

AV-CC

**FAX MESSAGE FROM
THE AUSTRALIAN VICE-CHANCELLORS' COMMITTEE**

***** PLEASE DELIVER IMMEDIATELY *****

TO: Mr A-Coulter

FROM: John Mullaney

NO. OF SHEETS (including cover sheet)

21

DATE: 22.1.90

MESSAGE:

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Australian Vice-Chancellors' Committee

(INCORPORATED IN THE A.C.T.)

22 January, 1990

Mr A W Coulter
Director of Development
The University of Queensland
ST LUCIA QLD 4067

Dear Mr Coulter,

As noted in my previous letter, I am forwarding to you the comments I have received on both the AARNet Management proposals and the draft Terms and Conditions of AARNet Membership paper.

In response to the call for comments included in the December AARNet papers, I have received responses from Mr Graham Rees (Deputy Director, Prentice Computer Centre), Mr Chris Rusbridge (of the AARNet Steering Committee) and Mr M Steel (Director Information Centre, Griffith University). I have attached the comments to this letter.

In addition to these comments, there are three other papers relevant to the meeting on 24 January 1990. These papers are:

AARNet Management Paper, Draft 11/12/89
AARNet Membership Terms and Conditions, Draft F
Proposed draft AARNet Constitution, Draft D

AARNet Steering Committee papers, December 1989
AARNet Steering Committee papers, December 1989
Tabled at the December meeting by Mr Chris Rusbridge

Please contact the AVCC Offices if you require a copy of any of these papers to be faxed to you.

I look forward to seeing you on 24 January.

Yours sincerely,


T.J. Mullarvey
Deputy Secretary

lc85-j.ltr

From: PSI%UQVAX.UQ.EDU.AU::CCREES
To: PSI%CSC.ANU::GIH900
Subj: AARNet Management

"Graham REES" 15-JAN-1990 14:10:04.71

The Case for Regional Management

DRAFT

Folks,

For comment please. This is my first pass on this, but I wanted to circulate something quickly to gauge other opinions. Obviously I am strongly against very central control with no real mechanism for a voice or a vote.

I live in a narrow street, which had, until recently, a broken white line down the middle. This made it illegal to park anywhere on the street at all. "Ah, but" said the Sargent from our local Police Station "we know this, but we tolerate street parking because of the narrow streets in your area". "Yes, thank you" I replied "but, if you were told to book me for illegally parking on the street, you would do so, and so you should, it's your job". The white line was removed on representation by a number of residents and I can now legally park on my street.

Regards

Graham REES
Deputy Director
Prentice Computer Centre
The University of Queensland

Comments based on the "AARNet Management Paper" circulated by the AVCC on December 21, 1989.

The AVCC paper lacks consistency, particularly about 'Regional Network Groups' and 'Regional Management Groups', their relationship and how these groups are to be structured. This paper argues for a hierarchical management structure. Such a structure was put forward very early in the development of the AARNet and in general it met with the approval of the networking community. However, the concept seems to have been diluted by the AVCC in favour of a strong central management system. Strong regional management is paramount to the long term success of AARNet. This paper explains why.

The management structure proposed follows the network organisation of National, Regional and Institutional. The AVCC structure is essentially National and Institutional. The network physically includes regional hubs and so the AVCC model includes 'Regional Network Groups', however, these are defined as working groups of the national body. There needs to be an appropriate management structure at each of the National, Regional and Institutional levels, with clearly defined boundaries of responsibility. It is quite clear that institutions are responsible for their own internal networks. None of us would tolerate external interference! So the AVCC needs to be concerned with the National and Regional management functions. The main arguments for strong regional management are:

1. It will encourage participation.

It is of the utmost importance that the network is 'used' by the whole academic and research community to ensure its success. The present networks are mainly used by a few computer/network literate groups. It will require an enormous promotional and educational effort to achieve a much higher penetration. The way to achieve this is through cooperative efforts on a regional basis. It certainly won't be achieved by the few staff proposed for the Central Management Group trying to coordinate such an effort Australia wide. It also won't be achieved by many individual institutions - simply because most don't have the resources. It will be achieved by a cooperative effort within the regions. The very idea of the regions is that there is common interest which promotes a strong sense of belonging and cooperation. This is certainly true within Queensland as illustrated by the QTinet developments, which were initiated long before the activities summarised in the AVCC document. The development funding proposed by the Queensland region (and subsequently approved by the AVCC) was included partly for this type of activity.

2. It will encourage cooperation between institutions within the regions.

There has been an emphasis recently on encouraging joint projects between institutions and between institutions and commercial partners. Strong regional management and cooperation will engenders such ventures. The Technology Quadrangle in South East Queensland is an initiative of four Universities to focus their combined research expertise to attract joint funding and provide technology transfer to government and industry. Such cooperation is attractive to potential commercial partners, which has resulted in a number of commercial organisations moving to Queensland. The regions reflect the hierarchy of many of the potential partners and Government bodies with which the institutions have business dealings. State Governments are more likely to provide funding and support for activities which benefit the whole State.

3. Improved AARNet management.

The regional groups chosen allow a much easier and better coordinated structure from institution to region to national body. Certainly within the Queensland region, most people involved in the computer/network area know one another personally. Meetings are easily arranged. Discussion and decisions are made in a (lively) but cooperative spirit. This regional cooperation has resulted in benefits to all institutions in the region and the AVCC should laud and encourage such activity by recognising the importance of regions.

Each institution (or member) will have better representation at the national level through the regional management group than in the present AVCC proposed management structure.

4. Special Regional Considerations.

Central control of a network, which provides services to members spread over an area the size of Australia, will tend to 'normalise' the network. The regions do have differing research interests and requirements which may require, from time to time, special network configurations or services. The regions must have the ability to provide facilities which are in their own interest. Of course such facilities could be provided separately, but this is not within the spirit of the cooperative AARNet venture.

A Management Structure

The following management structure is proposed as being a 'working' management providing good representation of both the network 'owners' and 'users'. In the model presented by the AVCC high level representation is mostly by the 'owners'. This is recipe for user dissatisfaction and ultimate disaster. Certainly the AVCC model has Regional Network Groups, but their responsibility is purely technical. It appears in this model that about 40 member institutions will be reporting directly to a small central management group - a continuing recipe for disaster.

The proposed formula is a management structure, which follows the three level network organisation of National, Regional and Institutional, as follows:

AARNet Board. The Board represents the 'owners' of the network and will have a membership of some mix of the AVCC, ACDP, CSIRO and the ARC. This will be policy making body. (The AVCC Paper seems to hedge around who actually owns the network. "The AANRet is an activity operating under the aegis of the AVCC" - what does this mean legally?)

AARNet Management Committee. This body represents the network 'users'. The membership of this body needs to be flexible with representation from each region as well as a number of User Groups (e.g. Libraries, Computer Science, Networking). It is proposed that the body is a working committee responsible for the National Network (the backbone), international links, implementation of national policy and other areas of national or common interest.

Regional Management Committees. These committees should have representation from each member institution. Other sub-committees, working groups and task forces could be set up locally as required. Some

regions may not be set by State boundaries. Perhaps Tasmania and the Northern Territory may wish to be included into the Victorian region for convenience. Of course the regions would be bounded by national policy and participate in national programs and developments, but otherwise would operate autonomously.

AARNet Management Committee

The AARNet Management Committee will be one of the keys to the success of the AARNet. The membership is proposed as:

Regional Members. One from each region

User Group Members. It is envisaged that from time to time specific user groups will need to be formed to direct development of the network or value added services. For example, one of the first groups should target Library applications.

Ex-officio Members as required, for example, the Central Office (see below).

The committee will activate Task Force Groups, headed by a committee member, as required. (A single technical group, as proposed thus far by the AVCC, can become stodgy, ineffectual and often dominated by a small number of people. The task force approach is more dynamic and has the effect of keeping committee members active.) Some suggested Task Forces are:

Education.

TCP/IP.

DECnet.

Backbone Network & ISDN.

OSI.

Overseas Links.

AARNet Central Office

The Central Office is the permanent staff of the AARNet and has administrative and operational functions much the same as in the present AVCC model. The number of permanent staff is quite small, which will incur the usual problems and inefficiencies of coverage for holidays and sick leave. It is proposed that many of the routine functions, such as network management, could be contracted. Taking the network management as an example, the University of Melbourne, in the present AVCC funding model, will receive \$25,000pa for management of the Victorian Region plus \$25,000pa for management of the National Hub. In addition there is a considerable amount allocated for central equipment and staff for national network management. It might be more sensible to contract the University of Melbourne to provide the total national management function.

Contracts will allow the AVCC more flexibility and potentially lower and fixed costs. Limited period contracts of 1 to 2 years will allow more dynamic and efficient management of a rapidly changing technology.

Date: Wed, 17 Jan 90 11:54 +0830
From: Chris.Rusbridge@sait.edu.au
Subject: Comments on AARNet Management paper for meeting
Sender: Chris Rusbridge <CCCAR@sait.edu.au>
To: gth900@CSC.ANU.EDU.AU, rxe900@CSC.ANU.EDU.AU

Comments on the AARNet Management Paper

These comments refer to the text of the AARNet Management Paper considered at the AARNet Steering Committee meeting on 14 December, 1989. In general these comments are in the context of decisions taken by that meeting, notwithstanding that the author may have more radical views.

1) The AARNet Board

It should be made clear in the document that all formal links between the AARNet and the AV-CC (not between AARNet Operations and the AV-CC Secretariat) are via the AARNet Board.

As described, the Board lacks adequate terms of reference. I suggest the following insertion before the last paragraph of section 3:

"The AARNet Board is responsible to the AV-CC for the development and operation of the AARNet to meet the needs of AARNet members. To this end the AARNet Board will:

"a) liaise with ACDP and CSIRO

"b) develop policies for the AARNet consistent with AV-CC policy, and taking into account consultation with ACDP and CSIRO

"c) approve the AARNet annual budget for recommendation to the AV-CC, membership fees, and other policy issues relevant to funding, and review spending against budget

"d) determine terms and conditions of membership

"e) liaise with and assist in the development of Regional Management Groups

"f) approve agreements with external networks, and

"g) report to the AV-CC, ACDP and CSIRO at least twice per year."

2) Regional Network Groups

The Steering Committee agreed to a strengthening of the Regional Network Management structures within the AARNet, where appropriate (eg where a strong regional network management structure already exists, as in Queensland, or develops later).

Section 5 of the paper should be revised to reflect this, and to provide a more effective role for these groups than merely the provision of "value-added services". The AARNet as a whole should not be committed only to "common networking services to every AARNet member institution" (top of p3), as different regions will wish to develop different services. In the case of Queensland, there are clear economic and other advantages in merging the operations of AARNet and QTInet, and it is likely that these can best be achieved by devolving the regional operation of AARNet to a regional management group. This would bring the AARNet in that respect closer to the original concept of a backbone network linking strong regional groups.

AARNet is inadequately funded and staffed to provide the services promised on a national basis without the full cooperation of regional management, which must be matched by providing appropriate regional control.

Acceptable principles for Regional Networking Groups to take over some AARNet functions should be stated. For example, must they contain one representative from each member, or can they be small executive groups as in NSW? How are commercial or other non-educational members to be represented, especially CSIRO?

It is difficult to be precise in such a document about the terms of reference of Regional network Groups, as the aim is to promote responsiveness to local conditions. But the following should be added to the responsibilities listed in p3:

"* where appropriate, the management of selected AARNet resources in the region"

3) AARNet Operations Section

The Steering Committee agreed that there should be one person in the AARNet Operations Section responsible for the management of the Unit, and for carrying out the policies of the AARNet Board. This person should report to the Deputy Secretary of the AV-CC for staffing purposes, but should be responsible to and report to the AARNet Board, and should always attend Board meetings. The Steering Committee further agreed that this person should in the first instance be the current Technical Manager, and that the Business Manager should report to the Technical Manager.

In view of this, it may be advisable to re-designate the Technical manager as AARNet General Manager.

4) Regional Operations

This section should make clear whether Regional Network Operations Sections (a better name, perhaps) report to the AARNet Operations Section, or to Regional Network Groups.

Chris Rusbridge
15 January, 1989

Date: Wed, 17 Jan 90 11:55 +0830
From: Chris.Rusbridge@sait.edu.au
Subject: Comments on AARNet Terms and Conditions paper for meeting
Sender: Chris Rusbridge <CCCAR@sait.edu.au>
To: gih900@CSC.ANU.EDU.AU, rxe900@CSC.ANU.EDU.AU

Comments on AARNet Membership Terms and Conditions

These comments refer to the text in Draft F of the AARNet Membership Terms and Conditions paper, dated 11 December 1989, considered at the AARNet Steering Committee meeting on 14 December, 1989.

1) General

This agreement appears to be slanted towards affiliate members only. Either provide a separate agreement covering all members, or (preferably) revise this paper to become an agreement between AARNet and all members, including affiliates. This will require editorial changes, including gathering sections of relevance only to affiliates into a separate part. I am happy to volunteer to assist in any such re-drafting.

This agreement should then be signed as a contractual agreement between AARNet and the members and affiliates, who will then have a chance to really understand their rights and obligations in AARNet.

2) What is a connection?

The last paragraph in Section 1 defines an AARNet connection, but rather vaguely. This definition is crucial to several aspects of the agreement, and should be expanded, and preferably put in a separate section. My suggested wording for development is:

"1.1 AARNet connections

"A connection to AARNet for the purposes of this document is a connection to a regional hub node or to a member institution, using AARNet-supported network layer protocols (currently IP, DECnet and ISO CLNP) in such a way that direct access to the AARNet and its services is possible.

"AARNet members and affiliates agree not to provide AARNet connections (as defined above) to non-members without the written consent of the AARNet Board. Note that connections using AARNet-supported protocols are permitted where access to the AARNet is blocked, for example by filters in the member's routers."

3) ACSnet

The paper so far fails to deal with ACSnet connections. Rather than leave this area un-defined, I suggest we allow ACSnet connections, and encourage contributions where usage is significant. Suggested wording for development is:

"1.2 ACSnet connections

"ACSnet connections between AARNet members or affiliates and non-members are not AARNet connections as defined above, and are freely permitted under terms and conditions to be decided by individual members. Where a connection appears to be imposing significant traffic load on the AARNet, however, members and affiliates are requested to levy charges for the connection and to return a share of these charges to the AARNet."

4) Commercial use of the AARNet

This thorny question is touched on only as a side issue in Section 2.1. I suggest it be directly addressed, up front.
Suggested wording for development:

"1.3 Commercial use"

[Insert top paragraph of p2, slightly modified.]

"For many reasons, including its funding sources and the policies of external networks crucial to AARNet, AARNet restricts traffic to academic and research activities. Usage of the network for commercial purposes is not in general permitted;" [delete from Section 2.1] " however the network may carry traffic of a commercial nature where one party to the traffic is a member or affiliate and the traffic is in support of academic and research purposes."

This clumsy wording is an attempt to allow useful commercial activity, but to prevent direct commercial activity irrelevant to research. But no-one will ever know!

5) Affiliate connection policy

The following comments are minor amendments to the bullets in the first cluster in Section 2.1, intended to clarify.

Amend the second bullet to read in part: "* Nomination of a sponsoring AARNet member..."

Amend the third bullet to read in full: "* Endorsement of the application by the Chief Executive Officer of the sponsoring member."

Amend the fourth bullet to read in part: "* A statement from the Chief Executive Officer of the _applicant_ organisation ... conditions applying to _affiliate_ membership."

6) Funding from affiliates

There should be some possibility of using the funding derived from affiliates for new facilities or growth. I suggest amending the last sentence of Section 4.2 to read in part: "... and that such charges are used for additional services and to offset the costs attributed to members..."

7) Affiliate Charges

Amend the first sentence of the second paragraph of Section 5 to read:

"Affiliate members pay a charging schedule which uses two components in addition to the data communications costs."

8) AARNet disclaimer

I believe it would be very wise for AARNet to make a disclaimer along the lines I suggest in an earlier document. This should be added as Section 6:

"6 Authenticity and Confidentiality

"The AARNet makes no guarantees and assumes no responsibilities for the integrity, authenticity, or confidentiality of information transmitted over Network links. Such matters are the responsibility of the

8
individual Members generating, receiving, or routing that information. No Member may take any action that is intended to falsify the origin or destination identities or the information content of any transmission."

9) User Responsibilities

Thus far the paper has not indicated what the responsibilities of members and affiliates are. This is essential if any security is to be maintained. I suggest the following as Section 7:

"7 Responsibilities of membership

"7.1 User Responsibilities

"Each Member is expected to encourage an attitude of professionalism and responsibility amongst its user communities regarding their transmissions over the Network. All uses of Network links must be consistent with the Consortium's purpose of supporting the research, educational, administrative, and related support-service goals and objectives of the Members. Each member is responsible for informing its user communities that transmission over the Network for any other purpose jeopardizes the institution's Membership in the AARNet. Specifically, no user of any node in the Network may transmit anything outside its Member domain that is likely to be perceived by the recipient(s) as

". an unsolicited attempt to promote the sale of goods, products, or services of any form that are offered by any non-Member for profit-making purposes, or

". an attempt by the sender to intrude on, hamper, or otherwise disrupt the receiving computing systems or the recipients' use of those systems.

"All members are required to inform their users of the obligations imposed by the AARNet membership or affiliation to international networks: e.g. acting as a routing node to a third country; violating regulations on trans-border data flow, etc.

"7.2 Fee-For-Usage Services Provided Between Members

"In the normal operation of its facilities, there may be services that one Member provides that are the subject of co-operative resource-sharing agreements with other institutions that are Members of the Consortium. Such services might perhaps include "remote job submission, execution, and retrieval" processing, or gateway access to other networks that have charges associated with traffic volumes, or any number of other services. The AARNet encourages Member use of the Network to facilitate such interinstitution resource-sharing ventures. However, the mechanisms and methods used by a service-providing Member to bill service-using Members for the usage of such services are in no way associated with the Membership Fee and are beyond the scope and concerns of the Consortium.

"7.3 External Customers

"Within some Member institutions, there may be nodes with usercodes assigned for use by individuals or organisations whose only relation to the Member institution is that of a pay-for-services customer of the Member's computing facilities. A Member is at liberty to take whatever actions it deems appropriate to prevent such customers from transmitting or receiving over the Network. If a Member chooses not to prevent transmissions by and to its customers, it must inform those customers that they may only transmit information for non-profit purposes in direct support of the educational and research activities of Members.

"7.4 Dealing with Abuses

"Upon receipt of notification and reasonable evidence that one of its users has violated any of the foregoing behavioural obligations, a Member is expected to take prompt action to ensure that the violation does not occur again. The nature of that action is left to the discretion of the Member according to its own institutional policies and procedures, which are beyond the scope and concern of the AARNet."

8) Termination of membership

The agreement should contain provisions for termination of members or affiliates who are not working within the guidelines and persistently fail to do so. I suggest the following:

"8 Termination of Membership

"A Member who fails to meet obligations to the AARNet as defined in these policies and procedures may have membership suspended or withdrawn by the National Board following advice from the Regional Network Board.

"Otherwise, membership shall continue unless the Member elects to withdraw from the AARNet by formal notice in writing to the Chair of the National Board. Withdrawal shall take effect from the 31st of December at least 3 months after the formal notice is received.

"Members withdrawing or whose membership is withdrawn shall pay all monies due to the AARNet immediately the withdrawal takes effect."

Chris Rusbridge

15 January, 1989

In the regional case, on the other hand, many such supporting structures will grow naturally out of increasing co-operation, and will tend to re-inforce that co-operation.

3) Resources and timeliness

There are many issues that can be devolved to an effective regional structure. Without this structure, as mentioned above, these issues must be carried out centrally, or omitted. There is an increasing list of things that people think are very important that are not being done because there are insufficient central resources available.

I believe this network requires at least 3 times the budgetted effort to make it work. If this effort is central, it will cost directly on the budget, and I don't believe we will get it until we can demonstrate that the network is a disaster without it (management by crisis). The other way to get this effort is through volunteer effort. There are relatively few who are willing to put expensive resources into a long term, national project, while co-operative regional projects are rapidly growing in importance, and it's much easier to persuade people to put time or even local money into things that benefit their region.

A side effect of lack of resources is the problem of timeliness. It's just going to take much longer to do if the central staff have to deal with all 40-plus members, rather than a small number of regional networks.

4) Flexibility and responsiveness to local conditions

The big disaster of a centralised management structure is its inflexibility and lack of responsiveness. The differences between the regions are vast and very important. Contrast Queensland with its pre-existing network and management structures, Tasmania with its single member, Victoria with its confusion, South Australia with its contiguity advantages, etc.

Regions have needs that will mean local alterations to national priorities. In Queensland again, the Technology Quadrangle concept probably places much more emphasis on high speed local communication. I think in South Australia, we would like to connect Flinders at 2 Mbps rather sooner than the national priorities might indicate.

Regions may also need extra protocols. Again, Queensland could well benefit from using the X.25 capabilities of the cisco routers to implement QTinet over AARNet. And in South Australia there are arguments for running XNS over the regional network (to allow a remote 3Com network belonging to SAIT but situated at Flinders to use SAIT resources). Queensland again may well wish to charge for network traffic in a way quite different from the models proposed nationally. Many of these requirements mean that regional management of AARNet nodes is required; national integrity is assured by national management of either the regional hub node, or preferably by national management of the regional interface.

5) Steering Committee position

I have not yet seen the minutes of the 14 December, 1989 Steering Committee meeting. A lot will depend on the precise wording of those minutes. I think it was a very difficult meeting to minute, with few precisely worded points of resolution (and no formal resolutions).

My memory is that the Steering Committee recommended a position somewhat between the original regional model (supported here) and the wholly national model in the Secretariat's Management Paper. This would be to start with a centralised model given the argument that essentially no strong regional management existed. (The argument is valid almost everywhere, except in Queensland.) There would then be a move towards more regional management as the groups developed and became capable of taking over responsibilities.

I suggest that we should develop along these lines, but that Queensland's existing strong regional management should be recognised, and regional management should be devolved in Queensland immediately, for a trial period of one year. The results of this experiment will help the AARNet Board determine the future of regional versus centralised management.

Chris Rusbridge

Academic Computing Service Manager, SA Institute of Technology
ACSnet: Chris.Rusbridge@levels.sait.oz [au]
InfoPSI: Chris.Rusbridge@sait.edu.au (DTE 505282622004)

Attachment A

Quoted from "A Progress Report on the AARN", posted to NEWS by Geoff Huston, dated September, 1989.

[...]

4. AARN Bodies

There are a number of committees and structures which have been set up to perform much of the planning activity to date. There are:

(i) The AARN Steering Committee, chaired by Professor K. McKinnon, Vice-Chancellor, The University of Wollongong. The committee comprises representatives of higher educational institutions and CSIRO. The brief of this committee is to provide overall direction and policy determination during this establishment phase of the project.

(ii) The AARN Technical Working Party, chaired by Dr R. Erskine, Director, Computing Services, The Australian National University. This committee includes network managers from higher educational institutions and a CSIRO representative. The brief of this committee is to provide advice on the appropriate technologies to use within the design of the network.

(iii) Regional Network Groups within each State. These groups include network managers drawn from all higher educational institutions and CSIRO divisions within the State. These groups are to provide specific definition of the design of Regional networks, and also to provide the framework for the subsequent operational and management infrastructure of the Regional network.

[...]

8. AARN Implementation Program

The objective of the network implementation program is to rapidly establish a high performance national computer network which provides a set of common communications services to scholars and researchers throughout the nation.

This high performance network will comprise a common backbone network and eight State Regional networks. The backbone network is designed to carry data traffic between each Regional network and also provide the interface between Australia and peer international networks. The eight Regional Networks are configured with interfaces from each State Capital city (Brisbane, Sydney, Canberra, Melbourne, Adelaide, Perth, Hobart, Darwin) into the backbone network.

[...]

As well as physical network design, the major aspect of the network implementation program is the required network management structure. The proposed AARN management structure uses a similar division into National and Regional areas of responsibility to that of the physical network structure. The following paragraphs provide more details of this proposed structure.

The recommendations being made to the AVCC, ACDP and CSIRO are that the network should be jointly owned by these three bodies, and that these bodies are to be the ultimate point of network policy determination and resolution and management responsibility.

To carry out the operational management responsibility on behalf of these bodies the following proposals have been made:

(i) The operational responsibility of the National Backbone Network is the maintenance of interconnection facilities between each Regional network as a National network service, and also interconnection of this national network with peer academic and research networks overseas. This area also covers the maintenance of the operation of network monitoring equipment and application gateways.

(ii) The operational responsibility of each of the the Regional networks is to maintain the necessary links to interconnect every member site within the region and also the links to the interface between the National and Regional network.

Each Regional Network configuration includes the provision of a Regional Network Centre, sited in each State capital. This centre houses the equipment which interfaces the Regional Network into the National Backbone, and also provides the termination equipment for the links from the centre to each member site. Each Regional Centre is to be hosted by a higher educational institution within each State Capital.

Within each region the network infrastructure will vary with each State, while still adhering to the basic approach taken for the implementation of the Backbone network. This approach nominates the formation of Regional Network management bodies whose brief is to provide this infrastructural support within each region and also to fill the operational management role for the resultant Regional Network.

A comparable national structure is required to manage the National Backbone network. This management structure is proposed to include a National Management Committee as the overall policy determination body. Reporting to this committee is a Network Management group, which will include a number of full time staff positions to provide executive functions, technical management, network operations and engineering support and network information services. It is intended to establish this body under the aegis of the AVCC, although its responsibilities will be to the funding partners through the AARN Management Committee.

Attachment B

Quote from email message from Graham Rees, UQ, 10 January, 1990

The Case for Regional Management

[...]

Strong regional management is paramount to the long term success of AARNet. This paper explains why.

[...]

The main arguments for strong regional management are:

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[...]

Attachment C

Quoted from email message from Terry Fanning, Adelaide, 11 Dec 1989

[...]

From my point of view the proposal, as I understand it, that AARN should have jurisdiction up to the nodes in individual organisations is not on. Their original proposal to fund and manage up to the regional hubs was sensible but that's where it should end. What the regions do on their side of the hub is their business and if they screw it up that is their problem.

[...]

I think we need to stop immediately, what appears to be an implicit acceptance by AARN management, that they know all the answers, that as long as we follow their advice we will be ok and that infallibility resides in Canberra as well as the Vatican.

Attachment D

Quoted from Brian Glaetzer, Roseworthy, in email message dated 11 Dec, 1989

> So, how strongly do we wish the organisation to reflect the original regional plans, and how soon?

I would opt for strongly regional as soon as possible.

I understand that AARN will have a regional guy under contract to manage the regional hub. I suggest that this person be responsible for the interface between our region and the national hub, and between our region and the members of our region. Obviously, these regional hub managers should liaise at the national level to exchange views and set standards just as the local managers should liaise with their regional hub manager. National level directives to the regional hub managers should take priority over local level directives from regional steering committee.

I see problems and standards being resolved at a local, then regional, then national level so that no one individual or group of individuals carries the whole burden of the AARN.

Although I do not think that management from the national level is appropriate, I think that they should be able to comment on any proposed changes so that they maintain an overview of the situation.

Brian

Attachment E

Quote from John Lockwood, SACAE in email message dated 9 January, 1990

I suggest that intially '2' (ie mixed services) in the first 12months with a move towards '3'. I do not think that the use of the word 'owned' is important - management is crucial. I would prefer that Canberra (ie ARNet support) concentrate on planning and strategic issues and as implementation occurs the management of that which is in place be left to the regions.

19 JAN 1990

MEMORANDUM

GRIFFITH UNIVERSITY

To: Queensland Computer Centre Directors

From: Director, Information
Technology Centre,
Griffith Universitybcc: Dr Robin Erskine, Chairman of
AARNet Steering Committee

File: DJ618

Date: 15 January 1990

Subject: ***AARNet Regional Management***

Graham Rees has distributed a paper to you entitled "The Case for Regional Management" (of AARNet) and has invited anyone to comment prior to the meeting of Queensland Computer Centre Directors on January 22nd. Because I will be on recreational leave on that day and so unable to attend, I thought I would let my views be known to you in advance. I don't know whether everyone is reachable yet via ACSNET (we really do need AARNet!), so to be sure of reaching everyone I am replying to Graham's electronically-delivered paper in the old-fashioned way.

I would like to congratulate Graham on bringing this issue out into the open because it needs to be cleared up. I understand Graham's concerns but in the main I do not share them. My reason for saying this is that I think he is worrying unnecessarily. I believe that the "AVCC model" (i.e. the management model as proposed in the paper circulated to Universities with the covering letter by the Director of Planning & Development, AVCC dated 21st December 1989) has been well thought out and includes enough "regional management" to answer Graham's concerns.

Chapter 4 "Management of AARNet" of the AVCC model allows for the creation of "regional based structures to provide local management and assistance in the installation and maintenance of the individual links to each member site connected to AARNet". There is nothing in the AVCC model to prevent Queensland from setting up such a structure if it wishes, in fact it seems to be encouraged. Such a structure in the AVCC model will clearly have a lot of influence over the way AARNet is managed in the region. I cannot imagine that the central body of AARNet would over-rule the recommendations of a Queensland body unless it has a very good reason to do so (such as the need to maintain uniform national standards).

I believe that Griffith University would be opposed to being represented on the AARNet senior management body only through a regional body. In the hypothetical situation where we might disagree with a decision of the regional body we would want our main path of representation to be via our shareholding in AARNet (i.e. via our AVCC membership) rather than via the regional body. Nevertheless the AVCC model does talk about representation of some of the views of member sites via "regional-based groups".

Although Graham does not refer to it directly, perhaps the central issue really is about AARNet funding? Should a regional body have the power to

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influence basic AARNet membership fees for AARNet members in the region? The current funding model envisages that AARNet membership fees should be based on institution operating grants. I strongly support this policy on egalitarian principles and would oppose any move to impose membership subscription differentials between regions.

Obviously Queensland, if it wishes, can provide extra services ("value-added services") for Queensland institutions. These would have to be paid for by those institutions that want to use them. Examples are:

- educational services
- extra Statewide network facilities (over and above those provided by AARNet)
- extra software development (over and above what Queensland may perform under an AARNet contract).

I believe that such services may be very valuable but that the funding for them must be "unbundled". There must be no compulsion on any AARNet member in Queensland to buy any particular service if it does not wish to do so. Most importantly, the basic AARNet service that it receives must not be affected in any way by whether or not any particular value-added services are purchased from the regional body or not. By unbundling the charges for these services we can ensure that they are delivered in a cost-effective manner.

Although I have not had time to canvass opinion fully at Griffith University, I believe that the opinion expressed here will be this University's position. I fully agree that a regional body should be involved in the management of AARNet but believe that the proposed AVCC model caters adequately for this need.



Mike Steel

Distribution:

Alan Coulter, University of Queensland
John Noad, Director, Prentice Computer Centre
Graham Rees, Deputy Director, Prentice Computer Centre
Ian Hunter, Director, Computer Centre, James Cook University
Bill Fisher, Director, Computing Services, Queensland University of Technology
Ross Gorham, Manager, Computing Services, Brisbane College of Advanced Education
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