THE PRENTICE CENTRE

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Fri, 11 Jan 1991

Memorandum to:

Professor ET Brown
Deputy Vice-Chancellor

AARNet Agreements

As you correctly surmise, The Prentice Centre has had considerable input in the formulation of both of the AARNet agreements. In addition, Alan Coulter, in his capacity as a member of the AARNet Advisory Board, has provided a great deal of advice on the content of these documents. I would recommend that the University agrees to abide by the terms of both agreements.

The AARNet and AV-CC Member Institutions agreement has been drafted with consideration given specifically to the academic and research objectives of the member institutions. Operational experience thus far with AARNet indicates that the network is successfully meeting its charter.

As you are aware The University of Queensland is the Regional Hub Site for QUESTnet, the Queensland region of AARNet. The Prentice Centre already provides the operational and additional responsibilities detailed in the AARNet and Regional Hub Sites agreement.

You may be interested that The Prentice Centre is the manager for a national project, funded by AARNet, to develop a pilot electronic directory service (with services similar to the telephone white and yellow pages but accessible electronically). Three other universities and the CSIRO are involved in the pilot project which, hopefully, will lead the way to every institution operating an electronic directory.

JD Noad
Director

THE UNIVERSITY OF QUEENSLAND

DEPUTY VICE-CHANCELLOR
PROFESSOR E.T. BROWN
BE, MEngSc (Melb.), PhD,
DSc (Eng) (Lond.), FTS,
FIE Aust, FIMM, MICE

Memorandum to: Mr J Noad
                   Director, Prentice Centre

                   AARNet Agreements

As you will note, the Vice-Chancellor has referred the attached document
to me for action.

Before responding to the AVCC on behalf of the University I would like to
have the benefit of your advice, particularly on the second document
"AARNet and Regional Hub Sites". The documents have been under
development for some time and it may well be that you have provided
previous input. It seems this is the final stage in the process and so
the option of negotiating major changes is not likely to be available to
us.

I will also be seeking the advice of the Director, Research Services when
he returns to his office on 14 January. Professor Sheehan will be away
until after our response must be formulated.

E T Brown   7 January 1991
Deputy Vice-Chancellor   91/5

REC'D.: 7-1-91

SEEN BY:

ACTION:

FWD. TO:

FWD. TO:

AV-CC

Australian Vice-Chancellors' Committee
(INCORPORATED IN THE A.C.T.)

18 December, 1990

MEMORANDUM TO   :   Vice-Chancellors: The University of Melbourne
                                          The University of Sydney
                                          The Australian National University
                                          The University of Queensland
                                          The University of Western Australia
                                          The University of Adelaide
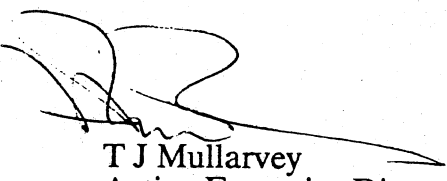   The University of Tasmania
                                          Northern Territory University

FROM   :   T J Mullarvey

SUBJECT   :   AARNet AGREEMENTS

You may recall that in March 1990, the Australian Vice-Chancellors' Committee (AVCC) circulated copies of the proposed AARNet Membership Agreement document and the AARNet Regional Hub Agreement document to Vice-Chancellors for comment. The AARNet Advisory Board has incorporated the responses into revised documents which were subsequently endorsed by the AVCC Board of Directors at their December 1990 meeting. These documents, *"AARNet and AVCC Member Institutions"*, and *"AARNet and Regional Hub Sites"*, are enclosed for your information.

The documents give the AVCC the opportunity to state in a clear informative manner a number of previously implicit assumptions regarding each institution's common participation in the AARNet program, including such aspects as the usage of AARNet facilities for the support of each institution's academic and research activities, the security aspects of AARNet connection, and so on. Additionally, the AARNet Regional Hub Site document outlines the roles and responsibilities of those institutions that host the AARNet Regional Hubs within each State and Territory.

It would be appreciated if you could confirm by 21 January 1991 that your institution/ agrees to abide by the terms of the attached documents. On receipt of the agreement to abide by the Regional Hub Sites document arrangements will be made to pay the management for 1991. This amount remains the same as that paid for 1990.

If you have any queries relating to the documents enclosed, please forward them in the first instance to Geoff Huston, AARNet Network Technical Manager, of the AVCC.

T J Mullarvey
Acting Executive Director

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Australian Vice-Chancellors' Committee

(INCORPORATED IN THE A.C.T.)

AARNet and AVCC Member Institutions

This document outlines the various responsibilities and roles of member institutions of the Australian Vice-Chancellors' Committee (AVCC), and the AVCC itself with respect to the support of the Australian Academic and Research Network (AARNet).

AARNet Network Charter

AARNet is a private telecommunications network service provided by the AVCC to the participating member institutions of the AVCC, and the Commonwealth Scientific and Industrial Organisation (CSIRO), in the interests of providing dedicated telecommunications services in support of members' research, academic and service activities.

In addition AARNet may provide telecommunications services to other organisations affiliated in some way with the academic and research objectives of a member institution, under terms and conditions approved by the AVCC.

The majority of AARNet funding is as a component activity of the AVCC, and its budget is included within the total AVCC budget. The CSIRO and the Australian Research Council also contribute a proportion of the total project budget. The objective of the activity is the provision of necessary national and international infrastructural telecommunications services to member institutions to support their academic and research aims and objectives.

AARNet Acceptable Use Policy

1. The function of AARNet is to carry material which supports the academic and research enterprise of higher education institutions and CSIRO and that this material may include news and ancillary materials relevant to the aims and objectives of these organisations.

2. This acceptable use policy includes the use of AARNet in connection with the administrative activities of the member organisations of AARNet, and also includes the use of AARNet for institutional support services.

3. This acceptable use policy includes the use of AARNet in support of the various infrastructural service support activities associated with the academic and research enterprise.

4. Use of AARNet for commercial purposes, and use of AARNet for purposes unrelated to the broad areas of relevance to the academic and research community is not considered acceptable use of AARNet services.

5. The use of AARNet by Australian organisations other than AVCC member institutions and CSIRO divisions requires the execution of an AARNet Affiliate Membership Agreement by the organisation and the AVCC. The AVCC reserves the right to approve each application for Affiliate Membership on a case by case basis.

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6. Traffic originating from peer academic and research networks which conforms to the originating network's acceptable use policies is in general considered acceptable traffic to be carried over AARNet.

7. AARNet facilities cannot be used by any individual or group of persons for any activities of an illegal or fraudulent nature, including such illegal activities as defined under the Australian Commonwealth Government Telecommunications Act 1989, or other applicable State and Commonwealth laws.

Additional notes of relevance to acceptable material as described in 1. above:

1.1 the AVCC, in conjunction with CSIRO and through the AARNet Advisory Board, will decide which categories of material it will allow to be transmitted and those it will not transmit;

1.2 specific materials not normally transmitted through the network may be provided to individual sites if the materials are required by network members for legitimate teaching and/or research purposes and if the request for such materials is supported by the Chief Executive Officer of the institution requesting such materials; and

1.3 if material which AARNet has resolved should not be transmitted is injected into the network the membership of the network member responsible for that action may be terminated by the AVCC.

Summary:

This acceptable use policy of AARNet includes the use of AARNet in connection with the administration of the AARNet member institutions, and also includes the use of AARNet for institutional support services, such as library communications activities. Also included within these usage guidelines is usage of AARNet in connection with the various service support activities in relation to academic and research activities.

Provision of Access to AARNet Services

Every member institution has the right to control access to AARNet within the institution. Open access to AARNet by all staff and support members of the institution is seen as providing productive benefits to the institution as a whole, and is therefore encouraged by AARNet.

Every member institution may grant access to AARNet facilities to other individuals who are closely affiliated to the institution and may be deemed to be members of the institution.

Every member institution should undertake its best endeavours not to allow direct access to AARNet facilities to other individuals, organisations or entities unless an appropriate AARNet access arrangement has been endorsed by both the AVCC and the member institution concerned. In most cases this access arrangement would be under the terms and conditions of an AARNet Affiliate Membership agreement.

Provision of Application Layer Gateway Services to Other Networks

It is recognised that AARNet member institutions maintain connections into other private and commercial networks using application layer gateways owned and operated by the AARNet member institution.

The AARNet guidelines concerning the provision of application layer gateway access to other networks by an AARNet member institution, is that the member institution should perform its best endeavours to ensure that:

1. all data traversing the gateway between AARNet and another network should be directed to, or sourced from, an AARNet member site, or site within an AARNet peer academic and research network. Where data is directed to, or sourced from a destination address within AARNet's peer international academic and research networks, then the forwarding of such data on behalf of members of other networks should conform to the AARNet usage policy.

2. the gateway should not forward data originating from a public access commercial data network to a second gateway for re-entry to a public access commercial data network if use is made of AARNet facilities simply for transit purposes to the second gateway.

Member institutions which maintain gateway systems may elect to charge gateway client AARNet members for use of the gateway services (in sending data through the gateway as a value added service). Client AARNet member institutions should not be charged in these circumstances unless there is prior agreement to this effect between the institution providing the gateway service and the client institution. Access mechanisms for such gateways are the responsibility of the service provider, not AARNet.

AARNet Communications Equipment

With respect to equipment installed on the premises of a member institution the following provisions apply:

1. that all AARNet equipment installed within members' sites is the property of AVCC, established within members' sites for AVCC, at AVCC's risk and expense;

2. the institution should provide a suitable environment and physical security for the installed AARNet equipment;

3. the institution agrees to apply its best efforts to keep all software associated with the communications equipment confidential, and not to distribute copies of the software to any third party;

4. Not to remove the AARNet equipment from the facility where it was originally installed outside of the provisions of maintenance activity without the prior consent of the AVCC.

AARNet Security and Integrity Guidelines

While AARNet offers great advantages to its serviced member community, it also increases the exposure of its members to security risks of unauthorized access and/or abuse of resources. The basic premise of AARNet is that the benefits gained offset such risks.

The security aims of each institution are to ensure that computing resources within the institution are accessed only by those individuals so authorized by the institution. This objective requires AARNet member institutions and AVCC staff to offer mutual assistance to identify and address security problems within AARNet as they arise.

It is important that institutions connecting to AARNet have an adequate internal computer and network access policy. Security measures to ensure resource integrity and to ensure resource access only by duly authorized users are a matter of high priority to each member site.

Each member institution should fully cooperate with other institutions, and with AVCC staff, in identifying and addressing operational integrity incidents within AARNet.

User data on the network should not be inspected unless absolutely essential for network operation or security reasons, and then only by authorized personnel (authorized AARNet operations staff, or an authorized member of a member institution's network operations staff). All such staff must work within the constraints of due care and attention to the confidentiality of all network user data.

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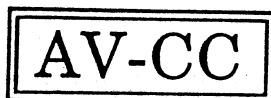
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AARNet and Regional Hub Sites

AARNET Regional Hubs

The structure of the Australian Academic and Research Network (AARNet) is a two layer hierarchy, where individual members of the network interconnect within a Region (State), and all Regions interconnect within a National trunk network structure.

The interface between the two network structures is located within a single host member site within each Region. Typically these sites house the termination equipment associated with the links to each member site within the Region and also house the termination of one or more links within the National trunk network. These sites are referred to in this document as Regional Hub Sites.

Those sites which host the AARNet Regional Hubs act as funded agents for the Australian Vice-Chancellors' Committee (AVCC) in the provision of some of the services associated with the operation of AARNet. This document sets out the responsibilities of these sites, and also outlines the relevant operational duties to be undertaken by these sites on behalf of the AVCC.

AARNet Regional Hub Operations Responsibilities

Each regional hub site is to regularly monitor the operational status of the AARNet regional hub equipment during the normal hours of operator coverage on the site. This includes the operational status of both the AARNet switching equipment as well as the Telecom modems and any other AARNet regional equipment which may be installed on site. It is recognised that this process may be automated into a watchdog software application running on a computing system within the site.

The regional hub site is also to provide a contact point for operational incident reporting and subsequent initial incident diagnosis on a 7 day, 24 hour basis. Such a contact provision may be by inclusion into a paging system to the relevant operational staff or similar contact mechanisms.

In the event of failure of this equipment, the staff at the Regional Hub site are to carry out basic integrity checks on the configuration in order to isolate the unit (or units) at fault. Following this initial activity, the relevant service organisation is to be called out to perform remedial activity.

All calls to nominated maintenance organisations relating to AARNet equipment are to be logged by the site, detailing the nature of the problem, the time at which the maintenance call was made, a description of the fault, the time taken to fix the unit, and any additional relevant information. A copy of these logs should be sent electronically to AARNet Operational Staff on a regular basis (every 2 months is nominated initially).

These procedures are documented more fully in a technical note relating to the maintenance procedures for AARNet, which has been circulated to the technical contacts at AARNet member sites.

AARNet Regional Responsibilities

The Regional Hub site is required to provide an AARNet Operations contact number for logging of fault calls from AARNet member sites within the region. Operational procedures call for AARNet member sites to log all suspected faults with this number after performing local initial fault isolation checks. The Regional Hub operations personnel are responsible for verifying the local initial diagnosis, logging the fault, and calling the relevant maintenance organisation on behalf of the member site. The Regional hub will be responsible for notifying all other AARNet sites of local faults, anticipated downtime periods, etc. Such notification would normally be via electronic mail to the AARNet contacts list.

AARNet Services - Additional Responsibilities

This section enumerates additional responsibilities of the regional hub sites in supporting national AARNet services. This section may be updated in the light of operational experience and the inclusion of additional services in the future.

Support of the Internet Domain Name Service (DNS)

1. Each Regional Hub site should be prepared to provide DNS server support for those members of the Regional network which are not in a position to provide such a facility locally.

2. Each Regional Hub site is also requested to act as secondary DNS servers for member sites within the Region, and work with other Regional Hub sites in coordinating the provision of secondary DNS server support for member sites from other Regions.

Support of USENET NEWS

1. Each Regional Hub site should run a USENET news host which is capable of receiving a NEWS transfer from the National hub, and capable of transmitting NEWS to all AARNet member sites within the region. This transfer should by preference use the Internet NNTP protocol (RFC977).

2. The National Hub NEWS host should be the major interface between the Australian NEWS system and the international NEWS network. One copy of all incoming international news will be passed to each Regional NEWS hub by the National Hub NEWS system, who in turn will pass one copy to each Regional member site.

3. Similarly new items posted at member sites should pass one copy back to the Regional Hub, who in turn will pass one copy to the National Hub as well as passing to all other Regional member sites. At the National Hub, one copy of the incoming item will be passed to all other Regional Hub NEWS hosts, as well as passing one copy to the international connected site.

4. The material passed within the NEWS set should conform to the AVCC guidelines on acceptable material, which is enumerated on the AARNet Membership papers.

Other Tasks

In additional it is anticipated that Regional hubs will play an active role in the regional activities relating to AARNet, including educational and promotional activities, engineering and planning activities, and similar tasks in the interest of ensuring maximal operational reliability and also assisting with the provision of services from AARNet to the regional user community.

Funding

Regional hub sites are funded by the AVCC for their undertaking of activities associated with the tasks outlined in this document. Variations to the levels of funding will be determined by the AVCC following advice from the AARNet Advisory Board, which will review the Regional Hub site arrangements from time to time.

This Document

The arrangements outlined in this document relating to Regional hub sites will be reviewed and possibly revised by the AARNet Advisory Board (acting on behalf of the AVCC) if there is a noted requirement for additional services to be provided by the Regional Hub sites, or if there are responsibilities which are covered in this arrangement which are to be performed using altered mechanisms.