Network Working Group Request for Comment: 4 Category: Informational Elmer B. Shapiro Stanford Research Institute 24 March 1969

Network Timetable

- 1 (n10) network checkout
- 2 Installation of communcation gear 8/1/69
 - $2a\ \ \mbox{From AT\&T}$ and/or BBN need dimensional, power and cabling specifications
 - 2b Need to establish SRI desired alternate locations so as to determine maximum telco cable lengths
 - 2c Need to establish location and drops on voice coordination circuits
 - $2d\ \ \mbox{Need}$ circuit information on voice drops for tie to intercom system
 - 2e Need to order and install a.c. power (coordinate with 4b)
 - 2f See 16
- 3 Design and construct host-Imp interface 9/1/69
 - 3a Need specifications from BBN
 - 3b Develop trial design
 - 3c Review with system programmers
 - 3d Establish final design
 - 3e Build and design hardware
 - 3f Debug trial software with hardware loop test
- 4 Imp installation 9/15/69
 - 4a from BBN get dimensional, power and cabling specifications
 - 4b SRI orders and installs a.c. power (coordinate with 2e)

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- 5 Debug host-Imp interface 10/1/69
 - 5a Get debug specifiations and procedures from BBN
 - 5b Write programs to debug with BBN
 - 5b1 Transfers of test messages
 - 5b2 Test procedures for crash and recovery
 - 5b3 Check message fill and stripping procedures

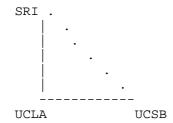
5c Try own transfer tests

- 5c1 Verify transfers to Imp
- 5c2 Verify transfers from Imp
- 5c3 Verify transfers looped with Imp
- 5d Work out Imp reload and restart procedures
- 6 Test messages between UCLA-SRI 10/15/69
 - 6a Network configuration



- 6b Agree with UCLA on nature of test messages
 - 6bl Formats
 - 6b2 Sequences
 - 6b3 Checks
 - 6b4 Test procedures
 - 6b5 Fault reporting

- 6c Test integrity of messages
- 6d Test sequence of delivery
- 6e Measure delays
- 6f Loop with UCLA
- 6g System response to invalid and abnormal conditions
- 6h Lose and restore facilities
 - 6h1 Communication link
 - 6h2 Imps
 - 6h3 Hosts
- 6i Develop net trouble reporting scheme
- 7 Test messages between UCSB-SRI 11/15/69
 - 7a Network configuration



- 7b All of 6
- 7c Load network for alternate routing to be effective
- 7d Develop voice coordination scheme
 - 7d1 Three way conference
 - 7d2 Design and build conference gear
 - 7d3 Deliver conference gear to UCLA and UCSB
- 7e Route messages around ring
 - 7e1 Via Imps

7e2 Via hosts

7e3 Six tests

7e3a UCLA-I, UCSB-I

7e3b UCLA-H, UCSB-I

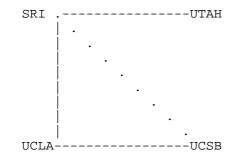
7e3c UCLA-H, UCSB-H

7e3d UCSB-I, UCLA-I

7e3e UCSB-H, UCLA-I

7e3f UCSB-H, UCLA-H

- 8 Test messges between UTAH-SRI 12/15/69
 - 8a Network configuration



8b Selected group of previous test

8b1 All of 6

8b2 7b

8c Expand voice coordination scheme

8c1 UTAH has access to UCLA and UCSB via SRI

8c2 with BBN and ARPA

- 9 Run simple TTY systems
 - 9a Single user access

9al On a serving host

9ala A to B

9a2 From a using host

9a2a A to B

9b Multiple user access

9b1 On a serving host

9bla A,C to B

9b2 From a using host

9b2a A,A to B

9b3 Various combinations

- 9c Login, logout, in and out of subsystems
- 9d Handling of error messages, crashes, recoveries
- 9e Establish message formats
- 9f Establish protocols
- 9g File storage and retrieval
- 9h Need user's guides for each site
- 9i Need to establish usage schedules
- 9j Need to set user names
- 9k Design and build comm exec or its equivalent
- 10 Run simple typewriter systems
 - 10a Same as 9c 9g
 - 10b How define when in half or full duplex mode
 - 10c How to set "break" characters
- 11 Run arbitrary terminals without local feedback

- 12 Run arbitrary terminals
- 13 Move files
- 14 Develop debugging techniques
 - 14a Fault detection
 - 14al Conformance to manual
 - 14a2 "Reasonableness" of result
 - 14a3 Comparison with alternate form of use
 - 14b Cause localization
 - 14b1 Comm-Imp complex
 - 14b2 Serving host
 - 14b3 Using host
 - 14b3 Try other programs
 - 14b5 Monitor subsystem via "link" procedures, where possible
 - 14b5a Use dialup Dataphone
 - 14b5b Use voice coordination channel
 - 14b6 Move canned messages
 - 14c Cause determination
 - 14d Cause correction
 - [This RFC was put into machine readable form for entry] [into the online RFC archives by David Capshaw 11/97]