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From: K. T. Pogram

Subject: Message from Steve Walker of ARPA/IPT concerning ARPA  
Network operation

Date: 7/7/75

We have received from Steve Walker of ARPA's Information Processing Techniques office an important message pertaining to the transfer of the operation of the ARPA Network from ARPA to the Defense Communications Agency. This message is being disseminated to Network users primarily via the TIP's "NetNews" facility; however, because of its importance, we are making it available as a "help file" on the MIT Multics system. A copy of the message is attached.

xc: D. D. Clark  
J. H. Saltzer ✓

Important operational message to all Network users  
from Steve Walker of ARPA/IPT

As many of you are aware, operational management of the ARPA network is being transferred to the Defense Communications Agency in a phased process beginning 1 July 1975 and to be completed by 31 December 1975. I would like to personally report that this transfer process is going very well, DCA is enthusiastic about the transfer and we do not anticipate any disruption or alteration of service during the transition. DCA and ARPA are working closely to define network policies that are consistent with present network functions as well as allowing development of new applications for this now fully operational system. We will be announcing specific network policies shortly (watch NetNews) but let me indicate some of the important points to you now:

- The "official" name of the network will remain the ARPA Network.
- The network will be for operational DoD use; non DoD government use will be approved on a case-by-case basis (the emphasis for non-DoD use will be on R&D type activities).
- Contractors will be allowed on the network through sponsorship by a government organization; the government sponsor will reimburse DCA for all expenses incurred by its contractors.
- There will be NO Tip Login. Responsibility for users of a computer on the network rests with the manager of that computer. Access to the network without an account on a host computer is meaningless. Therefore, authentication of network users will be a host function and will not be regulated by the network.
- All network usage must be in support of official Federal government business. Any other usage of the network is expressly prohibited.

Network Improvements:

There are a number of network additions and refinements underway at this time which should measurably enhance network performance in the coming months.

- A series of new network lines have been ordered including a fourth cross country link. Watch for changes in the network maps about 1 Oct. These additional lines were carefully selected to reduce the longest network hop length from 16 hops to 9.
- Additional memory has been ordered for eleven heavily loaded TIPs.

- A number of software modifications are underway, all aimed at improving network performance, among them:
  - The new Telnet protocol will be implemented in the TIP by the end of the year. This change allows local echoing of all characters except control and special keys. This should virtually eliminate the lag between hitting a key and its being printed on your terminal.
  - Network addressing will be increased above 63 nodes. The current network is limited to 63 nodes (IMPs) by software addressing conventions. These conventions will be changed to allow further network growth; the changes will not require existing host software to change. The protocol changes are detailed in an RFC by Dave Walden, see the Netnews entry dated 30 June 75.

#### New Netnews Features

We are permanently installing the Netnews prompt in the TIP so that you will be notified of the latest news items. Very shortly a message-type read capability will be installed in Netnews so that you can examine the subject of news items and select which you wish to read rather than being forced to examine all entries. We hope to make Netnews a viable means of communicating important news to network users. Your suggestions are welcome.

Let me stress ARPA's continuing interest and heavy involvement in the ARPA network. We have extensive plans for the development of network related activities. We are pleased to have the network become fully operational under DCA and we welcome the new users who will come on the network as a result.

Steve Walker, ARPA/IPT