Idaho Technology Authority (ITA)

ENTERPRISE STANDARDS – S3000 NETWORK AND TELECOMMUNICATIONS

Category: S3510 – NETWORK CONNECTIVITY AND TRANSPORT – TRANSPORT

CONTENTS:

I. Definition
II. Rationale
III. Approved Standard(s)
IV. Approved Product(s)
V. Justification
VI. Technical and Implementation Considerations
VII. Emerging Trends and Architectural Directions
VIII. Procedure Reference
IX. Review Cycle
X. Contact Information
Revision History

I. DEFINITION

Transport provides for the transparent transfer of data between different hosts and systems. The two (2) primary transport protocols in the Transmission Control Protocol/Internet Protocol (TCP/IP) suite are the Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP).

II. RATIONALE

Idaho State government must be able to easily, reliably, and economically communicate data and information to conduct State business. TCP/IP is the protocol standard used throughout the global Internet and endorsed by ITA *Policy 3020 – Connectivity and Transport Protocols*, for use in State government networks (LAN and WAN).

III. APPROVED STANDARD(S)

TCP/IP Transport:

1. Transmission Control Protocol (TCP); and

2. User Datagram Protocol (UDP).

IV. APPROVED PRODUCT(S)

Standards-based products and architecture

V. JUSTIFICATION

TCP and UDP are the transport standards for critical State applications like electronic mail and World Wide Web services.

VI. TECHNICAL AND IMPLEMENTATION CONSIDERATIONS

It is also important to carefully consider the security implications of the deployment, administration, and operation of a TCP/IP network.

VII. EMERGING TRENDS AND ARCHITECTURAL DIRECTIONS

The use of TCP/IP (Internet) protocols and applications continues to increase. Agencies purchasing new systems may want to consider compatibility with the emerging Internet Protocol Version 6 (IPv6), which was designed by the Internet Engineering Task Force to replace IPv4 and will dramatically expand available IP addresses.

VIII. PROCEDURE REFERENCE

Network Connectivity and Transport – Transport used on the State of Idaho's Wide Area Network must comply with the Department of Administration's "*P3020 – Connectivity and Transport Protocols*."

IX. REVIEW CYCLE

Twelve (12) Months

X. CONTACT INFORMATION

For more information, contact the ITA Staff at (208) 605-4064.

REVISION HISTORY

07/01/13 – Changed "ITRMC" to "ITA".

6/16/09 – Added Procedure Reference and deleted Timeline.

9/13/06 – Section VIII, Review Cycle, updated to reflect 12-month, rather than 6-month, review cycle. Warranted due to well established industry standard that is not likely to change in the near future.

8/25/04 – Revised to recommend considering compatibility with Internet Protocol Version 6 (IPv6) when purchasing new systems. IPv6 was designed by the Internet Engineering Task Force to replace IPv4 and will dramatically expand available IP addresses.

Effective Date: April 24, 2002