INTERDEPARTMENTAL

MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASS. 02139

from the office of Telecommunications



June 24, 1971

To: R. Scott

Subject: Data Switch

I think that D. Austin Henderson's letter to you (June 22, 1971) deserves some amplification.

At present the terminals on the M.I.T. data switch are restricted from direct dialing to an outside point. This is noted in Henderson's letter. However, what was not known or understood are the reasons why. They are:

- · The M.I.T. data switch is connected to the main M.I.T. telephone switch by tie-lines. These lines are blocked or restricted from 9th level or local trunk lines. To do otherwise would allow for abuse from any number of directions.
- · The data switch does not have its own 9th level trunks. I understand that this was due in part to the original design of the switch being for access only to M.I.T. computer systems. And, again, to prevent abuse.

However, in the last several years, a number of M.I.T. terminals have been allowed access to outside sources in the following ways:

- · For limited or occasional access, access has been gained through the M.I.T. operator. This is an awkward method.
- · For continued access, a direct outside telephone line was installed at the user's location and at his expense. It should be noted that accountability of costs, at present, cannot be determined when a user places local (off-campus) telephone calls.

There is a third way, and perhaps an unofficial way. I.e., connecting the data terminal to a M.I.T. (voice) telephone line by means of an acoustic coupler. This method was discussed with J. Saltzer on June 24.

The aforementioned access methods (not including the third described above) were reviewed with Henderson. It was a local decision not to implement the introduction of an outside line. It should be noted, however, that such lines do exist at Project MAC, and what was suggested by this office was the extension of the line to the terminal which would allow for: (1) access to M.I.T. systems via the data switch, and (2) access to BBN via the outside line. This method is utilized by a number of users at M.I.T.

The present data switch, as you know, will be replaced in August 1972 by a new system - CENTREX - No. 1 ESS. Users will be given the opportunity to decide as to whether they want:

- · Unrestricted data lines capable of dialing outside; or,
- · Restricted data lines not capable of dialing outside (continuation of present practices; or,
 - · A common voice/data line.

In any case, the decision is a local one - not a universal one - to have outside access. Further, CENTREX offers accountability in that all local calls will be registered and charged. Direct outside telephone lines do this now. In other words, the user who wants to have access to an outside source should pay for it.

I mentioned previously that an alternative was given to J. Saltzer in regards to Henderson's problem. Thus, he may not need to have to drive to BBN. Certainly no one should be forced to go to that extent to communicate to an outside source.

Should you wish to discuss this further, please advise.

M. Berlan

cc: R.M. Fano
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