

Certification Policy

Universign Trust Network

7, rue du Faubourg Poissonnière, 75009 Paris, France

OID: 1.3.6.1.4.1.15819.5.1.3.(1/3/4/5/6/7)

VERSION : 2.6 DIFFUSION : PUBLIC Effective date : 15/05/2019

Contents

1	Intr	oduction
	1.1	Overview
		1.1.1 Presentation of the Universign Trust Network
		1.1.2 Organisation of the Universign Trust Network
	1.2	Document name and identification
	1.3	UTN participants
		1.3.1 Certification Authorities
		1.3.2 Registration Authorities
		1.3.3 Subscribers
		1.3.4 Timestamping Authorities
		1.3.5 Relying parties
		1.3.6 Certificate Officer
	1.4	Certificate usage
		1.4.1 Appropriate Certificate uses
		1.4.2 Prohibited Certificate uses
	1.5	Policy administration
		1.5.1 Organization administering the document
		1.5.2 Contact person
		1.5.3 Person determining CP suitability for the policy
		1.5.4 CPS approval procedures
	1.6	Definitions and acronyms
2	Puh	lication and repository responsibilities
	2.1	Repositories
	2.2	Published information
	2.3	Time and frequency of publication
	2.4	Access Controls on repositories
	T.1.	
		ntification and Authentication
	3.1	Naming
		3.1.1 Types of names
		3.1.2 Need for names to be meaningful
		3.1.3 Anonymity or pseudonymity of Subscribers
		3.1.4 Rules for interpreting various name forms
		3.1.5 Uniqueness of names
		3.1.6 Recognition, authentication, and role of trademarks
	3.2	Initial identity validation
	3.2	Initial identity validation

		3.2.3	Authentication of individual identity	19
		3.2.4	Non-verified Subscriber information	
		3.2.5	Validation of authority	20
		3.2.6	Criteria for interoperation	20
	3.3	Identif	fication and authentication for re-key requests	20
		3.3.1	Identification and authentication for routine re-key	20
		3.3.2	Identification and authentication for re-key after revocation	20
	3.4	Identif	fication and authentication for revocation request	20
4	Cert	tificate !	Life-Cycle Operational Requirements	20
	4.1	Certifi	cate application	20
		4.1.1	Who can submit a Certificate application	20
		4.1.2	Enrolment process and responsibilities	21
	4.2	Certifi	cate application processing	21
		4.2.1	Performing identification and authentication functions	21
		4.2.2	Approval or rejection of Certificate applications	21
		4.2.3	Time to process Certificate applications	21
	4.3	Certifi	cate issuance	22
		4.3.1	CA actions during Certificate issuance	22
		4.3.2	Notification to Subscriber by the CA of issuance of Cer-	
			tificate	22
	4.4		cate acceptance	22
		4.4.1	Conduct constituting Certificate acceptance	22
		4.4.2	Publication of the Certificate	22
		4.4.3	Notification of Certificate issuance by the CA to other en-	
			tities	22
	4.5		ir and Certificate usage	22
	4.6		cate renewal	23
		4.6.1	Circumstance for certificate renewal	23
		4.6.2		23
		4.6.3		23
		4.6.4		23
		4.6.5	Conduct constituting acceptance of a renewal certificate.	23
		4.6.6	Publication of the renewal certificate by the CA	23
		4.6.7	Notification of certificate issuance by the CA to other	•
	4.77	<i>a</i> .: <i>a</i>	entities	24
	4.7		ficate re-key	24
		4.7.1	Circumstance for certificate re-key	24
		4.7.2	Who may request certification of a new public key	24
		4.7.3	Processing certificate re-keying requests	24
		4.7.4	Notification of new certificate issuance to subscriber	24

	4.7.5	Conduct constituting acceptance of a re-keyed certificate.	24
	4.7.6	Publication of the re-keyed certificate by the CA	24
	4.7.7	Notification of certificate issuance by the CA to other	
		entities	24
4.8	Certifi	cate modification	24
	4.8.1	Circumstance for certificate modification	24
	4.8.2	Who may request certificate modification	25
	4.8.3	Processing certificate modification requests	25
	4.8.4	Notification of new certificate issuance to Subscriber	25
	4.8.5	Conduct constituting acceptance of modified certificate .	25
	4.8.6	Publication of the modified certificate by the CA	25
	4.8.7	Notification of certificate issuance by the CA to other	
		entities	25
4.9	Certifi	cate revocation and suspension	25
	4.9.1	Circumstances for revocation	25
	4.9.2	Who can request revocation	26
	4.9.3	Procedure for revocation request	26
	4.9.4	Revocation request grace period	26
	4.9.5	Time within which CA must process the revocation request	26
	4.9.6	Revocation checking requirements for Relying Parties	26
	4.9.7	CRL issuance frequency	27
	4.9.8	Maximum latency for CRLs	27
	4.9.9	On-line revocation/status checking availability	27
	4.9.10	On-line revocation checking requirements	27
	4.9.11	Other forms of revocation advertisements available	27
	4.9.12	Special requirements regarding key compromise	27
	4.9.13	Circumstances for suspension	27
	4.9.14	Who can request suspension	27
	4.9.15	Procedure for suspension request	28
	4.9.16	Limits on suspension period	28
4.10	Certific	cate status services	28
	4.10.1	Operational characteristics	28
	4.10.2	Service availability	28
		Optional features	28
4.11		subscription	28
		crow and recovery	28
	4.12.1	Key escrow and recovery policy and practices	28
	4.12.2	Session key encapsulation and recovery policy and practices	29

5	Fac	ility, m	anagement, and operational controls	29
	5.1	Physic	cal controls	29
		5.1.1	Site location and construction	29
		5.1.2	Physical access	29
		5.1.3	Power and air conditioning	29
		5.1.4		29
		5.1.5	Fire prevention and protection	29
		5.1.6		30
		5.1.7	Waste disposal	30
		5.1.8	Off-site backup	30
	5.2	Proced	d <mark>ural controls</mark>	30
		5.2.1	Trusted roles	30
		5.2.2	Number of persons required per task	3 1
		5.2.3	Identification and authentication for each role	3 1
		5.2.4	Roles requiring separation of duties	3 1
		5.2.5	Risk analysis	32
	5.3	Person	nnel controls	32
		5.3.1	Qualifications, experience, and clearance requirements 3	32
		5.3.2	Background check procedures	32
		5.3.3	Training requirements	32
		5.3.4	Retraining frequency and requirements	32
		5.3.5	Job rotation frequency and sequence	33
		5.3.6	Sanctions for unauthorized actions	33
		5.3.7	Independent contractor requirements	33
		5.3.8	Documentation supplied to personnel	33
	5.4	Audit	logging procedures	33
		5.4.1		33
		5.4.2	Frequency of processing log	34
		5.4.3	Retention period for audit log	34
		5.4.4	Protection of audit log	34
		5.4.5	Audit log backup procedures	34
		5.4.6	Audit collection system	34
		5.4.7	Notification to event-causing subject	34
		5.4.8	Vulnerability assessments	34
	5.5	Record	ds archival	35
		5.5.1	Types of records archived	35
		5.5.2		35
		5.5.3	Protection of archive	35
		5.5.4	Archive backup procedures	36
		5.5.5	1 0	36
		5.5.6	Archive collection system	36

		5.5.7	Procedures to obtain and verify archive information	36
	5.6	Key ch	angeover	36
	5.7	Compr	comise and disaster recovery	36
		5.7.1	Incident and compromise handling procedures	36
		5.7.2	Computing resources, software, and/or data are corrupted.	37
		5.7.3	Entity private key compromise procedures	37
		5.7.4	Business continuity capabilities after a disaster	37
	5.8	CA ter	mination	37
6	Tech	nnical se	ecurity controls	38
	6.1	Keypai	ir generation and installation	38
		6.1.1	Keypair generation	38
		6.1.2	Private key delivery to Subscriber	38
		6.1.3	Public key delivery to CA	38
		6.1.4	CA public key delivery to Relying Parties	38
		6.1.5	Key sizes	39
		6.1.6	Public key parameters generation and quality checking	39
		6.1.7	Key usage purposes	39
	6.2	Private	key protection and cryptographic module engineering con-	
		trols .		
		6.2.1	Cryptographic module standards and controls	
		6.2.2	Private key (n out of m) multi-person control	40
		6.2.3	Private key escrow	40
		6.2.4	Private key backup	40
		6.2.5	Private key archival	40
		6.2.6	Private key transfer into or from a cryptographic module .	41
		6.2.7	Private key storage on cryptographic module	41
		6.2.8	Method to activate the private key	
		6.2.9	Method to deactivate the private key	
		6.2.10	Method to destroy the private key	
		6.2.11	Cryptographic Module Rating	
	6.3		aspects of key pair management	42
		6.3.1	Public key archival	42
		6.3.2	Certificate operational periods and key pair usage periods.	42
	6.4		tion data	43
		6.4.1	Activation data generation and installation	43
		6.4.2	Activation data protection	43
		6.4.3	Other aspects of activation data	43
	6.5	_	ater security controls	43
		6.5.1	Specific computer security technical requirements	43
		6.5.2	Computer security rating	44

	ntrols	
6.6.1 System develo	pment controls 4	-
	gement controls 4	_
6.6.3 Life cycle secu	rity controls 4	-
6.7 Network security contr	ols	
6.8 Time-stamping		5
7 Certificate, CRL and OCS	P profiles 4	5
7.1 Certificate profiles		5
7.1.1 Certificates .		5
7.2 CRL Profile		6
7.3 OCSP Profile		6
8 Compliance audit and other	er assessments 4	7
8.1 Frequency or circumst	ances of assessment 4	7
8.2 Identity/qualifications	of assessor 4	7
	to assessed entity 4	7
	essment 4	7
8.5 Actions taken as a resu	Ilt of deficiency 4	8
	<u>ults</u>	o
0.0 Communication of ics		0
9 Other business and legal m		8
9 Other business and legal m	natters 4	8
9.1 Fees	tatters 4	8 8
9 Other business and legal m 9.1 Fees	tatters 4	8 8 8 8
9.1 Fees 9.1.1 Certificate accomp. 9.1.2 Revocation or 9.1.3 Fees for other	natters 4	8 8 8 8
9.1 Fees	natters 4	8 8 8 8 8
9.1 Fees 9.1.1 Certificate accomplished 9.1.2 Revocation or 9.1.3 Fees for other 9.1.4 Refund policy 9.2 Financial responsibility	natters 4	8 8 8 8 8 9
9.1 Fees 9.1.1 Certificate accomplished 9.1.2 Revocation or 9.1.3 Fees for other 9.1.4 Refund policy 9.2 Financial responsibility 9.2.1 Insurance covers	natters 4	8 8 8 8 9 9
9.1 Fees	natters 4	8 8 8 8 9 9
9.1 Fees	natters 4	8 8 8 8 9 9 9 9
9.1 Fees	natters 4	8 8 8 8 9 9 9 9 9
9.1 Fees	natters 4 4 ess fees 4 status information access fees 4 services 4 4 y 4 erage 4 4 arranty coverage for end-entities 4 ness information 4	8 8 8 8 9 9 9 9 9 9
9.1 Fees	natters 4	8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
9.1 Fees	tatters 4	8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
9.1 Fees	natters 4	8 8 8 8 9 9 9 9 9 9 0 0
9.1 Fees	tatters 4	8 8 8 8 9 9 9 9 9 9 0 0 0 0
9.1 Fees	natters 4	8 8 8 8 9 9 9 9 9 9 0 0 0 0 0 0
9.1.1 Certificate accessions 9.1.2 Revocation or 9.1.3 Fees for other 9.1.4 Refund policy 9.2 Financial responsibility 9.2.1 Insurance cover 9.2.2 Other assets 9.2.3 Insurance or w 9.3 Confidentiality of busi 9.3.1 Scope of conficulty 9.3.2 Information no 9.3.3 Responsibility 9.4 Privacy of personal information policy 9.4.1 Privacy policy 9.4.2 Personal information policy 9.4.3 Non-personal information policy	natters 4	8 8 8 8 9 9 9 9 9 9 0 0 0 0 0 0 0 0 0 0 0

	9.4.6	Disclosure pursuant to judicial or administrative process . 5
	9.4.7	Other information disclosure circumstances
9.5	Intelled	ctual property rights
9.6		entations and warranties
	9.6.1	Certification Authority
	9.6.2	RA service
	9.6.3	Subscriber
	9.6.4	Relying Parties
	9.6.5	Other participants
9.7	Disclai	mers of warranties
9.8	Limita	tions of liability
9.9	Indemi	nities
9.10	Term a	nd termination
	9.10.1	Term
	9.10.2	Termination
	9.10.3	Effect of termination and survival
9.11		ual notices and communications with participants 5
9.12	Amend	lments
	9.12.1	Procedure for amendment
	9.12.2	Notification mechanism and period
	9.12.3	Circumstances under which OID must be changed 5
9.13		e resolution provisions
	-	ning law
		iance with applicable law
		laneous provisions
		Entire agreement
	9.16.2	Assignment
	9.16.3	Severability
		Enforcement (attorneys' fees and waiver of rights) 5
		Force majeure
9.17		provisions
		Organization reliability
		Accessibility

1 Introduction

1.1 Overview

This Certification Policy defines the commitments of members of the UTN, for the issuance and management of electronic Certificates.

1.1.1 Presentation of the Universign Trust Network

The Universign Trust Network (UTN) is a network of Certification Authorities (CA) and Timestamping Authorities (TSA) governed by common policies defined by Cryptolog International.

In this document, the term UTN refers, based on its context of use, to the Universign Trust Network or to Cryptolog International, the company in charge of its control and management.

The UTN particularly comprises:

- Primary Certification Authorities (Primary CAs);
- Intermediate Certification Authorities (Intermediate CAs);
- Timestamping Certification Authorities (Timestamping CAs);
- Timestamping Authorities (TSAs);
- Certificate Subscribers;
- Relying Parties.

1.1.2 Organisation of the Universign Trust Network

The Certification Authorities operate according to a hierarchically structured chain of trust. The Primary CAs issue Certificates to the Intermediate CAs who, in turn, issue Certificates to natural persons or legal persons (the Subscribers). The Timestamping Units (TSU) of the Timestamping Authorities (TSAs) receive Certificates from the Timestamping CAs and issue Timestamps. The Timestamping CAs may receive Certificates from the Primary CAs.

The Relying Parties rely on the information contained in the Certificates of the Subscribers and the Timestamps.

The UTN:

- publishes the Certification Policy governing the CAs;
- publishes the Timestamping Policy governing the TSAs;

• manages the Primary CAs of the network.

The members of UTN:

- publish their Practice Statements;
- manage the CAs and TSAs associated with the services that they offer.

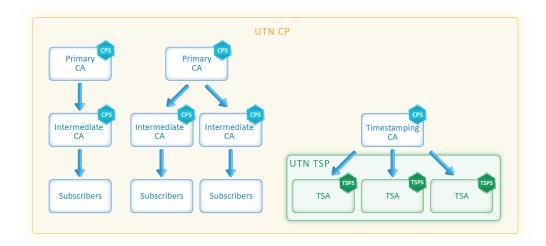


Figure 1: Organisation of the UTN

The UTN ensures the validation, management and application of the CP and the TSP. The UTN also ensures the consistency of the documentary references (User Agreement, CPS, TSPS, etc.) associated with its Policies. Every member authority of the UTN defines one or more Practice Statements in accordance with UTN 's Policy.

All requests of membership to the network or revocation of a Certificate of a CA or a TSU from the network must be addressed to the UTN. The components of the application file for membership to the network or revocation are communicated by UTN to the eligible bodies that request them.

The UTN monitors the audits and/or compliance controls conducted by members of the network. The UTN decides on the actions to be taken, and ensures that they are applied. It arbitrates disputes between its members.

The UTN may audit its members. The Certificates (Intermediate CAs or TSU) of UTN members may be revoked at any time, pursuant to the cases defined in this CP.

The UTN may delegate all or some of its functions.

PAGE: 10 / 57

1.2 Document name and identification

This document is the Certification Policy of the UTN.

This Certification Policy (CP) is common to all Certification Authorities that are members of the UTN. It defines the commitments of the member CAs of the network in terms of security and organisation of the processes for the issue, management and revocation of Certificates issued by the member CAs.

An OID is used for each type of Certificates issued in accordance with this CP. The Certificates corresponding to types 1.3.6.1.4.1.15819.5.1.3.(1/5/6/7) are recognised as qualified within the meaning of the eIDAS regulation (EU) No. 910/2014.

- natural person Certificates, in compliance with [ETSI 319 411-2] level QCP-n, corresponding to OID 1.3.6.1.4.1.15819.5.1.3.1;
- legal person Certificates, in compliance with [ETSI 319 411-2] level QCP-1, corresponding to OID 1.3.6.1.4.1.15819.5.1.3.5;
- natural person Certificates, in compliance with [ETSI 319 411-2] level QCP-n-qscd, corresponding to OID 1.3.6.1.4.1.15819.5.1.3.6;
- natural person Certificates, in compliance with [ETSI 319 411-2] level QCP-1-QSealCD, corresponding to OID 1.3.6.1.4.1.15819.5.1.3.7;
- natural person Certificates, in compliance with [ETSI 319 411-1] level LCP, corresponding to OID 1.3.6.1.4.1.15819.5.1.3.3;
- legal person Certificates, in compliance with [ETSI 319 411-1] level LCP, corresponding to OID 1.3.6.1.4.1.15819.5.1.3.4.

1.3 UTN participants

1.3.1 Certification Authorities

A Certification Authority (CA) refers to the authority in charge of creating, issuing, managing and revoking Certificates in pursuance of the Certification Policy.

Every member of the UTN defines one governing body for each CA: the Approval Board. It is empowered with the authorisations needed to:

PAGE: 11/57

• define and approve the Certification Practice Statement of the CA (CPS) in accordance with this CP;

- define the process for updating the CPS;
- inform the UTN about and provide it with the CPS and its revisions.

1.3.2 Registration Authorities

The Registration Authority (RA) is a component of the CA, in charge of identifying and authenticating Certificate applicants.

1.3.3 Subscribers

The Certificate Subscriber is the natural person or legal person who owns the Certificate. The Subscriber must have accepted the terms and conditions defined in the Subscriber Agreement.

1.3.4 Timestamping Authorities

A Timestamping Authority (TSA) refers to the authority in charge of creating and issuing Timestamps in accordance with the Timestamping Policy.

Every member of the UTN defines one governing body for each TSA: the Approval Board. It is empowered with the authorisations needed to:

- define and approve the certification practices of the TSA (TSPS) in accordance with this TSP;
- define the process for updating the TSPS;
- inform UTN about and provide it with the TSPS and its revisions.

The Certification Authorities issue Certificates for the Timestamping Units of the TSAs. These Certificates allow the Relying Parties to identify the TSA. The Certificates of TSUs are issued by a Timestamping CA of the UTN.

1.3.5 Relying parties

The Relying Parties are natural persons or legal persons who desire, for their own needs, to use the information contained in a Certificate or a Timestamp or to verify the validity of the Timestamp or Certificate. It is the duty of the Relying Parties to verify the information related to the revocation status of the Certificate.

The Relying Parties are subject to the stipulations of the Relying Party Agreement.

PAGE: 12 / 57

1.3.6 Certificate Officer

A Certificate Officer is a natural person who:

• carries out the tasks related to the life cycle of a Certificate of a legal person (from the Certificate application to its revocation);

• controls the use of the private key corresponding to this Certificate.

The Certificate Officer is appointed by the Certificate Subscriber. The Certificate Officer has a contractual, hierarchical or regulatory link with the legal person holding the Certificate and must be expressly mandated by it. The Certificate Officer must comply with the conditions stated in this CP, by the mandate that binds him to the Subscriber and by the Subscriber Agreement.

The Certificate Officer may need to be changed during the validity period of the Certificate (departure of the Certificate Officer from the entity, change of assignment and responsibilities in the entity, etc.). The Subscriber must immediately inform the CA about the departure or revocation of a Certificate Officer and appoint a new Certificate Officer. The CA must revoke a Certificate for which the Certificate Officer is no longer identified.

1.4 Certificate usage

1.4.1 Appropriate Certificate uses

Keypairs and Certificates of CAs The keypairs associated with the CA Certificates can be used to sign:

- the Certificates of Intermediate CAs (for Primary CAs);
- the Certificates of Subscribers (for Intermediate CAs);
- the CRL and/or OCSP responses of the CA;
- the Certificates of technical components of its infrastructure.

Keypairs and Certificates of Subscribers

The keypairs associated with the Certificates issued by the CA are intended to be used by the Subscribers for:

• signing documents with an electronic signature (for natural person Certificates issued by an Intermediate CA);

PAGE: 13 / 57

• sealing documents with an electronic seal (for legal person Certificates issued by an Intermediate CA);

• issuing Timestamps (for Certificates issued by a Timestamping CA).

1.4.2 Prohibited Certificate uses

Any use other than those specified in paragraph 1.4.1 is forbidden.

1.5 Policy administration

1.5.1 Organization administering the document

Universign Trust Network

Universign

7, rue du Faubourg Poissonnière, 75009 Paris, France

contact@universign.com

1.5.2 Contact person

Any questions related to this document may be addressed to:

The Policy Manager

Universign Trust Network

Universign

7, rue du Faubourg Poissonnière, 75009 Paris, France

contact@universign.com

1.5.3 Person determining CP suitability for the policy

The UTN determines the appropriateness of a CPS as regards the CP.

1.5.4 CPS approval procedures

The UTN pronounces the compliance of CPS with the CP according to an approval process that it defines at its discretion. This approval process includes audits conducted by UTN.

PAGE: 14 / 57

1.6 Definitions and acronyms

The terms used in this document are as follows:

Certificate Refers to the electronic file issued by the Certification Authority, comprising identification elements of its Subscriber and a cryptographic key allowing the verification of the Electronic Signature or Electronic Seal for which it is used.

Certification Authority (CA)

Refers to the authority in charge of creating, issuing, managing and revoking Certificates in pursuance of the Certification Policy.

- **Certification Policy** (CP) Refers to all the rules that the CA must comply with for implementing the certification service.
- **Certification Practice Statement** (CPS) Refers to the practices (organisation, operating procedures, technical and human resources) applied by the CA to implement its electronic certification service. These practices are compliant with the CP (s) that the CA has pledged to comply with.
- **Certificate Revocation List** (CRL) Refers to the list identifying the Certificates issued and later revoked by the Certification Authority.
- **Object IDentifier** (OID) Refers to the unique identification numbers organised hierarchically, which particularly enable referencing the conditions applicable to the certification or timestamping service, e.g. Certification or Timestamping Policy, Certificate family, Certification or Timestamping Practice Statements.
- **Online Certificate Status Protocol** (OCSP) A protocol that allows the Relying Parties to verify the status of a Certificate.

Registration Authority (RA)

Refers to the authority in charge of implementing the identification and authentication procedures for Certificate applications.

Relying Party Agreement

Refers to the agreement governing the relations between UTN and the Relying Parties.

Subscriber Agreement

Refers to the agreement governing the relations between the CA and the Subscriber.

PAGE: 15 / 57

Timestamp Refers to the electronic file issued by the Timestamping Authority, which binds the representation of a piece of data to a particular time, thereby establishing proof that the data existed at the said moment.

- **Timestamping Authority** (TSA) Refers to the authority in charge of creating and issuing Timestamps in pursuance of the Timestamping Policy.
- **Timestamping Policy** (TSP) Refers to all the rules that the TSA must comply with for implementing the timestamping service.
- **Timestamping Practice Statement (TSPS)** Refers to the practices (organisation, operating procedures, technical and human resources) applied by the TSA to implement its timestamping service. These practices are compliant with the TSP (s) that the TSA has pledged to comply with.
- **Timestamping Unit** (TSU) Set of hardware and software used by the TSA to create Timestamps. The TSU is identified via a unique key for sealing Timestamps.

2 Publication and repository responsibilities

2.1 Repositories

The CA publishes information related to the service that it provides (see 2.2).

The UTN publishes the CP in force and its prior versions as well as the Relying Party Agreement.

2.2 Published information

The CA pledges to inform the Subscribers and the Relying Parties about:

- the CP applicable to the Certificates that they use;
- the terms of use of the certification service:
- the CPS related to the applicable CP;
- the CRLs published in accordance with the requirements of the CP applicable to the Certificates;
- the currently valid Certificates of the CA.

The UTN provides the CA with a publishing website accessible at the address http://docs.universign.eu for providing the published information.

PAGE: 16 / 57

2.3 Time and frequency of publication

The time and frequency vary according to the information concerned:

• The CRLs are published every hour for Intermediate CAs and every day for the Primary CAs.

- The CA Certificates are distributed or uploaded before use.
- The CP, CPS and Relying Party Agreement are published after every update.

2.4 Access Controls on repositories

The published information is made public in accordance with section 2.1. They can be freely accessed in read-only mode.

Additions, deletions and modifications of this information are limited to only those persons who are authorised by the entity in charge of the published information.

3 Identification and Authentication

3.1 Naming

3.1.1 Types of names

The names used are compliant with the specifications of standard X.500.

The CA and the Subscriber are identified by an explicit name: the "Distinguished Name" ("DN" hereinafter) of type X.501. The DN fields and their semantics are given in the table below.

A CA may use additional fields that it defines in its CPS.

Natural person Certificates Natural person Certificates issued by the CA contain the following fields in the DN:

PAGE: 17 / 57

Field	Mandatory	Field Semantic	Verified by the RA
C	Yes	Nationality of the CA	
givenName	Yes	Given name of the natural person	Yes
surname	Yes	Surname of the natural person	Yes
0	No	Designation of the legal person to which the natural person	Yes
		is linked	
OI	No	Legal unique identifier of the legal person to which the natu-	Yes
		ral person is linked, structured as per ETSI 319 412-1	
SERIALNUMBER	Yes	The serial number assigned by the RA	Yes ¹
CN	Yes	Usual given name and surname of the natural person	Yes

Legal person Certificates Legal person Certificates issued by the CA contain the following fields in the DN:

Field	Mandatory	Field Semantic	Verified by the RA
C	Yes	Country of establishment of the Subscriber	Yes
ST	No	State/Region of the Subscriber	Yes
L	No	City of the Subscriber	Yes
0	Yes	Legal name of the Subscriber	Yes
OI	Yes	Legal unique identifier of the Subscriber, structured as per ETSI 319 412-	Yes
		1	
CN	Yes	Free named referring to the organization	Yes ²

3.1.2 Need for names to be meaningful

The names chosen to designate the Certificate Subscribers must be meaningful, and must allow directly or indirectly identifying the Certificate Subscriber.

3.1.3 Anonymity or pseudonymity of Subscribers

The anonymity or pseudonymity of Subscribers is forbidden.

PAGE: 18 / 57

¹It will only be verified that this number is unique.

²It will only be verified that the name is meaningful (seeSect. 3.1.2)

3.1.4 Rules for interpreting various name forms

No specific commitment.

3.1.5 Uniqueness of names

The same DN cannot be assigned by a CA to different Subscribers.

3.1.6 Recognition, authentication, and role of trademarks

The Subscribers declare that they possess the intellectual property rights associated with the names, brands, domain name or any other distinctive sign contained in their Certificate. The CA does not carry out any verification of these rights, but is still authorised to reject a Certificate application or to revoke a Certificate in case of a dispute regarding these distinctive signs. The CA cannot be held liable in the event of an unauthorised use of elements protected by intellectual property rights.

3.2 Initial identity validation

3.2.1 Method to prove possession of private key

If it generates its keypair, a Subscriber must prove to the CA issuing the Certificate, by appropriate means, that it is indeed in possession of the private key corresponding to the public key to be certified.

3.2.2 Authentication of organization identity

Irrespective of the type of Certificate issued, the future Certificate Subscriber must provide the information and documents that can be used to justify its identity and the information that it wishes to have appear on the Certificate. Only the information strictly necessary for issuing the Certificate will be requested by the CA. A copy of the identity proof documents will be safely preserved by the CA in the registration file of the Subscriber. The CA validates the identity of a natural person via a physical face-to-face meeting or a method known to be equivalent to the former for issuing qualified Certificates. The CA informs the Certificate applicant of the possible use of the transmitted information (email address, phone number, etc.) as authentication elements.

PAGE: 19 / 57

3.2.3 Authentication of individual identity

See 3.2.2.

3.2.4 Non-verified Subscriber information

Information that is not verified by the RA is specified in section 3.1.1.

3.2.5 Validation of authority

The RA verifies the authorisation of a natural person to represent a legal person during the validation of the Subscriber 's identity.

3.2.6 Criteria for interoperation

Not applicable.

3.3 Identification and authentication for re-key requests

The keys associated with the Certificates are not renewed.

3.3.1 Identification and authentication for routine re-key

Not applicable.

3.3.2 Identification and authentication for re-key after revocation

Not applicable.

3.4 Identification and authentication for revocation request

The RA authenticates the revocation applicant, mainly on the basis of the information contained in the registration file in the case of a revocation application of a Certificate intended for a natural person. It also verifies the applicant's authorisation in accordance with section 4.9.2 in case of a revocation application of a Certificate intended for a legal person.

4 Certificate Life-Cycle Operational Requirements

4.1 Certificate application

4.1.1 Who can submit a Certificate application

The Certificate application is sent by the Subscriber or by a person expressly appointed by the Subscriber (i.e. the prior consent of the future Subscriber is compulsory).

4.1.2 Enrolment process and responsibilities

The Certificate application includes identification data on the Subscriber. This identification data is transmitted under its sole responsibility.

The registration process at the CA requires the following steps:

- The applicant reads and accepts the CA 's Subscriber Agreement;
- the applicant provides the required information during the registration application. In this respect, he/she guarantees the accuracy of the provided information and must provide the RA with all information required for the registration file;
- the RA validates the information of the registration file (see Section 3.2.3) and transmits it securely to the CA;
- the applicant generates (or requests the generation of) its dual-key in a cryptographic device that complies with the requirements of Section 6.2.11;
- the applicant transmits (or requests the transmission of) its public key to the CA:
- the applicant proves to the CA that it possesses and/or controls its private key in accordance with section 3.2.1.

4.2 Certificate application processing

4.2.1 Performing identification and authentication functions

The RA validates the Certificate applications from the Subscribers. The RA validates the information provided by the Subscribers in accordance with the provisions of section 3.2.

4.2.2 Approval or rejection of Certificate applications

The CA processes the application on receiving it. If the application is rejected during one of these steps, the applicant is informed of this as soon as possible.

4.2.3 Time to process Certificate applications

A Certificate application remains valid until it is rejected. There is no maximum duration for the issue of a Certificate.

PAGE: 21 / 57

4.3 Certificate issuance

4.3.1 CA actions during Certificate issuance

The CA creates a Certificate once the validation process of the Certificate application is complete, as defined in section 4.2. The issued Certificate is compliant with the information contained in the Certificate application and with the profile defined in section 7.1.

4.3.2 Notification to Subscriber by the CA of issuance of Certificate

The CA notifies the applicant within a reasonable period about the issue of the Certificate and provides it in an appropriate manner.

4.4 Certificate acceptance

4.4.1 Conduct constituting Certificate acceptance

The Certificates are deemed as accepted if no objection is made within 48 hours after its provision or at the first use of the associated private key.

4.4.2 Publication of the Certificate

The Certificates are public.

4.4.3 Notification of Certificate issuance by the CA to other entities

Not applicable.

4.5 Keypair and Certificate usage

The Subscriber pledges to use the Certificate in accordance with:

- the CP, especially for the limits of use defined in section 1.4;
- the Subscriber Agreement that it consented to;
- the special terms and conditions defined between the CA and the Subscriber, where applicable;
- the KeyUsage extension or any other extension restricting the use of the key, defined in the issued Certificate.

PAGE: 22 / 57

The Relying Parties consent to the terms and conditions of the Relying Party Agreement before any use of the Certificates of UTN.

The Relying Parties are required to:

- determine that the use of the Certificate is compliant with the conditions defined in the CP (see section 1.4);
- determine that the Certificate is used in compliance with the KeyUsage extension defined in it;
- verify the status of the Certificate.

The CA cannot be held liable in case of any use of the Certificate that does not comply with the CP, the Subscriber Agreement, the Relying Party Agreement or any other special agreement signed between the CA and the Subscriber.

4.6 Certificate renewal

No renewal is authorised.

4.6.1 Circumstance for certificate renewal

Not applicable.

4.6.2 Who may request renewal

Not applicable.

4.6.3 Processing certificate renewal requests

Not applicable.

4.6.4 Notification of new certificate issuance to Subscriber

Not applicable.

4.6.5 Conduct constituting acceptance of a renewal certificate

Not applicable.

4.6.6 Publication of the renewal certificate by the CA

Not applicable.

UNIVERSIGN CERTIFICATION POLICY

PAGE: 23 / 57

4.6.7 Notification of certificate issuance by the CA to other entities

Not applicable.

4.7 Certificate re-key

Certificate re-key is not allowed.

4.7.1 Circumstance for certificate re-key

Not applicable.

4.7.2 Who may request certification of a new public key

Not applicable.

4.7.3 Processing certificate re-keying requests

Not applicable.

4.7.4 Notification of new certificate issuance to subscriber

Not applicable.

4.7.5 Conduct constituting acceptance of a re-keyed certificate

Not applicable.

4.7.6 Publication of the re-keyed certificate by the CA

Not applicable.

4.7.7 Notification of certificate issuance by the CA to other entities

Not applicable.

4.8 Certificate modification

No modification of the Certificate is authorised without renewal.

4.8.1 Circumstance for certificate modification

Not applicable.

UNIVERSIGN

PAGE: 24 / 57

4.8.2 Who may request certificate modification

Not applicable.

4.8.3 Processing certificate modification requests

Not applicable.

4.8.4 Notification of new certificate issuance to Subscriber

Not applicable.

4.8.5 Conduct constituting acceptance of modified certificate

Not applicable.

4.8.6 Publication of the modified certificate by the CA

Not applicable.

4.8.7 Notification of certificate issuance by the CA to other entities

Not applicable.

4.9 Certificate revocation and suspension

4.9.1 Circumstances for revocation

The Certificate may be revoked in case of:

- a request from the Subscriber;
- non-compliance with the Subscriber Agreement;
- inaccuracy or nullity of the information of the Certificate or if this information infringes upon the rights of a third party;
- suspicions of a private key being compromised, lost or stolen (including one of the private keys of the CA);
- error in the registration procedure;
- termination of the contractual relations between the CA and the Subscriber;
- non-payment related to the certification service, if applicable;

- permanent cessation of the CA 's activity;
- loss of control of the private key associated with the Subscriber 's Certificate (loss or theft of the activation data of the private key);

• use of the Certificate that damages or is likely to damage the CA.

The CA does not publish the causes for revocation.

4.9.2 Who can request revocation

Only the Subscriber, the Certificate Officer and the CA are authorised to file an application for the revocation of a Certificate.

4.9.3 Procedure for revocation request

The validation of the application by the CA must include the verification of the origin of the application and its admissibility. The CA authenticates the revocation application in accordance with the provisions of section 3.4 and revokes the Certificate immediately. All operations are conducted in such a way as to guarantee the integrity, confidentiality (if necessary) and authenticity of the data processed during the process. The CA informs the revocation applicant and the Subscriber (if they are two different persons) about the effective revocation of the Certificate and the change in status. All revocations are irrevocable.

4.9.4 Revocation request grace period

The revocation application is to be sent to the CA as soon as the Subscriber becomes aware of one of the possible causes of revocation. It must be filed immediately

4.9.5 Time within which CA must process the revocation request

Revocation applications are processed immediately after effectively authenticating the applicant and accepting the application, and within a maximum period of 24 hours.

4.9.6 Revocation checking requirements for Relying Parties

The Relying Parties are required to verify the status of the Certificates and the corresponding chain of trust.

PAGE: 26 / 57

4.9.7 CRL issuance frequency

The CRLs are updated at least once every 60 minutes.

4.9.8 Maximum latency for CRLs

CRLs are published within a maximum period of 30 minutes after they are generated.

4.9.9 On-line revocation/status checking availability

The Certificate revocation and status service is available on a publishing website. The Certificate status information system may include one or more OCSP responders (online certificate status protocol). The CA indicates in its Certificates that it issues a link to the OCSP responder to be used to verify the status of the Certificate. Under normal operation, OCSP responders are available 24/7.

4.9.10 On-line revocation checking requirements

A Relying Party is required to verify the status of a Certificate before using for verifying an electronic signature or seal. The Relying Party may either check the most recently published CRL or file a request for the Certificate status with the OCSP responder.

4.9.11 Other forms of revocation advertisements available

Not applicable.

4.9.12 Special requirements regarding key compromise

If the private key of the CA is compromised or suspected of being compromised, the CA informs the participants of UTN of the harmful effects of such an incident by appropriate means.

4.9.13 Circumstances for suspension

The suspension of Certificates is not authorized.

4.9.14 Who can request suspension

Not applicable.

PAGE: 27 / 57

4.9.15 Procedure for suspension request

Not applicable.

4.9.16 Limits on suspension period

Not applicable.

4.10 Certificate status services

4.10.1 Operational characteristics

The CA must provide the Relying Parties with information on the status of Certificates, allowing them to verify and validate them prior to use. The CA ensures the integrity and authenticity of the published CRLs and OCSP responses. The CRLs and OCSP responses contain information on the status of the Certificates until their expiry. The information on the status of qualified Certificates are preserved even after their expiry.

4.10.2 Service availability

The function of information on the status of Certificates is available on multiple publishing servers, thereby ensuring 24/7 availability under normal operating conditions.

4.10.3 Optional features

Not applicable.

4.11 End of subscription

The end of relations between the CA and a Subscriber is defined in a contract. The contract between the CA and the Subscriber may define obligations that persist after the expiry or revocation of the Certificate. If such a clause is not present, the relations end at the expiry or revocation of the Certificate.

4.12 Key escrow and recovery

The keys are not escrowed.

4.12.1 Key escrow and recovery policy and practices

Not applicable.

UNIVERSIGN CERTIFICATION POLICY PAGE: 28 / 57

4.12.2 Session key encapsulation and recovery policy and practices

Not applicable.

5 Facility, management, and operational controls

The CA defines its Information Security Policy (ISP). It describes the approach and solutions to be implemented in terms of security management.

The ISP is kept up to date and approved by the CA.

5.1 Physical controls

5.1.1 Site location and construction

The CA hosts its services in secured premises. These sites and premises have physical security mechanisms that provide strong protection against unauthorised access.

5.1.2 Physical access

Access to the zones of the CA services is restricted to only those persons who are authorised by name.

The premises consist of multiple successive physical security zones. Every successive zone offers a more restricted access with greater physical security against unauthorised access, due to the fact that each secure zone is encapsulated by the previous one.

5.1.3 Power and air conditioning

Backup measures have been installed to ensure that any interruption in the power supply or a malfunctioning of the air-conditioning system does not harm the commitments made by the CA in terms of availability.

5.1.4 Water exposures

The definition of the security perimeter takes water damage-related risks into account. Protective means are implemented by the host to mitigate the residual risks.

5.1.5 Fire prevention and protection

The secure zones are equipped with appropriate fire prevention and protection measures.

UNIVERSIGN CERTIFICATION POLICY PAGE: 29 / 57

5.1.6 Media storage

The media are stored in a secure manner. The backup media are stored securely in a site that is geographically separate from the one storing the original media. Zones containing data media are protected from risks of fire, floods and deterioration. Paper documents are stored by the CA in secure locked rooms, in a safe that can be opened only by the manager of the CA and by authorised staff. The CA takes measures to protect against the obsolescence and deterioration of the media during the records retention period.

5.1.7 Waste disposal

Media that is deemed sensitive in terms of confidentiality is destroyed, or may be reused in the operational context of an identical sensitivity level.

5.1.8 Off-site backup

In order to allow resumption of its commitments after an incident, the CA makes off-site backups of its critical functions and information. The CA guarantees that the backups are made by persons having Trusted Roles. The CA guarantees that the backups are exported outside the production site and benefit from measures for protecting confidentiality and integrity. The CA guarantees that the backups are regularly tested to ensure that the measures of the business continuity plan are followed.

5.2 Procedural controls

5.2.1 Trusted roles

The Trusted Roles defined in this chapter are applicable to all member CA of the UTN.

The following Trusted Roles have been defined:

Security manager: he is fully responsible for all security aspects of the information system.

System Administration Manager: he is responsible for the system administrators. He possesses authentication rights on all components of the CA.

PAGE: 30 / 57

System Administrator: he is in charge of the administration and configuration of all technical components of the CA as well as for the day-to-day operating processes of the CA. He is authorised to make backups and restores.

Auditor: he is authorised to audit the archives and all audit data of the CA.

Controller: he is in charge of the recurring analysis of events occurring on the components of the CA.

Secret Keeper: he ensures the confidentiality, integrity and availability of the secrets that are entrusted to him.

Registration operator: he carries out all registration operations of future Certificate Subscribers.

Staff occupying Trusted Roles must be free from any conflict of interest that is not compatible with their tasks.

5.2.2 Number of persons required per task

The CA determines the procedures and number of persons having a Trusted Role that are needed for every action on sensitive operations.

5.2.3 Identification and authentication for each role

Identification and authentication measures have been defined in order to implement the access control policy and operations traceability. The assigned Trusted Roles are notified in writing to the persons concerned by the CA. The CA regularly ensures that all the Trusted Roles are filled in order to ensure business continuity.

5.2.4 Roles requiring separation of duties

The CA ensures that the roles of Security Manager and System Administrator are not assigned to the same person.

The CA ensures that the roles of Controller and System Administrator are not assigned to the same person.

The CA ensures that the roles of Auditor and System Administrator are not assigned to the same person.

The CA ensures that the security operations are separated from the conventional operating activities and that they are systematically conducted under the control of a person having a Trusted Role.

PAGE: 31 / 57

5.2.5 Risk analysis

The CA carries out a risk analysis to identify the threats to its services. This risk analysis is reviewed periodically and during significant structural changes. Furthermore, the methodology used to carry out the risk analysis enables ensuring that the inventory of the CA is kept up to date.

5.3 Personnel controls

5.3.1 Qualifications, experience, and clearance requirements

The CA ensures that the assignments of staff to Trusted Roles correspond to their professional skills. The supervisory staff possesses the appropriate expertise and is familiarised with the security procedures. Anyone intervening in Trusted Roles is informed of his responsibilities (job description) and the procedures related to system security and staff control. Staff occupying Trusted Roles are appointed by the management of the CA.

5.3.2 Background check procedures

Before appointing a person to a Trusted Role, the CA verifies his legal history and his professional skills, in order to validate his suitability to the job in question. The following details are especially verified:

- the person has no conflict of interest that would impact the impartiality of the tasks assigned to him;
- the person has not committed any offence that contradicts his Trusted Role.

The CA selects persons for Trusted Roles in consideration of their loyalty, conscientiousness and integrity.

5.3.3 Training requirements

The staff is trained to operate the software, hardware and internal procedures in use.

5.3.4 Retraining frequency and requirements

Every change in the systems, procedures or organisations is covered by information or training for the intervening staff insofar as this change affects their work.

PAGE: 32 / 57

5.3.5 Job rotation frequency and sequence

Not applicable.

5.3.6 Sanctions for unauthorized actions

The sanctions in case of unauthorised actions are defined in contracts.

The nature of these sanctions is informed to the persons occupying a Trusted Role.

5.3.7 Independent contractor requirements

The requirements related to the staff of external service providers are formalised via contracts. The contracts signed with the service providers define the requirements related to confidentiality and security as well as the measures related to the use of computer resources.

5.3.8 Documentation supplied to personnel

The documented security rules and procedures are submitted to the Approval Board of the CA for approval. The security rules are communicated to the staff at joining, depending on the role assigned to the intervening staff. The persons tasked with an operational role in the CA have access to the corresponding procedures and are required to comply with them.

5.4 Audit logging procedures

5.4.1 Types of events recorded

The CA takes the necessary measures to record the following events:

- all events related to the registration (certificate application);
- all events related to the life cycle of the CA 's keys;
- all events related to the life cycle of the certificates issued by the CA, including events linked to the revocation;
- all events of the various components of the CA (start-up of servers, network access, etc.).

These logs enable ensuring the traceability and accountability of the actions conducted, especially in case of a request from a legal or administrative authority. In its internal procedures, the CA describes the details of the recorded events

PAGE: 33 / 57

and data. The traceability procedures implemented by the CA are robust and help to aggregate logs from various sources, to detect intrusions and to develop a monitoring plan.

5.4.2 Frequency of processing log

The event logs are systematically used when an abnormal event is recorded.

5.4.3 Retention period for audit log

The event logs are stored for the duration required for providing evidence in administrative and legal proceedings.

5.4.4 Protection of audit log

The event logs are accessible only to authorised staff. They cannot be modified.

5.4.5 Audit log backup procedures

The logs are regularly backed up on an external system.

5.4.6 Audit collection system

The systems for collecting the event logs of the CA are intended to be used to provide evidence during legal proceedings and in case of an administrative inspection. They also contribute to ensuring business continuity. The collected information is stored for an appropriate period of time, even after the discontinuation of the CA 's business activities. They are relevant and proportional as regards their purpose.

5.4.7 Notification to event-causing subject

There is no notification of events.

5.4.8 Vulnerability assessments

The CA implements controls for detecting:

- unauthorised access:
- technical anomalies;
- inconsistencies between different events of the CA.

PAGE: 34 / 57

5.5 Records archival

5.5.1 Types of records archived

The following data is archived:

- the CPS;
- the published CRLs and Certificates;
- the Subscribers ' registration data;
 - proof of acceptance of the general and special terms and conditions of use and/or the Subscriber Agreement (see Section 4.1.2);
 - the Subscribers 'registration applications;
 - a copy of the information that enabled verifying the identify of a natural person;
 - the registration file of Subscribers (see section 3.2);
- the event logs, particularly containing:
 - events related to a significant change in the CA 's environment and the specific time of occurrence of the event;
 - events related to operations on the keys and certificates issued by the
 CA and the specific time of occurrence of the event.

In its internal procedures, the CA describes the details data and events that will be stored.

5.5.2 Retention period for archive

All the archives are preserved in compliance with the legislation in force (see Sect. 9.4.1)) and the obligation inherent to the CA (see Sect. 5.8).

5.5.3 Protection of archive

Irrespective of their medium, the integrity of the archives is protected and they are accessible only to authorised persons. These archives can be consulted and used for the entire duration of their life cycle and are preserved in a secure environment.

PAGE: 35 / 57

5.5.4 Archive backup procedures

Regular electronic backups of the archives are made by persons having Trusted Roles. These backups are exported outside the production site and benefit from measures for protecting confidentiality and integrity.

5.5.5 Requirements for time-stamping of records

The event records must contain the date and time of the event. However, there is no requirement of a cryptographic timestamp for these events.

5.5.6 Archive collection system

The systems for collecting archives of the CA are internal systems.

5.5.7 Procedures to obtain and verify archive information

The archives (hard and soft copies) can be recovered in a period of less than two working days. These archives are preserved and processed by teams of the CA.

5.6 Key changeover

The CA does not have an automatic key renewal procedure; instead, a CA must generate a new keypair and file a Certificate application with a Primary CA before the expiry of the currently valid CA Certificate.

The CA must apply all necessary actions to prevent any interruption of the CA 's operations.

5.7 Compromise and disaster recovery

5.7.1 Incident and compromise handling procedures

The CA implements procedures and means for notifying and processing incidents. These means help to minimise damage in case of incidents.

The CA implements a response plan in case of a major incident, such as the compromising of publishing mechanisms or its Certificate issuing mechanism.

A major incident, such as a loss, suspected compromising or theft of the private key of the CA, is immediately notified to the Approval Board, which, if necessary, may decide to file a CA Certificate revocation application with the UTN and to end the CA.

PAGE: 36 / 57

5.7.2 Computing resources, software, and/or data are corrupted

A continuity plan has been implemented for responding to the availability requirements of the various components of the CA. This plan is tested regularly.

5.7.3 Entity private key compromise procedures

This point is covered in the business recovery and continuity plans. The compromising of a key of the CA immediately triggers the revocation of the issued Certificates. In this case, the various persons and entities concerned are informed of the unsafe nature of the CRL signed by the compromised key of the CA. Similar measures are taken if the soundness of the algorithm used or that of the parameters used by the CA become insufficient for the purposes of the CA.

5.7.4 Business continuity capabilities after a disaster

The business continuity capacity following a disaster is addressed in the business recovery and continuity plan. After a disaster, the CA implements this plan in order to restore the affected services. In particular, the CA has a redundant architecture for its critical services. Moreover, the CA manages a stock of spare parts in order to handle any hardware breakdown.

In case of a major incident, the CA has a business recovery plan that allows it to set up a new CA within a reasonable period of time. This plan is based on a secondary host room.

Once its business is recovered, the CA implements all necessary measures to prevent the recurrence of a similar disaster. The restoration operations are conducted by staff having Trusted Roles.

The Business Recovery Plan is tested regularly.

5.8 CA termination

In case of a permanent shut-down, the CA implements an end of life plan. This end of life plan addresses the following aspects:

- the notification of the shut-down to the Subscribers and the persons and organisations affected by the plan;
- the notification of the shut-down to UTN;
- the potential revocation of all issued Certificates that are still valid when the decision was made to discontinue the business activity;

PAGE: 37 / 57

- the inapplicability of the private key of the CA;
- the measures required to transfer its obligations related to the registration files, revocation lists and the archives of audit data;
- the provision of information for Relying Parties.

This plan is verified and updated regularly.

6 Technical security controls

6.1 Keypair generation and installation

6.1.1 Keypair generation

The keys of the CA are generated:

- during a key ceremony in front of witnesses;
- under the control of at least two persons having Trusted Roles (see Sect. 5.2.1);
- in secure premises (see Sect. 5.1);
- in an HSM compliant with the requirements defined in section 6.2.11.

The keys are generated according to a specific procedure and result in the drafting of a report after the ceremony.

The Subscribers' keypairs to be certified are generated in accordance with the requirements of sections 6.1.5 and 6.1.6.

The public keys of the Subscribers are transmitted to the CA under the conditions laid down in section 6.1.3.

6.1.2 Private key delivery to Subscriber

Not applicable.

6.1.3 Public key delivery to CA

The public key to be certified is transmitted to the CA in order to guarantee the integrity and source of this key.

6.1.4 CA public key delivery to Relying Parties

The CA 's Certificate is published on the Publishing Website.

The Certificate contains the information specified in chapter 7 of the CP.

UNIVERSIGN CERTIFICATION POLICY PAGE: 38 / 57

6.1.5 Key sizes

The CA 's keys must be compliant with (or cryptographically superior or equal to) the following characteristics:

Certificate	Key Size	Format
CA	2048	RSA
	4096 (for keys generated	RSA
	after 1 January 2019)	

The Subscribers 'keys must be compliant with (or cryptographically superior or equal to) the following characteristics:

Certificate	Key Size	Format
Subscriber	2048	RSA
	4096 (for keys generated	RSA
	after 1 January 2019)	

6.1.6 Public key parameters generation and quality checking

The CA and the Subscribers must use certified hardware (see Sect. 6.2.11)) and algorithms whose parameters comply with the appropriate security standards. The parameters and algorithms used are documented in chapter 7.

6.1.7 Key usage purposes

See section 7.1.

6.2 Private key protection and cryptographic module engineering controls

6.2.1 Cryptographic module standards and controls

The cryptographic modules used by the CA for generating and implementing its signature keys are certified hardware cryptographic modules that comply with the requirements of section 6.2.11. The CA ensures the security of these modules throughout their life cycle. In particular, the CA implements the procedures required for:

• ensuring their integrity during their transport from the supplier;

PAGE: 39 / 57

- ensuring their integrity during their storage before the key ceremony;
- ensuring that the operations of activation, backing up and restoration of the signature keys are conducted under the control of two staff members having Trusted Roles;
- ensuring that they are in a proper functional state;
- ensuring that the keys that they contain are destroyed after being decommissioned.

6.2.2 Private key (n out of m) multi-person control

The private key of the CA is controlled by the activation data stored on the smart cards handed over to the secret keepers during the key ceremony. A sharing of the HSM's secret is implemented by the CA.

6.2.3 Private key escrow

The private keys are not escrowed.

6.2.4 Private key backup

The private keys of the CA are backed up via copies:

- either outside an cryptographic module but in an encrypted form and with an integrity control mechanism. The corresponding cryptographic offers a security level equivalent to storage in a cryptographic module and is based on an algorithm, a key length and a standard operating procedure capable of resisting cryptanalysis attacks for at least the service life of the thus protected key. These backup copies of the CA 's private keys are stored in a secure safe that can be accessed only by persons with Trusted Roles.
- or in an equivalent cryptographic module operated under similar or superior security conditions.

The backups are made under the control of two persons having Trusted Roles.

6.2.5 Private key archival

The private keys of the CA are not archived.

PAGE: 40 / 57

6.2.6 Private key transfer into or from a cryptographic module

Apart from the backup copies, the private keys of the CA are generated in its cryptographic module and hence are not transferred. During the generation of a backup copy, the transfer implements an encryption mechanism that enables guaranteeing that no sensitive information transits in an unsecure manner.

6.2.7 Private key storage on cryptographic module

The private keys of the CA are stored in a cryptographic module. For the purposes of backup copies, they are stored in a cryptographic module in compliance with the measures defined in section 6.2.4.

6.2.8 Method to activate the private key

The activation of private keys is controlled by specific data referred to as activation data. It is carried out in a cryptographic module that complies with the requirements of section 6.2.11, under the control of two persons with Trusted Roles.

6.2.9 Method to deactivate the private key

The private key is deactivated when the cryptographic module is shut down.

6.2.10 Method to destroy the private key

The private key of the CA is destroyed from its cryptographic module. The CA ensures that all corresponding backup copies are also destroyed.

6.2.11 Cryptographic Module Rating

Cryptographic module of the CA: The cryptographic module used by the CA complies with the following certification requirements:

- EAL 4+ as regards the Common Criteria of ISO/CEI 15408 (compliant with the Protection Profile CWA 14167-2 or CWA 14167-3); or
- FIPS 140-2 level 3
- or equivalent.

PAGE: 41 / 57

Cryptographic module of Subscribers: The CA does not hand over a signature creation device to the Subscribers. The signature creation devices of Subscribers must at least comply with the following certifications:

- EAL 4+ as regards the Common Criteria of ISO/CEI 15408 (compliant with Protection Profile CWA 14169 or certified as compliant with the Protection Profile of a Secure Signature Creation Device (SSCD) by a European governmental entity);
- FIPS 140-2 level 3
- QSCD or QSealCD within the meaning of regulation eIDAS (EU) No 910/2014.
- or equivalent.

For Certificates issued in accordance with OID 1.3.6.1.4.1.15819.5.1.3.6, the device must be a QSCD.

For Certificates issued in accordance with OID 1.3.6.1.4.1.15819.5.1.3.7, the device must be a QSealCD.

6.3 Other aspects of key pair management

6.3.1 Public key archival

The CA archives its public keys as per the requirements of section 5.5.

6.3.2 Certificate operational periods and key pair usage periods

The maximum service life of the Certificates is:

- 30 years for the Primary CA Certificates;
- 20 years for the Timestamping CA Certificates;
- 15 years for the Intermediate CA Certificates;
- 5 years for natural person Certificates and legal person Certificates;
- 11 years for legal person Certificates intended for timestamping.

PAGE: 42 / 57

6.4 Activation data

6.4.1 Activation data generation and installation

The activation data of the CA 's key is generated during the key ceremony. This activation data is stored on smart cards and handed over to the secret keepers.

Every secret keeper takes the necessary measures to protect themself against the loss, theft, unauthorised use or unauthorised destruction of their smart card and the activation data that it contains.

6.4.2 Activation data protection

The activation data is stored on a nominative and personal smart card. The responsibility for this smart card falls on the person to whom the card is submitted. The card is protected by a personal password of the secret keeper. The smart cards are then stored in a personal secure safe. Every secret keeper is responsible for their part of the activation secret. They give their consent by signing a form defining their responsibilities.

6.4.3 Other aspects of activation data

Transmission of activation data: The transmission of smart cards containing activation data from one secret keeper to a new secret keeper must be carried out in such a way as to protect the activation data from loss, theft, modification, unauthorised disclosure or unauthorised use of this data.

Destruction of activation data: The activation data is decommissioned in order to prevent the theft, loss, modification, unauthorised disclosure or unauthorised use of this data.

6.5 Computer security controls

6.5.1 Specific computer security technical requirements

Depending on the system to be protected, the CA implements control mechanisms that are appropriate as regards the platform to be secured (in order to protect against the execution of an unauthorised or potentially dangerous code on its system).

The CA implements access control and authentication mechanisms for all roles authorised to generate new certificates. It maintains these security systems continuously. These mechanisms are described in the CPS.

6.5.2 Computer security rating

Not applicable.

6.6 Life cycle technical controls

6.6.1 System development controls

All software components of the CA are developed under conditions and according to development processes that guarantee their security. The CA implements quality processes during the design and development of its software.

When beginning production of a software component, the CA checks its source and its integrity and ensures a traceability of all modifications made to its information system.

The development and testing infrastructure are separate from the production infrastructure of the CA.

6.6.2 Security management controls

The CA ensures that the software programs are updated in such a way as to ensure system security. The updates are carried out by persons having a Trusted Role in the CA.

6.6.3 Life cycle security controls

Not applicable.

6.7 Network security controls

Network communications containing confidential information are subjected to protective measures against eavesdropping. The rules governing these controls are verified regularly.

Security measures are implemented in order to protect the local components of the information system from unauthorised access, especially for sensitive data.

The CA implements platform administration access management procedures in order to maintain a high level of security. These measures include the authentication of administrators, the production of logs for audits, the use of secure VPN-type channels as well as the possibility of modifying access rights at any time. The CA also implements an administration network that is disconnected from the nominal network.

PAGE: 44 / 57

The CA implements access control procedures to separate the administration functions and the operational functions. The use of applications (publishing, certificate generation, revocation) requires an authentication of the users or entities. An access control policy is implemented to limit access to these applications to authorised persons only.

6.8 Time-stamping

All servers of the CA are synchronised with the same time source (UTC). The synchronisation of the servers is regularly checked.

7 Certificate, CRL and OCSP profiles

7.1 Certificate profiles

All Certificates issued by the CA are compliant with standards X.509, [ETSI 319 412-2], [ETSI 319 412-3] et [ETSI 319 412-5].

The following tables indicate the fields that should be present and their semantics, if applicable. In its CPS, the CA specifies the value of the basic fields as well as the type and value of the extensions used.

7.1.1 Certificates

Base fields

Field	Value
Version	v3
Issuer DN	The DN of the CA compliant with section 3.1.1
Subject DN	The DN of the Subscriber compliant with section 3.1.1

PAGE: 45 / 57

Certificate extensions

Field	OID	Crit.	Comment
Authority Key Identifier	2.5.29.35	No	Must be present for Sub-
			scriber and Intermediate CA
			Certificates
Subject Key Identifier	2.5.29.14	No	Must be present
Key Usage	2.5.29.15	Yes	Must be present
Basic Constraint	2.5.29.19	Yes/No	Must be critical for Interme-
			diate CA Certificates, non-
			critical for Subscriber Certifi-
			cates
CRL Distribution Points	2.5.29.31	No	Must be present and at least
			include one download URL
Authority Info Access	1.3.6.1.5.5.7.1.1	No	Must be present for Sub-
			scriber and Intermediatea CA
			Certificates
Certificate Policies	2.5.29.32	No	Must be present for Sub-
			scriber Certificates and com-
			prise an OID defined by this
			CP
QC Statements	1.3.6.1.5.5.7.1.3	No	Must be present for qualified
			Subscriber Certificates

7.2 CRL Profile

Base fields

Field	Value
Version	1
Signature	RSA/SHA-256
Issuer DN	The DN of the CA
Next Update	7 days maximum

CRL extension

Field	OID	Crit.	Comment
Authority Key Identifier	2.5.29.35	No	Must be present
CRL Number	2.5.29.20	No	Must be present

7.3 OCSP Profile

The CA must specify if it provides an OCSP status verification service.

UNIVERSIGN CERTIFICATION POLICY PAGE: 46 / 57

8 Compliance audit and other assessments

8.1 Frequency or circumstances of assessment

Audits are conducted by the CA:

- · an internal audit conducted
- either by external service providers specialising in the domain;
- or by an internal lead auditor of the CA.
- a certification audit for standards [ETSI 319 411-1] and [ETSI 319 411-2], conducted every 2 years by an accredited body.

A control of compliance with the CPS in force is conducted:

- during the operational implementation of the system;
- at least once per calendar year (internal audit);
- during the surveillance or renewal of certifications, in accordance with the regulatory procedures in force;
- when a significant change is carried out.

8.2 Identity/qualifications of assessor

The evaluators must ensure that the policies, statements and services are correctly implemented by the CA and detect cases of non-compliance that could compromise the security of the offered service. The CA pledges to appoint evaluators whose skills are proven in matters of information system security and who are specialised in the domain of activity of the controlled component.

8.3 Assessor's relationship to assessed entity

Unless specifically agreed between the CA and the UTN, the CA appoints the evaluator authorised to conduct the audit. The CA guarantees the independence and impartiality of the evaluator.

8.4 Topics covered by assessment

The evaluator checks the compliance of the audited component, on all or part of the implementation of:

- the CP;
- the CPS;

PAGE: 47 / 57

• the components of the CA.

Before every audit, the evaluators suggest a list of components and procedures that they wish to verify to the Approvals Committee of the CA. They use this to develop the detailed audit plan.

8.5 Actions taken as a result of deficiency

After a compliance check, the evaluator and his team submit a verdict to the Approvals Committee of the CA, which can be: "successful", "failed", "to be confirmed".

"Failed" verdict: The audit team issues recommendations to the CA. The CA can choose the measures to be applied.

"To be confirmed" verdict: the audit team identifies the non-compliances and ranks them. The CA should then suggest a schedule for resolving the non-compliances. A verification will be used to ensure that the identified non-compliances have been resolved.

"Successful" verdict: the CA confirms that the controlled component is compliant with the commitments of the CP and its announced practices.

8.6 Communication of results

The results of the compliance audits are sent to the Approval Board, to the UTN and are made available to the authorities in charge of qualifying and certifying the service.

9 Other business and legal matters

9.1 Fees

The members of UTN determine the pricing conditions of their services.

9.1.1 Certificate access fees

Not applicable.

9.1.2 Revocation or status information access fees

Access to the CRL publishing service, OCSP responders and the revocation service is free of charge.

9.1.3 Fees for other services

No specific commitment.

PAGE: 48 / 57

9.1.4 Refund policy

The CA services are not subject to any reimbursement.

9.2 Financial responsibility

9.2.1 Insurance coverage

The members of the UTN subscribe to an appropriate liability insurance that covers the financial risks related to the use of the service that it provides, in accordance with the regulations applicable to its business.

It is the duty of the CA to evaluate the financial risk that is to be covered.

9.2.2 Other assets

The CA implements an administrative and financial policy that aims to maintain, throughout the duration of its business, the financial resources required for fulfilling the obligations defined by the CP.

9.2.3 Insurance or warranty coverage for end-entities

No specific commitment.

9.3 Confidentiality of business information

9.3.1 Scope of confidential information

The following information is considered to be confidential:

- the private keys of the CA,
- the activation data associated with the private keys of the CA,
- the event logs,
- the supporting documents of the registration files,
- the audit reports,
- the causes of revocation of Certificates,
- the business continuity, recovery and stoppage plans.

Other information may be considered as confidential by the CA.

9.3.2 Information not within the scope of confidential information

The publishing website of the CA and its contents are deemed as public.

UNIVERSIGN CERTIFICATION POLICY PAGE: 49 / 57

9.3.3 Responsibility to protect confidential information

The CA pledges to process confidential information in accordance with the obligations applicable to it.

9.4 Privacy of personal information

9.4.1 Privacy policy

The CA collects and processes personal data in accordance with the regulations related to personal data protection that are applicable to it.

9.4.2 Personal information

Personal data contained in the registration files and not published in the Certificates or CRLs is considered to be confidential.

9.4.3 Non-personal information

Agreements between the CA and the users of its services may comprise a special processing of non-personal and non-confidential information, within the meaning of article 9.3.1.

9.4.4 Responsibility to protect personal

The CA is responsible for processing the personal data of the users of its service.

9.4.5 Notice and consent to use personal information

The CA informs the persons, about whom it collects personal data, about the processing of this data and the purposes of this processing.

9.4.6 Disclosure pursuant to judicial or administrative process

Personal information may be provided to legal or administrative authorities under the conditions defined by the regulations.

9.4.7 Other information disclosure circumstances

Agreements between the CA and the users of its services may provide for the disclosure of personal information within the limits defined by French regulations.

PAGE: 50 / 57

9.5 Intellectual property rights

As part of its business activity, the CA may be required to issue or permit the use of elements protected by intellectual or industrial property rights.

These elements and the associated copyrights shall remain the property of the owner of these rights. The Relying Parties and the Subscribers may reproduce these elements for their internal use. Prior authorisation of the copyright holder is required for the provision to third parties, extraction or reuse in whole or in part of these elements or of their derivative works or copies, aside from the requirements of the CA 's service.

Any use or reproduction, in whole or in part, of these elements and/or the information that they contain, not authorised by the other party and used for any purpose other than the operation of the service, is strictly forbidden and constitutes infringement, which may be penalised through legal proceedings.

The use of the information contained in the Certificates or related to their status is authorised in strict compliance with the Relying Party Agreement.

9.6 Representations and warranties

The common obligations of the CA of UTN are as follows:

- to protect and guarantee the integrity and confidentiality of their private cryptographic keys;
- to use their private cryptographic keys only pursuant to the conditions of and with the tools specified in the CP;
- to apply and comply with the requirements of the CP and the CPS applicable to them;
- to submit to the compliance audits conducted by the audit team mandated by UTN;
- to accept the consequences of these audits and in particular, to remedy any noncompliances that may be reported;
- to document their internal operating processes;
- to implement the (technical and human) resources needed for executing the operations that they are in charge of, while guaranteeing the quality and security of these operations.

9.6.1 Certification Authority

The CA is responsible for:

• the compliance of the CPS vis-à-vis the CP;

PAGE: 51/57

- the compliance of the Certificates with the CP;
- the compliance of all different components of the CA and the related controls with the principles of security.

The CA is responsible for damage caused to the Relying Parties if:

- the information contained in the Certificate does not correspond to the information contained in the registration file;
- the CA has not revoked a Certificate and/or has not published this information pursuant to the conditions defined in the CP.

9.6.2 RA service

See above.

9.6.3 Subscriber

The Subscriber:

- communicates accurate and up-to-date information when filing an application for a Certificate;
- is responsible for access to its private key and, if applicable, the activation means of its key;
- complies with the conditions for use of its private key;
- informs the CA of any change in the information contained in its Certificate;
- immediately sends a Certificate revocation application if there is any suspicion of the corresponding private key or the activation means of this key becoming compromised.

9.6.4 Relying Parties

The Relying Parties pledge to comply with the obligations defined in the Relying Party Agreement and to familiarise themselves with the terms and conditions of the CP applicable to the service that they use, particularly the limits of use and guarantees associated with the service

9.6.5 Other participants

No specific commitment.

PAGE: 52 / 57

9.7 Disclaimers of warranties

The limits of guarantee of the CA are defined in Subscriber Agreement and the Relying Party Agreement.

9.8 Limitations of liability

The CA cannot be held liable in case of any use of the Certificates that is unauthorised or does not comply with the CP, the Subscriber Agreement or the Relying Party Agreement.

The CA cannot be held liable for indirect damages resulting from the use of a Certificate.

The CA is not responsible for the use of the private keys associated with the Certificates or the activation data of these keys.

The CA is not responsible for any use that is unauthorised or non-compliant with the documentation of their equipment and/or software provided to the users of the certification service.

The CA cannot be held liable for any damages resulting from errors or inaccuracies in the information contained in the Certificates, when these errors or inaccuracies result directly from the erroneous nature of the information communicated by the Subscriber.

9.9 Indemnities

The conditions for compensation of damages caused to Subscribers and to Relying Parties are defined contractually.

9.10 Term and termination

9.10.1 Term

The CP comes into force once it is published on the publishing website of UTN.

9.10.2 Termination

The CP remains valid until it is replaced by a new version.

9.10.3 Effect of termination and survival

Unless specified otherwise in this CP or in the CP that will replace it, the end of validity of the CP results in the nullity of all obligations of the CA applicable to the Certificates issued in accordance hereof.

PAGE: 53 / 57

9.11 Individual notices and communications with participants

Unless agreed otherwise by the parties concerned, all individual notifications and communications mentioned in the CP must be sent by means that guarantee their origin and their receipt.

9.12 Amendments

9.12.1 Procedure for amendment

The UTN may amend the CP. These amendments take the form of new versions of the CP. They are published on the publishing website of the UTN. The UTN determines whether the changes to the CP require a change in the OIDs for the issued Certificates.

9.12.2 Notification mechanism and period

The UTN may make unannounced changes to the CP in force in case of a minor change, such as spelling or URL errors. The UTN is the sole entity authorised to assess whether a change is minor or not.

The UTN informs its members about its intent to modify the CP, by specifying the suggested modifications and the commenting period. These change proposals are also published on the website of the UTN. Members who administer their own publishing website must publish the change proposals on it as soon as they are received.

Commenting period: Unless specified otherwise, the commenting period is one (1) month from the publishing of the proposal for non-minor changes on the publishing website of the UTN. All entities intervening in the UTN may submit comments during this period.

Processing of comments: Once the commenting period ends, the UTN may decide to publish the new CP or once again initiate a new amendment process with a modified version or withdraw the proposed version.

9.12.3 Circumstances under which OID must be changed

If there is a substantial change in the CP, the Approval Board of UTN may decide that a change in OID is necessary

The OID may be changed if the modification of the CP is likely to affect the assurance level of already issued Certificates.

9.13 Dispute resolution provisions

The CA implements an adequate procedure for amicably settling disputes between it and the users of its services.

9.14 Governing law

In the case of a dispute between the CA and the UTN arising from the interpretation, application and/or execution of the CP and if no amicable settlement can be reached by the parties as described above, exclusive jurisdiction is granted to the courts under the Court of Appeal of Paris.

9.15 Compliance with applicable law

The provisions of the CP are compliant with the applicable requirements of French law.

The legislative and regulatory texts applicable to the CP are, mainly, those indicated in the references of this policy.

9.16 Miscellaneous provisions

9.16.1 Entire agreement

The CA may specify specific requirements in the CPS.

9.16.2 Assignment

No specific commitment.

9.16.3 Severability

If a clause of the CP becomes null or is deemed unwritten by the verdict of a court having jurisdiction, the validity, legality and enforceable nature of the other clauses shall not be affected or reduced in any manner whatsoever.

9.16.4 Enforcement (attorneys' fees and waiver of rights)

The requirements defined in the CP must be applied in accordance with the provisions of the CP and the associated CPS and no exemption of rights, with the intent to modify any prescribed right or obligation, shall be possible.

9.16.5 Force majeure

The CA shall not be held liable for indirect damages and the interruption of its services resulting from force majeure, which caused direct damage to their users.

9.17 Other provisions

9.17.1 Organization reliability

To guarantee the impartiality of its services, the CA ensures that the persons occupying Trusted Roles do not suffer from any conflicts of interest that would harm the impartiality

of their tasks, especially when the said task consists of generating and revoking Certificates.

9.17.2 Accessibility

Insofar as possible, the CA allows disabled persons to access the services that it provides.

PAGE: 56 / 57

References

[RFC 3647]

Network Working Group - Request for Comments: 3647 - Internet X.509 Public Key Infrastructure - Certificate Policy and Certification Practices Framework - November 2003.

[ETSI 319 401]

ETSI EN 319 401 V2.1.1 - Electronic Signatures and Infrastructures (ESI); General Policy Requirements for Trust Service Providers (2016-02)

[ETSI 319 411-1]

ETSI EN 319 411-1 V1.1.1 - Electronic Signatures and Infrastructures (ESI); Policy and security requirements for Trust Service Providers issuing certificates; Part 1: General requirements (2016-02)

[ETSI 319 411-2]

ETSI EN 319 411-2 V2.1.1 - Electronic Signatures and Infrastructures (ESI); Policy and security requirements for Trust Service Providers issuing certificates; Part 2: Requirements for trust service providers issuing EU qualified certificates (2016-02)

[ETSI 319 412-2]

ETSI EN 319 412-2 V2.1.1 - Electronic Signatures and Infrastructures (ESI); Certificate Profiles; Part 2: Certificate profile for certificates issued to natural persons (2016-02)

[ETSI 319 412-3]

ETSI EN 319 412-3 V1.1.1 - Electronic Signatures and Infrastructures (ESI); Certificate Profiles; Part 3: Certificate profile for certificates issued to legal persons (2016-02)

[ETSI 319 412-5]

ETSI EN 319 412-5 V2.1.1 - Electronic Signatures and Infrastructures (ESI); Certificate Profiles; Part 5: QC Statements (2016-02)

[ETSI 319 421]

ETSI EN 319 421 V1.1.1 - Electronic Signatures and Infrastructures (ESI); Policy and Security Requirements for Trust Service Providers issuing Time-Stamps (2016-03)

[eIDAS Regulation (EU) No 910/2014]

Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC

PAGE: 57 / 57