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# WebTrust has been a Framework for a Globally Recognizable CA Setup.

Only other alternative is ETSI EN 319 411 (1 and 2), which is adopted by Europe.



### **Areas Covered**

The WebTrust for CAs program includes the principles listed below. Underlying each principle, there are a series of supporting criteria to which the CA has to conform.

#### 1. CA Business Practice Disclosure (CP/CPS)

• The Certification Authority discloses its key and certificate life cycle management business and information privacy practices and provides its services in accordance with its disclosed practices.

#### 2. Service Integrity

- Subscriber information was properly authenticated (for the registration activities performed by the CA) and
- The integrity of keys and certificates it manages is established and protected throughout their life cycles.

#### 3. CA Environmental Controls

- Subscriber and relying party information is restricted and protected
- Continuity of key and certificate management operations is maintained
- CA systems development, maintenance and operation are properly authorized and performed to maintain CA systems integrity



## **Summary of WebTrust for CAs Criteria Topics**

CA BUSINESS PRACTICES DISCLOSURE (CP/CPS)		
CA ENVIRONMENTAL CONTROLS	CA KEY MANAGEMENT	CERTIFICATE LIFE CYCLE MANAGEMENT
<ul> <li>CP/CPS Management</li> <li>Security Management</li> <li>Asset Classification and Management</li> <li>Personnel Security</li> <li>Physical and Environmental Security</li> <li>Operations Management</li> <li>System Access Management</li> <li>Systems Development and Maintenance</li> <li>Business Continuity Management</li> <li>Monitoring and Compliance</li> <li>Event Journaling</li> </ul>	<ul> <li>CA Key Generation</li> <li>CA Key Storage Backup and Recovery</li> <li>CA Key Escrow (optional)</li> <li>CA Key Usage</li> <li>CA Key Archival</li> <li>CA Key Destruction</li> <li>CA Cryptographic Device Life Cycle Management</li> <li>CA-Provided Subscriber Key Management Services (optional)</li> </ul>	<ul> <li>Subscriber Registration</li> <li>Certificate Rekey/ Renewal Certificate Issuance</li> <li>Certificate Distribution</li> <li>Certificate Revocation</li> <li>Certificate Suspension (optional)</li> <li>Certificate Status Information Processing</li> <li>Integrated Circuit Card Life Cycle Management (optional)</li> </ul>

\*\*Indicative list only



## **The Audit Process: Participants**

#### Personnel responsible for

- Security management
- Personnel
- Physical security
- IT operations (e.g., network and system security, monitoring, change management)
- CA business continuity management
- CA key management operations
- Registration authority activities

#### Involvement typically includes

- Participation in interviews to discuss CA processes
- Responding to requests for documented policies/procedures, lists of events occurring during the period, and supporting evidence for a sample of events selected by the auditor

#### Level of involvement

- Typically the CA assigns an audit coordinator who spends 25 – 50% of their time coordinating meetings and the gathering of audit evidence during the fieldwork phase of the audit.
- Other individuals are typically involved for a small portion of focused time.



## **Key areas of Importance for Auditees**

- Functioning of Policy Authority: Decision making for policy & practice change, supervision of audits, security report, etc.
- 2. Services Isolation: For separation of services like CM, TSA, OCSP, etc. And also the application/security layer like the database, HSM, etc
- 3. Redundancy architecture / Fault Tolerance: To have critical services to tolerate local failures, and hence capacity planning should provide zero downtime and operate in a buffer.
- 4. Time Synchronization: Importance to have accuracy of time across CA Infra with reliable time source.
- Performance & availability for critical services: Uptime and response times of services like OCSP and CRLs.
- 6. CA Facility Administrative and Access Ownership.
- 7. Primary and DR Setup (BCP).
- 8. Certificate Linting Requirements
- 9. Incident Management mechanism & reporting.
- 10. Internal Audits and results.
- 11. Risk detection mechanism (Prominent Companies, Countries of suspicion, blacklists of UN / Terror / etc)
- 12. Weak key detection (Compromised keys / Weak keys)





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## Thank you!

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