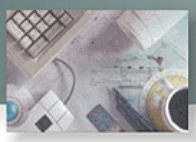

Discipline

DEFINITION	
Name	Network
Description	Defines the roles, standards, and technologies that provide the voice, video and data communications infrastructures necessary to facilitate the interconnection of the State's distributed information resources. Some examples of components included in this discipline are: • Hardware and protocol specifications • Deployment and management guidelines • Strategies for cost containment & fiscal responsibility • Guidelines for selection and usage of service providers
Rationale	Networks are the essential enabling technology for client/server, Internet and collaborative computing. Lack of robust network architecture will impact the success of distributed applications. There is an increased need for access to various types of information across the enterprise through various media such as video, voice, and traditional data services. Therefore, the network discipline defines the architectural guidelines and technologies to ensure seamless interoperability, availability, reliability, and functionality.
Benefits	• Enables a seamless data interchange capability. • Enables interoperability across the enterprise. • Provides cost efficiencies by enhancing purchasing power. • Enables standardized training programs and resource sharing. • Lessens the complexity of network systems management and administration by providing selection criteria for the acquisition and usage of network related technologies and services. • Enhances data access and system performance.
BOUNDARY	
Boundary Limit Statement	The Network Discipline includes all aspects of *voice, video*, and *data* communications. Generally it includes: • Physical network equipment (e.g., switches, routers, PBX, Call Processors) • Communication Services (e.g., Virtual Private Networks, leased facilities, Remote Access Services) • Protocols (e.g., TCP/IP, OSPF, SNA) • Network Management (e.g., network configuration, DHCP) • Topologies (e.g., Ethernet, LAN, WAN, Token Ring, FDDI) • Transportation Media (e.g., fiber, copper, wireless) This domain also includes elements of Network Security (e.g., firewalls, network intrusion detection). It does not include responsibility for data or application level considerations.

ASSOCIATED ARCHITECTURE LEVEL

Specify the Domain Name	Infrastructure

CRITICAL REFERENCES

Related Domains/Disciplines

☐ *Interface – Branding*	☒ *Integration – Functional Integration*	☒ *Systems Mgt – Business Continuity*
☒ *Interface – Access*	☐ *Integration – Middleware*	☐ *Security – Managerial Controls*
☐ *Interface – Accessibility*	☐ *Application – Application Engineering*	☒ *Security – Technical Controls*
☐ *Information – Knowledge Mgt*	☐ *Application – Electronic Collaboration*	☒ *Security – Operational Controls*
☐ *Information – Data Mgt*	☒ *Systems Mgt – Asset Mgt*	☐ *Privacy – Profiling*
☐ *Information – GIT*	☒ *Systems Mgt – Change Mgt*	☐ *Privacy – Personification*
☒ *Infrastructure – Network*	☒ *Systems Mgt – Console/Event Mgt*	☐ *Privacy – Privacy*
☒ *Infrastructure – Platform*	☒ *Systems Mgt – Help Desk/Problem Mgt*	

Standards Organizations/Government Bodies

List Standards Organizations	IETF; ITU; IEEE; ANSI; TIA/EIA; IANA; ISO; UL
List Government Bodies	NIST; FCC; PSC; OIT Office; ITAB

Stakeholders/Roles

List Stakeholders	All State agencies, departments, and commissions within the three governmental branches
List Roles	

Discipline-specific Technology Trends

List Discipline-specific Technology Trends	• VPN - VPN connections in lieu of dedicated circuits. Issues on providing the service and changes to the organizations.
	• Network Security:
	  - Leveraging the network infrastructure to limit damage from viruses and worms.
	  - Content Filtering - As the use of the internet increases abuse of the internet will also increase. The state must address what is proper use and place restrictions for both capacity and liability reasons.
	• Frame Relay/ATM Replacement – The point in which services should be moved from the Frame Relay/ATM network to a single IP network combined with MPLS (Multi Protocol Label Switching) – Impacts on network management.
	• Convergence
	VoIP – The need for data collaboration or network transport. Audio & Video
	• Data Exchange – This could increase traffic on existing lines since there is and will be increasing need for various multi-state applications to share data real time. Another potential impact is the potential of server consolidation as Gerry spoke about in our meeting with him earlier.
	• E-Government - The development of E-Gov. could impact the network since the citizens' requests will come into a centralized

	host and depending on the request may have to be routed into several different internal servers located in various locations and managed by any number of agencies. This will add additional stress to agencies' private networks. • Mobility - Wireless - wireless technology is maturing for both LAN and wide area application. As the state integrates this technology into its network, safeguards and best practices must be outlined to insure security. - PDA's, Cell Phones, Laptops, Tablet PC's are examples of mobile technologies. • Network & Computing Consolidation - Consolidation and centralization of computing and networking functions is occurring in the private sector. Because of both political and budgetary reasons the state will need to address this issue. • Standardization – Organizations are moving toward common hardware and software products & protocols utilizing open standards wherever possible within the enterprise. • Open source software and products – Increasing availability and utilization of free and open source software and products.
Technology Trend Source	Gartner; Meta Group
ASSOCIATED COMPLIANCE COMPONENTS	
List Discipline-level Compliance Components	TBD
METHODOLOGIES	
List methodologies followed	N/A
DISCIPLINE DOCUMENTATION REQUIREMENTS	
Provide documentation requirements for this Discipline	Documentation includes both Product and Compliance Components.
ASSOCIATED TECHNOLOGY AREAS	
List the Technology Areas associated with this Discipline	Premise Design Network Hardware Network Security Voice & Video Remote Access Cost Containment & Fiscal Responsibility External Service Providers Addressing & Names Resolution Network Tools & Utilities Protocols
CURRENT STATUS	
Provide the Current Status	☐ *In Development* ☐ *Under Review* ☒ *Approved* ☐ *Rejected*
AUDIT TRAIL	

Creation Date	12/09/2003	*Date Approved/Rejected*	4/13/04
Reason for Rejection			
Last Date Reviewed		*Last Date Updated*	
Reason for Update			