BOEING

December 6, 1990

Mr. Geoff Huston
Network Technical Manager
AARNet
Australian National University
G.P.O. Box 4
Canberra ACT 2601
AUSTRALIA

Subject: Request For Information

Dear Mr. Huston:

Enclosed please find a draft requirements definition and a framework for a statement of work for the development and support of a telecommunications network for the contemplated Australian Supercomputing Network (ASN). We are providing this information to you so that you can comment on the adequacy of our specifications, and the interest of your organization in supporting this project, if we choose to proceed. This information is Commercial-In-Confidence and shall not be duplicated, or disclosed for any purpose other than to evaluate the information.

If you are interested in supporting this project, please review the material and indicate how you would like us to change it, or what information we might add to facilitate your responding to a subsequent request for proposal. We would appreciate receiving your comments by January 31, 1991. We are not responsible for any costs incurred in responding to this request.

Based on information received we expect to develop a request for proposal within 30 - 60 days thereafter. Requests for proposal will be issued to potential suppliers and one will be selected and asked to implement the network and start supporting its operation as of April 1, 1991, or shortly thereafter.

This request is one of the steps we are taking in preparing to implement ASN and its physical plant. This request does not imply that ASN will be implemented, nor does your response to it ensure that your organization will be requested to implement and support the network. However, you will be invited to bid if in responding you indicate interest, and we decide to solicit proposals.

Please direct any questions on this communication to me in writing, by facsimile at (206) 865-2007, or by calling me at (206) 865-4560.

Sincerely yours,

Samuel L. S. Jacoby
Program Manager

January 7, 1991

Mr. Geoff Huston
Network Technical Manager
AARNet
Australian National University
G.P.O. Box 4
Canberra ACT 2601
AUSTRALIA

Subject: Request for Information related to the telecommunications
            network for the contemplated Australian Supercomputer Network
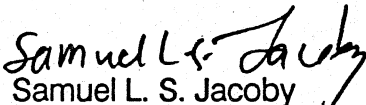   (ASN)

Reference: Boeing December 6, 1990, letter to addressee, same subject

Dear Mr. Huston:

The purpose of this letter is to inform you that pursuant to the request by one
or more potential bidders we have extended the submittal date to the subject
Request For Information by a period of 15 days. Consequently, we would
appreciate receiving your comments by February 15, 1991. A submittal by
facsimile on this date, followed by hard-copy submittal via regular airmail will be
sufficient.

Please address any questions on this communication to the undersigned in
writing, by facsimile at (206) 865-2007, or by calling at (206) 865-4560 during
office hours, or at (206) 723-1427 during evenings or weekends.

Sincerely yours,

Samuel L. S. Jacoby
Program Manager

APPENDIX A

A.0 SYSTEM OVERVIEW

A.1 ASN OVERVIEW

The proposed Australian Supercomputing Network (ASN) facility will be implemented in two phases. The facility includes computational servers, comprehensive network capabilities, and visualization workstation and personnel support at several regional and other user centers.

High performance computing hardware that is either in place, or will be installed by 1991, is adequate to satisfy the projected near-term requirements. Therefore phase 1 ASN computational server capability will employ existing platforms such as a CRAY Y-MP, and a shared Connection Machine CM-2. Additional hardware may be required to satisfy the load projected for 1992 and on. To that end, a Fujitsu VP-2000 and possibly other servers may be added or upgraded in phase 2.

The Australian Academic Research Network (AARNet) will be augmented, at the beginning of the first phase of ASN implementation, to provide the ASN regional backbone network (depicted in a diagram below) for ASN users to access the computational servers. ASN's contribution to AARNet is justified by sharing with commercial users the benefits that flow from the enhanced AARNet. As the ASN load builds, this design will be revised, possibly by further enhancement of AARNet. Another option is the implementation of a parallel network, which, if implemented, will connect to AARNet and provide redundant and alternate routing capabilities of mutual benefit to both networks. In any event, the approach will evolve as required to ensure that the performance and mission of AARNet are not compromised.

During phase 1, four primary regional user centers will be established in Australia. These centers will be located in Brisbane, Sydney, Canberra, and Melbourne. Other user sites (e.g., Townsville) that can access the AARNet, hence ASN, will be considered secondary user centers. Additional primary regional user centers will be established in Adelaide and in selected Asia/Pacific locations during phase 2. Workstations and support personnel will be provided at these user centers. Regional user center structure, and the (currently) proposed equipment placement schedule are shown on diagrams below.

The ASN visualization support capability will range from low end graphics workstations to high performance visualization servers such as the Stardent 3000 product line. These high performance servers will provide not only high resolution graphics, but also parallel and vector processing capabilities.

LEGEND:

──────── Primary Regional User Center Link (Phase I)
─ ─ ─ ─ Secondary Regional Link (Phase I)
············ Secondary Regional Link (Phase I, Primary Link (Phase 2)
─·─·─·─ Secondary Regional Link (All Phases)
········ Internet Link
──────── ASN Primary Backbone