QUALIFIED TRUST SERVICES PROVIDER "CENCERT"

# POLICY FOR QUALIFIED TRUST SERVICES

Version: 1.31

#### Document Card:

Document title	Policy for qualified trust services
Document owner	ENIGMA Systemy Ochrony Informacji Sp. z o.o.
Version	1.31
Document status	Approved
Date of approval	2021-09-17
Number of pages	53

#### approved by:

Version	approved by
1.31	The Board of Directors of Enigma Systemy Ochrony Informacji Sp. z o.o.

# version history

Version no.	Prepared by	Description of changes	Valid from
1.0	1.0JacekInitial version replaces Policy of certification for qualified certificates in. 2.3 and Policy of time stamping and other qualified certification services in. 1.1.		2017-05-20
1.1	1.1     Jacek     Implementing of the auditor's comments, ECDSA added       Pokraśniewicz,     Piotr Popis		2017-06-14
1.2	Jacek Pokraśniewicz	New functionalities of: generating a certificate based on the public key provided, providing a remote sealing service, adjustment to the GDPR Removal of obsolete transitional provisions	2019-04-01
1.3Jacek PokraśniewiczAdded the ability to perform th (server) rSign mode. New serv advanced seal (including certifi authentication. New ability to confirmation or qualified signa certificates containing a nickna		Added the ability to perform the signature service in the remote (server) rSign mode. New service for issuing certificates for advanced seal (including certificates for PSD2) and website authentication. New ability to authenticate with a notary confirmation or qualified signature. Possibility to issue certificates containing a nickname.	2020-12-03
1.31	Jacek Pokraśniewicz	Added declaration of the availability of current CRLs, details regarding certificates with a pseudonym, other minor fixes.	2021-10-10

#### Table of contents

1.	П	NTRODUCTION	5
	1.1.	INTRODUCTION	
	1.2.	IDENTIFIER OF CERTIFICATION POLICY	
	1.3.	DESCRIPTION OF THE CERTIFICATION SYSTEM AND THE PARTICIPATING ENTITIES	
	PUBI	LIC KEYS FOR VERIFICATION OF PROVIDED TRUST SERVICES:	6
	1.4.	SCOPE OF APPLICATIONS	7
	1.5.	CERTIFICATION POLICY ADMINISTRATION PRINCIPLES	8
	1.6.	GLOSSARY OF USED TERMS AND ACRONYMS	9
2.	P	RINCIPLES OF INFORMATION DISTRIBUTION AND PUBLICATION	11
3.	П	DENTIFICATION AND AUTHENTICATION	12
	3.1.	STRUCTURE OF NAMES ASSIGNED TO THE SUBSCRIBERS	
	3.	1.1 Certificate for electronic signature	12
	3.	1.2 Certificate for electronic seal	14
	3.	1.3 Certificate for website authentication	15
	3.2.	SUBSCRIBER'S AUTHENTICATION WHEN ISSUING THE FIRST CERTIFICATE	16
	3.3.	SUBSCRIBER'S AUTHENTICATION WHEN ISSUING SUBSEQUENT CERTIFICATES	17
	3.4.	METHODS OF SUBSCRIBER'S AUTHENTICATION WHEN REPORTING CERTIFICATE INVALIDATION,	
		SUSPENSION AND SUSPENSION REPEALING CLAIMS	17
	3.5.	MANAGEMENT OF PERMISSIONS TO MAKE STAMPS IN REMOTE MODE	
4.	С	ERTIFICATE LIFE CYCLE – OPERATIONAL REQUIREMENTS	19
	4.1.	APPLICATION FOR ISSUING A CERTIFICATE	
	4.2.	PROCESSING THE APPLICATION	
	4.3.	ISSUING CERTIFICATE	
	4.4.	CERTIFICATE ACCEPTANCE	
	4.5.	USING KEY PAIR AND CERTIFICATE	
	4.	5.1 Using certificate	21
	4.	5.2 Using private key	21
	4.6.	CERTIFICATE REPLACEMENT	
	4.7.	CERTIFICATE REPLACEMENT COMBINED WITH REPLACEMENT OF KEY PAIR	
	4.8.	CHANGE IN THE CERTIFICATE CONTENT	
	4.9.	CERTIFICATE REVOCATION AND SUSPENSION	
	4.10	. CERTIFICATE STATUS INFORMATION SERVICES	
	4.11.	. END OF TRUST SERVICE PROVISION FOR THE SUBSCRIBER	
	4.12	. ENTRUSTING AND REPRODUCTION OF PRIVATE KEYS	
5.	0	RGANIZATIONAL, OPERATIONAL AND PHYSICAL PROTECTIONS	27
	5.1.	PHYSICAL PROTECTIONS	
	5.2.	PROCEDURAL PROTECTIONS	
	5.3.	PERSONAL PROTECTIONS	
	5.4.	PROCEDURES OF CREATING AUDIT LOGS	
	5.5.	Archiving the records	
	5.6.	REPLACEMENT OF THE CERTIFICATION CENTRE'S KEY PAIR	
	5.7.	LOSS OF PRIVATE KEY CONFIDENTIALITY AND ACTION IN THE EVENT OF DISASTERS	30
	5.	7.1 Loss of private key confidentiality	30
	5.	7.2 Weakness of cryptographic algorithms	30
	5.	7.3 Natural disasters	30

	5.8. End	OF OPERATIONS	31
6.	TECH	NICAL PROTECTIONS	32
	6.1. Geni	ERATING AND INSTALLING KEY PAIRS	32
	6.1.1	Generating key pairs	32
	6.1.2	Delivering private key to the Subscriber	32
	6.1.3	Delivering public key of the Subscriber	33
	6.1.4	Delivering CenCert public key	33
	6.1.5	Cryptographic parameters of keys	33
	6.1.6	Purpose of using key	34
	6.2. Prot	ECTION OF PRIVATE KEYS	34
	6.3. Отни	ER KEY PAIR MANAGEMENT ASPECTS	35
	6.4. Acti	VATING DATA	36
	6.5. Сом	PUTER PROTECTIONS	36
	6.6. Prot	ECTIONS RELATED TO IT SYSTEM LIFE CYCLE	37
	6.7. Сом	PUTER NETWORK PROTECTIONS	37
	6.8. Time	STAMPING	37
7.	PROFI	LE OF CERTIFICATES, CRL LISTS AND OCSP TOKENS	39
		II E OF CEPTIEICATES AND CEPTIEVING STATEMENTS	30
	711	Distinguished Names	39
	712	Profile of subscribers' certificates	40
	713	Certificates to sign OCSP tokens, certificates of infrastructure keys and test certificates	43
	7.2 PROF	The of CRL LISTS	75
	7.3 PROF	ULE OF OCSP	44
	7.4 PROF	ILE OF OCOT MANP	45
0			
ð.	AUDIT		46
9.	MISCE	LLANEOUS	47
	9.1. FEES		47
	9.2. FINA	NCIAL LIABILITY	47
	9.3. Coni	FIDENTIALITY OF INFORMATION	47
	9.4. PERS	ONAL DATA PROTECTION	48
	9.5. Prot	ECTION OF INTELLECTUAL PROPERTY	48
	9.6. GRAM	NTED GUARANTEES	
	9.7. Exen	/IPTIONS FROM GUARANTEES GRANTED BY DEFAULT	48
	9.8. LIAB	ILITY RESTRICTIONS	49
	9.9. Assi	GNMENT OF COMPENSATION CLAIMS	51
	9.10. TRAN	SITIONAL REGULATIONS AND PERIOD OF VALIDITY OF CERTIFICATION POLICY	51
	9.11. Dete	ERMINATION OF THE MANNER AND ADDRESSES FOR DELIVERY OF LETTERS	51
	9.12. Chai	NGES IN THE CERTIFICATION POLICY	52
	9.13. Sett	LEMENT OF DISPUTES	52
	9.14. Appl	ICABLE LAW	52
	9.15. Lega	IL BASIS	52
	9.16. Misc	ELLANEOUS	53

# 1. Introduction

# **1.1.** Introduction

This document is a policy describing implementation, by *CenCert* Certification Centre, conducted by Enigma Systemy Ochrony Informacji Sp. z o.o., of qualified trust services consisting in:

- 1) issuing and revoking qualified certificates and
- 2) issuing qualified time stamps.

Trust services provided on the basis of the present policy meet the requirements of Regulation 910/2014 (eIDAS).

Structure of the document has been based on standard RFC 3647 "Internet X.509 Public Key Infrastructure Certification Policy and Certification Practices Framework".

# **1.2.** Identifier of certification policy

Policy name	POLICY FOR QUALIFIED TRUST SERVICES	
Policy qualifier	None	
OID number ( <i>Object Identifier</i> )	1.3.6.1.4.1.10214.99.1.1.1.4	
Date of entry	10.10.2021	
Date of expiration	Until revoked	

# **1.3.** Description of the certification system and the participating entities

CenCert is a qualified trust service provider (QTSP) operating in accordance with the eIDAS regulation, also in accordance with the implementing acts and in accordance with the national

law, namely the Act on trust services (Journal of Laws of 2016, item 1579) and implementing acts.

# **Public keys for verification of provided trust services:**

- key to sign CRL certificates and lists,
- key to sign time stamps

- are available in the form of certificates issued by the domestic root (NCCert) and on the TSL list.

CenCert does not issue certificates for subordinate trust service providers (SubCA). CenCert issues the certificate of the key to perform the OCSP service.

CenCert supports Subscribers by Registration Authorities (RA):

- Central Point of Registration (CPR) whose data can be found in Chapter 1.3.
- Field Points of Registration.

List of Field Points of Registration is modified in line with up-to-date needs of Subscribers and CenCert's possibilities. Contact details of field points of registration are available on the website.

Most field registration authorities (mobile registration authorities) offer the possibility of providing the service of issuing qualified certificate at the Subscriber's home or in a place of his or her work.

CPR is the contact point for any inquiries and applications related to CenCert's operations.

The contact point for handling any matters related to execution of this certification policy by CenCert is:

Central Registration Authority CenCert ENIGMA Systemy Ochrony Informacji Sp. z o.o. biuro@cencert.pl Postal address, contact phones and fax number are published on the website https://www.cencert.pl.

Electronic requests to change the certificate status (invalidation, suspension, suspension repealing) and requests to change of persons authorized to initiate a sealing session in a remote mode should be sent to the address rev@cencert.pl. Correct requests sent to other CenCert addresses (e.g. biuro@cencert.pl) will be, if possible, operated, but CenCert is neither responsible for their punctual service, nor for their service in general.

The Subscriber of trust services with regard to:

- qualified certificate for electronic signature may be any natural person having full capacity to conclude legal acts,
- qualified certificate for electronic seal-may be any legal person as defined by the national law as well as any other entity of a similar nature (an organizational unit not having legal personality, civil partnership, etc.),
- qualified time stamp may be any natural person, legal person as defined by the national law as well as any other entity of a similar nature (an organizational unit not having legal personality, civil partnership, etc.).

# **1.4.** Scope of applications

CenCert, pursuing this certification policy, issues:

- qualified certificates for implementation of qualified electronic signature,
- qualified certificates for implementation of qualified or advanced electronic seal,
- qualified certificates for website authentication,
- qualified time stamps,
- infrastructure certificates used internally in the Certification Centre,
- certificates for OCSP service provision,
- CRL lists and OCSP tokens,
- test certificates.

CenCert, as a qualified trust service provider, may provide services for the submission of:

- 1) a qualified electronic seal, or
- 2) a qualified electronic signature

- on behalf of the subscriber, on the terms set out in this policy, applicable procedures and commercial contracts.

Infrastructure certificates are clearly differentiated from qualified certificates by appropriate extensions.

Test certificates are clearly differentiated through the use of DN identifier containing "TEST" fields (or other similar fields such as "TEST1", TEST2", "TEST <characters of other alphabets>", etc.) in all places meant for text data (first and last name, common name etc.) and sample numbers (e.g. 1234...) in places meant for numerical data (PESEL, Tax Identification Number (NIP), etc.).

According to eIDAS:

- 1. Qualified electronic signature has full legal effect equivalent to personal signature.
- 2. Qualified electronic signature based on qualified certificate issued in one member state is regarded as qualified electronic signature in all of the remaining member states.
- 3. Qualified electronic time stamp benefits from a presumption of accuracy of the date and time that it indicates and integrity of the data which the indicated date and time are connected with.
- 4. Qualified electronic seal issued in in one member state is regarded as qualified electronic time stamp in all member states.

# **1.5.** Certification policy administration principles

The entity authorized to administer the certification policy, including to approve changes is the Board of Directors of ENIGMA Systemy Ochrony Informacji Sp. z o.o.

Any amendments to the certification policy, except for those that remedy obvious editing errors or stylistic errors require a new version number to be assigned.

According to Article 24.2.a) of eIDAS, CenCert informs the supervision authority of any changes in provision of qualified trust services and the intention of cessation of its activity (see also chapter 5.8).

# **1.6.** Glossary of used terms and acronyms

In the present document, the following phrases shall be used in the meaning mentioned below. It should be noted that the descriptions placed here are not always general definitions of a given term, but rather explain the meaning of a given term or acronym in the context used in CenCert.

Term/acronym	Description
eIDAS	Regulation of the European Parliament and the European Council (EU) No. 910/2014 of 23 July 2014 on electronic identification and trust services with regard to electronic transactions on the internal market and repealing Directive 1999/93/EC
Act	Act of 5 September 2016 on trust services and electronic identification.
QTSP	(Qualified Trust Service Provider) qualified provider of trust services
РКІ	<i>Public Key Infrastructure</i> – public key infrastructure – is a system covering Certification Centres, Points of Registration and end users, used for distribution of public key certificates and assuring the possibility of their reliable verification
Certification Centre	CA (Certification Authority) – CenCert; organization which issues certificates, according to this policy and work procedures
Point of registration	RA (Registration Authority) – Organizational unit of CenCert or a third- party company having a contract with Enigma – performing, via authorized Registration Inspectors, activities provided for implementation of this policy and work procedures, in accordance with rights of Registration Inspectors (e.g. confirmation of identity of the persons applying for certificates, transferring electronic cards with keys, etc.)
Legal person	Legal person as defined by the national law or another unit of a similar nature (an organizational unit not having legal personality, civil partnership, etc.)
Identity document	Identity document issued in an EU Member State (including Poland) or a passport issued by a country not being an EU Member State.
Subscriber	Natural person or Legal person whom a qualified certificate has been issued to on the basis of the present certification policy (whose data are entered in the certificate as the certificate owner's data). Natural person or Legal person whom a qualified time stamp has been issued to.
CPR CenCert Central Point of Registration.	
DN	DN identifier – <i>Distinguished Name</i> – identifier of PKI entity according to syntax as defined in X.500 series standards.

Term/acronym	Description	
NCCert	Root of the national PKI system kept by the National Bank of Poland, on	
	the basis of the competent minister's authorization.	
TSL	U Trust service Status List – lists issued electronically by the European commission (list of lists) and EU member countries (including Poland) ontaining information about entities providing trust services, their status whether "qualified" or not) and verification data of "tokens" issued by ntities providing trust services (namely verification of qualified ertificates, time stamps, etc.).	
CRL	<i>Certificate Revocation List</i> -List of revoked certificates, issued, electronically sealed and published by CenCert.	
OCSP	<i>Online Certificate Status Protocol</i> - services informing about the certificate revocation status, as asked by the person trusting the certificate.	
Private key	Data used for submission of electronic signature/stamp.	
Public key	Data used for verification of electronic signature/stamp, usually distributed in the form of a certificate.	
HSM	<i>Hardware Security Module</i> – a device having the functionality of generating cryptographic keys and using the private key for generating electronic signatures/electronic seals (e.g. when issuing certificates, CRL lists).	
QSCD	<i>QSCD – Qualified Signature Creation Device</i> – device for submission of electronic signature or electronic seal, which a) can be found on the list referred to in Article 31.2 eIDAS, or b) is deemed as such, pursuant to Article 51.1 of eIDAS.	
rSign	(Remote sign) Electronic signature provided by CenCert on behalf of the owner of the certificate.	
PSD2	(Directive (EU) 2015/2366 Of The European Parliament And Of The Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC)	

# 2. Principles of information distribution and publication

CenCert publishes the following information:

- CenCert's current public key/keys (in the form of certificates issued by NCCert).
- Current CRL list
- Archive CRL list.
- Current certification policy, marketing materials, current messages etc.

CenCert does not publish Subscribers' certificates. Archive CRL lists are published as compressed archives containing CRL lists from a given period.

The above information is available in a repository available at <u>www.cencert.pl</u> by means of HTTP/HTTPS protocol.

# **3.** Identification and authentication

This chapter describes the principles of identification and authentication used by CenCert at operations that require such operations – in particular when issuing certificates and changing certificate status.

### **3.1.** Structure of names assigned to the Subscribers

Subscribers are identified in certificates using distinguished identifiers (Distinguished Names) defined in ITU Recommendations, series X.500.

CenCert confirms the identity and credibility of information entered in the certificate, as per the provisions of chapter 3.2., but it does not verify the right to use reserved trademarks (especially patent rights), is not liable for unauthorized use of trademarks and is not a party in this type of disputes. In the case of loss by the Subscriber of the right to use a given name or other symbol shown in the certificate, they are obliged to notify about this fact in order to revoke the certificate due to invalidity of the data contained in the certificate.

#### **3.1.1** Certificate for electronic signature

#### **3.1.1.1** Certificate for electronic signature containing personal data

The Subscriber's distinguishing identifier consists of the following attributes:

**Country (countryName)** = PL

first name (givenName) = <name or first names of the Subscriber>

Surname (sureName) = <surname of the Subscriber>

**Serial number (serialNumber)** = <additional data identifying the Subscriber, for ex. PESEL (Personal ID Number), NIP (Tax Identification Number) or identity document no.>

**Common name (commonName)** = <**Subscriber's name**>

*Serial number* may be written in the form consistent with ETSI EN 319 412-1. In this case, the relevant certificate extension indicates compliance with this standard.

*Common name* may contain the Subscriber's full name or its informal identification - e.g. friendly form of name, pseudonym, nickname, surname written differently than in formal documents etc.

In the case of Subscribers having several names, it is acceptable to enter only one name to the certificate

DN identifier may contain the following optional additional attributes (fields may occur many times):

**Professional position (title)** 

**Organization (organizationName)** 

Name of organizational unit (organizationalUnitName)

Address (fields from set: postalAddress, localityName, stateOrProvinceName, postalCode)

Professional position may define the professional position, but also rights to perform a particular profession (e.g. along with the number of the license), authorization to perform certain activities.

Attribute *Organization* contains the name of the entity which the Subscriber is related to, compliant with the entry in the relevant register, records, statute or other document of this type, appropriate for the type of the entity.

Attribute *Name of organizational unit* contains the name of organisational unit being part of the organization whose name appears in attribute *Organization*.

Address fields contain address data used for better identification of the entity whose name appears in attribute Organization. This does not have to be a complete postal address of the entity.

#### **3.1.1.2** Certificate for electronic signature containing a pseudonym

The Subscriber's distinguished identifier consists of the following attributes:

Country = <country> Pseudonym = <nickname> Common Name = <nickname>

The content of the "Pseudonym" field must not be misleading (in particular, give the wrong impression that the certificate belongs to a public or well-known person). The field must also not contain vulgar or offensive content.

The Common Name field has the same content as the Nickname field, possibly supplemented with an indication that the content of the field is a pseudonym (eg by a note "(pseud.)").

DN identifier may contain the following optional additional attributes (fields may occur many times):

**Organization (organizationName)** 

#### Name of organizational unit (organizationalUnitName)

Address (fields from set: postalAddress, localityName, stateOrProvinceName, postalCode)

Attribute *Organization* contains the name of the entity which the Subscriber is related to, compliant with the entry in the relevant register, records, statute or other document of this type, appropriate for the type of the entity.

Attribute *Name of organizational unit* contains the name of organisational unit being part of the organization whose name appears in attribute *Organization*.

Address fields contain address data used for better identification of the entity whose name appears in attribute Organization. This does not have to be a complete postal address of the entity.

#### **3.1.2** Certificate for electronic seal

The Subscriber's distinguishing identifier consists of the following attributes:

Country (countryName) = <country> Organization (organizationName) = <official name of the entity >

**Organization identifier (organizationIdentifier)** = <identifier of the entity> **Common name (commonName)** = <entity name>

Field *Organization* contains the official name of the organization, consistent with the entry in a relevant register, records, statute or other document of this type appropriate for the type of the entity.

Organization identifier contains an identifier of an organization (for ex. NIP, i.e. Tax Identification Number) in the form consistent with ETSI EN 319 412-1.

*Common name* should contain the name most often used by the organization. It does not have to be the official name, consistent with a record in the register or statute.

DN identifier may contain the following additional attributes (fields may occur many times):

#### Name of organizational unit (organizationalUnitName)

Address (fields from set: postalAddress, localityName, stateOrProvinceName, postalCode)

Attribute *Name of organizational unit*- contains the name of organizational unit being part of the organization whose name appears in attribute *Organization*.

Address fields contain address data used for better identification of the entity whose name appears in attribute Organization. This does not have to be a complete postal address of the entity.

#### **3.1.3** Certificate for website authentication

The Subscriber's distinguishing identifier consists of the following attributes:

**CountryName** = < Subscriber's country>

**GivenName** = <Subscribrer's given name or names>

SureName = < Subscribrer's family name>

albo

**organizationName** = <official name of the entity >

**organizationIdentifier** = <identifier of the entity>

**commonName** = < name / names of domains used by the Subscriber >

The DN identifier may also contain other attributes that identify the Subscriber (e.g. additional fields for the postal address, the name of the organizational unit, etc.)

The organization identifier is written in a form compliant with ETSI EN 319 412-1.

# **3.2.** Subscriber's Authentication when issuing the first certificate

Verification of the identity of a **natural person** applying for a certificate - is performed by the Registration Inspector or a notary public on the basis of a valid identity document or on the basis of a valid qualified signature. If the certificate is to contain the organisation's data, an authorization is required (unless the authorization of a given person in the organization results from the statute, registration records of the organization, etc.). If the certificate is to contain specific data specifying e.g. professional qualifications, a document confirming the qualifications is required.

The person or persons acting on behalf of the **Legal Entity** applying for the certificate must be authorized to represent the Legal Entity in accordance with the provisions of the relevant register or the statute of the organization, or on the basis of a power of attorney issued by persons authorized to represent. Verification of the identity of the person receiving the certificate (if the keys are generated by CenCert) or submitting the public key to be included in the certificate is performed by the Registration Inspector on the basis of a valid identity document or an electronic signature.

If the certificate is to contain specific information regarding the Subscriber's specific rights (e.g. fulfilling the roles specified in the PSD2 Directive), the rights are checked on the basis of relevant documents or registers.

The information on DNS addresses of domains included in the website authentication certificate is checked by confirming that the domain is managed by the person submitting the application.

In the case of electronic signature certificates containing a pseudonym instead of the first and last name (see section 3.1.1.2), CenCert does not verify the rights to use a given pseudonym or its uniqueness, without prejudice to the provisions regarding the rules for including the organisation's data in the certificate. CenCert stores data that allows the identification of a specific natural person using a given certificate containing a pseudonym.

CenCert has the right to refuse to issue a certificate with a pseudonym if, in CenCert's opinion, the content of the entry in the certificate violates the conditions specified in section 3.1.1.2).

# 3.3. Subscriber's Authentication when issuing subsequent certificates

In the case of issuing subsequent certificate for electronic signature, authentication may be performed in a simplified manner, based on a qualified signature made with a valid, previous certificate issued by CenCert. The new certificate contains the same Subscriber's identification data as the previous certificate. The right to use any additional certificate attributes (e.g. organization details, professional qualifications, etc.) is not re-checked.

There is no simplified procedure for seal certificates, nor for certificates for website authentication.

# 3.4. Methods of Subscriber's authentication when reporting certificate invalidation, suspension and suspension repealing claims

Revocation or suspension of a certificate for electronic signature is executed:

- on the website of CenCert, on the basis of the full name and the password of the Subscriber, agreed when issuing the certificate or
  - on the basis of an application signed by the Subscriber.

Suspension of a certificate for electronic signature is repealed on the basis of the application signed by the Subscriber.

Revocation of a certificate for electronic signature containing data of the organization the Subscriber is related to will be also performed at a request issued by this organization, signed by authorized persons.

Invalidation of a certificate for electronic seals is executed at a request issued by the Subscriber (a Legal Person), signed by an authorized person.

Revocation of the certificate containing data specific to PSD2 will also be implemented upon a request from an authorized financial market supervisory institution.

The certificate status change request must be supplied in the form of a paper original or electronic document signed with a qualified signature.

# 3.5. Management of permissions to make stamps in remote mode

In the rSeal service, CenCert creates a seal on behalf of the Subscriber, at the request of the Subscriber, during the sealing session initiated by one of the persons authorized by the Subscriber.

Each session is initiated using a valid qualified signature of an authorized person. An authorized person also has the option to terminate an active sealing session at any time.

The subscriber may manage the personal data of persons authorized to manage sessions by submitting paper or electronic applications, signed by an authorized (by the contract or official records) person. Applications should be sent in accordance with the contact details provided in chapter 1.3.

CenCert guarantees the execution of a correctly submitted application (and signed by the appropriate person / person) by the end of the next business day after receiving the application.

# 4. Certificate life cycle – operational requirements

# 4.1. Application for issuing a certificate

Notification of the need for issuance of a certificate for electronic signature may be submitted by a natural person (entity) applying for issuing a certificate or an entity financing the service, in any form accepted by a given Point of Registration. Such role is also met by a contract or order for the service of issuing certificates, containing data of the persons whom the certificates are to be issued to.

In the event when personal data for issuing the certificate are not transferred by the person whom they relate to, the transferring entity is responsible for obtaining the consent from the person the data relate to, to transferring the personal data in order to execute the trust service.

The Registration Inspector, having the data of the person applying for the certificate, prepares an application for issuing the certificate and the transfer protocol. If the issuance of the certificate does not involve the handover of a smartcard, the application for certificate issuance may also be prepared and sent in a different way, without the participation of the Registration Inspector.

The request contains information on conditions of trust service provision, including limitations of liability of CenCert – by indicating the binding version of *the Qualified trust services policy*. The request also includes required information and consent of the person applying for the certificate – in particular information and consent required by the regulations on Personal Data Protection and confirmation of assignment of databases used for verification of electronic signature, which are included in the issued certificate.

In the case a certificate for electronic seal – the application contains indication (full name, number of identity document) of a person authorised to receive the key for creating seals and/or key activation data.

In case of simultaneous purchase of the certificate to be signed and the electronic seal, on the same QSCD card:

1) In the application for issuing a certificate the person indicated as authorized to receive the QSCD card with the keys for generating seal must be the person purchasing a certificate for electronic signature (is must be the same person).

2) The Inspector generates on the same card - a pair of keys for placing the signature and a pair of keys for placing the seal.

In the case of issuing a qualified certificate to a qualified electronic signature/seal on the basis of a public key generated by the Subscriber, CenCert confirms the possession of the QSCD certificate by the device owned by the Subscriber. The application for issuing the qualified certificate is accompanied by a public key and relevant documents (including the SSCD / QSCD certificate of the device and subscriber's statements).

# 4.2. **Processing the application**

The application for a certificate may be processed on paper or in electronic form.

The application for issuing a certificate for electronic signature in paper form is signed by the person applying for the certificate in the presence of the Registration Inspector or a notary. An electronic application is signed by the person applying for the certificate (a qualified signature is required) using the qualified certificate already held by that person.

# 4.3. Issuing certificate

The signed application for certificate issuance is approved for execution by the Registration Inspector authorized to generate certificates. If automatic verification of the correctness of the application is possible (only applications in electronic form), the application may be approved by the CenCert computer system. After the application is approved, a certificate is generated.

After approval of the certificate application:

1) A qualified certificate is issued and sent to the Subscriber or made available to him in another way.

2) In the case of a signature or stamp "on the card" - a transport code is sent to the Subscriber to activate the card (the transport code file also includes the certificate).

3) In the case of the rSeal - the Subscriber is sent a certificate and a PIN for activating the seal creation key.

The activation of the smartcard is a one-time and irreversible process. Before activating the card, it is not possible to use the keys written on it to perform a signature or an electronic seal. By receiving an inactive electronic card, the Subscriber can be sure that the keys stored on it have not been used before.

## 4.4. Certificate acceptance

The Subscriber is obliged to verify and accept the certificate immediately upon receipt of the certificate and before its use (in particular before making the first signature verified using the certificate. In the case of untrue data contained in the certificate (in particular identification data of the Subscriber or data of the person or organization whose data are also included in the Subscriber's certificate), the Subscriber is obliged to immediately inform CenCert, in accordance with procedures valid when revoking certificates, in order to revoke the certificate and receive a new one, containing correct data.

Using a certificate containing false data exposes the Subscriber to penal liability.

# 4.5. Using key pair and certificate

#### 4.5.1 Using certificate

Subscribers' certificates can be used solely to verify electronic signatures or electronic seals, or internet domain authentication, in accordance with this certification policy, subject to possible constraints stipulated in the certificate.

The only way to confirm the Subscriber's certificate validity in terms of possible revocation or suspension is to check certificate status on an appropriate CRL list or using the OCSP service. The fact of not publishing a new CRL list in a given time cannot be used as the basis to imply no revocation of certificates.

#### 4.5.2 Using private key

Private key connected with the Subscriber's certificate may be used only for goals resulting from the applications stipulated in the related certificate.

Private key for electronic signature should remain at the sole discretion of the Subscriber – the natural person whose data are placed in the certificate. It is not acceptable for the key to be used by another person.

Private key for electronic seal should remain at the sole discretion of the person or persons authorized by a given Legal Person.

In the case of a rSign or rSeal, the private sealing key is stored on CenCert's HSM and is used by CenCert exclusively to submit a signature or a seal on behalf of the Subscriber, at his/her request. In the case of conceiving a reasonable suspicion that an unauthorized person has access to the private key, the Subscriber should immediately revoke the certificate related to the key (and if several certificates were associated with the key – all certificates should be revoked).

Specification of PIN number to smart card containing keys used for placement of qualified electronic signatures or seals may proceed only in a safe environment – that is on a computer which only persons trusted by the Subscriber have access to, protected against any type of hazardous software, in particular using relevant antivirus software and firewalls.

Terms of use the smart card for generating electronic signatures/seals:

- When signatory authentication is requested to perform digital signature, its PIN shall be submitted through a trusted channel (secure messaging) established between the signature creation application and the smart card prior to the signature computation.
- When PIN is modified it shall be modified under the sole control of its owner, i.e. the signatory and through a secure channel established with the signature creation application.
- The digital signature shall be executed under the sole control of the signatory and shall ensure that the data to be signed are issued from the signature creation application.
- The data to be signed shall be sent to the smart card through a trusted channel (secure messaging) established between the signature creation application and the smart card, after the signatory authentication.

In the event when the Subscriber's smart card contains, except for the data used for placement of qualified electronic signatures, also other data, in particular other private keys (e.g. key for e-mail encryption, key for login to the operating system etc.), the card should be organized in such a way that the card required specification of a separate PIN number in order to execute a qualified signature. PIN number for placement of electronic signatures/qualified seals should have another value than the codes starting other services available using the card.

In the case of signing or sealing using the HSM device owned by the Subscriber, the signing key activation data (eg PIN, password or activation cards) must be stored securely, with confidentiality safeguards, and entered into the HSM device in the manner provided for in documentation (in particular, certification documentation) of a given HSM device.

In the case of rSign and rSeal service, the Subscriber has the following duties:

- Ensures the confidentiality of data (received from CenCert) activating the private key for generating seals.
  - In particular: In the case of the remote signing/sealing session, key activation data is transferred to the CenCert server providing the rSign or rSeal service. Before transferring activation data, the Subscriber's application must confirm establishing a secure transmission channel (TLS) with the CenCert server and correctly identify the CenCert server based on the SSL/TLS certificate. The

appropriate CenCert server certificate providing the stamping service is published at https://www.cencert.pl.

- Uses a reliable application that:
  - generates a cryptographic hash of data presented as data to be signed (which it intends to sign), in a form appropriate for the rSign or rSeal service;
  - attach to the signed or sealed data a seal created by the rSign or rSeal service or make this signature/seal available separately from the data.
- Ensures that the security and integrity of the elements of the system used for signing or sealing service, located on the Subscriber's side (i.e. outside the CenCert), is kept entirely under his/her control.
- Ensures that the signing/sealing application, located on the Subscriber's side (other than CenCert), ensures the confidentiality, integrity and authenticity of data sent between the end user and this application (including in particular confidentiality of all sensitive credentials and integrity and authenticity cryptographic hash from data to be signed).
- Ensures compliance with the document described in chapter 9.16 for rSign or rSeal respectively.

# 4.6. Certificate replacement

It is accepted to replace a valid qualified certificate without changing the Subscriber's private key – provided that the key's cryptographic safety is still sufficient for the new validity period of the certificate.

Replacement (renewal) of the certificate proceeds on the Subscriber's initiative. The Certification Centre, if possible, will inform the Subscriber, before the expiry date of the certificate, about the need for its replacement using available contact details.

# 4.7. Certificate replacement combined with replacement of key pair

Certificate replacement combined with replacement of key pair is possible, meeting the requirements of chapter 3.2.

Replacement (renewal) of the certificate proceeds on the Subscriber's initiative. The Certification Centre, if possible, will inform the Subscriber, before the expiry date of the certificate, about the need for its replacement using available contact details.

## 4.8. Change in the certificate content

Change in certificate content requires issuance of a new certificate containing new content. The previous certificate – provided that the data it contains have become outdated and contain untrue information about the Subscriber – is revoked.

The Subscriber is responsible for reporting the need for updates of data contained in the certificate as well as determination whether the data change implies the need for revoking the previous certificate.

CenCert is allowed to change the content of the certificate (that is, to issue a new certificate and revoke the old one) without re-authentication of the subscriber, for the same public key, in the case of corrections, obvious typographical errors or technical errors of the certificate. The Subscriber is immediately informed about the certificate correction.

### 4.9. Certificate revocation and suspension

The entity authorized to revoke the certificate is:

- Subscriber.
- The organization whose data is included in the certificate for electronic signature.
- For certificates containing data specific to PSD2 the institution supervising the financial market, the data of which is entered in the certificate.
  - • CenCert.

The certificate can be revoked only prior to the date of the end of its validity period. Invalidation of a certificate is irreversible – the invalidated certificate cannot become valid again.

The Subscriber and the organization whose data have been placed in the certificate for electronic signature, has the right to revoke the certificate for any reason.

The certificate Subscriber is obliged to immediately revoke the certificate when:

- he/she has lost exclusive control over the private key related to the certificate (e.g. he/she has lost the electronic card or the card has been destroyed, blocked, etc.),
- the data contained in the certificate are incorrect or outdated.

The organization whose data have been placed in the certificate for electronic signature is obliged to immediately revoke the certificate when:

- the data of the entity contained in the certificate are incorrect or outdated,
- a circumstance justifying placing data of an organization in the Subscriber's certificate (e.g. employee dismissal, change in the scope of duties, etc.) has ceased.

CenCert has the right to change the certificate status only in justified cases. In particular, CenCert may revoke a certificate containing a pseudonym, if it turns out that the pseudonym does not meet the conditions specified in section 3.1.1.2.

The Certification Centre provides a possibility to apply for revocation, suspension or repealing suspension of a certificate in a 365/24/7 mode.

In the case of the certificate suspension – suspention lasts for a maximum of 7 days, then the certificate is revoked automatically.

According to Articles 28.5, 38.5 of eIDAS, the period of suspension is clearly indicated in the CenCert certificate database and the suspension status is visible, during the period of suspension, on the CRLs and OCSP tokens.

According to Article 24.3 of eIDAS-if the Certification Centre decides to revoke the certificate, it registers such revocation of in its database concerning the certificates, and publishes information on the status of the certificate invalidation in due time, but in any case, within 24 hours, upon receipt of the application. Invalidation becomes effective immediately upon its publication.

Procedures associated with change in certificate status are located on CenCert website.

In the case of cancellation or suspension on the basis of the Subscriber's password – the operation is performed on the CenCert website, whose data can be found in Chapter 1.3.

The Subscriber is immediately informed on change in certificate status by e-mail.

## 4.10. Certificate status information services

The Certification Centre informs about the certificate status using the CRL list and OCSP service.

The CRL list is issued at least once every 24 hours, with guaranteed availability of 99.95% on an annual basis.

In order to examine the status of the certificate revocation, it is required to:

- download the OCSP token for this certificate and check the certificate status saved in this token or
- download the CRL list issued after the time at which we examine the certificate validity and check the status of the certificate on CRL.

The validity of signatures under the OCSP token and the CRL list should be checked based on current TSL list.

OCSP replies and CRL lists contain correct information about revocations even after the period of certificate validity elapses.

The Certification Centre publishes archive CRL lists at the latest after the end of validity of the key used to sign them.

# 4.11. End of trust service provision for the Subscriber

If not provided otherwise – the relation between CenCert and the Subscriber, or the financing entity, concerning provision by CenCert of trust services, ends along with the end of the validity date specified in the certificate. In the case of time stamping – within 24 months after issuing the time stamp.

In the case of the remote sealing service (on behalf of the subscriber), the service ceases to be provided immediately after the end of the certificate's validity (cancellation or expiration).

# 4.12. Entrusting and reproduction of private keys

The Certification Centre does not entrust its private key to any entities.

In the case of the remote sealing service, the Subscriber entrusts CenCert with his private key. The entrusted key is not transferred by CenCert to anyone - it also cannot be transferred to the Subscriber.

# 5. Organizational, operational and physical protections

# 5.1. Physical protections

CenCert servers are located in air-conditioned server rooms, protected against flooding, equipped with a fire protection system, power outages, as well as an access control system and an alarm system for burglary and assault.

Physical access to CenCert server devices (including HSM devices) is possible only for authorized persons. Each time access to devices is recorded.

The Certification Center is equipped with a backup center, located in a remote location from the primary center.

All data and devices essential for the security of the Certification Center and the services provided by them (in particular, electronic cards and other hardware components enabling the activation of the CenCert private key, access codes to devices, cards and systems, archiving media) are secured and available only to authorized persons.

### **5.2. Procedural protections**

The Certification Centre has the following functions having direct impact on provision of certification services:

Function name	Type of obligations
System administratorConfiguration of the CenCert system regarding certification policy, management of rights for operators. IT infrastructure management, make	
System operator	Constant operation of the data communications system, including making backup copies, management of rights (including certificates) of Registration Inspectors
Registration Inspector (registration officer)	Verification of Subscribers' identity, issuing orders to issue Subscribers' certificates, revoking Subscribers' certificates

Function name	Type of obligations
Audit Inspector	Analysis of records of registers of events in data communication systems used when providing the certification services
Safety Inspector (security officer)	Supervision over the implementation and application of all safe operation procedures when providing certification services, supervision over physical access to protected devices.

Substantially - every Registration Inspector is also a Revocation Inspector (revocation officer).

The function of the Safety Inspector cannot be combined with the function of the System Administrator or with the function of the System Operator. The function of the Audit Inspector cannot be combined with any of the remaining functions mentioned above.

The persons performing functions of Registration Inspectors can have various kinds of rights included in full rights of the Registration Inspector. In particular, some people performing this role may have the right only to confirm the identity of the Subscriber or only the right to revoke the certificates.

# **5.3.** Personal protections

All persons performing at least one of the function listed in chapter 5.2 fulfil the following requirements:

- they have full capacity to be a party in legal acts,
- they have knowledge and skills necessary for work on a given position, regarding technology of provision of certification services, provided by the Certification Centre.

All persons performing the said functions, before admission to perform their duties, are trained in the scope relevant for a certain work position, also with regard to procedures and regulations of work binding in CenCert and penal liability related to the provision of certification services.

In the case when a specific function is performed by one person working on the terms other than employment contract with Enigma, Enigma enters into a contract with this person or with the company where he/she is employed, defining the principles of liability. In the case of persons employed in Enigma under a contract of employment, the liability of this person is stipulated by valid regulations of the Labour Code.

Regardless of a possible financial liability, people unreliably performing their obligations associated with the provision of certification services or not observing requirements imposed by regulations on trust services (in particular requirements about confidentiality, requirements with regard to issuance and revocation of certificates) are subject to penal sanctions defined in the Act.

### 5.4. Procedures of creating audit logs

The Certification Centre provides recording of any significant events related to the execution of certification services provided by it.

The logs are protected against modification.

They are stored for 3 years from the date of their production.

### 5.5. Archiving the records

The Certification Centre archives the following paper and electronic records associated with provision of services:

- requests for issuing a certificate signed by the Subscribers,
- issued certificates and CRL lists,
- requests to invalidate a qualified certificate,
- service provision policy

- for 20 years from their generation.

# 5.6. Replacement of the Certification Centre's key pair

Generation and replacement of the Certification Centre's key pair may take place on the scheduled dates or earlier.

Planned replacement of CenCert key pairs takes place

no earlier than 8 years and no later than 6 years before the expiry of the current key pair
 – for RSA 4096 and ECDSA 256 keys, valid for 11 years.

# 5.7. Loss of private key confidentiality and action in the event of disasters

#### 5.7.1 Loss of private key confidentiality

CenCert has relevant procedures valid in the case of loss of CenCert private key confidentiality or a reasonable suspicion that such an event has occurred.

In the case of compromising the key, these procedures stipulate in particular:

- 1. Reporting the incident in accordance with eIDAS, informing Subscribers about the situation and about the further action plan.
- 2. Producing new CenCert keys and reporting them to the competent minister in order to issue a new NCCert certificate and place on the TSL list.
- 3. If possible in the given situation (in particular when CenCert databases remain credible) issuing new Subscribers' certificates for the keys held by the Subscribers, on the basis of new CenCert keys, with validity periods at least the same that the revoked certificates had.

In the case of loss of confidentiality of private keys entrusted by Subscribers (sealing service in remote mode), CenCert immediately revokes key certificates and informs the Subscribers about the situation.

#### 5.7.2 Weakness of cryptographic algorithms

When it turns out that the cryptographic algorithms used by CA or the Subscribers, or their parameters, are insufficient for the intended use, CA shall notify all the Subscribers and shall make such information available publicly and plan revocation of the affected certificates. If possible, the certificates will be replaced with other ones, with the use of new cryptographic algorithms and/or their parameters.

#### 5.7.3 Natural disasters

The Certification Centre has contingency plans to ensure operation continuity, anticipating in particular unavailability and no possibility of functioning of the Basic Centre and/or Central Point of Registration and/or shutdown of the repository or OCSP services server.

## 5.8. End of operations

In the case of the intended end of operations with regard to qualified trust services, the Company's Board of Directors shall take every effort to ensure this activity's takeover by another qualified supplier of these services. If achieving such an agreement proves impossible, the Company's Board of Directors shall make the decision on planned end of CenCert operations.

The government body exercising supervision over provision of trust services shall be notified immediately about the intended end of operations, with at least 3-months' advance.

The following are also informed about the intended end of operations:

- Subscribers with sufficient advance allowing them to purchase new certificates from a different qualified trust service provider and
- entities cooperating when executing trust services by CenCert (including those conducting Points of Registration) in the time consistent with any concluded contracts.

In the period of finishing the operations, CenCert shall terminate all authorizations to act on behalf thereof (in particular with regard to the operations of Points of Registration)

After the end of the operations all issued certificates (being still within the term of validity) are revoked and, after issuing the last CRL list, CA private key is destroyed.

Documents and provisions for which archiving is required are transferred after the end of the operations to the entity indicated by the government body exercising supervision over provision of trust services.

In the case of finishing execution of only one of qualified trust services (and maintaining provision of the remaining qualified services) the above provisions shall respectively apply.

# 6. Technical protections

# 6.1. Generating and installing key pairs

#### 6.1.1 Generating key pairs

The Certification Centre's key pairs are generated by CPR personnel in accordance with the documented procedure, in presence of at least two persons performing functions related to implementation of trust services, including the Safety Inspector. A protocol shall be drawn up from the key generation ceremony.

Keys of Registration Inspectors, used for gaining access to the CenCert system, are generated independently by the inspectors or by CPR personnel, on an electronic card meeting the requirements of QSCD.

Subscribers' keys are generated by the Registration Inspector or by the Subscriber, for certificates for qualified signatures or seals - on an electronic card (or HSM) meeting the QSCD requirements.

Subscriber keys for rSign / rSeal services are generated by the CenCert system on the HSM.

When generating keys, all requirements resulting from the certification documentation of a given HSM device (or smart card) apply. CenCert checks compliance with these requirements also in the case of generating keys on the device owned by the Subscriber.

#### 6.1.2 Delivering private key to the Subscriber

The electronic card which the Subscriber's keys are saved on is technically secured in a way enabling placement of electronic signature only after the card is activated by introducing a transport code. The transport code is delivered to the Subscriber in a different shipment than the card itself. Card activation is one-time and irreversible.

The electronic card is delivered to the Subscriber or (in the case of a seal – to the authorized person) by the Registration Inspector, after identity verification.

In the case of the rSeal service, the person authorized by the Subscriber receives from the registration inspector (in person), on a removable media (e.g. USB stick), a file containing, among others, password protecting the private key ("Passphrase"). The password is a random number with a length of 128 bits and is stored in an encrypted form. The key to decrypt the

password (also 128 bits long) is sent by the CenCert server to the e-mail address of the authorized person, after issuing the certificate for sealing.

In the case of the rSign service, the Subscriber receives the password securing the private key ("Passphrase") saved, along with other data, in the form of a QR-code on the Certificate Application. This password is a random number of 128 bits long and is stored in an encrypted form. The key to decrypt the password (also 128 bits long) is sent by the CenCert server to the Subscriber's mobile application, after the installation of this QR-code in the application and after confirmation by the CenCert server that no one has obtained this key before (the QR code is one-time). The certificate for the private key is issued only after confirming the correct installation of the data in the Subscriber's mobile application on the basis of a one-time code, so it is not possible for another person to have the access code to the Subscriber's private key.

#### 6.1.3 Delivering public key of the Subscriber

If a certificate for the qualified seal is generated on the basis of a public key, the key is delivered to CenCert CPR by the Registration Inspector or the CenCert System Administrator, present during the pair of keys generation by the Subscriber on the QSCD device.

In the case of generating a certificate for an advanced seal or website authentication, the public key is delivered to CenCert in a form signed with a qualified signature or it is delivered together with the certificate application.

#### 6.1.4 Delivering CenCert public key

The Certification Centre's public key is available in the form of a certificate issued by NCCert and registration on the national TSL list.

A reference to the national TSL list is available at the CenCert website.

#### 6.1.5 Cryptographic parameters of keys

The Certification Centre's RSA keys have the length of 4096 bits, except for

• keys generated within the effective term of the previous certification policy version, which might have the length of 2048 bits.

The Certification Centre's ECDSA keys have the length of 256 bits.

The Subscribers' keys have the length of 2048 bits (RSA keys) or 256 bits (ECDSA).

Infrastructure keys:

- RSA keys to protect communication between CenCert and Points of Registration have the length of 2048 bits or longer, ECDSA keys (if used) 256 bits or longer,
- Registration Inspectors' keys have the length of 2048 bits (RSA).

All keys of the ECDSA algorithm are generated in the domains defined in NIST standards, using prime numbers.

For the submission of seals by CenCert (including the signing of certificates and other data structures issued by CenCert), SHA-2 hash algorithms are used.

#### 6.1.6 **Purpose of using key**

The Certification Centre's private key for sealing certificates - can be used only to seal certificates and CRL lists pursuant to the present certification policy. The corresponding public key serves solely to verify certificates and CRL list.

The Certification Centre's private key for sealing OCSP tokens- can be used only for this purpose. The corresponding public key serves solely to verify OCSP tokens.

The private key of the Certification Centre used for stamping OCSP tokens - can be used for this purpose only. The corresponding public key is used only for the verification of OCSP tokens.

Private keys of the Subscribers can be used only for placing qualified signatures or electronic stamps.

# 6.2. Protection of private keys

The Certification Centre's private keys are generated and processed in HSM devices having one of the certificates:

- 1) Common Criteria (standard ISO/IEC 15408) for level EAL4 or safer,
- 2) FIPS PUB 140-2 for level 3 or safer.
- 3) QSCD.

Subscribers' private keys for qualified signatures / seals and private keys of Registration Inspectors are generated and processed on smart cards or HSM meeting the QSCD requirements.

CenCert does not impose any requirements on the device (or software) for generating and processing the Subscribers' private keys for qualified certificates for advanced (non-qualified)

seals and qualified certificates for website authentication. In such cases, the risk analysis and selection of appropriate solutions is on the part of the subscribers.

Backup copies of CenCert private keys are generated with the same security requirements as for keys in the original location of these keys.

Backup copies of Registration Inspectors' private keys are not generated.

Backups of private keys Subscribers used for rSign and rSeal service are created in a manner consistent with the HSM device certificate. Key copies are stored in protected rooms and stored for a maximum of 7 days.

The Subscribers' or the Certification Centre's private keys are not archived.

Activation of the Certification Centre's keys requires simultaneous presence of at least two authorized persons.

The Subscribers' and Registration Inspectors' private keys (on QSCD cards) are activated by a PIN code.

In the case of rSign and rSeal services, Subscriber's private keys are activated by means of mechanisms provided for in the HSM certification documentation.

Destroying the Subscribers' and Registration Inspectors' private keys is performed by the holder of the given card, by logical key removal from the electronic card or physical destruction of the card. In the case of the remote sealing service - the key is destroyed by removing the encrypted key from the HSM device and the key storage locations in encrypted form (including from backup copies).

The Certification Centre's private keys, used for provision of trust services, are destroyed by a committee in accordance with the documented procedure.

The Certification Centre does not impose formal requirements for testing a manifesting electromagnetic radiation effect of devices or rooms where CenCert's, Registration Inspectors' and the Subscribers' keys are generated and processed.

# 6.3. Other key pair management aspects

The validity period of Subscribers' certificates is maximum 5 years. The validity period of Registration Inspectors' certificates is maximum 2 years. After cancellation or expiry of the last certificate associated with the private key for rSign or rSeal service, the key is destroyed (including deleted from backup copies) within 7 days.

# 6.4. Activating data

CenCert adopted and complies with the documented procedures of handling all the activating data. General principles on which detailed procedures are built are as follows:

- 1. Activation of the CenCert key requires simultaneous presence of at least two persons performing functions associated with provision of trust services.
- 2. Any activating data should be remembered or securely recorded by people routinely using them. The passwords are archived in a protected manner.
- 3. Activating data necessary at least potentially in both locations (Basic and Spare Centre), are saved in two copies and stored in both locations.

Subscribers' private keys for rSign / rSeal services are stored in an inactive mode, except for signing / sealing sessions. Activation of the key requires each time the Subscriber initiates a seal-creation session, including: entering the password protecting the key ("Passphrase"). In the case of rSeal, it is additionally required to approve the session with a qualified signature of one of the persons authorized by the Subscriber. The stamping session ends after the expiry of the time for which it was established or at any time - at the Subscriber's request. In the case of rSign, starting a signing session requires the use of a mobile device with an application that meets the conditions described in the document listed in chapter 9.16.

The password protecting the key for rSign / rSeal services is transferred to the Subscriber by CenCert before issuing the certificate. CenCert applies technical and procedural safeguards to ensure that the only possessor and owner of the password securing the key for placing the signature/seal is the Subscriber. Loss of access by the Subscriber to the password means the technical impossibility of placing the signature/seal (the password cannot be reproduced or read from the CenCert system).

# 6.5. Computer protections

Is not required for the Certification Centre to use servers having safety certificates for equipment or software of the operating system.

The Certification Centre carries out regular susceptibility tests and penetration tests, of the used IT system, not less frequently than every 6 months. Results of tests are not published.

All operations to be performed on computers and servers of the Certification Centre can be made after prior authentication and control of rights. Performed operations are saved in event logs.

### 6.6. Protections related to IT system life cycle

The Certification Centre has adopted documented procedure for making modifications or changes in the data communication system. In particular, this applies to tests of new software versions and/or using the existing databases for this purpose. These principles guarantee continuous operation of the data communication system, the integrity of its resources and preservation of data confidentiality.

The procedure guarantees testing new software versions in the testing environment. For implementation of any works in the test environment, it is not allowed to used private CenCert keys meant to provide trust services.

# 6.7. Computer network protections

Servers used by CenCert keys to provide certification services pursuant to the present policy are connected by means of logically separated, two-segment internal network, separated from the external network with firewalls.

# 6.8. Time stamping

Issuing time stamps, as well as time stamping of certificates, certifying statements, CRL lists and entries in the devices and software log is done using the indication of current time from timers built in the devices or the workstations.

Workstation timers are synchronized using NTP protocol with the UTC(pl) time shared publicly on the certificate of the Head Office of Measures.

Synchronization ensures time accuracy not smaller than 1s.

CenCert guarantees availability of the time stamping service at the level of 99,9% measured in a yearly perspective.

The time stamping services are provided in reply to the request containing an advanced signature of an entity authorized to receive the stamp. CenCert, after arrangement with the customer, may also provide other authentication methods (e.g. login/password).

# 7. Profile of certificates, CRL lists and OCSP tokens

### 7.1. Profile of certificates and certifying statements

#### 7.1.1 Distinguished Names

# DN ID connected with provision of the service of issuance of qualified certificates for electronic signatures and seals:

Country (countryName) = *PL* Organization name (organizationName) = *Enigma Systemy Ochrony Informacji Sp. z o.o.*, Common name (*commonName*) = *CenCert QTSP CA* organizationIdentifier = *VATPL-5261029614* 

DN IDs connected with provision of the service of issuance of qualified time stamps:

Country (countryName) = *PL* Organization name (organizationName) = *Enigma Systemy Ochrony Informacji Sp. z o.o.*, Common name (*commonName*) = *CenCert QTSP TSA* organizationIdentifier= *VATPL-5261029614* 

Country (countryName) = *PL* Organization name (organizationName) = *Enigma Systemy Ochrony Informacji Sp. z o.o.*, Common name (*commonName*) = *CenCert QTSP TSA ECC* organizationIdentifier= *VATPL-5261029614* 

# DN ID connected with provision of the service of issuance of qualified certificates for website authentication:

Country (countryName) = *PL* Organization name (organizationName) = *Enigma Systemy Ochrony Informacji Sp. z o.o.*, Common name (*commonName*) = *CenCert QTSP WEB CA*  organizationIdentifier= VATPL-5261029614

# DN IDs associated with provision of trust services, for keys generated and saved in the national TSL before the effective date of this policy:

Country (countryName) = *PL* Organization name (organizationName) = *ENIGMA SOI Sp. z o.o.* Common name (*commonName*) = *CenCert Centrum Certyfikatów Kwalifikowanych* Serial number (serialNumber) = *Nr wpisu:* 11

Country (countryName) = *PL* Organization name (organizationName) = *ENIGMA SOI Sp. z o.o.* Common name (*commonName*) = *CenCert Centrum Kwalifikowanych Znaczników Czasu* Serial number (serialNumber) = *Nr wpisu:* 12

### 7.1.2 **Profile of subscribers' certificates**

The Certification Centre issues certificates in a format of X.509 v.3 consistent with RFC 5280. Numbers in issued certificates are pseudorandom and unique within the Certification Centre. Uniqueness of certificate numbers is provided by the software generating certificates along with the used databases.

CenCert applies the following identifiers of cryptographic services: sha256-with-RSA, sha384-with-RSA, sha512-with-RSA, sha1-with-RSA<sup>1</sup>, sha256-with-ecdsa, sha384-with- ecdsa, sha512-with-ecdsa. The ECDSA algorithm is used and accepted for eliptic curves domains defined in NIST standards.

Extension	Description/value	critical?
AuthorityKeyIdentifier	abbreviation from public key, CA	NO
SubjectKeyIdentifier	abbreviation from the Subscriber's public key	NO

Extensions of qualified certificates of Subscribers:

<sup>&</sup>lt;sup>1</sup> The algorithm SHA-1 is used only for verification, in seals and signatures generated before July 2, 2018

Extension	Description/value	critical?
KeyUsage	nonRepudation – for certificates for electronic signatures and seals	YES
	<pre>digitalSignature, keyEnciphering - for website authentication certificates</pre>	
extendedKeyUsage	for website authentication certificates	YES
	Server Authentication (1.3.6.1.5.5.7.3.1)	
	Client Authentication (1.3.6.1.5.5.7.3.2)	
CertificatePolicies	<pre>1) {1.3.6.1.4.1.10214.99. 1.1.1.4}</pre>	NO
	or (only for certificates issued with the use of CA keys introduced to use before the effective date of this policy)	
	{1.2.616.1.113681.1.1. 10.1.1.2}	
basicConstraints	empty sequence	YES
	(determination that the Subscriber is the final user and cannot issue certificates)	
<i>crlDistributionPoints</i>	contains locations of the current CRL	NO
qcStatement	esi4-qcStatement-1 Declaration that the certificate is qualified within the area of EU	NO
	id-etsi-qcs-QcCompliance {0.4.0.1862.1.1}	
qcStatement	esi4-qcStatement-4 Declaration that the private key connected with certificate is in the QSCD device	
	id-etsi-qcs-QcSSCD {0.4.0.1862.1.4}	
	It does not appear in certificates for advanced (non-qualified) seals and in certificates for website authentication	

Extension	Description/value	critical?
qcStatement	esi4-qcStatement-6 Declaration meaning a sort of a certificate	NO
	id-etsi-qct-esign {0.4.0.1862.1.6.1}- for certificates for electronic signature	
	id-etsi-qct-eseal {0.4.0.1862.1.6.2}- for certificates for electronic seal	
	id-etsi-qct-web {0.4.0.1862.1.6.3} – for website authentication certificates	
qcStatement	esi4-qcStatement-5 Indication (URL) for statements (PDS - <i>PKI</i> <i>Disclosure Statements</i> )	NO
	id-etsi-qcs-QcPDS {0.4.0.1862.1.5}	
	URL indicating PDS	
qcStatement	id-etsi-qcs-semanticsId-Natural {0.4.0.194121.1.1}	NO, extension optional
	indicates compliance of the serialNumber construction of DN identifier with the syntax and semantics defined in ETSI EN 319 412-1	
	for certificates for natural persons	
qcStatement	id-etsi-qcs-SemanticsId-Legal {0.4.0.194121.1.2}	NO
	indicates compliance of the serialNumber construction of DN identifier with the syntax and semantics defined in ETSI EN 319 412-1	
	for certificates for legal entities	

Extension	Description/value	critical?
qcStatement	Only for PSD2 certificates:	NO
	etsi-psd2-qcStatement {0.4.0.19495.2}	
	Oznaczenie instytucji nadzoru finansowego (NCAName, NCAId) oraz jedna lub więcej ról zdefiniowanych w PSD2, zgodnie z ETSI TS 119 495:	
	- PSP_AS	
	id-psd2-role-psp-as {0.4.0.19495.1.1}	
	- PSP_PI	
	id-psd2-role-psp-pi {0.4.0.19495.1.2}	
	- PSP_AI	
	id-psd2-role-psp-ai {0.4.0.19495.1.3}	
	- SP_IC	
	id-psd2-role-psp-ic {0.4.0.19495.1.4}	
Authority Information Access –	id-ad-caIssuers	NO
	indication of URL for location of the CA certificate issued by NCCert (HTTP protocol)	
Authority Information Access –	<i>id-ad-ocsp</i> indication of URL for OCSP server (HTTP protocol)	NO, extension optional

# 7.1.3 Certificates to sign OCSP tokens, certificates of infrastructure keys and test certificates

Certificates to sign OCSP tokens have extensions

- *KeyUsage->* digitalSignature critical
- extendedKeyUsage-> id-kp-OCSPSigning (see RFC 5280) non-critical
- *id-pkix-ocsp-nocheck* non-critical.

Certificates of infrastructure keys (system access keys of Registration Inspectors, as well as for communication protection) are not qualified certificates – they do not have proper extensions of QCStatements. They have, on the other hand, extension ExtKeyUsage

{1.3.6.1.4.1.10214.2.1.1.2} or {1.3.6.1.4.1.10214.2.1.1.3} proving that these are infrastructure certificates used only under the CenCert system and cannot be used beyond this system.

Test certificates have identical structure as production certificates, provided that their DN identifier is built of fields "TEST" (or "TEST TEST", TEST2", "TEST <characters of other alphabets>", etc.) in all places meant for text data (first and last name, common name etc.) and sample numbers (1234...) in places meant for numerical data (PESEL (Personal ID Number), NIP (Tax Identification Number), etc.).

# 7.2. Profile of CRL lists

The Certification Centre issues CRL lists in a format consistent with Recommendation X.509: 2000 version 2. of the format.

The seal of the Certification Centre under the CRL list is made using the algorithm of abbreviation SHA-2. Until the date specified the SHA-1 Act the algorithm SHA-1 can also be used.

Extensions

Bay	Description/value	critical?
extensions		
AuthorityKeyIdentifier		NO
keyIdentifier	abbreviation from public key	
cRLNumber	successive number of the CRL list issued in CenCert	NO

The CRL lists may contain other extensions, marked as non-critical.

# 7.3. Profile of OCSP

Demands consistent with RFC 6960 are acceptable. The demand content is sent and the reply is downloaded using the HTTP protocol.

The OCSP service address is included in the certificate extension (see section 7.1.2).

The certificate server reply is consistent with the RFC 6960 standard. For inquiries about unknown certificate number, service returns the value *unknown*. The service returns information about revocations regardless of the certificate validity date.

The OCSP token is marked with a seal placed using a key serving only for this purpose and contains a certificate of this key, issued using a CenCert key for issuance of certificates.

#### 7.4. **Profile of time stamp**

Demands of time stamping consistent with RFC 3161, signed electronically in order to authenticate according to standard PKCS#7, are acceptable. The time stamping demand content is sent and the time stamp is downloaded using the HTTP protocol.

If the time stamping demand (according to RFC 3161) has an optional attribute *ReqPolicy*, it should contain the identifier "{2 5 29 32 0}"(any policy). Optional attribute *Extensions* may occur but is not processed by CCK system.

Attribute *Version* of signature under the request (according to PKCS#7) should contain the value of "1". Attribute *Certificates* should contain the list of certificates, consisting only of a certificate (consistent with the X.509v3 certificates) of the key used for signing the time stamp. Attribute *SignerInfos* should contain the list of electronic signatures, consisting of exactly one signature. Optional attributes of signature *SignedAttrs* and *UnsignedAttrs* not are processed by the CCK system.

The time stamping server reply to a correctly formulated stamping request is consistent with standard RFC 3161 and is marked with an advanced seal placed with a private key of the Certification Centre's for sealing time stamps. The seal under the time stamp includes, among others, date and time, as well as data sent by the person requesting the services (cryptographic hash from the time-stamped data).

# 8. Audit

The Certification Centre is subject to audits in accordance with Article 20 of eIDAS.

# 9. Miscellaneous

### **9.1.** Fees

CenCert collects fees for provision of its services according to the price list valid at a given time.

CenCert does not collect fees for invalidation, suspension or revocation of the certificate, as well as for access to public CenCert key and the published (current and archive) lists of revoked certificates.

# 9.2. Financial liability

Liability of the CenCert Certification Centre is defined in Article 13 of eIDAS.

The Certification Centre, as a qualified provider of trust services, is responsible for damage caused intentionally or due to negligence to a natural person or legal person in connection with default in meeting the obligations specified in eIDAS, subject to limitation of liability specified in chapter 9.8 below.

The intention or negligence CenCert is presumed, unless CenCert can demonstrate that the damage mentioned above resulted from the intended action or negligence of CenCert.

# **9.3.** Confidentiality of information

Principles of protection of confidentiality of the information related to the provision of certification services are specified in the Act of trust services and electronic identification, as well as in the Act on protection of personal data.

The Certification Centre treats as Confidential Information all information related to the services provided thereby, except for the following information:

- Certification policy in the currently binding versions,
- Public CenCert key,
- List of revoked certificates, OCSP tokens,
- Certificates of infrastructure keys,

• Current information, intended for publication (such as price list of services, commercial offer, current messages, contact details).

# 9.4. Personal data protection

CenCert processes the personal data of subscribers in accordance with

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) and the Act of Personal Data Protection of 10 May 2018.

CenCert has implemented and fulfils appropriate procedures ensuring protection of personal data.

Subscribers are informed, at signing the contract, about processing of their personal data by CenCert and about their rights resulting from it.

# 9.5. **Protection of intellectual property**

Enigma Systemy Ochrony Informacji Sp. z o.o. has full right to administer proprietary copyrights pertaining to this Certification Policy.

Enigma Systemy Ochrony Informacji Sp. z o.o. allows using the policy (including printing and copying) by the Subscribers and other users of certification services, for the purposes related to the use of certificates, OCSP tokens and time stamps issued by CenCert.

# 9.6. Granted guarantees

Not applicable

# 9.7. Exemptions from guarantees granted by default

The Certification Centre does not grant to the Subscribers any guarantees granted by default, except for guarantees which may result from the binding regulations.

Any guarantees granted by the Certification Centre have to be granted in a written form, under pain of invalidity.

# 9.8. Liability restrictions

The Certification Centre shall not be liable for damage resulting from non-observance, by the recipient of trust services, of the principles specified the certification policy, in particular for damage resulting from:

1) using the certificate not in line with the scope specified in the policy indicated in the certificate, including damage resulting from exceeding the highest limit value of the transaction, if this figure has been indicated in the certificate;

2) untrue data contained in the certificate, stated by the recipient of trust services using this certificate, unless the damage was a result of default on due diligence by the supplier of trust services;

3) storage or using, by recipients of trust services, of the private keys for submission of electronic signature, electronic seal or authentication of websites - or data protecting these keys - in a manner not ensuring their protection against unauthorised use, in particular failure to comply with the obligations arising from the provisions of Chapter 4.5.2 of this policy.

The Certification Centre not responsible for ensuring that the issued certificate will be appropriate for the needs of the Subscriber or that it will be correctly functioning in the system in which the Subscriber wants or needs to use it.

In the case of shortening the validity period of certificates through the fault of the Certification Centre, the liability of the Certification Centre is limited to reimbursement of the cost of issuing the certificates, in proportion to shortening the validity period.

The Certification Centre is not liable for the consequences of revoking a certificate containing a pseudonym, if, after issuing the certificate, it turns out that the pseudonym does not meet the conditions specified in section 3.1.1.2, and this fact was not known to the Certification Centre at the time of issuing the certificate.

The Certification Centre is not liable for unavailability of the OCSP service, provided that in the unavailability period certificate status information services work correctly, on the basis of the CRL list, in accordance with the declaration of availability specified in chapter 4.10.

The Certification Centre is not liable for unavailability of the time stamping service and the current CRL provisioning service, provided that the unavailability period does not violate the declarations of availability of the service specified in chapters 4.10 and 6.8, respectively.

The Certification Centre, providing trust services, is not liable for correct operation of the software used by the Subscriber and correctness and adequacy of technical and organizational safeguards applied to the Subscriber.

In particular, during provision of the time stamping service, CenCert is not liable for correctness of calculations of the cryptographic hash from the data that are to be time-stamped.

In particular, during provision of rSign or rSeal service, CenCert is not liable for the correctness of calculating the cryptographic hash of the data to be sealed, nor for the cryptographic hash sent to the CenCert system corresponds to the data that the Subscriber intends to sign/seal, and also is not liable for the security of processing, outside the CenCert system, the password securing the private key used for signing/sealing, nor for the Subscriber's management of the rights of persons authorized to initiate the sealing session, including for reporting changes in entitlements to the CenCert personnel well in advance.

CenCert is neither responsible for punctual handling of the certificate status change request (invalidation, suspension or suspension repealing), nor for handling the request in general – if it has not been delivered to CenCert to the address indicated in chapter 1.3, intended for sending certificate status change requests (traditional or e-mail address, depending on the form of the application).

CenCert is not responsible for the timely handling of an application for a change in the authorization of persons to establish a seal session in remote mode (authorization, deletion of authorization, change of data), or for the fact that the application will be served - if it has not been delivered to CenCert on indicated in Chapter 1.3 address (traditional address or email, depending on the form of the application).

CenCert is not liable for loss of the Subscriber's access to the private key used for placing electronic signatures or seals, resulting from a blockade of the electronic card due to a wrongly entered PIN and/or PUK number, exceeding the fixed limit of failed attempts, about which the Subscriber has been informed.

CenCert is not responsible for the loss of access to the private key used in rSeal service, caused by the loss of the password to activate the key.

CenCert is not responsible for the loss of access to the private key used to perform the signature in the remote mode (rSign), caused by the loss of "backup" data saved by the mobile application, or the loss of the PIN to the mobile application, or the loss of access to SMS messages sent to the defined in CenCert Phone number.

Total financial liability of ENIGMA SOI Sp. z o.o. under provision by CenCert of certification services cannot exceed 1 000 000 EUR. The amount of one-time compensation under incorrect use of the certificate issued by CenCert cannot exceed 250 000 EUR.

### 9.9. Assignment of compensation claims

The Certification Centre has concluded a valid civil liability insurance contract for damage caused to the recipients of certification services, in accordance with the Act on trust services.

# 9.10. Transitional regulations and period of validity of certification policy

This certification policy is in force for certificates issued during its effective term. Certificates used for investigation or as evidence after the period of their validity should be used in accordance with the certification policy under which they have been issued.

The policy can be applied from the moment of approval (before the effective date) to the implementation of trust services for testing and audit purposes.

# 9.11. Determination of the manner and addresses for delivery of letters

Any letters associated with the current activity of the Certification Centre should be delivered at the Central Registration Point.

Any letters can also be delivered to the address of the registered office of Enigma Systemy Ochrony Informacji Sp. z o.o.

# 9.12. Changes in the certification policy

The certification policy management principles are described in chapter 1.5.

# 9.13. Settlement of disputes

All disputable matters concerning provisions of trust services of CenCert, including complaints, should be addressed to Enigma Systemy Ochrony Informacji Sp. z o.o. at biuro@enigma.com.pl.

# 9.14. Applicable law

Operation of the certification subsystem is governed by the law of the Republic of Poland and the European Union.

# 9.15. Legal basis

Rules of action of Certification Centre are consistent with the binding law and, in particular, with the regulations contained in the following legal acts:

- Regulation of the European Parliament and of the Council (EU) No. 910/2014 of 23 July 2014 and Commission Implementing Decisions (EU) issued on its basis.
- The Act of 5 September 2016 on trust services and electronic identification.
- Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) and the Act of Personal Data Protection of 10 May 2018.
- The Penal Code Act.
- The Copyright Act.

# 9.16. Miscellaneous

CenCert provides potential customers with rSeal service, before the service begins, description of remote sealing service interface.

CenCert provides potential developers of a mobile application for the rSign service, after signing an appropriate contract, a description of the security and functional requirements for the mobile application.