

# S/MIME Certificate Working Group



CA/BROWSER FORUM

# Antitrust Compliance



“As you know, this meeting includes companies that compete against one another. This meeting is intended to discuss technical standards related to the provision of existing and new types of digital certificates without restricting competition in developing and marketing such certificates. This meeting is not intended to share competitively-sensitive information among competitors, and therefore all participants agree not to discuss or exchange information related to:

1. Pricing policies, pricing formulas, prices or other terms of sale;
2. Costs, cost structures, profit margins,
3. Pending or planned service offerings,
4. Customers, business, or marketing plans; or
5. The allocation of customers, territories, or products in any way.”

# October 20



Special meeting at CABF virtual face-to-face

1. Roll Call
2. Read Antitrust /Compliance Statement
3. Review Agenda
4. New members
  - Google
5. Discussion
  - Revisit progress and process
6. Any other business
7. Next call: October 28, 2020 at 11:00 am Eastern Time

Adjourn

# Background



The SMCWG is chartered to work on requirements applicable to CAs that issue S/MIME certificates used to sign, verify, encrypt, and decrypt email.

- Currently 36 members
- Just starting work: 7 meetings (including startup meetings to form the WG)

S/MIME varies from some other CABF focus areas:

- Wide variety of deployment modes
- Most standards specific to user groups
- Tolerant processing by Certificate Consumers
- Little visibility on use

# Members



## 25 Certificate Issuers

Actalis, Asseco Data Systems (Certum), BuyPass, CFCA, Chunghwa Telecom, Comsign, DigiCert, D-TRUST, eMudhra, Entrust DataCard, GDCA, GlobalSign, HARICA, iTrusChina, MSC Trustgate.com, SecureTrust, SECOM Trust Systems, Sectigo, SHECA, SSC, SSL.com, SwissSign, TrustCor, TWCA, OISTE Foundation

## 3 Certificate Consumers

Microsoft, Mozilla/Thunderbird, Zertificon

## 3 Associate Members

ACAB Council, U.S. Federal PKI, WebTrust

## 5 Interested Parties

Arno Fiedler, PSW, TeleTrust, Vigil Security, Nathalie Weiler

proposed  
Certificate Consumer

Google

# Use Cases



## SIGN

- signing mails to protect integrity
- signing mails to assert authenticity
- signing mails for content commitment or wilful acts
- Origin / authentication

## ENCRYPT

- encrypting mails to protect confidentiality

## KEYGEN AND/OR KEY STORAGE

- keygen by CA
- crypto token
- operating system (NSS, CAPI, etc)
- web browser (browser crypto)
- application (on iOS, Android, etc)
- enterprise email gateway
- cloud user agent

## RELATED CONSIDERATIONS

- Protection of the private key; attestation
- Dual use or split keys
- Escrow / key archive considerations

# Approach



The SMCWG is chartered to work on requirements applicable to CAs that issue S/MIME certificates used to sign, verify, encrypt, and decrypt email.

- Certificate profiles for S/MIME certificates and Issuing CA certificates
- Verification of control over email addresses
- Key management, certificate lifecycle, etc.
- CA operational practices, physical/logical security, etc.
- Identity validation for natural persons and legal entities

# S/MIME Certificate Profile



<https://docs.google.com/spreadsheets/d/1gEq-o4jU1FWvKBeMoncfmhAUemAgGuvVRSLQb7PedLU/edit?usp=sharing>

Reviewing known public reqs/stds such as Mozilla, Gmail, US Federal, ETSI, etc.

Adopt practices from BR where possible

- Split vs dual use
- Validity period, Algorithms, LDAP
- Certificate policy OID - what's useful for Relying Party?



# Relying Party Interests



What are our priorities?

- Simplest form of requirement - a literal baseline
- Or define parameters around the options?

What's the typical Relying Party and what might they want to know?

- Escrow by Issuer?
- Soft? Token?
- User agent (Cloud agent, gateway)?
- Validation (email vs identity)? Group control?