



Laboratory for Computer Science

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August 3, 1976

Mr. R.M. Carlson, Contracts Administrator
Honeywell Information Systems Inc.
7900 Westpark Drive
McLean, Virginia 22101

Dear Mr. Carlson:

We transmit with this letter the response of M.I.T. to your letter of 29 July 1976. The response is addressed to your proposal review on a point by point basis.

If issues raised by this response require discussion or clarification, I am happy to pursue this as necessary.

Sincerely yours,

David D. Clark
Research Associate

xc: J. Connolly
T. Lightburn
J. Saltzer ✓
L. Verdery

Enclosure

DDC/gn

Response to Proposal Review

1. The task schedule included in the statement of work represents the best estimate of the completion date of the various tasks, and MIT intends and expects that this task schedule will be part of the statement of work which is included in the final contract as negotiated with Honeywell. We intend to make our best effort to complete all tasks described within the limits of the schedule. See, however, the discussion of points 2 and 4 below.

2. MIT agrees that it will deliver to Honeywell items described on the subcontractor data requirements list (SDRL) with the following three exceptions.

A. The item SDRL 0002, monthly progress report, is an innapropriate report to be required of a research task of the sort which MIT is undertaking as specified in the subcontract. This comment is not intended to include the monthly fiscal report which MIT now delivers, and will continue to deliver. Given the shortage at MIT of research staff at the level required to prepare such a preport, it is most important that we not agree to its preparation. We feel very strongly that there is room for improved communication between MIT and HISI as to the current state and intended direction of MIT's research, and we are completely agreeable to the inclusion within the SDRL of any items which we mutually recognize as legitimately furthering this increased communication.

B. The item SDRL 0022, semi-annual report, should be replaced with an annual report with a submittal date of 15 July. In previous years, an annual reporting period has been recognized as the correct interval for this report. An annual report due 15 July correspondes to the annual report generated by our group in the normal course of documenting its research. A semi-annual report due 15 January would have the very undesirable effect of placing an additional unwanted management burden on the very limited manpower we have of the sort appropriate for writing this report. It should be noted that on or about January 15th we hold a technical design review in which the various research projects related to this subcontract are presented and discussed. We feel that attendance at this meeting by appropriate HISI personal will provide an effective means of increased communication between MIT and HISI.

C. The item SDRL 0005 final report has a submission date of March 1, 1977 which has been changed from the schedule originally submitted to Honeywell by MIT of 15 July 1977. This is an inappropriate change; see the discussion under item 4 below.

3. The section in the MIT proposal entitled New Tasks does not describe or propose a study of external I/O in general, but only that to multiplexed devices such as front end processers and networks. The two tasks explicitly recognize Honeywell's interest in the connection of networks to the front end processor in section 2.2. MIT feels that it is crucial that we investigate the protocols for interconnecting Multics and the SFEP as part of this research, as discussed in section 2.1, in order that we develop an overall

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solution to the network connection problem which is consistent and uniform. Consistent with our current estimates of manpower availability, the tasks described in the proposal are rather more limited in scope than those proposed in the list of candidate tasks in the SOW. Taking into account our own interests and capabilities, and discussions we have had with the Air Force, we feel that section 2 from our proposal is a reasonable description of the work we wish to do on this area. We propose that our section 2 replace the current material in the SOW.

4. MIT is confident that the final report produced to describe the Kernel redesign project will not be degraded as to content by the departure of the various faculty members previously associated with the research. There remain competent people, including the principal investigator for the project, who are fully cognizant of all aspects of the research being performed. The only impact which the reduction in top level personnel will have on the final report is one of preparation time. Faculty, especially during the academic year, have only a limited amount of time available for research, and the reduction in faculty will imply that the preparation of the report will take a larger number of months. For this reason, MIT initially proposed a submission date for the final report for 15 July 1976, and we propose that this still be considered the correct submission date. Any attempt to produce the report before this date will, in our opinion, inevitably imply that the report might be of lower quality. If Honeywell is concerned that a submission date of 15 July is late enough that the report will fail to impact on Honeywell's design specification, we request that Honeywell not view the final report as the only means by which its personnel may become acquainted with our overall conclusions. Our annual report for the fiscal year closing June 30, 1976 contains a discussion which provides an integrated view of some of the more important research done by MIT to this date, and we are happy to work actively to inform appropriate employees of HSI about the overall merits of the various research tasks now under way. We again propose the January design review as an especially suitable vehicle.