

itsme® Signature Creation Service Policy Version 1.1

This document describes the policy requirements for the itsme Server
Signing Application Service

23-09-2019

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1. INTRODUCTION

1.1. Overview

This document describes the rules to be followed for the creation of signatures according to the itsme® sign Generic Qualified Signature Policy. This is the default signature policy that is applicable when no specific rules are to be applied.

1.2. Business or Application Domain

This signature policy does not pose any limitations on the scope and boundaries of the business (application) domain in which the signature validation service policy(ies) is(are) suitable for use.

This signature policy does not pose any limitation on the transactional context in which the signature is created. See also clause 3.1.

1.3. Document and policy(ies) names, identification and conformance rules

1.3.1. Policy identification

Signature policy name: COMPL_POL_GenericQualifiedSignatureCreationPolicy

OID: 1.3.6.1.4.1.49274.1.1.4.1.1

1.3.6.1.4.1.49274 (BMID organization).1 (Compliance Domain).1 (Policies).4
(COMPL_POL_GenericSignatureValidationServicePolicy).1 (major version).1 (minor version)

1.3.2. Distribution points

The latest version of this policy will always be present at <https://www.itsme.be/legal/document-repository>
Older versions of this policy will be present in the same location.

At this moment no machine processable formats are available for the present signature policy.

1.4. Signature policy document administration

1.4.1. Signature policy authority

The BMID TSP Management Board is the authority that is responsible for the signature policy document. The BMID TSP Management Board is part of Belgian Mobile ID SA/NV (registered under number 0541.659.084). The BMID TSP Management Board can be contacted via the contact form at the itsme website at <https://www.itsme.be/en/contact>, tsp@itsme.be or via postal mail at TSP Management Board; Belgian Mobile ID SA/NV; Sinter Goedeleevoorplein 5, 1000 Brussels.

1.4.2. Contact person

Questions about this signature policy should be directed to the president of the BMID TSP Management Board via the contact form on the itsme® website at <https://www.itsme.be/en/contact>, tsp@itsme.be or via postal mail at TSP Management Board; Belgian Mobile ID SA/NV; Sinter Goedeleevoorplein 5, 1000 Brussels.

1.4.3. Approval procedures

The approval procedures for this signature policy consists of a formal approval by the members of the BMID TSP Management Board during a meeting or via an e-mail procedure.



1.5. Definitions and Acronyms

1.5.1. Abbreviations

AdES	: Advanced Electronic Signature
AdES/QC	: Advanced Electronic Signature created with a Qualified Certificate
BMID	: Belgian Mobile ID NV /SA
CA	: Certification Authority
DA	: Driving Application
OCSP	: Online Certificate Status Protocol
OID	: Object Identifier
PKI	: Public Key Infrastructure
QES	: Qualified Electronic Singature
QTSP	: Qualified Trust Service Provider
QSCD	: Qualified Signature Creation Device
RQSCD	: Remote Qualified Signature Creation Device
SCA	: Signature Creation Application
SSA	: Server Signing Application
SVA	: Signature Validation Application
TSP	: Trust Service provider
XML	: eXExtensible Markup Language

1.5.2. Definitions

(signature) commitment type: signer-accepted indication of the exact implication of a digital signature

driving application: application that uses a signature creation system to create a signature or a signature validation application in order to validate digital signatures or a signature augmentation application to augment digital signatures

eIDAS regulation: 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

itsme® Sign Creation Service: The signature creation service offered by BMID.

Itsme® Server Signing service: The part of the itsme® Sign Creation Service that allows an external SCA to request a hash to be signed and receive the digital signature value as a result.

relying party: natural or legal person that relies upon the signature

Remote Qualified Signature Creation Device: Signature creation device where the hardware element that protects the private key is not in the hands of the certificate holder, but in a remote datacenter

signature applicability rules: set of rules, applicable to one or more digital signatures, that defines the requirements for determination of whether a signature is fit for a particular business or legal purpose

signature creation device: configured software or hardware used to implement the signature creation data and to create a digital signature value

signature creation application: application within the signature creation system, complementing the signature creation device, that creates a signature data object

signature level: format specific definition of a set of data incorporated into a digital signature, which allows to implement a signature class as per the ETSI AdES format standards, e.g. XAdES-B-LTA, XAdES-E-C, PAdES-B-T, PAdES-E-LTV are examples of signature levels.

signature validation policy: list of constraints processed by the SVA

signature validation report: comprehensive report of the validation provided by the SVA to the DA and allowing the DA to inspect details of the decisions made during validation and investigate the detailed causes for the status indication provided by the SVA

Signature Validation Service (SVS) Policy: set of rules that indicates the applicability of a signature validation service to a particular community and/or class of application with common security requirements



signature validation status: one of the following indications: TOTAL-PASSED, TOTAL-FAILED or INDETERMINATE.

signature validation: process of verifying and confirming that a digital signature is technically valid

signature verification: process of checking the cryptographic value of a signature using signature verification data

signer: entity being the creator of a digital signature

subscriber: Legal or natural person bound by agreement with BMID to any subscriber obligations. In the BMID ecosystem, subscribers consist as well from customers (Service Providers) that have signed a contract with BMID as end-users who only have accepted the terms and conditions of the services they are using.

trust service practice statement: statement of the practices that a trust service provider employs in providing a trust service

2. SIGNATURE APPLICATION PRACTICES STATEMENTS

This signature policy shall be implemented by a solution conform to the latest version of the BMID Practice Statement (with name COMPL_POL_BMIDpracticeStatement and OID 1.3.6.1.4.1.49274.1.1.2.1.1).

The Service Provider who operates the Driving Application is responsible for the security of the Driving Application. The WYSIWYS Provider who operates the Signature Creation Application (SCA) is responsible for the security of the SCA. Between Driving Application and SCA, mutual authentication should be performed. Between SCA and itsme® SSA, mutual authentication shall be performed.

3. BUSINESS SCOPING PARAMETERS

3.1. BSPs mainly related to the concerned application/business process

This signature policy is not limited to a certain application or business process. The Driving Application and/or SCA is (are) responsible for all business aspects. This signature creation policy does not impose any workflow (sequencing and timing) of signatures. The Driving Application or SCA may implement such workflow if relevant.

Unless it is sure that the commitment from the signer is not contractual, the WYSIWYS provider should only allow file formats that are free from possible corruption agents (e.g. macro's) such as PDF/A (not regular PDF) or plain txt.

The SCA shall use the digital signature value created by the itsme® SSA to create an advanced electronic signature format as defined by the eIDAS regulation.

3.2. BSPs mainly influenced by the legal/regulatory provisions associated to the concerned application/business process

3.2.1. Legal type of the signatures

Since the itsme® Sign Creation Service always uses Qualified Certificates on RQSCD, and this signature policy imposes the use of an advanced electronic signature format as defined by the eIDAS regulation, the signatures created under this signature policy shall comply with the requirements for Qualified Electronic Signatures.



3.2.2. Commitment assumed by the signer

The SCA shall define for the specific business process whether and if so, which commitment type will be included in the signature. The definition of the commitment type to be included may be delegated to the Driving Application.

3.2.3. Level of assurance on timing evidences

The SCA should add two qualified electronic time stamps from different providers and with different organizational and technical characteristics (e.g. different algorithms) to protect the AdES signature. Alternatively Evidence Revords (IETF RFC 4998 or IETF RFC 6283) may be used. For signatures that are short-lived (some days at the most) the addition of time stamps may be omitted.

3.2.4. Formalities of signing

The SCA should offer a WYSIWYS visualization to the signer. Only when the business process does not allow for a WYSIWYS (e.g. signing an electronic registered mail for receipt, where the recipient is only permitted to view the content of the registered mail after the signature), the WYSIWYS may be omitted. This can only be the case if a commitment type is used that does not include a contractual commitment.

The SCA should indicate before the signature to the user what the signature policy, commitment type (optional) and signer role (optional) are that will be taken up in the signature.

The itsme® SSA will visualize the description of the data to be signed, the signature policy, commitment type (optional) and signer role (optional) in the itsme® app that acts as sole control mechanism.

3.2.5. Longevity and resilience to change

The SCA shall ensure that the signature level and time assertion quality are sufficient to guarantee the longevity and resilience to change that is required for the specific business process in which the signature is created.

3.2.6. Archival

There are no requirements regarding archival.

3.3. BSPs mainly related to the actors involved in creating/augmenting/validating signatures

3.3.1. Identity (and roles/attributes) of the signers

The itsme® SSA will identify the signer via the itsme® app. The SCA may indicate a role of the signer. This may be a claimed role or a certified role. The SCA may use attributes to define workflows and / or perform access control, however attributes will not be included in the signatures.

3.3.2. Level of assurance required for the identity of the signer

The itsme® Sign Creation Service will comply with the requirements for the identity proofing for the creation of Qualified Certificates as imposed by the CA.

3.3.3. Signature creation devices

The itsme® SSA will protect the signer's private key in an RQSCD. This RQSCD will be operated by a QTSP and the RQSCD environmental aspects will be included in the QTSP accreditation scope.



3.4. Other BSPs

3.4.1. Other information to be associated with the signature

No other information associated with the signature will be included in the signature.

3.4.2. Cryptographic suites

The cryptographic suite of the signature itself will be defined by the itsme® SSA in agreement with the CA that issues the signer's certificate. Currently the following parameters are applicable:

- Signing algorithm: RSA
- Key length: 2048 bits
- Hashing algorithm: SHA256

The SCA shall ensure that the cryptographic suites used in objects that are added to compose the AdES format (e.g. in timestamps) respect the guidelines of the latest version of ETSI TS 119 312 "Electronic Signatures and Infrastructures (ESI); Cryptographic Suites".

3.4.3. Technological environment

The SCA will connect with the itsme® Sign services via the itsme® sign API. The certificates used for the creation of the signatures will be qualified certificates that are created via the itsme® account of the user on the itsme® service and for which the private key is protected in the RQSCD operated by BMID. The activation of the private key will only be possible via the itsme® app of the subject of the certificate.

4. REQUIREMENTS / STATEMENTS ON TECHNICAL MECHANISMS AND STANDARDS IMPLEMENTATION

The SCA shall format the signature in a format compliant with ETSI EN 319 122, ETSI EN 319 132, ETSI EN 319 142 or ETSI EN 319 162.

5. OTHER BUSINESS AND LEGAL MATTERS

This signature policy does not impose or implement any business matters. All legal matters are governed by the contract or Terms and Conditions that were accepted by the Subscriber before starting to make use of the signature validation service.

6. COMPLIANCE AUDIT AND OTHER ASSESSMENTS

This signature policy is a policy for the itsme® SSA. Although this service is not a Qualified Service (it is not possible to certify signature creation services as a qualified service), the RQSCD is audited and under supervision of the Belgian Supervisory Body together with the itsme® Sign Validation service (which is a Qualified Signature Validation Service). The RQSCD and the Qualified Certificates are thus subject to the rigorous eIDAS accreditation scheme.

This itsme® SSA is operated by BMID and is within the scope of the BMID ISO 27001/2 certification. No other compliance audits or assessments are applicable.