

#	Assertions	Answer	Comment
	Attribute Management and Attribute Release	<input type="checkbox"/>	
1	The Community must define and document the semantics, lifecycle, data protection, and release policy of attributes stored or asserted by the AA.	<input type="checkbox"/>	
2	The AA Operator must implement the community definitions as defined and documented, for all the AAs it operates.	<input type="checkbox"/>	
3	The AA Operator must collect and publish the community documents for the benefit of Relying Parties.	<input type="checkbox"/>	
	Attribute Assertions	<input type="checkbox"/>	
1	Assertions provided by an AA must be integrity-protected. They must be signed by the identified AA, or be transmitted over an integrity-protected channel where the server has been authenticated, and preferably both.	<input type="checkbox"/>	
2	The AA must respect data protection requirements of the Infrastructure and Community. This may mean that AAs require client authentication, in addition to the encryption of the messages and the communication channel.	<input type="checkbox"/>	
3	If an AA Operator issues assertions containing a lifetime, this lifetime must be compliant with the Community policies, be no more than 24 hours, and the assertion must not be valid beyond the validity period of the attributes it contains. The Community Management is responsible for the content of the assertion, as issued, during its entire lifetime.	<input type="checkbox"/>	
4	Re-issuance of assertions must be based on information held in the AA at the time of re-issuance.	<input type="checkbox"/>	
5	The AA Operator must only issue assertions or release attributes to requesters in accordance with the Community policies.	<input type="checkbox"/>	
	Operational Requirements	<input type="checkbox"/>	
1	An AA that issues attribute assertions must be a dedicated system, running no other services than those needed for the AA operations.	<input type="checkbox"/>	
2	An AA may be run in a virtual environment that has security requirements the same or better than required for the AA, and for all services running in this environment, and it must not leave this security context. Any virtualization techniques employed (including the hosting environment) must not degrade the context as compared to any secured physical setup. Only AA Operator designated personnel should have control over the virtualisation and security context of the AA.	<input type="checkbox"/>	
3	The AA must be located in a secure environment where access is controlled and limited to specific trained personnel.	<input type="checkbox"/>	
4	The AA must be run with an intended continuous availability. Hosted Communities must be informed if AA Operator procedures change.	<input type="checkbox"/>	
5	To achieve sustainability, an AA Operator should offer its AA services as a long term commitment.	<input type="checkbox"/>	
	Key Management	<input type="checkbox"/>	
1	A key used to protect assertions should be dedicated to assertion protection functions.	<input type="checkbox"/>	
2	Keys must not be shared between AA Operators. A single AA Operator may use the same signing key for multiple AAs. Where multiple AAs are under the control of a single AA operator but located in physically distributed locations, the key must only be shared using secure protocols.	<input type="checkbox"/>	
3	Keys must have a protection strength equivalent to 112 bits (symmetric) or higher.	<input type="checkbox"/>	
4	Keys must only be accessible by the service and by trained personnel subject to procedural controls.	<input type="checkbox"/>	
5	AA Operators are encouraged to consider using an HSM to store signing keys. Otherwise, when using software-based private keys these must be suitably protected by the operating system.	<input type="checkbox"/>	

	Network Configuration	<input type="checkbox"/>	
1	The network to which the AA system is connected must be highly protected and suitably monitored.	<input type="checkbox"/>	
	Site security	<input type="checkbox"/>	
1	The AA Operator should document the physical site security controls and maintain them in a state consistent with the security requirements of the hosted Communities.	<input type="checkbox"/>	
	Metadata publication	<input type="checkbox"/>	
1	The AA Operator must publish at least the following metadata for each AA it hosts, to the Community and related relying parties:	<input type="checkbox"/>	
1.a	administrative contact details for the AA Operator, including at least one email address and one postal contact address	<input type="checkbox"/>	
1.b	an operational security contact for the AA Operator, being at least an email address and preferably including a telephone number,	<input type="checkbox"/>	
1.c	those aspects of their operational environment that are relevant to the evaluation of the security and trust by the Communities and Relying Parties	<input type="checkbox"/>	
1.d	the public key for verifying signed messages, where relevant, or the set of certificates up to a self-signed root	<input type="checkbox"/>	
1.e	a web URL to a general information page about the Community	<input type="checkbox"/>	
2	The AA Operator should provide a means to validate the integrity of its roots of trust.	<input type="checkbox"/>	
	Audits	<input type="checkbox"/>	
1	The attributes in the AA and their binding to subjects must be verifiable and auditable.	<input type="checkbox"/>	
2	The AA Operator must record and archive at least the following for all of its hosted AAs	<input type="checkbox"/>	
2.a	all requests for attributes	<input type="checkbox"/>	
2.b	all issued attribute assertions	<input type="checkbox"/>	
2.c	any configuration change to the AA relevant to the access control of the attribute repository	<input type="checkbox"/>	
2.d	any change affecting the binding between subjects and attributes	<input type="checkbox"/>	
3	The AA Operator must record and archive at least the following for of its AA issuance s	<input type="checkbox"/>	
3.a	all login/logout/reboot/key activations of the issuing system	<input type="checkbox"/>	
3.b	changes to the configuration of the issuing system	<input type="checkbox"/>	
4	The AA Operator must keep these records after termination of the effects of the auditable event for as long as required by the Community and any relying parties that have entered into an agreement with the AA Operator, and as required by applicable legislation.	<input type="checkbox"/>	
5	The AA Operator must provide assistance to operational security teams during a security incident.	<input type="checkbox"/>	

6	The AA Operator must accept being audited following reasonable requests from a Community it serves and from relying parties that have entered into an agreement with the AA Operator, to verify its compliance with these guidelines.	<input type="checkbox"/>	
7	The AA Operator should perform operational audits of its staff at least once per year. A list of AA Operator staff should be maintained, and verified at least once per year.	<input type="checkbox"/>	
	Privacy and confidentiality	<input type="checkbox"/>	
1	AA Operators must define and publish an appropriate privacy and data release policy compliant with the relevant legislation and the requirements of the Community.	<input type="checkbox"/>	
	Compromise and disaster recovery	<input type="checkbox"/>	
1	The AA Operator must have an adequate compromise and disaster recovery procedure, and must be willing to disclose this to the hosted Communities or to either an assessor or all related relying parties.	<input type="checkbox"/>	
	Relying Party Obligations	<input type="checkbox"/>	
1	If a Community uses AAs operated by multiple AA Operators then Relying Parties must assess each of the AA Operators individually.	<input type="checkbox"/>	
2	Relying Parties must verify the integrity and validity of attribute assertions and any binding to a valid subject at the time of reliance.	<input type="checkbox"/>	
3	Relying Parties must rely on assertions with an explicit lifetime only for as long as they are valid.	<input type="checkbox"/>	
4	Relying Parties must assess the risk of relying on assertions with no explicit lifetime and should not rely on them for longer than 24 hours after issuance.	<input type="checkbox"/>	
5	Relying Party must validate all verifiable elements.	<input type="checkbox"/>	