8.5 Access process

Authentication
Authorization
Use

Rate each issue from 0-10.

The access process is designed based on the notion that the utility of the overall information capability of the enterprise depends on the ability to legitimately access the information resources with minimal friction while still assuring the continuing value of the information in light of the hostilities of the environment in which it works.

The access process architecture defines how identified subjects demonstrate their identities through authentication, and how the properly authenticated identified subjects can then use the content through an authorization mechanism.

TOTAL (total and divide by 2)

8.5.1 Identification

Rate each issue from 0-10.

Issue	Rate
Identity of people and things, including programs and processes are	
unique tags that allow individuals to be associated with other properties.	
An identification system is used to track identities and associate them with	
these other properties.	
Initialization of identification processes are designed to meet the needs of	
the clearances and classifications of the identified entities.	
For low surety situations, nominal background checks and standard	
government identities are considered adequate for initial identification.	
Clearance processes with background checks and detailed life reviews are	
invoked for situations in which people have to be identified with higher	
surety upon entry to a system of identification.	
For externally mandated clearance processes, the external mandates for	
initial identification are used in addition to internal requirements.	
Pedigrees for hardware and software are considered in determining	
suitability for trust in high risk situations.	
TOTAL (total and divide by 7)	

8.5.2 Authentication

Rate each issue from 0-10.

Authentication is used to verify the authenticity of identity to a level of surety based on testing that identity against its known properties in the identification system.

Issue	Rate
The surety of the authenticity of an identification is tied to the available	
properties in the identification system and the ability to present and verify	,
those factors as present or absent in the individual in question.	
For higher risk, higher surety is desired, and sequential authentications	
are used to increase the certainty with which authenticity of an identity is	
believed.	
Different properties have different defined surety levels based on their	
ability to withstand different threats more or less successfully.	
The surety of authentication is not trusted beyond the surety of the	i
identification system used to authenticate the properties.	
Threat capabilities and intents are considered in evaluating the surety of	•
authentication techniques.	
TOTAL (total and divide by 6)	

8.5.3 Authorization

Rate each issue from 0-10.

Issue	Rate
Subjects are only authorized to uses after the subject's identity has been	
authenticated to an adequate level for the access decision process to be	
completed.	
Based on a requested use, the identity, and the surety of authentication,	
use is treated in one or more of a set of pre-defined ways.	
TOTAL (total and divide by 2)	

8.5.4 Use

Rate each issue from 0-10.

Issue	Rate
The whole process as as transparent and automatic to the user relative to	
the utility associated with that use as feasible for the surety required and	
the applicable costs constraints.	
The effort and surety for simple low-risk operations is minimal.	
The effort required to perform the process never exceeds the business	
value granted by that use.	
Authentication allows use of a set of capabilities for a period of time so	
that a single authenticated identity is authorized for sets of activities which	
are performed without additional authentication at every step.	
The time and set of activities permitted are limited by risk management	
determined factors.	
For high valued transactions, like large financial transfers or setting off	
explosive devices, additional authentication is warranted and applied.	

Issue	Rate
Additional authentication associated with that high valued transaction is	
leveraged to allow uninhibited subsequent use for a period of time and to a	
set of functions where feasible.	
Where feasible, use in excess of least privilege is not granted.	
Where additional access is granted, risk management approval is required	
prior to implementation of the system and at periodic intervals over the life	
cycle of its use.	
When additional access is granted, audit mechanisms associated with use	
are used to provide additional checks on that use and to limit the effects of	
illicit use.	
In all cases, use is audited if the value of the operation exceeds the	
threshold of risk requiring audit or if there are regulatory or other drivers	
that mandate auditing of use.	
TOTAL (total and divide by 11)	

8.5.5 Roll-up

Issue	Rate
Access process	
Identification	
Authentication	
Authorization	
Use	
TOTAL (total and divide by 5)	

Startup	Diligence	Typical	Excellent	Best
2	5	3	7	0