

Topics:

## **Design Criteria for Data Network Protocols [1]**

SA-10-002 Design Criteria for Data Network Protocols

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### **PURPOSE**

GTA has executed a major project to acquire IT infrastructure services and managed network services for use by State agencies. These services were acquired in a competitive bid environment fully in keeping with GTA's technology portfolio management responsibilities. By bundling together the IT infrastructure and managed network services requirements of the State, GTA was able to acquire services that minimize the total cost of ownership for the State while maximizing the benefits received. However, the cost model relies on maintaining the State's bulk acquisition power by using the winning service providers for the State's IT infrastructure and networking needs. To that end, it serves the best interest of the State for GTA to specify these IT infrastructure services and managed network services as Georgia's enterprise operational environment. The State's managed network efficiently routes IP based protocols between State locations and between the State locations and the Internet.

State government can benefit most from the managed network services by requiring usage of these services and standardizing application design criteria toward that purpose. While this standard does not require all agencies to use the managed network services of the enterprise operational environment, it is established in anticipation of some point in the future when all agencies may be migrated to the these services. The paced implementation of IP based protocols for data network communication provided for herein will allow easier migration at that time.

### **STANDARD**

- An agency that develops, customizes, modifies or maintains IT application solutions (applications) for use in performing a business function shall adhere to the following communication design criteria:
  - A. All applications shall use IP based protocols to support data network communications.
  - B. All IP based protocols placed into production shall be compatible with the State's managed services network for all normal operational network connectivity.
  - C. All applications shall be brought into compliance with this standard as:
    - Agencies establishing new applications,
    - Agencies replacing applications, or
    - Agencies making significant modifications to applications.
- Disaster recovery provisions may be exempted from this standard.

### **TERMS and DEFINITIONS**

**IP (Internet Protocol)** - IP is the computer networking protocol used on the Internet and is used for communicating data across a packet-switched internetwork using the Internet Protocol Suite, also referred to as TCP/IP. IP is the