A DoD Statement on the NRC Report

STATUS OF THIS MEMO

This RFC reproduces a letter from the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASDC3I) to the Director of the Defense Communications Agency (DCA). This letter is distributed for information only. Distribution of this memo is unlimited.

CONTEXT

In December 1978, the Principal Deputy Under Secretary of Defense for Research and Engineering, Gerald P. Dinneen, USDR&E, issued a memorandum mandating the use of TCP/IP for all packet-oriented data networks where there is potential for host-to-host connectivity across network or subnetwork boundaries, and designating the Defense Communications Agency as the DoD Executive Agent for computer communications protocols (see IEN-152).

In April 1980, the Assistant Secretary of Defense for Communications, Command, Control, and Intelligence, Gerald P. Dinneen, ASDC3I, issued a memorandum reaffirming the requirement of TCP/IP, confirming the role of DCA as the Executive Agent, and approving a plan for the organization and activities of the Executive Agent (see IEN-152).

In March 1982, Richard D. DeLauer, ASDC3I, issued a memorandum reaffirming the requirement for the use of TCP/IP, and reaffirming the role of DCA as Executive Agent (see IEN-207).

However, there is also a DoD policy of long standing to use non-DoD standards when such standards are available and meet the military requirements. This policy is cited in DeLauer's memorandum.

Because questions were raised about the DoD use of TCP/IP as a protocol standard, while the ISO is developing an differing set of standards, and the NBS is working toward establishing the ISO standards as FIPS, in May 1983 the National Research Council (NRC) was asked jointly by DoD and NBS to study the issues and recommend a course of action. The final report of the NRC committee was published in February 1985 (see RFC-942).

The enclosed letter is from Donald C. Latham (ASDC3I) to DCA transmitting the NRC report and requesting specific actions relative to the recommendations of the report.

Postel [Page 1]

DEPARTMENT OF DEFENSE

April 1985

Assistant Secretary of Defense Washington, D.C., 20301-3040

Command, Control,
Communications
and
Intelligence

MEMORANDUM FOR DIRECTOR, DEFENSE COMMUNICATIONS AGENCY

SUBJECT: National Research Council Report on Transport Protocols for DoD Data Networks

Attached is the final report on "Transport Protocols for Department of Defense Data Networks" from the National Research Council (Board on Telecommunications and Computer Applications, Commission on Engineering and Technical Systems). The report recommends that DoD immediately adopt the International Standards Organization Transport Protocol (TP-4) and Internetwork Protocol (IP) as a DoD co-standard to the current DoD standard Transmission Control Protocol (TCP) and IP and move ultimately toward exclusive use of TP-4.

Whenever international standards are available and can be used to support military requirements, they will be implemented as rapidly as possible to obtain maximum economic and interoperability benefits. However, TP as a proven commercial offering is not available at this time. The progress of TP will be monitored carefully and once commercially available, TP will be tested and evaluated for use in military application.

In order to insure that DoD is in a posture to evaluate TP once it is in wider use in the commercial sector, request you initiate the following actions:

- (1) develop the DoD military requirement specification for TP to insure that industry is aware of DoD needs as TP is commercially implemented.
- (2) insure that appropriate advisory representation is provided to commercial standards working groups that are currently refining TP under the auspices of the National Bureau of Standards.
- (3) insure that the DCA protocol test facility can accommodate TP testing as required when commercial implementations are available.
- (4) develop a transition strategy for Option 2 of the report to include estimated resource requirements.
- (5) evaluate the detailed recommendations presented in the Report (pages 61-64) as they apply to Option 2.

Donald C. Latham

Postel [Page 2]