

Australian Vice-Chancellors' Committee

(INCORPORATED IN THE A.C.T.)

AUSTRALIAN ACADEMIC AND RESEARCH NETWORK (AARNet)

MEETING NO. 1/91

The next meeting of the AARNet Advisory Board will be held on Friday 22 February 1991 in the War Memorial Gallery, The University of Sydney commencing at 9:30 am. The meeting is expected to complete its business by 12:30 pm. A light lunch will be provided after the meeting.

AGENDA

1. ATTENDANCE AND APOLOGIES

Professor Don McNicol (Chair)
 Dr Robin Erskine
 Mr Alan Coulter
 Professor Peter Poole
 Dr J G (Iain) Wallace —
 Mr Greg Batchelor
 Dr John O'Callaghan
 Professor Mary O'Kane

Secretariat

Mr John Mullarvey
 Mr Geoff Huston

2. MINUTES

... The minutes of the third meeting of the Board held on 26 November 1990 are attached and require **confirmation**.

3. MATTERS ARISING FROM THE MINUTES (NOT RAISED ELSEWHERE IN THE AGENDA)

3.1 Staffing

... The Australian Vice-Chancellors' Committee has proceeded with the advertisement of the position of General Manager for AARNet. A copy of the advertisement placed in the Australian on 12 February 1991 is attached.

Applications for the position close on 22 February 1991. It is proposed that interviews be held as soon as possible.

It is **recommended** that the Board:

note the action taken.

Telecom Australia

3.2 AARNet Usage Statistics

... The regular report of AARNet usage is provided for the Board. The attached statistics provide information on total usage of AARNet from the period 1 July 1990 to the week ending 10 February 1991. Additionally a TCP/IP application profile for international traffic for the month of January 1991 is attached. These graphs indicate applications profiles for both incoming and outgoing international traffic, on both a packet and byte basis. Finally a complete set of 15 minute snapshots for the week ending 10 February for all AARNet links is attached.

Mr Huston will report on current usage levels.

It is **recommended** that the Board:

note the current usage levels.

3.3 Membership Agreements with AVCC Member Institutions

The AARNet Membership documents have been sent to all AVCC member institutions. The majority of institutions had responded by 21 January 1991 indicating their agreement to the document. Late responses are being followed up by the AVCC.

The AARNet Regional Hub documents were sent to the AARNet Hub sites in December 1990 seeking their agreement to document. Late responses and minor queries are being followed up by the AVCC.

It is **recommended** that the Board:

note the action taken.

3.4 AARNet Backbone Upgrade

Mid May
The recommendations of the Board at Meeting 3/90 concerning the approval of the purchase of ISDN services as the basis of the backbone trunk network upgrade were pursued over December 1990 by AARNet staff. The outcome of this detailed consideration was a recommendation to the AVCC that ISDN had not reached a sufficient level of maturity to be used as the basis of a reliable high speed service. Attached papers provide further information relating to these findings.

These conclusions were forwarded to Professor McKinnon, the Chair of the Board, together with a recommendation to proceed with an alternative technical approach using Telecom Australia's Megalink services. Approval was given to proceed with a Megalink order to interconnect Victoria, the Australian Capital Territory and New South Wales. These orders have been placed with Telecom Australia in December 1990 which has confirmed that upgrade will be installed in May 1991.

It is **recommended** that the Board:

note the reasons for Victoria, Australian Capital Territory and New South Wales links being upgraded using Telecom's Megalink services instead of ~~original intended~~ ISDN service.

3.5 Connection of AVCC Member Institutions

The process of connecting all AVCC member institutions to AARNet is now underway. For Bond University the link is anticipated to be commissioned early March 1991, Swinburne Institute of Technology, Victoria College and Phillip Institute of Technology late March, and for Ballarat University College May 1991. Discussions are underway with the Australian Catholic University and a set of orders is anticipated to be released in early March with an implementation target of late May 1991.

With these six connections all current AVCC member institutions will then be connected to AARNet.

It is recommended that the Board:

note the action taken.

4. AARNet BUDGET 1991

The Board considered the proposed 1991 AARNet budget at meeting 3/90. This budget has now been revised in light of actual expenditure to date and updates to various AARNet activities.

.... The updated budget papers are attached for consideration. It is proposed that any variation to institutional contributions to AARNet for 1991 be considered when the AVCC revises its 1991 budget in June 1991.

It is recommended that the Board:

note the revised 1991 AARNet budget.

Review for May.

5. AFFILIATE MEMBERSHIP OF AARNet

5.1 Summary of Affiliate Membership status

... Attached is a summary of Affiliate Membership applications processed as of 12 February 1991. Total fees for 1991 for this program are some \$134,500 to date. As indicated in the attachment a further \$100,000 is anticipated in 1991 under this program.

Mr Huston will report on the interest expressed by others in joining AARNet.

It is recommended that the Board:

note the interest shown by outside bodies in wishing to join AARNet.

5.2 Anglo-Australian Observatory

... Attached is a request from the Anglo-Australia Observatory (AAO) to connect as a Network Service Affiliate member of AARNet, and a request for approval to connect through a notional 9.6Kbps connection.

The Board has previously considered the policy issue of charging an affiliate member a rate for a notional connection even though the actual size of the link to AARNet may be larger. When previously considering this issue the Board requested that all such proposals be referred to it for consideration.

It is understood that the existing connection by the Anglo Australian Observatory to CSIRO Radio Physics is via a 48 Kdds service. It is further understood that this high speed connection is due to local requirements.

To assist in considering this request AARNet has noted that the traffic from the Observatory's IP Network number through AARNet to date is well under the traffic levels commensurate with a 9.6 Kbps dedicated link.

While a number of institutions are using the existing informal connection to avail themselves of the Observatory's computers for data reduction, it would appear that a special case exists for approving connections to AARNet at the 9.6 Kbps rate rather than the actual connection rate. However it will be necessary to keep this matter under review and to reconsider the issue should the traffic levels increase above that commensurate with a 9.6 Kbps link.

It is recommended that the Board approve:

- (i) the application for AAO to connect to AARNet using the 48 KDDS service but in recognition of the existing traffic levels to be charged at the rate applicable for 9.6 Kbps link; and ✓
- (ii) the level of traffic emanating from the Observatory's network number through AARNet to be reviewed on an annual basis and reported to the Board. ✓

5.3 Western Australia Tertiary Institutions Service Centre

Attached is correspondence received from the WA Tertiary Institutions Service Centre (TISC) requesting access to AARNet and seeking advice as to whether this organisation is considered a component of the four higher education institutions in WA, or if an Affiliate Membership arrangement is applicable.

This issue is not explicitly addressed in the Affiliate Membership papers, and is accordingly passed to the Board for consideration.

It is recommended that the Board:

advise the AVCC as to the appropriate mechanism for connecting the WA Tertiary Institutions Service Centre and similar bodies to AARNet.

6 AARNet LINKS WITHIN MELBOURNE

Attached is a document detailing the situation with respect to the link between the Victorian Hub and Monash University/CSIRO Clayton.

It is apparent that this link is the most heavily loaded of all regional links within AARNet and accordingly the attached document recommends to the Board that this link should be the first to be examined in part of a longer term program of upgrading regional links in response to demand.

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It is noted that any activity concerning the Clayton link will involve AARNet, CSIRO and Monash University.

It is **recommended** that the Board:

request the AVCC to work with CSIRO and Melbourne higher education institutions to prepare a specific detailed proposal with respect to upgrading the Clayton AARNet link.

7. INTERNATIONAL LINKS

... Attached is a proposal to implement an upgrade to the capacity of the connection from AARNet to the United States to 256Kbps during 1991 to meet anticipated further growth in usage of this service by the AARNet user community. Usage statistics gathered to date indicate that this additional capacity will be required in the timeframe of the third quarter of 1991.

Such an upgrade to 256Kbps requires a 5 month order lead time due to the requirements to install a high speed tail circuit from the AARNet Hub at the University of Melbourne to the OTC Service Aggregation Centre at the Telecom Australia Exhibition Street Exchange. Accordingly approval is sought to proceed with this order immediately in order to commission the service at that point in time when the additional capacity will be required by the AARNet client community. The increased costs associated with this upgrade have been included in the revised 1991 budget discussed earlier.

It is **recommended** that the Board:

approve the proposal to implement the upgrade of the capacity of the Melbourne/US link to 256Kbps as soon as possible.

8. THE AUSTRALIAN SUPERCOMPUTER NETWORK

... AARNet is in receipt of a Request for Information from Boeing Computer Services in relation to the provision of communications services for the Australian Supercomputer Network (ASN).

This document assumes that the proposed ASN will interconnect with AARNet in Brisbane, Sydney, Canberra and Melbourne in the first instance, and furthermore assumes that ASN would use AARNet services to access ASN clients in all other parts of Australia as well as using the AARNet link to Internet in the United States for international access.

Boeing Computer Services have indicated to the AVCC that they intend to proceed with a request for proposals to supply communications services to the ASN in April 1991.

To date AARNet has made no determination as to its desired role in such a situation. Specifically, AARNet has made no commitment as to;

- (i) whether AARNet would approve of multiple connection points to the ASN, and;
- (ii) whether ASN could use AARNet facilities to service locations not connected by ASN; and

Underproven
State Government
will eventually
be forced to
Option 3.

- (iii) whether AARNet would wish to assume the role of value added carrier services supplier and supply such communications services to ASN directly.

... Attached for the information of members is an extract from the documentation received from Boeing Computer Services on this issue. **PLEASE NOTE THAT THE DOCUMENTATION IS MARKED "COMMERCIAL IN CONFIDENCE"**

It is recommended that the Board:

consider the proposal from Boeing Computer Services and indicate to the AVCC its views on the proposal.

9. ROLES AND OBJECTIVES OF AARNET

... Dr Robin Erskine has prepared the attached discussion paper on the potential roles and objectives of AARNet. This item relates not only to the objectives in any response to Boeing Computer Services in relation to ASN, but also relates to other commercial research related initiatives within Australia, including the Australian Computing and Communications Institute (ACCI) which has recently been set up with the support of the Strategic Research Foundation of Victoria.

... Similarly this relates to the possible relationship between AARNet and other participants in the Australian communications sector. Specifically, IBM Australia has indicated a keen interest in AARNet in recent weeks (summary attached).

... The Board also indicated that consideration of the discussion paper prepared for meeting 3/90 "The Structures of Management" would be deferred to this meeting. As this item relates to the roles and objectives of AARNet consideration of this paper is included in this item.

*No note
a manager
appears*

It is recommended that the Board:

consider the attached papers with a view to providing advice to the AVCC on the future roles and objectives of AARNet including its management structures.

10. DATE OF NEXT MEETING

At Meeting 3/90 the dates of the next three Board meetings for 1991 were proposed to be:

31 May 1991
23 August 1991
25 November 1991

A number of members have indicated that prior commitments will make it difficult to attend meetings on these dates.

It is recommended that the Board:

determine the dates for the remaining Board meetings for 1991.

11. OTHER BUSINESS

15 February, 1991

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