect in the event of a name change or termination of an institution that is a subscriber. This transition period implies the following:

- All personalised cards (care provider cards [zorgverlenerpassen] and named employee cards [medewerkerpassen op naam]), and also unnamed employee cards [medewerkerpassen niet op naam] and Server Certificates will remain active.
- the subscriber registration will remain active.
- no new products may be applied for.

After the transition period, all cards and Server Certificates will be withdrawn and the subscriber registration will be deleted. The UZI register does not provide any refund for the remaining period of validity of withdrawn UZI certificates.

4.13 **Key escrow and recovery**

The UZI register does not support key escrow and key recovery.

5 Physical, procedural and personnel security

5.1 **Physical security**

The services of the UZI register are provided from various locations. The registration work is carried out at the CIBG's premises. The personalisation work takes place at the premises of the supplier of the personalisation services. The certification takes place at the computing centre of the CA services supplier. The work in relation to the mobile identification and issuance takes place on location.

The necessary physical security measures have been taken for all locations. These measures have been taken on the basis of risk analyses and security plans. The measures taken guarantee a secure and properly protected registration, personalisation, certification, issuance and withdrawal process that prevents unauthorised access to, or violation of, these processes or the locations where they are being carried out. For example, the work relating to the certification takes place in a high security environment at a computing centre. This environment complies with legal regulations imposed by the government. Numerous measures have been taken at all locations to prevent emergency situations and to limit any emergency-related damage. Examples of these measures are lightning conductors, power supplies, structural measures and access procedures.

The UZI register has separate test, acceptance and production systems. The transfer of software from one environment to the other takes place in a controlled fashion via a change management procedure. This change management procedure covers, among other things, monitoring and recording versions, changes and emergency repairs to all operational software. Before software can be put into production, the UZI register carries out tests on the basis of predetermined test plans.

The integrity of TSP systems and information is protected against viruses, malware and unauthorised software and other possible sources that could lead to a disruption of the services, by means of a combination of suitable physical, logical and organisational measures. These measures are preventive, repressive and corrective in nature. Examples of these measures are logging, firewalls, intrusion detection and redundancy of systems, system elements and network components.

All used system storage media are treated safely in order to protect them from damage, theft and unauthorised access. Storage media are carefully removed when they are no longer needed.

Usage capacity is monitored and predictions are made in order to ensure sufficient processing capability and storage capacity in the future.

The UZI register takes prompt and coordinated action to respond quickly to incidents and to limit the effect of any security violation. All relevant incidents are immediately reported to the organisations stipulated in the law and regulations whenever they occur. Incidents relating to a category specified in advance by the Policy Authority of the PKI for the government are reported to said Policy Authority.

5.2 **Procedural security**

5.2.1 *Confidentiality functions*

Personnel with access to cryptographic material or people who also operate in a confidential role have a position that is classified as confidential. Hereby, all staff in confidential positions have been screened for the presence of conflicting interests

that could influence the impartiality of the activities of the UZI-register. This by means of a 'Declaration on behavior' in accordance with the Judicial Data Act.

5.2.2 *Number of people required per task*

The services of the UZI register are organised in such a way that it is impossible for a single person to compromise the reliability of the services. Registration, personalisation, certification and issuance are organisationally separated tasks. The 'four eyes principle' and/or functional separation is applied to registration tasks.

5.2.3 *Identification and authentication in relation to TSP functions*

No specific provisions.

5.2.4 *Functional separation*

The UZI register maintains functional separation of the implementation, decision-making and verification tasks. In addition, there is functional separation between system management and operation of the TSP systems, as well as between Security Officer(s), System auditor(s), system administrator(s) and TSP operator(s).

5.3 **Personnel security**

5.3.1 *Job requirements*

All employees involved in the services of the UZI register have extensive knowledge and experience in the field of certification services. All employees responsible for checking identification documents have the necessary knowledge to check the authenticity of the documents.

Security tasks and responsibilities, including confidential positions, are documented in the appropriate job descriptions. These have been drawn up on the basis of the separation of tasks and authorities and a specification of the sensitivity of the position.

Any employee authorisation is carried out on the basis of a 'need-to-know' principle. Procedures have been drawn up and implemented for all confidential and administrative tasks which affect the provision of certification services.

5.3.2 *Background check*

Background checks are carried out on all employees involved in personalisation and certification work. The UZI register requests all employees involved in registration and issuance to provide a certificate of good conduct.

All employees who carry out tasks for the UZI register are able to take part in training and awareness activities which are relevant for the execution of their task.

5.3.3 *Training requirements*

The UZI register deploys sufficient personnel who have enough specialist knowledge, experience and qualifications which are necessary for the TSP services. Managers are fully aware of the nature of the certification services and corresponding quality level.

5.3.4 *Training and education*

Specific training is obligatory for all personnel. An annually updated training plan is used to monitor training.

5.3.5 *Frequency of job circulation and career planning*

No specific provisions.

5.3.6 *Sanctions for unauthorised actions*

Any employee who performs an unauthorised action is immediately denied access to all systems. The TSP management decides on the duration and the conditions of the access denial and any additional actions and sanctions to be taken.

5.3.7 *Hiring personnel*

The aforementioned requirements apply to hired personnel. Personnel are hired on the basis of master contracts.

5.3.8 *Making documentation available to employees*

UZI register employees will be demonstrably provided with the documentation which is necessary for the proper fulfilment of the task assigned to them.

5.4 **Security audit procedures**

5.4.1 *Recording events*

The UZI register maintains overviews of:

- Creating accounts.
- Installation of new software or software updates.
- Date and time and other descriptive information concerning backups.
- Date and time of all hardware changes.
- Date and time of audit log dumps.
- Shutting down and (re)starting of systems.
- All registration activities relating to the application and withdrawal of certificates and any changes to registration details.

The UZI register manually or automatically monitors the following events:

- Life cycle events relating to the CA key, including:
 - generating keys, backup, storage, recovery, archiving and destruction;
 - life cycle events relating to the cryptographic equipment.
- Life cycle events relating to the management of certificates, including:
 - certificate applications, reissue and withdrawal;
 - successful or unsuccessful processing of applications;
 - generating and issuing certificates and CRLs.
- Security incidents, including:
 - successful and unsuccessful attempts to gain access to the system;
 - PKI and security activities undertaken by personnel;
 - reading, writing or deleting security-sensitive files or records;
 - changes to the security profile;
 - system crashes, hardware failure, and other irregularities.

The parts of the loggings contain the following elements:

- Date and time.
- Serial number.
- Author identity.
- Type.

5.4.2 *Loggings interval*

Loggings are investigated on a random basis and as part of internal quality processes.

5.4.3 *Logging retention periods*

The consolidated loggings are kept for a period of at least seven years.

5.4.4 *Security of audit logs*

Events which are included electronically and manually in audit log files are protected against unauthorised perusal, change, deletion or other undesirable changes by means of physical and logical access control resources.

5.4.5 *Saving audit logs*

All audit logs are saved internally on the systems. In addition, logging is archived off-site. The most important log details are also archived each quarter at the CIBG.

5.4.6 *Notification of logging event*

The UZI register carries out a more detailed investigation if the logging reveals malicious activities.

5.4.7 *Vulnerability analysis*

At least once a year the UZI register carries out a risk analysis, which includes a vulnerability analysis. On the basis of the outcomes of these analyses the UZI register implements suitable measures as necessary.

5.5 **Archiving documents**

5.5.1 *Events*

The UZI register archives all relevant information relating to events, details, files and forms. At least the following is recorded:

- Applications for registration and applications for certification (application forms).
- Documents submitted during the application procedure (including a copy of the identity document, excerpt from the Trade Register of the Chamber of Commerce, document of establishment and original, certified copy of a diploma).
- Storage location of copies of applications and identity documents.

- Information which is relevant for the identification of a subscriber or certificate holder.
- Information concerning the checks carried out.
- Correspondence relating to registration application or card application.
- Proof of date and time of issue of the certificates.
- Information concerning withdrawal requests of certificates or deletion from the registration.
- Complaints and correspondence received in relation to complaints.
- Information requests received in writing.

5.5.2 *Archive retention period*

All archived events are stored in accordance with chapter 10.4 of the selection list¹² throughout the period of validity of the qualified certificate and for a period of seven years after the date on which the validity of the qualified certificate expires.

Alle archived events with regard to the subscription registration are stored for a period seven years from the date on which the subscription registration is deleted.

5.5.3 *Archive security*

The UZI register ensures the integrity and accessibility of the archived details. The UZI register arranges careful and secure storage and archiving.

5.5.4 *Archiving backup procedures*

Incremental backups of the registration system and of digital documents are created on a daily basis. Full backups are carried out on a weekly basis and are also archived at an external location. No backup is made of the paper archive.

5.5.5 *Conditions and time indication of recorded events*

All information on paper is accompanied by a date and/or a date of receipt.

Electronically stored information is accompanied by an indication of the date and time from the processing system used to perform the action. The processing systems are synchronised in accordance with the Network Time Protocol using a reliable time source based on the atomic clock in Frankfurt.

The date and time a card is issued is recorded upon issue and signed by both parties.

5.5.6 *Archiving system*

Electronic archiving takes place at physically separated locations (online details synchronisation). Paper dossiers are stored at a single physical location.

5.5.7 *The acquisition and verification of archived information*

No specific provisions.

5.6 **Renewing keys after CA re-key**

If the CA starts using a new key pair, the new CA certificates will be added to the UZI card. In addition, the CA certificates will be made available in the directory and on the website.

5.7 **Violations and continuity**

The UZI register has drawn up a calamities plan to minimise the consequences of any calamity that might occur. The Business Continuity Plan describes procedures and methods relating to fallback services.

¹² Generieke Selectielijst voor de archiefbescheiden van het CIBG Dienst voor registers vanaf 1995- vallend onder het zorgdragerschap van het Ministerie van Volksgezondheid, Welzijn en Sport en Stichting Donorgegevens Kunstmatige Bevruchting vanaf 1995

In the event of any compromising of keys, or in the event of calamities, the UZI register may instigate an investigation, but this is not mandatory. In the event of a compromise of (one of) the private key(s) of the UZI register, the UZI register will undertake the following actions as a minimum:

- The UZI register will inform trusting parties, subscribers and certificate holders as soon as possible by publishing the information on www.uziregister.nl
- The UZI register will inform the subscribers in question via an email sent to the email address provided during registration.
- If necessary, the UZI register will immediately withdraw the certificates in question and publish them on the applicable CRL.
- The UZI register will immediately inform the PKI Policy Authority for the government, Radiocommunications Agency Netherlands 9 (AT), certifying authority and optionally Dutch Data Protection Authority (AP) in the event of a calamity.

In the event of a compromise of one of the algorithms used by the UZI register, the UZI register will consult with the PKI Policy Authority for the government. In principle the UZI register will follow the Policy Authority's guidelines. Before proceeding with large-scale revocation as a consequence of a compromise of an algorithm, coordination will take place with the Ministry of Health, Welfare and Sport.

5.8

TSP termination

In the event that the UZI register terminates the certification services, this will be done in accordance with a controlled process described in more detail in the UZI register CA Termination Plan. This termination can be voluntary or involuntary in nature and this will determine the activities to be carried out.

Elements of the plan in the event of termination include:

- Communication with subscribers, trusting parties and other TSPs with which relationships exist or other forms of regular cooperation;
- Decommissioning of the relevant private CA keys;
- The publication service must continue to be active at least six months after termination;
- The Consortium will be instructed to perform the LunaCA Zeroization and Destruction Key Ceremony on a date yet to be determined. The Consortium will submit an official document to the CIBG as proof of the destruction.
- Doc-Direkt will be instructed to destroy the dossiers. In accordance with Doc-Direkt PDC (see Central Government Portal).

6 Technical security

6.1 **Generating and installing key pairs**

When generating key pairs, the UZI register will use secure resources and reliable systems. The UZI register ensures that the reliability and the security of the systems fulfils internationally recognised standards and national legislation.

The keys are generated using equipment which complies with Common Criteria EAL 4+ or higher in accordance with ISO 15408 ('Cryptographic module for TSP Signing Operations').

6.1.1 *Generating key pairs*

When generating key pairs, the UZI register uses reliable procedures in a secure environment which complies with objective and internationally recognised standards.

The keys of the CAs of the UZI register were generated in a FIPS 140-2 level 3 certified Hardware Security Module (HSM). The keys of the CAs are 4096 bits RSA. The keys of the (intended) certificate holders are generated in a FIPS 140-2 level 3 certified HSM. This involves the use of the signature algorithm. The keys are injected via a secured communications channel in the smart card (Secure Signature Creating Device - SSCD). Transfer of private keys and SSCD to the user

The UZI card (smart card with keys and certificates) is:

- Handed over in person to the certificate holder in the case of a 'care provider' [zorgverlener] or an 'named employee' [medewerker op naam]. The PIN, PUK code and withdrawal code are sent separately to the intended certificate holder in the form of a PIN letter.
- Handed over in person to the applicant/certificate manager on behalf of the subscriber in the case of an 'unnamed employee' [medewerker niet op naam]. The PIN, PUK code and withdrawal code are sent to the applicant separately in the form of a PIN letters.

The private key is not transferred in the case of server certificates. The certificate and the certified public key are sent to an email address provided during application once the applicant/certificate manager on behalf of the subscriber has appeared in person.

6.1.2 *Transfer of public keys to the CA*

The key pairs for UZI cards are generated by the personalisator. The public keys are sent via secured connections in signed messages to the CA for signing.

In the case of server certificates, the key pair is generated by the subscriber/applicant. In such instances the public key is also sent to the CA in a signed message via a secured connection.

6.1.3 *Transfer of the public key from the TSP to end users*

The public key of the UZI register CA's, is signed by the PKI Government Domain CA, as a result of which the integrity and origin of the public key is safeguarded. The public keys of the underlying CAs are signed by the TSP CA. These public keys are made available by the UZI register to trusting parties, in the form of CA certificates, via www.zorgcsp.nl

6.1.4 *Key lengths*

The key length of a Certificate is at least 2048 bits RSA. The key length of a CA-Certificate is 4096 bits RSA.

The UZI register generates keys in smart cards or HSMs which comply with the FIPS 140-2 level 3 standard.

6.1.5 *Intended key use (as referred to in X.509 v3)*

The certificates, including the corresponding key pairs, are exclusively intended for the purposes described in this CPS. The purposes for which a key may be used are included in the certificate (field: KeyUsage).

6.2 **Private key protection**

6.2.1 *Standards for cryptographic modules*

For operational use, the cryptographic details are stored in a Hardware Security Module (HSM). The HSM fulfils the requirements described in FIPS 140-2 level 3 or higher.

6.2.2 *Functional separation management private keys*

The private keys of the CAs of the UZI register cannot be read as a single entity.

A backup is made of the private keys of the CAs of the UZI register. The backup is saved in cryptographic modules in several encrypted parts. The backup can only be used if several parties are present with their part of the key.

6.2.3 *Escrow of private keys of certificate holders*

Since 1 October 2013 the UZI register has not supported key escrow and key recovery. This termination applies to all cards that were issued before that date.

6.2.4 *Backup of the private keys of certificate holders*

The UZI register does not make a backup of the private keys of certificate holders.

6.2.5 *Archiving private keys of end users and TSP*

Private keys are never archived. Technical and organisational measures have been taken to ensure that it is impossible to archive these keys.

6.2.6 *Access to private keys in cryptographic module*

In the case of private keys saved in a cryptographic hardware module, access security is used which ensures that the keys cannot be used outside the module.

6.2.7 *Saving private keys*

Private keys are saved securely throughout the entire lifespan.

6.2.8 *Activating private keys*

The private keys of the CAs of the UZI register can only be activated by means of a key ceremony and in the presence of the necessary officials. The UZI register ensures a careful procedure in a secured environment.

An activation code is issued for the activation of end users' private keys (see paragraph 6.4).

6.2.9 *Method for the deactivating private keys*

In certain circumstances, to be determined by the UZI register, the private keys will be deactivated with due regard for the applicable due diligence procedures.

If an UZI card that has been lost by the certificate holder is returned to the UZI register, the UZI register will destroy the card and the associated private keys. Any still active certificates belonging to the card will be withdrawn.

6.2.10 *Method for destroying private keys*

The private keys with which certificates can be signed, cannot be used after the end of their life cycle. The UZI register arranges adequate destruction to ensure that it is impossible to reproduce the destroyed keys from the remnants.

6.2.11 *Safe resources for generating electronic signatures*

The Hardware Security Modules used within the UZI register systems have been certified in accordance with FIPS 140-2 level 3. As a consequence, cryptographic material cannot be changed during storage, use and transport without this being noticed. The supplier will supply the HSMS in tamper-evident bags so that any form of interference can be detected. Each consignment is checked immediately upon arrival, on the basis of the corresponding out-of-band list.

The smart card (combination of microprocessor and operating system) is independently certified on the basis of the following standards:

- Common Criteria EAL4+(Common Criteria for Security Evaluation (Version 2.1, ISO/IEC 15408: 1999), Evaluation Assurance Level 4+ (EAL4+), <http://www.commoncriteriaportal.org/>)
- FIPS 140-2 level 3 (Federal Information Processing Standards Publication, Security Requirements for Cryptographic Modules, National Institute of Standards and Technology, <http://csrc.nist.gov>)

The smart card also complies with:

- ISO 7816 standaard (Information technology - Identification cards - Integrated circuit(s) cards with contacts)
- PKCS#15 (Cryptographic Token Information Syntax Standard (June 6th, 2000) , RSA Laboratories, www.rsasecurity.com.)

6.3 **Other aspects of key pair management**

All aspects of the key management are executed by the UZI register through the application of careful procedures which correspond to the intended purpose.

6.3.1 *Archiving public keys*

Public keys are archived by the UZI register for at least seven years after the end of the original period of validity of a certificate, in a physically secure environment.

6.3.2 *Period of use of public/private key*

Table 6 gives an overview of the validity period of the SHA-2 generation (G21).

Certificaat	Geldig tot
Root Certificate	March 23, 2020
Domain Certificate	March 23, 2020
TSP Certificate	March 22, 2020

Table 6 validity CA Certificaten SHA-2 generation (G21)

Table 7 gives an overview of the validity period of the Public G3 / Private G1 hiërarchie.

Certificaat	Geldig tot
Root Certificate	November 14, 2028
Domain certificate	November 13, 2028
TSP certificate	November 12, 2028

Table 7 validity CA Certificaten Public G3/Private G1 hiërarchie

For the certificates on the UZI card, including the associated key pairs, a maximum period of three years from the production date is used. For certificates in the server certificates, a maximum period of three years after the production date is used. The production date is the date on which the Certification Authority (CA) produced and published the certificate.

6.4 **Activation details**

6.4.1 *Generation and installation of activation details*

The use of activation details is linked to the use of a smart card. These activation details are prepared and distributed in a safe manner. Distribution always takes place separately from the UZI card. The PIN and the PUK code consist, in all instances, of a minimum of six numbers. The PIN and the PUK code are only made available to the certificate holder and are only issued once.

6.4.2 *Protection of activation details*

Activation details are distributed in such a way that it is impossible for third parties to access the details without being detected. After transfer of the activation details, the certificate holder will be responsible for protecting these details.

If the cardholder did not receive the first PIN letter, it can be reprinted and sent again by the UZI register. The PIN letter can only be reprinted if the UZI card has already been issued. Reprinting of the PIN letter is only possible for a period of 6 weeks after the card has been issued. Given that the initial activation details may have been issued to a different person, the cardholder must change the PIN and PUK code immediately after receipt.

After the period of 6 weeks, the UZI register will assume that the activation details have been correctly received. The cardholder is responsible for monitoring this deadline. The UZI register will charge the normal rate for a new card with new codes. If the subscriber is to blame for the PIN letter being sent to the wrong address, for example because the UZI register was not informed in time of a change of address or if the cardholder/subscriber lost the PIN letter, the subscriber will receive an invoice for the costs of resending the PIN letter.

In the event of a reprint the UZI register will, for security reasons, generate a new withdrawal code.

The option of reprinting must not be used if the cardholder received the PIN letter but then lost it. For security reasons a new card must then be applied for. Normal charges apply for a new card with new codes.

The UZI card will be blocked after an incorrect PIN has been entered for a third time. Unblocking can be done using a PUK code. If the PUK code is also incorrectly entered three times, the smart card will be blocked for good and therefore rendered unusable. The PIN and the PUK code will be communicated to the certificate holder

in a PIN letter. In the event that the codes are lost, it will no longer be possible to use or unblock the card. Normal charges apply for a new card with new codes.

6.5 **TSP systems access security**

6.5.1 *General system security measures*

The UZI register will take adequate measures to safeguard availability, integrity and exclusivity. Computer systems will be secured in a suitable manner against unauthorised access and other threats. The UZI register has an information security plan which details the measures in question. The measures will be developed into service level agreements with suppliers. Management activities will be logged.

6.5.2 *Specific system security measures*

The registration systems of the UZI register include suitable checks and security measures. Partly for this reason it is impossible for a card application to be processed by a single employee of the UZI register.

6.5.3 *Management and classification of resources*

The UZI register classifies the resources used on the basis of a risk analysis.

6.6 **Technical life cycle control measures**

6.6.1 *System development control measures*

An independent EDP auditor has issued an audit certificate for the systems used by the UZI register on the basis of CWA 14167-1 or EAL 4+ certificate in accordance with ISO/IEC 15408. The UZI register carries out tests before the systems are put to use. Testing takes place in accordance with test plans drawn up in advance.

6.6.2 *Security management control measures*

The UZI register has separate test, acceptance and production systems. The transfer of software from one environment to another takes place in a controlled fashion via a change management procedure. This change management procedure covers, among other things, monitoring and recording versions, changes and emergency repairs to all operational software.

The integrity of TSP systems and information is protected against viruses, malware and unauthorised software and other possible sources that could lead to a disruption of the services, by means of a combination of suitable physical, logical and organisational measures. These measures are preventive, repressive and corrective in nature. Examples of these measures are logging, firewalls, intrusion detection and redundancy of systems, system elements and network components.

All used system storage media are treated safely in order to protect them from damage, theft and unauthorised access. Storage media are carefully removed when they are no longer needed.

Usage capacity is monitored and predictions are made in order to ensure sufficient processing capability and storage capacity in the future.

6.6.3 *Life cycle of the security classification*

The security classification is assessed annually and modified as necessary.

6.7 **Network security**

Measures have been implemented for network security in such a way that safeguards the availability, integrity and exclusivity of the details.

Communication about public networks between systems of the TSP takes place in a confidential manner.

The link between the public networks and the networks of the UZI register is subject to stringent safety measures (up-to-date firewall, virus scanners, proxy).

6.8 **Time-stamping**

No specific provisions.

7 Certificate, CRL and OCSP profiles

7.1 Certificate profiles

The UZI register certificates comply with the following standards:

- X.509 v3 standard.
- Part 3a, 3b, 3e and 3h of the Schedule of Requirements of the PKI for the Government (see <http://www.logius.nl>).
- In addition, the signature certificates are structured in accordance with the Qualified Certificate Profile of the relevant ETSI standards. The specific extensions in that context are also included in the signature certificates (non-repudiation) of the UZI register.

An X.509 certificate consists of a collection of objects. Each object has a name, and each object consists of a number of attributes. An attribute can contain various items such as keys, algorithms, names, types, etc. A certificate profile describes which objects are used and which values the attributes of these objects can contain. This chapter provides a general overview of the certificate profiles of the UZI register. This means, in particular, the fields which contain details which are relevant to certificate holders.

The basic structure of a certificate consists of a to-be-signed section (tbsCertificate) and a signature of the issuer. The tbsCertificate consists of a number of obligatory basic attributes followed by extensions. The basic attributes and extensions are shown in the following subparagraphs.

7.1.1 Basic attributes

The certificates from the UZI register have the following basic attributes:

Field	Value
Version	2 (X.509v3)
Certificate. SerialNumber	Contains the unique serial number of the certificate
Signature	The algorithm used is: <ul style="list-style-type: none"> • 'SHA256 with RSA Encryption'
Issuer	Contains the name of the UZI register CA in question belonging to the type of UZI card and is displayed using the OrganizationName, organizationIdentifier, CommonName and CountryName attributes. The OrganizationName is ' CIBG De organizationIdentifier is 'NTRNL-50000535'. The CommonName contains one of the following values depending on the card type and generation: <ul style="list-style-type: none"> - 'UZI register Care Provider [zorgverlener] CA G21' - 'UZI register named employee [medewerker op naam] CA G21' - 'UZI register unnamed employee [medewerker niet op naam] CA G21' - 'UZI register Care Provider [zorgverlener] CA G3' - 'UZI register named employee [medewerker op naam] CA G3' - 'UZI register unnamed employee [medewerker niet op naam] CA G3' - 'UZI register Private Server CA G1'

Field	Value
	The CountryName is set to 'NL' in accordance with ISO 3166.
Validity	The certificate validity period for the certificates is set to three years
Subject	<p>The name of the subject is shown as a Distinguished Name (DN), and by the following attributes which are included in all certificates: CountryName, CommonName, OrganizationName, and SerialNumber. The attributes which are used to describe the subject define the subject in a unique way.</p> <p>The CommonName contains:</p> <ul style="list-style-type: none"> - for the care provider card [zorgverlenerpas] and named employee card [medewerkerpas op naam], the full name of the certificate holder: <first names><space><if filled in: prefixes birth name+ space><birth name>; - for the unnamed employee card [medewerkerpas niet op naam], the function of the employee as indicated by the subscriber; - for the Server Certificates the name of the system, the so-called fully qualified domain name (FQDN). <p>The OrganizationName contains the name of the subscriber. This is the party on whose behalf the certificate holder acts when using the certificate.</p> <p>The CountryName contains the country of the subscriber in accordance with ISO 3166.</p> <p>The SerialNumber contains the UZI number (See paragraph 7.1.4).</p> <p>In addition to the above attributes which are always present, Title, Surname, GivenName, StateOrProvinceName, LocalityName and OrganizationalUnitName are also in use, but not for all types of certificates.</p> <p>The Title attribute contains, for the care provider card [zorgverlenerpas], the formal term of address (role) of the care provider [zorgverlener] (e.g. dentist [tandarts] or cardiologist [cardioloog]). More information about filling-in this field is included in Annex 3.</p> <p>In the case of the care provider card [zorgverlenerpas] and the named employee card [medewerkerpas op naam], the Surname and GivenName are also used. These contain respectively <if filled in: prefixes birth name+ space><birth name> and the <first names>.</p> <p>The OrganizationalUnitName only occurs as an option in the case of the unnamed employee card [medewerkerpas niet op naam] and Server Certificates, and offers space for including the department of the employee or server.</p> <p>Server Certificates include the StateOrProvinceName which contains the name of the state or province where the subscriber is located and the LocalityName which contains the name of the neighbourhood or local area where the subscriber's business is located.</p>
subjectPublicKeyInfo	Contains the 2048 bits RSA PublicKey of the Subject

Table 8 Basic attributes of certificate profiles

7.1.2

Extensions

The certificate contains the following standard and private extensions:

Standard extensions

Field	Essential	Value
AuthorityKeyIdentifier	No	KeyIdentifier is set to 160 bit SHA-1 hash of the public key of the CA that issued the certificate.
SubjectKeyIdentifier	No	KeyIdentifier is set to 160 bit SHA-1 hash of the public key of the subject
KeyUsage	Yes	Differs per certificate type: <ul style="list-style-type: none"> - In authenticity certificates only the digitalSignature bit is included. - In confidentiality certificates only the keyEncipherment and dataEncipherment bits are included. - In signature certificates only the non-Repudiation bit is included in a unique way. - In the server certificates (services) only the DigitalSignature and KeyEncipherment bits are included.
BasicConstraints	Yes	The CA bit is set to 'False' and pathLenConstraint to 'none'
CertificatePolicies	No	Contains: <ul style="list-style-type: none"> - the Object Identifier (OID) for the applicable Certificate Policy of the PKI for the Government (see Table 4 Overview of certificates with OID of applicable CP Public G3/Private G1 generation); - A link to the CPS of the UZI register (see par.1.2.3); - a user text (UserNotice): 'The field of application of this certificate is limited to communication within the Government domain as indicated in the Schedule of Requirements of the PKI for the Government. See http://www.logius.nl.
AuthorityInfoAccess.accessMethod (OCSP)	No	This attribute includes the URL of the OCSP services: http://ocsp.uzi-register.nl .
AuthorityInfoAccess.accessMethod (CA Issuers)	No	In this attribute the URL is included to CA certificate of the issuing CA. This varies per product: <ul style="list-style-type: none"> - http://cert.pkioverheid.nl/UZI-register_Zorgverlener_CA_G3.cer - http://cert.pkioverheid.nl/UZI-register_Medewerker_op_naam_CA_G3.cer - http://cert.pkioverheid.nl/UZI-register_Medewerker_niet_op_naam_CA_G3.cer - http://cert.pkioverheid.nl/UZI-register_Private_Server_CA_G1.cer <p>The TSP CA's issued under the G3 CA hierarchy are 'resigned' April 18th, 2019 and used in production since June 1st, 2019. Since this date the CaIssuers URL's in end certificates are as follows:</p> <ul style="list-style-type: none"> - http://cert.pkioverheid.nl/20190418_UZI-register_Zorgverlener_CA_G3.cer - http://cert.pkioverheid.nl/20190418_UZI-register_Medewerker_op_naam_CA_G3.cer - http://cert.pkioverheid.nl/20190418_UZI-register_Medewerker_niet_op_naam_CA_G3.cer

Field	Essential	Value
ExtendedKeyUsage	No	<p>ExtendedKeyUsage is essential in authenticity certificates in order to be able to use the certificate for smart card logon. The following values are included:</p> <ul style="list-style-type: none"> - clientAuth: certificate usable for SSL client authentication - email protection. This is needed to be able to use the certificate in standard email clients - documentSigning so that the certificate is usable for signing documents <p>The signature certificates include the following ExtendedKeyUsages:</p> <ul style="list-style-type: none"> - email protection. This is needed to be able to use the certificate in standard email clients - documentSigning so that the certificate is usable for signing documents <p>The confidentiality certificates include the following ExtendedKeyUsages:</p> <ul style="list-style-type: none"> - email protection. This is needed to be able to use the certificate in standard email clients - Encrypting File System. This is necessary for the encryption of system files. <p>Server certificates include the following ExtendedKeyUsages:</p> <ul style="list-style-type: none"> - ServerAuthenticatie - ClientAuthenticatie
SubjectAltName	No	<p>This attribute includes various numbers in the subjectAltName.otherName which may have a meaning within the care sector and which uniquely identify the subject as a care provider within a certain care institution. See paragraph 7.1.5. The authenticity certificate includes a separate subjectAltName.otherName with a Microsoft User Principal Name (UPN) to make the certificate suitable for smart card logon. The UPN is filled in with the following value:</p> <p style="text-align: center;"><UZI number>@<subscriber number>.</p>
CrlDistributionPoints	No	<p>Contains the URI in which the CRL in question, which belongs to the certificate type, can be retrieved. See paragraph 7.2.3.</p>

Table 9 Standard extensions of certificate profiles

Private extensions

Non-repudiation certificates contain very few qcStatements which indicate that the certificate in question is a qualified certificate.

Field	Essential	Value
etsiQcsCompliance	No	<p>Indicates that the issue of a qualified certificate corresponds with Annex I of EU Regulation 910/2014.</p>
etsiQcsQcSSCD	No	<p>Indicates that the private key belonging to the public key has been stored in the certificate on a qualified signature-creation device (QSCD) in accordance with Annex II of EU Regulation 910/2015.</p>
etsiQcsQcType (Type1)	No	<p>Indicates type of qualified certificate in accordance with Annex I of EU Regulation 910/2014. Type 1: Certificate for electronic signatures (esign) as defined in Regulation (EU) No 910/2014</p>
etsiQcsQcPDS	No	<p>Reference to PKI Disclosure Statement (PDS) with https://www.zorgcsp.nl/pds/pds.html as the URL and English as the language.</p>

Table 10 Private extensions certificate profiles

7.1.3 *Email addresses*

The email address is not included in the certificate profiles for the UZI register. In order to use the UZI card in a Microsoft Windows/Outlook environment, the configuration of a PC must be modified in accordance with Microsoft Knowledge Base Article – 276597 (How to turn off e-mail matching for certificates in Outlook).

7.1.4 *UZI number*

In the certificate profile of the UZI register the UZI number is included in the subject.SerialNumber of all types of card of the UZI register. This guarantees that the subject Distinguished Name is unique.

For the 'care provider' [zorgverlener] and the 'named employee' [medewerker op naam] cards, the UZI number is uniquely linked to the natural person. Any new card application for the same natural person, will contain the same UZI number. If a 'care provider' [zorgverlener] or 'named employee' [medewerker op naam] applies for cards for various institutions, these cards will contain the same UZI number. A person will only be issued with a new UZI number if his/her first names, (prefixes) birth name, date of birth or birthplace change.

In the cases of unnamed employee [medewerkerpas niet op naam] and Server Certificates, a new unique UZI number is generated with each (card)application/(card)issue. The UZI number on this card type offers trusting parties the possibility to check with the subscriber in question as to which employee or system is involved. Whenever a card is applied for, a new UZI number will be generated because the UZI register cannot issue a guarantee that the same employee or service is involved. A record of this is kept by the subscriber.

The UZI register will generate the UZI number for all types of card using the same nine-digit number series.

7.1.5 *SubjectAltName.otherName*

This paragraph describes how the subjectAltName.othername is included in the certificates from the UZI register.

PKI overheid specifies a subjectAltName.othername with an OID-like structure, as follows: **<OID CA>-<Subject ID>**. The <OID CA> and the <Subject ID> are separated by a '-'.
<OID CA>
stands for the OID of the issuing CA, which represents
<PKIoverheid>.<Domain>.<TSP>.<CA>.

<Subject ID>

is a specific identification within the domain of the TSP. In this the UZI register has chosen to include various numbers which may have a meaning within the care sector and which uniquely identify the subject as a care provider within a certain subscription.

Values SubjectAltName.otherName: <OID CA>

The following table shows the values of the <OID CA> in the production environment.

CA type	OID
UZI register Care Provider [zorgverlener] CA	2.16.528.1.1003.1.3.5.5.2
UZI register named employee [medewerker op naam] CA	2.16.528.1.1003.1.3.5.5.3
UZI register unnamed employee [medewerker niet op naam] CA	2.16.528.1.1003.1.3.5.5.4

UZI register Server CA	2.16.528.1.1003.1.3.5.5.5
------------------------	---------------------------

Table 11 <OID CA> production environment UZI register

Values SubjectAltName.otherName: <Subject ID>

The <Subject ID> in the UZI register is a compound field, consisting of fields separated by a '-':

<Subject ID> = <version no.>-<UZI no.>-<card type>-<Subscriber no.>-<role>-<AGB code>

The following table clarifies the fields:

Field	Type	Value	Explanation
version no.	1NUM	1	Version number of the <Subject ID> specification for possible future developments.
UZI no.	9NUM	See par 7.1.4.	A unique number for certificate holders.
card type	1CHAR	The following coding is used: 'Z' : Care provider card [zorgverlenerpas] 'N' : Named employee card [medewerkerpas op naam] 'M' : Unnamed employee card [medewerkerpas niet op naam] 'S' : Server Certificates	Coding for type of UZI resource.
Subscriber no.	8NUM		Subscriber number of the care provider or indication body.
role	6CHAR	Depending on card type For care provider cards [zorgverlenerpassen] <professional title code>.<specialism code> The <professional title code>=2NUM The <specialism code>=3NUM OR '00.000' For named employee card [medewerkerpas op naam], unnamed employee card [medewerkerpas niet op naam] and Server Certificates	In the case of the care provider card [zorgverlenerpas] the <professional title code> always has a value which is not equal to zero. The <specialism code> may be zero because a lot of professional titles do not have a specialism and it is not obligatory to include the specialism. For further clarification on filling-in, see Annex 3.
AGB code	8NUM	AGB code or 00000000 if no AGB code given.	See table 11

Table 12 Fields <Subject ID> in SubjectAltName.otherName

7.1.6

Clarification value AGB code

An AGB code can be included in the card or server certificates upon request. In consultation with Vektis it has been decided which AGB code is to be included per card.

Card type	Subscriber type	
	Care provider [zorgverlener]	Organisation
Care provider [zorgverlener]		
Named employee [medewerker op naam]	AGB care provider code subscriber [zorgverlenercode abonnee]	AGB code practice or institution

Unnamed employee [medewerker niet op naam]	AGB care provider code subscriber [zorgverlenercode abonnee]	AGB code practice or institution
Server	AGB care provider code subscriber [zorgverlenercode abonnee]	AGB code practice or institution

Table 13 Clarification of AGB code use

7.2

CRL profiles

The CRL profiles are compiled in accordance with section 3a, 3b,3e and 3h of the Schedule of Requirements of the PKI for the government (see <http://www.logius.nl>). The profile of the CRL for the certificates contains a number of attributes and extensions. These are shown in the following subparagraphs.

7.2.1

Attributes

The CRLs for certificates from the UZI register have the following attributes:

Field	Value
Version	1 (X.509 version 2)
signatureAlgorithm	SHA-256 WithRSAEncryption
Issuer	<p>Contains the name of the UZI register CA belonging to the certificate type and is displayed using the following attributes: OrganizationName, CommonName, , organizationIdentifier and CountryName.</p> <p>The OrganizationName is set to CIBG</p> <p>De organizationIdentifier is 'NTRNL-50000535'.</p> <p>Depending on the CA that signs the CRL, the CommonName contains:</p> <p>'UZI register Care Provider [zorgverlener] CA G21' 'UZI register named employee [medewerker op naam] CA G21' 'UZI register unnamed employee [medewerker niet op naam] CA G21'</p> <p>'UZI register Care Provider [zorgverlener] CA G3' 'UZI register named employee [medewerker op naam] CA G3' 'UZI register unnamed employee [medewerker niet op naam] CA G3' 'UZI register Private Server CA G1'</p> <p>The CountryName is set to 'NL' in accordance with ISO 3166.</p>
thisUpdate	Date/time of issue.
nextUpdate	<p>This is the date/time when the validity of the CRL ends. The value is 'thisUpdate' plus forty- eight hours.</p> <p>The UZI register publishes an update of the CRL every hour.</p>
revokedCertificates	The withdrawn certificates with certificate serial number and date of withdrawal.

Table 14 CRL attributes

7.2.2 Extensions

The CRLs for certificates from the UZI register have the following extensions:

Field	Essential	Value
AuthorityKey Identifier	No	Contains 160 bit SHA-1 hash of the public key of the CA that signed the CRL.
CRLNumber	No	Serial number

Table 15 CRL extensions

7.2.3 CRL Distribution Points

In the case of the user certificates, the CRL Distribution Point differs per certificate type depending on the CA that issues the certificate. The table below contains the overview of the CRL Distribution Points per card type in the production environment:

Name UZI card type	CRL Distribution Point
Care provider [zorgverlener]	http://www.csp.uzi-register.nl/cdp/uzi-register_zorgverlener_ca_g21.crl
Named employee card [medewerkerpas op naam]	http://www.csp.uzi-register.nl/cdp/uzi-register_medewerker_op_naam_ca_g21.crl
Unnamed employee card [medewerkerpas niet op naam]	http://www.csp.uzi-register.nl/cdp/uzi-register_medewerker_niet_op_naam_ca_g21.crl

Table 16 CRL Distribution points user certificates UZI register (G21)

Name UZI card type	CRL Distribution Point
Care provider [zorgverlener]	http://www.csp.uzi-register.nl/cdp/uzi-register_zorgverlener_ca_g3.crl
Named employee card [medewerkerpas op naam]	http://www.csp.uzi-register.nl/cdp/uzi-register_medewerker_op_naam_ca_g3.crl
Unnamed employee card [medewerkerpas niet op naam]	http://www.csp.uzi-register.nl/cdp/uzi-register_medewerker_niet_op_naam_ca_g3.crl
Server Certificates	http://www.csp.uzi-register.nl/cdp/uzi-register_private_server_ca_g1.crl

Table 17 CRL Distribution points user certificates UZI register (G3)

7.2.4 TSP and CA certificates

A UZI card (smart card) is supplied with the full certificate hierarchy for the user certificate in question. CA certificates of the TSP are available via: <https://cert.pkioverheid.nl/>.

7.3 OCSP profile

7.3.1 OCSP responder certificate

The OCSP responder certificates follow the certificate profile for server certificates wherever possible. Specific deviations in the OCSP responder certificate profiles are:

- the lack of Subject.StateOrProvinceName, Subject.Locality and Subject.SerialNumber

- the lack of the Authority Information Access
- the lack of the Subject.AltName
- the subject.CommonName is as follows: OCSP responder [CN delegated CA]. For example, for the 'UZI register Care Provider [zorgverlener] CA G3', the CN of the corresponding OCSP responder is: 'OCSP responder UZI register Care Provider [zorgverlener] CA G3'.
- the use of KeyUsage=Digital Signature
- the use of extendedKeyUsage=id-kp-OCSPSigning
- the use of a so-called ocsponocheck extension: (iso(1) identified-organization(3) dod(6) internet(1) security(5) mechanisms(5) pkix(7) ad(48) ocsponocheck(5))

7.3.2 OCSP responses

The OCSP responses of the UZI register are of the 'basic' type - as specified in RFC 2560 OCSP- that must be supported by all OCSP clients.

This means:

- the response has been signed by an authorised CA Responder that has a specific server certificate which has been signed by the same CA as the CA that issued the certificate which is being validated. This provides an indication that the responder is authorised to answer requests about the status of these certificates. This certificate is sent out with each response so that the trusting party can check the response.
- a (basic) OCSP response consists of:
 - a version number of the response syntax;
 - the name of the responder.
 - a response for each of the certificates in the request;
 - operational extensions. Currently this is only the OCSP Nonce;
 - an OID that indicates the signature algorithm used;
 - a signature of the response.

For each of the certificates in a request the response contains:

- a certificate identifier;
- the certificate status;
- the period of validity of the response;
- optional extensions, currently only the OCSP Nonce;

The certificate status has one of the following three values:

- 'Good'.
- 'Revoked'.
- 'Unknown'.

The status 'good' indicates, as a minimum, that the certificate has not been withdrawn, but does not guarantee that the certificate is still valid at that point in time. The 'revoked' status indicates that the certificate has been withdrawn. The 'unknown' status indicates that the OCSP responder of the UZI register does not know the status of the certificate. This could occur, for example, if the status of a test certificate is requested from the OCSP responder of the production environment.

8 Conformity assessment

The TSP service of the UZI register was certified in 22-11-2004 on the basis of the 'Scheme for certification of Certification Authorities' based on ETSI EN 319 411-2 and ETSI TS 102 042. As it still holds this certification, it fulfils the requirements imposed on certification service providers in ETSI EN 319 411-2 and the requirements contained in the Electronic Signatures Act [Wet elektronische handtekeningen] (Weh). The ETSI TS 101 456 standard has been superseded by ETSI EN 319 411-2 (in combination with ETSI EN 319 401). ETSI 102 042 has been superseded by 319 411-1 as of 1 July 2016.

This certification was renewed on 22-11-2017 by BSI Group The Netherlands B.V. (hereafter referred to as: BSI).

eIDAS

On 1 July 2016, the European Regulation (Regulation (EU) no. 910/2014 of the European Parliament and the Council of 23 July 2014 concerning electronic identification and trust services for electronic transactions in the internal market and implying withdrawal of Directive 1999/93/EC) came into effect.

This regulation replaces the Electronic Signatures Act [Wet elektronische handtekeningen].

Because this regulation includes the requirements with regard to frequency of the audit and the accreditation, the TTP.NL Scheme is no longer valid as of that date.

In addition, the earlier ETSI certifications in November 2016 ETSI TS 101 456 and ETSI TS 102 042 have been replaced by the ETSI certifications ETSI EN 319 411-2 and ETSI EN 319 411-1 respectively.

The UZI register also complies with the relevant elements of the Schedule of Requirements of the PKI government as stipulated in the Schedule of Requirements. This can be demonstrated using an audit certificate issued by BSI Group The Netherlands B.V.

A copy of the ETSI EN 319 411-1 and the ETSI EN 319 411-2 certificates can be found on the site of the UZI register (see certification policy).

For reasons of secrecy the audit reports drawn up by the auditors in question are confidential. They are not available to third parties and may only be perused on request and in strict confidentiality.

As from 10 March 2017, the Radio Communications Agency Netherlands [Agentschap Telecom] (hereafter referred to as AT) has been designated as the legal regulator for eIDAS regulation. As Trust Service Provider (TSP) the UZI register has been registered under registration number 940473 with the Radio Communications Agency Netherlands, as verified issuer of Qualified Certificates to the public.

8.1 **Audit cycle**

The audit cycle is performed in accordance with the ETSI EN 319 403 certification schedule. The UZI register undergoes a certification audit once every 2 years. In the interim years a full verification audit is carried out every year. If larger changes are implemented at a policy or technical level, an interim conformity audit can be carried out.

Besides these audits the UZI register also carries out internal audits and self-assessments.

8.2 Certifying body

Certification audit and verification audits are performed by an organisation accredited by the Dutch Accreditation Council.

8.3 Relationship with the certifying body

The auditors that perform the audits are independent. There is no additional relationship between the UZI register and the certifying body.

8.4 Focus of the audit

During the audits, an assessment is carried out to determine to what extent the management system for the issuing of (qualified) certificates permanently fulfils the requirements of the standards:

- ETSI EN 319 411-1, (with respect to the unnamed employee card [medewerkerpas niet op naam] and Server Certificates), including the standards referred to therein of the CABforum Baseline Requirements and the Network Security Controls.
- ETSI EN 319 411-2, (with respect to the care provider card [zorgverlenerpas] and named employee card [medewerkerpas op naam])
- requirements from the Regulation on electronic identification and trust services (the eIDAS Regulation)
- the Schedule of Requirements PKI government parts 3a, 3b and 3h.

The audit is performed on the following issues and processes:

- Registration Service.
- Certificate Generation Service.
- Dissemination Service.
- Revocation Management Service.
- Revocation Status Service.
- Subject Device Provision Service.

8.5 Audit results

If shortcomings are discovered during the audit, the UZI register draws up, within 3 weeks after receipt of the audit report, an action plan to analyse the observed deviations and take effective corrective measures.

8.6 Availability of conformity certificates

The conformity certificates of the most recent audits will be available on the website of the UZI register and in the electronic storage location of the Policy Authority of the PKI for the government. The UZI register also complies with the framework of standards of the PKI for the government as stipulated in the Schedule of Requirements (see www.logius.nl).

9 General terms and conditions

9.1 Applications for invoicing and payment of UZI certificates

9.1.1 *Rate applicable to the issue of UZI certificates*

The application of UZI certificates, namely the Server Certificate and the UZI card, from a Care Provider [zorgverlener] (subscriber) registered in the UZI register, is subject to a cost-covering rate. This rate is applicable to both the initial application and subsequent applications for an UZI certificate, including renewals. The rates for the UZI certificates are stated on www.uziregister.nl.

9.1.2 Rate changes

The rate for the UZI certificates may change periodically. If the rate is changed, the Regulation on the Use of the Citizen Service Number in Healthcare [Regeling gebruik burgerservicenummer in de zorg] will be changed accordingly and notification of this change will be given on www.uziregister.nl.

9.1.3 *Registration in the UZI register*

Before UZI certificates can be applied for, the care provider [zorgverlener] must be registered as a subscriber in the UZI register. The registration procedure is described in chapter 3 ('Identification and authentication').

9.1.4 *Applying for UZI certificates*

An application for UZI certificates must be made by the card applicant. To this end, an application must be submitted via the application process on the website (www.uziregister.nl/aanvragen), or an application form made available by the UZI register must be submitted. The procedure relating to the application and issue of UZI certificates is recorded in detail in Chapter 3 ('Identification and authentication') and Chapter 4 ('Operational requirements applicable to certificate life cycle').

No costs are charged for rejected applications.

9.1.5 *Production of UZI certificate*

After the identification and authentication (Chapter 3 'Identification and authentication') has been carried out and approved by the UZI register, the applied for UZI certificate will be produced.

9.1.6 *Invoicing and payment*

Within three weeks after the production date of the UZI card, the subscriber will receive an invoice at the postal address registered with the UZI register. In addition, the invoice will be sent in digital form to the applicant's email address. The UZI register has outsourced the invoicing activities to X-Pact B.V. The invoice will be sent out on the basis of the details issued to X-Pact B.V., such as the postal address of the subscriber and the email address of the card applicant. The UZI register will not honour a request for a modification to an invoice.

The card applicant is responsible for choosing the right UZI certificate. If the card applicant applies for an UZI certificate which turns out to be incorrect, for example a wrong type of UZI card or wrong PKCS#10 file, the full costs will be charged.

9.1.7 *Payment term*

The payment term after invoicing is thirty days. In the event of late payment, the UZI register is entitled to instigate collection measures and/or engage a third party to collect the claim. In the event of late payment UZI certificates will be withdrawn

by the UZI register. The withdrawal of UZI certificates will take place six weeks after the reminder has been sent.

9.1.8 *Validity of UZI certificate*

The period of validity of an UZI certificate is three years after the production date. The production date is the date on which the Certification Authority (CA) produced and published the certificate.

9.1.9 *Delivery and initial usage of UZI certificates*

The UZI certificates are delivered in accordance with the technical and/or functional specifications referred to in the Certification Practice Statement (CPS). If it turns out that the UZI certificate does not function in accordance with the CPS, the subscriber or his authorized representative will immediately inform the UZI-register within six weeks after delivery of the UZI-pass or after sending the UZI-server certificate.

9.1.10 *Replacement conditions*

If an UZI card or certificate does not work in accordance with the technical and/or functional specifications described in the CPS, the UZI register will replace it free of charge during the six weeks referred to in paragraph 9.1.9.

The activation details (PIN and PUK code) can only be resent during the six weeks. See paragraph 6.4.2 for the conditions and procedure.

If a certificate holder suspects that the UZI card is defective, the certificate holder must contact the Atos support desk¹³. If, following a telephone check by an employee of the support desk, it is established that the UZI card is probably defective, the subscriber may be eligible for the guarantee scheme. The subscriber can acquire a new card free of charge via this guarantee scheme. The guarantee scheme only applies if:

- The support desk has established, after a telephone assessment, that the card is probably defective.
- The UZI card is still valid for at least 3 months.
- The certificates on the UZI card are withdrawn by the subscriber, in accordance with the procedure in paragraph 4.10.
- The subscriber or certificate holder returns the UZI card to the UZI register with the corresponding PIN and PUK codes. The subscriber is responsible for ensuring that the package is correctly received by the UZI register. It is therefore advisable to send it by registered post. These costs cannot be declared.
- On the basis of the notification and the UZI card received, the UZI register should be able to determine that the cardholder has used the card carefully. The card must not be visibly damaged upon receipt.

9.1.11 *Risk, ownership and duty of care*

The risk of destruction, loss or theft, damage or deterioration of UZI certificates transfers to the subscriber at the moment of receipt of an UZI certificate. The subscriber is not authorised to make any changes to the UZI certificate. The issued UZI certificates remain in ownership of the UZI register. The UZI register is authorised to withdraw an UZI certificate from use by a subscriber. UZI certificates cannot be transferred to third parties. The subscriber or authorised representative must ensure that the UZI certificates are used and stored in a careful, safe and prudent manner.

¹³ The Atos service desk has been duly authorised by the CPS.

9.2 **Confidentiality of company data**

On the basis of the Government Information (Public Access) Act [Wet openbaarheid van bestuur] (Wob) anyone can ask the UZI register to submit documents relating to a governmental matter.

If the UZI register outsources work to third parties, this work will be carried out under the responsibility of the UZI register. The agreements between third parties and the UZI register are laid down in contracts.

If the issuing of documents or details could harm the services of the UZI register, the purchasers of its services, or one of the third parties engaged by the UZI register, these will not be made available to others, except those parties who need access to those documents in connection with their work. Examples of such documents are those that contain company-sensitive information in relation to infrastructure, security and finances.

9.3 **Confidentiality of personal details**

A record will be kept of all activities carried out which are important in the registration process. During the process as few personal details will be recorded as possible. In any event no (personal) details will be recorded which are not important for the registration process or for one of the facilitating services of the UZI register.

The authorised applicants, certificate holders and certificate managers are entitled to meet and correct their personal details.

9.3.1 *Confidential information*

The information obtained by the UZI register about a person, being a natural person or legal entity, will be treated as confidential. The requirements imposed in the General data protection [Algemene verordening gegevensbescherming] (AVG) are explicitly applicable.

At least the following documents contain information which is regarded as confidential and will therefore, in principle, not be issued to third parties:

- information relating to the registration and certification of parties;
- agreements with suppliers and service providers;
- security procedures and measures;
- Administrative Organisation (AO) procedures;
- audit reports.

9.3.2 *Non-confidential information*

The published details of certificates can only be consulted publicly using the search function on the website. The information issued in relation to published and withdrawn certificates is limited to that referred to in chapter 7 'Certificate, CRL and OCSP profiles' of this CPS.

Information in relation to withdrawal of certificates is available via the CRL. The information provided there relates only to the certificate number, the moment of withdrawal and the status (valid/withdrawn) of the certificate.

9.3.3 *Release of information*

If, within the framework of a criminal or disciplinary legal investigation, non-public information is requested from the UZI register by an authorised investigating officer, this information will be released by the director of the CIBG on the basis of a court order. The requirements imposed in the AVG are explicitly applicable to this.

If a subscriber or certificate holder requests non-public information from the UZI register in a civil procedure for the purposes of proof of certification, this information will be released by the director of the CIBG if, in the opinion of the latter, there is no

substantial interest that stands in the way of the data issue. If data is going to be issued, the party in question will be informed accordingly.

Confidential details will only be issued in order to provide proof to parties other than the subscriber or certificate holder, on the basis of the prior written permission of the subscriber or the certificate holder.

Notwithstanding the above, no details belonging to certificate holders or subscribers will be released to third parties, unless this is necessary on the basis of legislation and regulations or if the subscribers or certificate holders have given their explicit permission.

9.4 **Intellectual property rights**

This CPS is owned by the UZI register. Unchanged copies of this CPS may be distributed and published without permission provided the sources are mentioned.

Certificates and bearers of the private and public key (UZI card) issued by the UZI register certificates will continue to be the property of the UZI register. UZI cards must be returned at the request of the UZI register. All intellectual property rights related to the certificates and the UZI card, including the rights relating to software, databases and logos are vested in the UZI register. The rights cannot be transferred to third parties.

The UZI register guarantees its subscribers and certificate holders that the certificates and bearers of the private and public key it issues, including the corresponding and delivered equipment and documentation, do not violate intellectual property rights, including copyrights, brand rights and rights to software used which are vested in its suppliers.

9.5 **Liability and guarantees**

9.5.1 *Liability of the TSP*

In its capacity as certificate service provider the UZI register is liable for damage which natural persons or legal entities, that reasonably trust a certificate issued by the UZI register and act on the grounds thereof, suffer in conjunction with:

- The accuracy, at the time of issue, of all the details included in the certificate and the inclusion of all details prescribed for this certificate.
- The fact that, at the time of issue, the party referred to in the certificate as signatory was the holder of the details for the generation of electronic signatures.
- The fact that the details for generating electronic signatures and the details for verifying electronic signatures, if both have been generated by the UZI register, can be used complementarily.

The UZI register can be held liable if it fails to register withdrawal of the certificate, including the updating and publishing of the CRL, and a person has acted accordingly in reasonable trust. The UZI register cannot be held liable, on the basis of the above grounds, if it can submit proof that no careless actions were taken.

The UZI register excludes all liability for damage if the certificate is not used in accordance with the usage described in paragraph 1.4.

On the instruction of the Policy Authority of the PKI for the government, the UZI register can include usage-related restrictions in a signature certificate, provided these restrictions are clear to third parties. The UZI register is not liable for damage which is the consequence of using a signature certificate in a way which is contrary to the restrictions stipulated by the Policy Authority.

The UZI register guarantees that procedures have been set up and measures implemented so that this CPS is complied with.

The UZI register does not accept any liability to the trusted party for damage it suffers, in whatever form, apart from exceptions referred to below:

- The UZI register is, in principle, liable in those instances in which a trusted party suffers damage, pursuant to paragraphs 1 to 3 inclusive of Article 6:196b of the Dutch Civil Code, on the understanding that:
 - the word 'signatory' should be read as 'certificate holder';
 - additionally for authenticity certificates:
 - the phrase 'a qualified certificate as referred to in Article 1.1. section ss of the Telecommunications Act [Telecommunicatiewet]' should be read as 'an authenticity certificate';
 - the term 'electronic signatures' should be read as 'authenticity characteristics'.
 - additionally for confidentiality certificates:
 - the phrase 'a qualified certificate as referred to in Article 1.1. section ss of the Telecommunications Act' should be read as 'a confidentiality certificate';
 - the phrase 'generating electronic signatures' should be read as 'generating encrypted details';
 - the phrase 'verifying electronic signatures' should be read as 'deciphering encrypted details'.

9.5.2 *Liability of subscribers and certificate holders*

Subscribers and certificate holders are obliged to observe the stipulations of the UZI register in relation to the purchase of certification services as laid down in the CPS. They must also observe instructions communicated to them by the UZI register when the UZI cards are issued and/or made known to them at a later date.

Certificate holders within an organisation are also obliged to comply with instructions communicated to them by the subscriber. In the event of any contradiction in the instructions of both parties, the instructions of the UZI register will, in principle, take precedence over the instructions of the subscriber.

If subscribers or certificate holders do not comply with the stipulations, this may result in damage for the UZI register, the subscriber, certificate holders or third parties. In such instances the subscriber will, in principle, be held liable for not complying with the stipulations. The following stipulations are supplementary to paragraph 4.6.1 of this CPS.

- The subscriber will only and exclusively purchase certification services from the UZI register for its systems, databases and employees.
- The legal representative guarantees that he is legally authorised to connect the subscriber to the UZI register. In addition, the legal representative can designate one or more authorised representatives, referred to as the applicant(s), for whom the legal representative will have final responsibility. This applicant(s) will be charged, on behalf of the subscriber, with the actual execution of the applications for and withdrawal of UZI cards in accordance with the procedures of the CPS. If the subscriber registration of (the organisation of) the subscriber is to be deleted, only the legal representative will be authorised to do so.
- The subscriber is obliged to set up and execute a procedure on the basis of which the subscriber or the applicant(s) can check whether the intended certificate holders within the subscriber's organisation actually perform work for the organisation. If the subscriber is a certificate holder, the same procedure will apply.

- The subscriber guarantees that the intended certificate holder works within the organisation for whom UZI cards are being applied for and that the card application per individual certificate holder is complete, correct and authorised. The subscriber always has final responsibility for ensuring that the application is correct. If the subscriber is a certificate holder, the same procedure will apply.
- Before applying for an UZI card, the subscriber must inform the intended certificate holder within the organisation in writing about the exact conditions for using the UZI card. This means any restrictions regarding its use, the existence of a voluntary accreditation and the procedures for complaint handling and processing disputes. The above must be in accordance with the CPS. This information must be drawn up by the subscriber in writing and in language which is easy to understand. In addition, the subscriber must ensure that the intended certificate holder has actually read the applicable obligations and procedures from the CPS before the UZI register proceeds to issue an UZI card. In order to achieve this the subscriber will record the rights and obligations of the intended certificate holders within the organisation in writing and will ensure that the certificate holders within the organisation comply with the procedures, rights and obligations resulting from the CPS. If the subscriber is a certificate holder, the same procedure will apply.
- The subscriber is always responsible for the choice and (physical) protection of his software, equipment and telecommunications facilities and the availability of his information and communication systems, with which he can set up the electronic communication for himself and the certificate holders within the organisation. For example, the subscriber will take suitable measures to protect his system against viruses and other software containing inappropriate elements.
- The subscriber will issue correct, full and up-to-date details to the UZI register, including details of the certificate holders within the organisation for the generation and issue of certificates. The subscriber will report changes in address, organisation, organisation name, positions, contact persons or personal details of the subscriber or the certificate holders within the organisation, or other relevant changes, to the UZI register no later than 24 hours after the change in question has occurred.
- If the subscriber applies for server certificates, he will also be obliged to set up and execute a procedure on the basis of which the subscriber or the applicant(s) can check whether the system or database for which a server certificate is being applied, is actually used for the organisation.
- The subscriber and certificate holder cannot transfer rights and obligations resulting from the relationship with the UZI register to third parties, unless determined otherwise by the UZI register.
- The subscriber will himself ensure timely replacement close to the end of the period of validity, and an emergency replacement in the event of compromise and/or other types of calamities relating to the certificate or master certificates. The subscriber is expected to take adequate measures to ensure the continuity of certificate use.¹⁴

The above obligations for the subscriber or certificate holder will be recorded and, insofar as they can be designated as too unspecific, will be developed into UZI register guidelines and/or more detailed regulations. Insofar as the provisions relate to UZI cards for which a subscriber has applied on behalf of the certificate holder within the subscriber's organisation, the rights and obligations between the subscriber and the certificate holder will have to be mutually recorded in writing.

¹⁴ In the event of calamities affecting the UZI register, the Ministry of Health, Welfare and Sport will take adequate measures.

9.5.3 *Liability of trusted parties*
No specific provisions.

9.6 **Exclusion of guarantee**

In the event of system defects, service activities, or factors outside the control of the UZI, the UZI register will do all it possibly can to ensure that the services can be reached again as quickly as possible. The publication service will be available again, no later than within 24 hours. With this in mind a fallback scenario has been designed which is regularly tested. The UZI register is not responsible for the non-availability of the services due to natural disasters or other circumstances for which the UZI register cannot be held responsible.

9.7 **Limitation of liability**

The UZI register accepts no liability for damage that occurs in conjunction with natural persons or legal entities in the event of:

- Damage if the certificate is not used in accordance with the described field of application.
- Damage which results from use of the certificate whereby the restrictions indicated on the certificate are violated.
- Damage which arises due to restrictions on the use of the signature certificate being violated, on the condition that the UZI register communicates the restrictions in advance to third parties.
- Damage as a consequence of non-attributable failures in the fulfilment (force majeure), including among other things: delay and defects in the execution of work which can be attributed to non-technical malfunctions, such as transmission errors, equipment and system software malfunctions, defects in the equipment and software, intent, which includes fraud, illegal use of software, sabotage, theft of details and operating mistakes by third parties, errors by third parties resulting in network failure, a power cut, fire, lightning strike, substantial water damage, a break in the telephone cable, war-related violence, acts of terror, natural disasters and, more generally, causes which are unconnected to the reasonable care taken by the UZI register.
- Damage which arises due to subscribers, cardholders and/or trusting parties not fulfilling the obligations described in this CPS.
- Damage as a consequence of misuse, loss, theft or other disappearance of the certificate, the PIN, the PUK code, withdrawal code, bearer of the public and private key and the private key.
- Damage which arises due to the issue of a certificate on the grounds of incorrect information provided by the subscriber or cardholder, insofar as the UZI register could not, on the basis of the procedures and checks referred to in this CPS, reasonably have discovered that the information was incorrect.
- Damage as a consequence of the use of a certificate after the time of withdrawal of the certificate and publication on the CRL.
- Damage as a consequence of errors caused by the transfer of details by the subscriber and/or cardholder, the software, the equipment or telecommunication facilities used by the subscriber and/or cardholder.
- Damage as a consequence of a defect and/or incorrect information in the sent message, or in the sending or receipt thereof, which leads to serious damage such as physical injury, death or environmental damage, including but not limited to damage within the framework of using medical applications.
- Damage caused by the courier company (Dynalogic) delivering the UZI product or checks the identity of the certificate manager/holder outside the agreed time window.
- Damage caused by the courier company having been unable to carry out the correct identification of the certificate manager/holder due to the actions of the certificate manager / holder.

Insofar as the interests involved in the trust are disproportional compared to the level of reliability offered by the certificate, the trusted party will be regarded as not having trusted the certificate reasonably, even if the trusted party has fulfilled all other obligations.

9.8 **Compensation**

Compensation will be available only if it can be irrefutably established that the UZI register can be held liable for the damage suffered.

9.9 **Period of validity of the CPS**

The CPS is valid from the date of publication. The CPS is valid as long as the services of the UZI register continue, or until the CPS is replaced by a newer version. Newer versions will be designated by a higher version number (vX.xx). In the event of major changes, the version number will be increased by 1. In the event of editorial changes, the version number will be increased by 0.10. Newer versions are to be published on the website of the UZI register.

If one or more stipulations of this CPS are declared inapplicable by legal judgement or otherwise, this will not affect the validity and applicability of all other stipulations. In that case the parties will be bound by a stipulation with the same purport, wherever possible, which cannot be rendered invalid.

9.10 **Internal communication by the parties involved**

No specific provisions.

9.11 **Changes**

9.11.1 *Change procedure*

The currently valid CPS will be assessed and updated by the UZI register at least annually. Changes apply as of the moment that the new CPS is published and reported to the Policy Authority. The management of the UZI register is responsible for correct compliance with the procedure as described in paragraph 9.11 and for the eventual approval of the CPS in accordance with this procedure.

9.11.2 *Change and classification requests*

Subscribers, certificate holders, trusted parties and any other interested bodies can submit a written change request supported by arguments. The UZI register can itself submit a change request, for example as a result of an internal review or audit, a change to the schedule of requirements of the PKI for the government, changed legislation or suchlike. All change proposals are to be directly recorded. The UZI register will send a confirmation of receipt to the party submitting the request.

The TSP management and staff of the UZI register will classify the change requests. Where necessary, specialist legal or technical knowledge will also be consulted. During classification the urgency of the change request will also be determined. Changes to the CPS will be implemented in batches wherever possible.

9.11.3 *Publication of changes*

The UZI register publishes the CPS on the website: www.zorgcsp.nl. In addition, the CPS can be requested using the contact information referred to in paragraph 1.5.1 'Contact details'. These requests can be made by telephone or in writing.

9.12 **Conflict resolution**

If a conflict arises regarding the interpretation of the stipulations of this CPS, the CPS will indicate the interpretation of the UZI register stipulations. This interpretation must take account of the general objective of the UZI register. If this clarification does not produce a satisfactory result for the party/parties involved, the

conflict will be submitted to a conflict mediator acceptable to all involved parties, before any other judicial or extrajudicial steps are taken. Agreements about the financing of this conflict mediation will be made at that point in time. If the above does not lead to a settlement of the dispute, it will be submitted to a competent court in The Hague.

In the event of complaints concerning services delivered by the UZI register, the complaint must be submitted in writing to the UZI register, for the attention of the Applications and Processing department head Registers & Knooppunten 1, stating as reference: 'Complaint'. The UZI register will then process the complaint in accordance with the CIBG complaints procedure, as stipulated in chapter 9 of the General Administrative Law Act [Algemene wet bestuursrecht] (Awb).

If a conflict arises between two purchasers of services offered by the UZI register, the department head of the UZI register can mediate, or designate an independent mediator, if the parties cannot reach agreement on the basis of mutual consultation.

9.13 **Applicable law**

The services of the UZI register and this CPS are subject to Dutch law.

9.14 **Compliance with relevant legislation**

The UZI register is a certificate service provider within the meaning of the Telecommunications Act. As a result, it is bound by all European and national legislation and regulations related to its capacity as a TSP and the services that it delivers. The above applies with due regard for the fact that the UZI register, as part of the CIBG, is an administrative body within the meaning of the Awb.

9.15 **Other stipulations**

If one or more stipulations of the CPS are declared inapplicable by legal judgement or otherwise, this will not affect the validity and applicability of all other stipulations.

Annex 1: Definitions and abbreviations

The definitions of the terms used were drawn up based on the following assumptions:

- In a number of cases, a decision was taken to use the English terms. The reason for this is that, often, there is no correct Dutch translation for the English term in question. If a Dutch term is used alongside an English term with the same meaning, both terms will be included in the list (the most usual term is included in the list followed immediately by the translation in italics).
- In the case of 'PKI terms' (PKI = Public Key Infrastructure), the terms will link up wherever possible with the general definitions used by the PKI for the government and in the specialist literature on this issue.

The glossary consists of three columns: Abbreviation, Term and Definition. The terms are arranged alphabetically based on the 'Term' column. In a number of cases clarification is provided immediately after the definition and, where applicable, the source of the information, with an empty line in between.

Abbreviation	Term	Definition
	Subscriber	A care provider [zorgverlener] registered in the UZI register that purchases certification services from the UZI register. The subscriber is the party on whose behalf a certificate holder acts when using a certificate. The name and the subscriber number of the subscriber are stated in the certificate.
	Surname	The surname is the (correspondence) name as used on a daily basis by the person.
AT	Radio Communications Agency Netherlands [Agentschap Telecom]	Radio Communications Agency Netherlands is both the implementing body and the regulator of legislation and regulations in the field of telecommunications, Source: www.agentschaptelecom.nl
AGB	General Care Providers Database [Algemeen Gegevensbeheer Zorgverleners]	A database in which details of care providers [zorgverleners] are registered. In addition to general personal and practical information, this registration also includes details which are important for the communication between care providers [zorgverleners] and care insurers, particularly with regard to billing. AGB is administered by Vektis.
AP	Authority personal data (autoriteit persoonsgegevens)	The AP makes sure that personal details are used carefully and are protected and that privacy is also guaranteed in the future.
WLZ	Long-Term Care Act [Wet langdurige zorg]	The Long-Term Care Act is for people who need intensive care or supervision all day. For example, elderly people with advanced dementia or people with a serious mental, physical or sensory handicap.
	Asymmetric key pair	A public and private key which are linked to each other mathematically in such a way that, in a cryptographic calculation, they are each other's counterpart. Asymmetric key pairs are used for, among other things, the placement and verification of the electronic signature. See also 'Private key' and 'Public key'.
	Authentication	A process whereby someone's identity can be confirmed or with which the integrity and origin of submitted details can be verified. See also 'Authentication certificate', 'Authorisation' and 'Identification'.
	Authentication certificate	A certificate that should exclusively be used for authentication - or electronic identification.

Abbreviation	Term	Definition
	Authorisation	Granting someone the authority to carry out certain activities (for example: inspecting, modifying or processing details).
AVG	General data protection regulation [Verordening algemene gegevensbescherming.	The General Data Protection Regulation (AVG) has been applicable since 25 May 2018. This regulation ensures that the same privacy legislation applies throughout
	BIG register	Register of professionals in individual healthcare as referred to in Articles 3 and 34 of the Individual Healthcare Professions Act. See also: www.bigregister.nl
	BSN services	Citizen Service Number (BSN) services include: - the requesting and verifying of a Citizen Service Number, - the requesting of personal details - the Compulsory Identification Act [Wet op de identificatieplicht] (WID) check.
BSN	Citizen Service Number	The unique identifying number allocated to a natural person pursuant to the Citizen Service Number [General Provisions] Act [Wet algemene bepalingen burgerservicenummer].
	CA certificate	A certificate from a Certification Authority that contains, among other things, the public key and has been issued and signed by a higher CA.
CIBG	CIBG	The CIBG is an implementing body of the Ministry of Health, Welfare and Sport, that is charged with a number of legal implementation tasks. See also: www.cibg.nl
	Certificate	Electronic confirmation which links details for the verification of a certain person with details about the confidentiality and authenticity and/or electronic signature and therefore confirms the person's identity. A certificate is a publicly accessible document that is issued by a TSP and that contains a number of details checked by the TSP. A certificate contains at least: a) the notification that the certificate is being issued as a qualified certificate; b) the identification and the country of establishment of the issuing certificate service provider; c) the name of the signatory; d) space for a specific attribute of the signatory, that is stated as necessary, depending on the purpose of the qualified certificate; e) details for the verification of the signature which correspond to the details for generating the signature being checked by the signatory; f) the statement of the times at which the validity of the qualified certificate starts and ends; g) the identity code of the qualified certificate; h) the electronic signature of the issuing certificate service provider which fulfils the criteria of Article 15a, second paragraph, sections a to d, of Book 3 of the Dutch Civil Code; i) any restrictions concerning the use of the qualified certificate, and j) any limits relating to the value of the transactions for which the qualified certificate can be used.
	Certificate holder	A natural person or legal entity for whom a certificate has been issued and whose identity can be established using the certificate.
	Certificate manager	The role of certificate management is only important for products where the certificate holder is a system or a group/position, in other words for Server Certificates and named employee cards [medewerkerpas op naam]. In the case of these products, the UZI register has opted for the applicant of these products to also act as the certificate manager on behalf of the subscriber.

Abbreviation	Term	Definition
	Certificate profile	A description of the content of a certificate. Each type of certificate (signature, confidentiality, etc.) has its own content and description. This contains, for example, agreements regarding names, etc.
CP	Certificate Policy - <i>certification-policy</i>	A document with an itemised collection of requirements that indicates the frameworks within which the UZI register issues certificates. The CP is drawn up by the Policy Authority of the PKI for the government. By using the CP, among other things, certificate holders and trusting parties can determine how much trust they place in the UZI register.
CRL	Certificate Revocation List - <i>certificate revocation list</i>	A list of withdrawn (= revoked) certificates. The Certificate Revocation List (CRL) can be accessed and consulted by the general public. The list is made available by and under the responsibility of the UZI register. The CRL is itself also electronically signed by the CA of the UZI register.
	Certification services	The issuing, managing and withdrawal of certificates by certification service providers, as well as other services related to the use of electronic signatures, identity and confidentiality.
CA	Certification Authority	The part of the UZI register that arranges the signing of the certificates and that is trusted by end users.
CPS	Certification Practice Statement	A document that describes the procedures pursued, and the measures taken by, the UZI register regarding all aspects of the services. The CPS describes how the UZI register fulfils the requirements stipulated in the Certificate Policy (CP).
	Compromise	Any violation of the trust in the exclusive use of a component by authorised persons. Within the framework of the PKI for the government, the term component usually means the private key. A key is regarded as compromised in the event of: <ul style="list-style-type: none"> - Unauthorised access or suspected unauthorised access; - Lost or presumed to be lost private key or SSCD; - Stolen or presumed to be stolen private key or SSCD; - Destroyed private key or SSCD. A compromise constitutes a reason for placing a certificate on the Certificate Revocation List.
	Consortium	The consortium of KPN Corporate Market BV and ATOS Nederland BV with KPN Corporate Market BV as lead agency.
DAF	Digital application facility	
	Directory service	The directory service is a service of the UZI register which is intended to make issued certificates available and accessible on the Internet.
	End user	See certificate holder

Abbreviation	Term	Definition
	Electronic signature	<p>A signature that consists of electronic details attached to, or logically associated with, other electronic details and which are used as a means of authentication.</p> <p>The electronic signature that can be placed with the UZI card is formally referred to as the 'advanced electronic signature'. This is an electronic signature that has the same legal force as a handwritten signature on paper, provided it fulfils the following requirements:</p> <ul style="list-style-type: none"> - It is linked uniquely to the signatory; - It makes it possible to identify the signatory; - It is created using resources that the signatory can keep under their exclusive control; - It is linked to the electronic file in such a way that any later change to the details can be traced; - It is based on a qualified certificate as referred to in Article 1.1, section ss of the Telecommunications Act; <p>It has been generated using a safe resource for generating electronic signatures, as referred to in Article 1.1 section vv of the Telecommunications Act.</p>
	Electronic identity	<p>A unique electronic representation of an identity, for example in the form of a X.500 Distinguished Name structure.</p> <p>These electronic details are added to or linked in a logical way with other electronic details. They act as a unique characteristic of the owner's identity.</p>
	Escrow (Key Escrow)	'Key guarantee'. A method for storing a copy of a private key which is given to a trusted third party to keep, referred to as a 'Key Escrow Agency' (KEA).
ETSI	European Telecommunication Standard Institute	The ETSI is an independent institute in the field of telecommunications standardisation.
	Birth name	The birth name is the name included in the identity document (also known as maiden name or family name).
	Qualified certificate	A certificate that fulfils the requirements imposed pursuant to Article 18.15, second paragraph of the Telecommunications Act, and has been issued by a certificate service provider that fulfils the requirements imposed pursuant to Article 18.15, first paragraph of the Telecommunications Act.
	Authorised applicant	A care provider [zorgverlener] or representative of a (care) institution who has been authorised by the legal representative of the (care) institution to submit applications for the issue of UZI cards to the UZI register in the name of the (care) institution.
	Signature certificate (non-repudiation certificate)	A certificate that is linked to the key which must be used when placing an electronic signature.
HSM	Hardware Security Module	A resource that contains the private key(s) of systems, protects this/these key(s) against compromise and executes electronic signature, authentication or decryption on behalf of the system.
	Hierarchy	A chain of authority of mutually trusting Certification Authorities (CA).
	Identification	The process whereby the identity of a person or an organisation is established.
	Proof of identity or identity document	A document as referred to in the Compulsory Identification Act (WID) used to establish the identity of a natural person.
	Indication body	The CIZ, referred to in Article 7.1.1, first paragraph, of the Long-Term Care Act.
	Institution	A legal entity which provides care commercially, an organisational group of natural persons that provide care commercially or have it provided, as well as a natural person that has care provided commercially and the institutions designated by the Minister of Health, Welfare and Sport.

Abbreviation	Term	Definition
	Integrity	The certainty that details are complete and unchanged.
ISO	International Organization for Standardization.	Organisation that issues a number of standards and guidelines for quality management systems orientated around the quality of the main process of an organisation. The ISO standards and guidelines are internationally accepted and are revised every five years.
	Withdrawal code	Code with which the certificate holder can submit and authorise a withdrawal request for an UZI card, for example after the card has been lost.
	Irreversibility - <i>non-repudiation</i>	Irreversibility proves the origin or the receipt of details so that neither of the parties (receiver and sender) can deny the transaction or the message. In the practice of the UZI register this characteristic is linked to the certificate for the electronic signature. See also: signature certificate.
	Card applicant	The legal representative or the person for whom the legal representative has issued a financial authorisation to the UZI register in order to apply for UZI certificates.
	Cardholder	The natural person that uses the UZI card. (see also certificate holder)
PIN	Personal Identification Number	Data which is necessary in order to be able to use the UZI card. This data is personalised and must be kept secret at all times. The UZI register uses a PIN as activation data.
PUK	Personal Unblocking Key	The PUK code is needed to unblock the UZI card.
	Private key	See 'Private key'.
	PIN mailer PIN letter	The PIN letter contains the pin, puk and withdrawal code and, depending on the card type, is sent to the applicant or the certificate holder. The codes are printed in a secured manner so that only the party that opens the envelop knows the codes.
	PKCS#10 request	This is a file format standardised by RSA laboratories (syntax) which can be used to submit the necessary information (public key, subject information) to a CA system with which this CA system can generate a certificate. For system certificates, applicants submit a PKCS#10 request in ASCII format directly via the web registration.
PA	Policy Authority	Authority under the responsibility of the Minister of the Interior and Kingdom Relations which determines the certification policy (CP/Certificate Policy) of the UZI register. see also http://www.logius.nl
	Private key	The key of an asymmetric key pair which only has to be known to its holder and must be kept strictly secret. Sometimes the terms secret or personal key are used. See also: 'asymmetric key pair' and 'public key'.
PKI	Public Key Infrastructure	A combination of architecture, technology, organisation, procedures and rules based on asymmetric key pairs. The purpose is to facilitate reliable electronic communication and reliable electronic services.
	Public key	The key of an asymmetric key pair which can be made public. Sometimes the term public key is used. See also: 'asymmetric key pair' and 'personal key'.
RA	Registration Authority	The part of the UZI register that carries out the registration work in order to process the certificate applications.

Abbreviation	Term	Definition
	- <i>registration authority</i>	
	Revocation	Revocation concerns making a certificate invalid (withdrawal). A certificate is revoked by placing the serial number of the certificate on the Certificate Revocation List (CRL) (revocation = rescind/withdraw).
	Root CA	The highest point of trust in the hierarchy of a Public Key Infrastructure (PKI).
SSCD	Secure Signature Creation Device	A resource for generating electronic signatures that fulfils the requirements imposed in Article 18.17, first paragraph of the Telecommunications Act.
SUD	Secure User Device	A resource that contains the private key(s) of users, protects this/these key(s) against compromise and executes electronic signature, authentication or decryption in the user's name.
	Server certificate	Besides the UZI card in the form of a smart card the UZI register also issues server certificates. These server certificates can be used to demonstrate that a service (e.g. a, application or server) actually belongs to a specific care provider [zorgverlener]. In addition, a server certificate can be used to create a secure connection between services.
	Key(s)	See respectively: - Asymmetric key pair - Private key - Public key
	Key pair	See also asymmetric key pair.
	Smart card	A small plastic card the size of a credit card which contains an electronic chip, including a microprocessor, memory space and a power source. The cards can be used to store information and are easy to carry around.
	Master certificate	This is the certificate belonging to the place where the trust in all PKI for the government issued certificates originated. There is no higher CA from which the trust is derived. This certificate is signed by the holder, the party responsible for policy at the highest point of trust. All underlying certificates are issued by the holder of the master certificate.
	Assessment register	A register recognised by the party responsible for policy of the UZI register. The UZI register can issue the care provider [zorgverlener] or institution guarantee for a care provider [zorgverlener] or institution that is included in such a register.
TSP	Trusted Service Provider <i>provider of a □ certification service</i>	A natural person or legal entity that issues the certificates and/or provides other services connected to the electronic signatures, including identity and confidentiality. The UZI register is a TSP.
UZI	Unique Care Providers Identification	Unique way of identifying care providers [zorgverleners].
	UZI card	The bearer of the electronic identity of a care provider [zorgverlener].
	The UZI register	Register of care providers [zorgverleners]. The UZI register ensures the unique identification of care providers [zorgverleners]. It is based on a PKI which links the legal and physical identity to an electronic identity and records this in certificates. See also: www.uzi-register.nl
	Responsible party	In the context of the care institutions registration process, the responsible party means the party that is permitted to register the care institution in the UZI register.

Abbreviation	Term	Definition
	Confidentiality	The guarantee that details are exclusively available to the party to whom they are intended, without anybody else being able to decipher them. Outside the private sector, the term exclusivity is also used.
	Confidentiality certificate	A certificate that belongs with the key pair that has to be used in confidentiality applications.
	Trusting party	The natural person or legal entity that is the recipient of a certificate and acts in trust on the basis of that certificate.
Wet aanvullende Bepalingen verwerking Persoonsgegevens in de Zorg	Use of Citizen Service Number in Healthcare Act [Act Additional provisions for the processing of personal data in the care	The Use of Citizen Service Number in Healthcare Act regulates that the citizens service number is used in the care sector. The citizen service number has to be used in the care sector in order to determine unequivocally which details belong with which client.
WID	Compulsory Identification Act [Wet op de identificatieplicht]	The Compulsory Identification Act refers to the passport and identity card as a valid means of identification. A number of documents are regarded as equivalent to the passport and identity card, namely a driving licence, diplomatic passport, service or official passport, travel document for refugees or foreign nationals and other travel documents stipulated by the Minister, such as the Dutch identity card. The emergency passport and the laissez passer are not valid means of identification.
Wkkgz	Healthcare Quality, Complaints and Disputes Act [Wet Kwaliteit, klachten en geschillen zorg]	The Healthcare Quality, Complaints and Disputes Act (Wkkgz), which regulates quality and the right to complain for clients in the care sector, has been valid since 1 January 2016. The Healthcare Quality, Complaints and Disputes Act applies to all care providers [zorgverleners], including care institutions and independent professionals, such as independent entrepreneurs.
WTZi	Care Institutions (Accreditation) Act [Wet Toelating Zorginstellingen]	Care institutions need accreditation if they want to offer care which is eligible for reimbursement on the grounds of the Health Insurance Act [Zorgverzekeringswet] or Long-Term Care Act. The Care Institutions (Accreditation) Act (WTZi) regulates these accreditations.
	Legal representative	The person who, in accordance with the excerpt from the Chamber of Commerce or document of establishment, is authorised to bind the organisation legally to the UZI register.
X.509	X.509	This is an electronic certificate that is compiled in accordance with a standardised structure.
	Care	care: 1 °. care or service as described under or pursuant to the Healthcare Insurance Act and the Long-term Care Act; 2 °. form of assistance for the costs of which a subsidy is provided on the grounds of Article 3.3.3 of the Long-term Care Act or Article 68 of the Healthcare Insurance Act; 3 °. care as referred to in articles 5, 6b and 12a of the Public Health Act; 4 °. actions in the field of individual health care as referred to in Article 1 of the Individual Health Care Professions Act; all this including the financial settlement;

Abbreviation	Term	Definition
	Care providers	Care provider as referred to in the Healthcare Quality, Complaints and Disputes Act. The Healthcare Quality, Complaints and Disputes Act stipulates that a <i>care provider</i> is an institution or a care provider [zorgverlener] working alone.
	Care provider [zorgverlener]	a natural person who provides care on a commercial basis

Annex 2: Assessment criteria for organisations and care providers [zorgverleners]

The UZI register guarantees that only parties that belong to the domain indicated by the Minister of Health, Welfare and Sport can become a subscriber to the UZI register. The UZI register has two types of subscribers, namely organisations (care institutions and indication bodies) and people (care provider [zorgverlener] working alone). Both types of subscribers can apply for UZI cards for care providers [zorgverleners], other employees and services. For care provider cards [zorgverlenerpassen] the UZI register guarantees that these are issued to a care provider [zorgverlener]. If the care provider [zorgverlener] no longer fulfils the assessment criteria, the UZI register will retract the care provider card [zorgverlenerpas].

This annex clarifies the criteria on the basis of which the guarantees referred to are issued.

A. Assessment criteria for organisations

Organisations which belong to the domain of the UZI register are:

- Care providers that fall under the Use of the Act Additional provisions for the processing of personal data in the care. For the term care provider please refer to the Healthcare Quality, Complaints and Disputes Act.
- Indication body: the CIZ, referred to in Article 7.1.1, first paragraph, of the Long-Term Care Act;
- Organisations which comply with the Decree on the use of the Citizen Service Number in Healthcare, Article 2, paragraph 2 and 4.

Before an organisation is registered as a subscriber, the UZI register assesses whether the organisation belongs to the domain. In this case the following criteria are applied:

- Organisations that have an accreditation within the meaning of the Care Institutions (Accreditation) Act (WTZi) belong to the domain. These organisations do not have to submit any additional proof.
- Organisations which are included in the Pharmacies Register within the framework of the Medicines Act belong to the domain. These organisations do not have to submit any additional proof. If the organisation is not included in the aforementioned registers, the organisation must submit proof. This proof can be submitted in the form of:
 - - A copy of a document of establishment or notarial deed:

On the basis of its objective as described in the document of establishment or the notarial deed, the organisation can demonstrate that it belongs to the aforementioned domain.
 - A copy of a licence or decision:

On the basis of a granted licence or decision in favour, the organisation can demonstrate that it belongs to the aforementioned domain.
 - Individual declaration:

A partnership of care providers [zorgverleners] without legal personality can be registered in the UZI register on the basis of a personal statement signed by all parties involved. This personal statement must provide evidence of a care provider within the meaning of the Healthcare Quality, Complaints and Disputes Act.

Care agreement with a care insurer: The care provider can use this to demonstrate that this care is provided within the meaning of the Wkkgz.

B. Assessment criteria for care providers [zorgverleners]

People who are designated in the UZI register as a care provider [zorgverlener] (subscriber or certificate holder):

- Professionals as referred to in Article 3 of the Individual Healthcare Professions Act
- Professionals as referred to in Article 34 of the Individual Healthcare Professions Act.
- Professionals as referred to in Article 36a of the Individual Healthcare Professions Act.

Professional who provide care within the meaning of the Additional Provisions for the processing of personal data in healthcare, but who are not professionals as referred to in Article 3, 34 or 36a of the Individual Healthcare Professions Act.

Before a care provider [zorgverlener] is registered as a subscriber or certificate holder, the UZI register assesses whether the assessment criteria have been fulfilled. The following criteria are applied:

- The UZI register assesses whether the professional is registered in the BIG register and whether there is a situation in which the professional is not allowed to use the stated professional title or specialism (see C Criteria registration and withdrawal card in the event of suspension). This assessment includes any stated specialism. If the professional is registered in the BIG register and is permitted to use the professional title, the professional can be registered in the UZI register as a subscriber or holder of a care provider card [zorgverlenerpas]. Professional groups that are subject to this assessment are:
 - Pharmacists
 - Doctors¹⁵
 - Physiotherapists
 - Healthcare psychologists
 - Psychotherapists
 - Dentists
 - Midwives
 - Nurses
 - Physician assistant
 - Clinical technologist
- Professionals who are included in the Paramedics Quality Register do not have to submit additional types of proof. The UZI register assesses with the Paramedics Quality Register Foundation whether the professional is actually registered. Professional groups that are subject to this assessment are:
 - Dieticians [diëtisten]
 - Occupational therapists [ergotherapeuten]
 - Dermatologists [huidtherapeuten]
 - Speech therapists [logopedisten]
 - Oral hygienists [mondhygiënisten]
 - Cesar remedial therapists [oefentherapeuten Cesar]
 - Mensendieck remedial therapists [oefentherapeuten Mensendieck]
 - Optometrists [optometristen]
 - Orthoptists [orthoptisten]
 - Podiatrists [podotherapeuten]
 - Radio diagnostic laboratory technicians [radiodiagnostisch laboranten]
 - Radio therapeutic technicians [radiotherapeutisch laboranten]

¹⁵ The dispensing GP [apotheehoudend huisarts] specialism is included in the certificates after a check has been carried out in the BIG register that the professional is allowed to invite the GP specialism and after the certificate holder has submitted a copy of the pharmacy licence.

- Professionals who are included in the Oral Hygienists Quality Register do not have to submit additional types of proof. The UZI register assesses with the Oral Hygienists Quality Register whether the professional is actually registered. Professional groups that are subject to this assessment are:
 - Oral hygienists [mondhygiënisten]

- Professionals who are included in the Pharmacy Technicians Quality Register (KAA) do not have to submit any additional proof. The UZI register assesses with these registers whether the professional is actually registered. The professional groups that are subject to this assessment are:
 - Pharmacy assistants [apothekersassistenten]

- Professionals as referred to in Article 34 of the Individual Healthcare Professions Act who are not included in the Paramedics Quality Register, the Oral Hygienists Quality Register, the Pharmacy Technicians Quality Register (KAA) must submit an original and validly authenticated copy of the diploma in question, or a digital excerpt thereof (pdf with certificate from DUO) with their application to be registered as a subscriber or with the application for a care provider card [zorgverlenerpas]. The UZI register decides on the basis of an assessment of the diplomas as to whether the party in question can be registered as a subscriber or holder of a care provider card [zorgverlenerpas]. Professional groups that are subject to this assessment are:
 - Pharmacy assistants [apothekersassistenten]
 - Dieticians [diëtisten]
 - Occupational therapists [ergotherapeuten]
 - Dermatologists [huidtherapeuten]
 - Speech therapists [logopedisten]
 - Oral hygienists [mondhygiënisten]
 - Cesar remedial therapists [oefentherapeuten Cesar]
 - Mensendieck remedial therapists [oefentherapeuten Mensendieck]
 - Optometrists [optometristen]
 - Orthoptists [orthoptisten]
 - Podiatrists [podothérapeuten]
 - Radio diagnostic laboratory technicians [radiodiagnostisch laboranten]
 - Radio therapeutic technicians [radiotherapeutisch laboranten]
 - Dental prosthetists [Tandprothetici]
 - Individual healthcare carers [Verzorgenden in de individuele gezondheidszorg] (VIG-ers)

- Professionals as referred to in Article 36a of the Individual Healthcare Professions Act who are not included in the BIG register must submit an original and validly authenticated copy of the diploma in question, or a digital excerpt thereof (pdf with certificate from DUO) with their application to be registered as a subscriber. The UZI register decides on the basis of an assessment of the diplomas whether the party in question can be registered as a subscriber. Professional groups that are subject to this assessment are:
 - Clinical technologist
 - Bachelor Medical Assistant

- Professional practitioner who provides care within the meaning of the Additional Provisions Act on the processing of personal data in healthcare, but is not a professional as referred to in Article 3, 34 or 36a of the Individual Healthcare Professions Act, must submit documents as a subscriber with their application for registration. These documents are:
 - An original certified copy of the relevant diploma or digital extract (pdf with DUO certificate)

- A care agreement in the name of the healthcare provider (if the healthcare provide is in possession of a care agreement)
- Declaration showing which cars is provided by the healthcare provider.

The UZI register decides on the basis of the above documents or the healthcare provider can be registered as a subscriber.

C. Consequences of a restriction on authority

The UZI register can only issue the care provider [zorgverlener] guarantee in the case of a care provider [zorgverlener] who is entitled to use the protected professional title or qualification title. In the case of the professionals in accordance with Article 3 of the Individual Healthcare Professions Act, a registration in the BIG register is an initial requirement for being eligible for the care provider [zorgverlener] guarantee. In some instances an authority restriction may apply. With regard to the authority to use the professional title in relation to the registration in the BIG register, the following situations are possible:

- 1 The care provider [zorgverlener] is registered in the BIG register and is fully authorised. In some instances a conditional measure may apply. Due to its conditional character, this measure will not affect the authority.
- 2 The care provider [zorgverlener] is registered in the BIG register and is partially unauthorised. This means that certain activities cannot be performed. The care provider [zorgverlener] can still use the professional title.
- 3 The care provider [zorgverlener] is registered in the BIG register and is temporarily unauthorised (this is the case in the event of a suspension or injunction). At the time of the suspension the care provider [zorgverlener] is not allowed to use the professional title and will have lost any corresponding rights.
- 4 The care provider [zorgverlener] has been deleted from the BIG register. The care provider [zorgverlener] is unauthorised.

Because registration in the BIG register is a requirement to be eligible for the care provider [zorgverlener] guarantee, the outlined situations can be translated as follows to the UZI register:

- 1 If a care provider [zorgverlener] is fully authorised, the UZI register can simply issue the care provider [zorgverlener] guarantee.
- 2 If a care provider [zorgverlener] is only partially unauthorised, the care provider [zorgverlener] can continue to use the professional title. The UZI register will then, in principle, issue the care provider [zorgverlener] guarantee. If the partial disqualification ought to have consequences for the care provider [zorgverlener] guarantee in the UZI card, this should be stated in the disciplinary legal judgement.
- 3 Although, in the event of a suspension or injunction, situations are imaginable which might be reversed on appeal, the care provider [zorgverlener] will be unauthorised at time of the suspension or injunction. Consequently, the UZI register cannot issue the care provider [zorgverlener] guarantee.
- 4 If the care provider's [zorgverlener] registration is deleted, the UZI register cannot issue the care provider [zorgverlener] guarantee.

Relationship between UZI card and authority

The degree of authority can be translated as being able to obtain or retain an UZI card with a care provider [zorgverlener] guarantee. Column (I) of the following table indicates what the consequences are of a card application. Column (II) indicates what the consequences are if the care provider [zorgverlener] already has a care provider card [zorgverlenerpas].

Authorised?	(I) UZI card application	(II) UZI card owned
Fully authorised	allocate card	no action
Partially unauthorised	allocate card	no action

Temporarily unauthorised	reject application	withdraw UZI card
Unauthorised	reject application	withdraw UZI card

Table 18 Relationship between UZI card and authority

Thanks to the outlined activities and method, the care sector and all trusting parties can assume that the holder of a care provider card [zorgverlenerpas] is actually a care provider [zorgverlener] as well.

Relationship between subscriber and authority

A subscriber can apply for cards for care providers [zorgverleners], employees (auxiliary staff) and systems. The relationship to the subscriber is included in these cards. For subscribers it also applies that the UZI register issues the care provider [zorgverlener] guarantee. This means that a care provider [zorgverlener] who is (temporarily) unauthorised, cannot be a subscriber to the UZI register.

If the care provider [zorgverlener] is already a subscriber, all cards issued for that subscriber will be withdrawn. This means that any cards for other care providers [zorgverleners] under the subscriber will also be withdrawn. In the event of a temporary suspension the subscriber can re-apply for cards after the suspension.

The table below shows an overview of the consequences.

Authorised?	Application registration subscriber	Existing subscriber
Fully authorised	grant subscriber application	no action
Partially unauthorised	grant subscriber application	no action
Temporarily unauthorised	reject subscriber application	withdraw all subscriber's cards
Unauthorised	reject subscriber application	withdraw all subscriber's cards

Table 19 Relationship between the subscriber and authority

In the event of a suspension or an injunction, an appeal will usually be made. In that case there is a chance that the temporary lack of authority will be designated as unjustified. In that situation consideration can be given to issuing new cards at no cost to the subscriber.

In the event of unconditional suspension of a care provider [zorgverlener] that is a subscriber, a transition period of three months will come into effect. This transition period implies the following:

- all named cards (care provider card [zorgverlenerpas] and named employee cards [medewerkerpassen op naam]) will be withdrawn in accordance with the applicable rules.
- Unnamed employee cards [medewerkerpassen niet op naam] and Server Certificates will continue to be active.
- the subscriber registration will remain active.
- no new UZI certificates may be issued under this subscriber.

After the transition period, unnamed employee cards [medewerkerpassen niet op naam] and Server Certificates will be withdrawn and the subscriber registration deleted. The UZI register does not issue any refund for any remaining period of validity of the UZI certificates.

D. Transition period 'becoming obsolete specialism'

The care provider card [zorgverlenerpas] always includes a legally protected professional title or legally protected qualification title. If applicable, the care provider card [zorgverlenerpas] also contains the legally protected specialism of the care provider [zorgverlener]. A specialism can only be included in the care provider

card [zorgverlenerpas] if it is registered in the BIG register. If a specialism is removed from the BIG register, any care provider card [zorgverlenerpas] on which this specialism is stated must be withdrawn. This card may no longer be used. The care provider [zorgverlener] in question can, of course, apply for a new UZI card without specialism or with a different specialism, recorded in the BIG register. The UZI register assesses periodically with the BIG register as to whether the registrations of professional titles and specialisms are still up-to-date. On the basis of the outcome of this assessment the UZI register takes suitable measures. Where necessary the UZI register takes the initiative to withdraw cards.

The UZI register makes an exception to this policy if a specialism becomes obsolete. This is a specialism for which no re-registration can take place. The registration of a new specialism sometimes takes place after the old specialism has been deregistered. In those instances it is impossible for the care provider [zorgverlener] to apply for a new UZI card with the correct specialism on time.

The UZI register will only withdraw the card one calendar month after it receives notification that the specialism has been removed from the BIG register. The UZI register informs the subscriber to this effect and advises the subscriber and care provider [zorgverlener] to use the month to ensure that any new specialism is registered in the BIG register and to submit a new card application.

Specialisms for which this method applies:

- neurological and psychiatric disorders

Annex 3: Professional titles, qualification titles and specialisms

The annex contains the professional titles, qualification titles and specialisms and the corresponding codes as used by the UZI register. The codes referred to are – after assessment – included in the certificates in accordance with the description in paragraph 7.1.5 of this CPS. Although the codes referred to are fixed codes, the exact text may differ.

Article 3 of the Individual Healthcare Professions Act

Professional groups included in the BIG register are:

Term of address	Code
Pharmacist	17
Doctor	01
Physiotherapist	04
Healthcare psychologist	25
Psychotherapist	16
Dentist	02
Midwife	03
Nurse	30
Physician assistant	81

Specialisms under Article 3 professions

Pharmacist	Code
Hospital pharmacist	060
Public pharmacist [openbaar apotheker] (Public Pharmacy)	075

Doctor	Code
Allergologist (closed register)	002
Anaesthesiologist	003
Dispensing GP [apotheekhoudend huisarts]	004
Doctor of clinical chemistry (closed register)	020
Doctor of social medicine	055
Gastroenterologist	013
Doctor for the mentally handicapped	056
Medical microbiologist	024
Company doctor	008
Cardiologist	010
Cardiothoracic surgeon	011
Surgeon	014
Dermatologist	012
Gynaecologist	046
GP	015
Internist	016
Internist-allergologist (closed register)	062
Youth healthcare doctor [jeugdarts]	0
Ear nose and throat specialist	018
Paediatrician	019
Clinical geneticist	021
Clinical geriatrician	022
Lung specialist	023
Neurosurgeon	025
Neurologist	026
Nuclear medicine scientist	030
Ophthalmologist	031

Doctor	Code
Orthopaedic surgeon	032
Pathologist	033
Plastic surgeon	034
Psychiatrist	035
Radiologist	039
Radiotherapist	040
Rheumatologist	041
Rehabilitation specialist	042
Geriatric medicine specialist	047
A&E doctor [spoedeisende hulp arts]	071
Sports doctor [sportarts]	074
Urologist	045
Insurance doctor	048
Neurologist/psychiatrist (closed register)	050

Healthcare psychologist	Code
Clinical neuropsychologist	063
Clinical psychologist	061

Dentist	Code
Orthodontist	053
Dental surgeon	054

Nurse	Code
Nurse spec. acute care for some disorders	066
Nurse spec. chronic care for some disorders	068
Nurse spec. mental healthcare [verpl. spec. geestelijke gezondheidszorg]	069
Nurse spec. intensive care for some disorders	067
Nurse spec. prev. care for some disorders	065

Article 34 of the Individual Healthcare Professions Act

Qualification titles in accordance with Article 34 of the Individual Healthcare Professions Act are:

Term of address	Code
Pharmacy assistant [apothekersassistent]	83
Dietician	89
Occupational therapist	90
Dermatologist	88
Clinical physicist [klinisch fysicus]	84
Speech therapist [logopedist]	91
Oral hygienist [mondhygiënist]	92
Cesar remedial therapist	94
Mensendieck remedial therapist	93
Optometrist	87
Orthoptist	95
Podiatrist [podothérapeuten]	96
Radio diagnostic laboratory technician	97
Radio therapeutic technician	98
Dental prosthetist	85
VIG-er ¹⁶	86

Article 36a of the Individual Healthcare Professions Act

Qualification titles in accordance with Article 36a of the Individual Healthcare Professions Act are:

¹⁶ Individual healthcare carers [Verzorgenden in de individuele gezondheidszorg] (VIG-ers)

Term of address	Code
Clinical technologist	82
Bachelor Medical Assistant	80

Other Care

Professionals who provide 'care within the meaning of the Act additional provisions processing personal data in the care (Wet aanvullende bepalingen verwerking persoonsgegevens in de zorg).

Term of address	Code
Care provider other care	99