

"f) approve agreements with external networks, and

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

The wording here is again a potential problem. The draft management paper intended the AARNet Board to be a body with an similar relationship to all the owner bodies. There is no intention of a "special" relationship to the AVCC in the draft management paper.

Rewording this, and taking into account the previous comments, the AARNet board would be responsible for:

- Representing the interests of the AVCC, ACDP and CSIRO in the determination of AARNet policy matters.*
- In implementing matters of policy, to be consistent with the general policies and objectives of the AVCC, ACDP and CSIRO.*
- Consider the AARNet operational budget for recommendation to the AV-CC, ACDP and CSIRO.*
- Conduct an annual review of AARNet expenditure, and report to the owners on AARNet expenditure.*
- Executing agreements with third parties in the interests of the provision of required services to the AARNet user community*

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.

This is a point of contention, and perhaps the problem lies in the wording above. The aim of AARNet is the provision of services on a national scale. This objective is not achieved by a loose collective of regional network providing different sets of services: the result in such a case is not a national network in any form: a network is by its very nature a common set of services available to a distributed user population. Without a common service element there is no network. I would reaffirm the objective of common service provision as the major justification of the entire project. The development of services which may be of relevance to the entire AARNet following operational experience on a smaller scale than national exposure is an activity which also warrants AARNet support. The case as to whether such activities are by their very nature based on the experimental efforts of individuals drawn from a number of institutions, or whether such developmental could be effectively encouraged by the involvement of Regional management structures is an open issue. I am yet to be convinced that regional management structures could achieve the desired results here.

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.

Whether the Queensland network can be regarded as one requiring inheritance within a successor national network due to its role within production systems within the state, or is a project which can be viewed as a pilot for further national adoption is again an open point. It should be noted that previous efforts to create a national network using this approach met with strong opposition on technical grounds in previous years, and subsequent developments in networking technology have not changed the picture substantively.

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.

I would perhaps put forward the view that there is considerable confusion between operational support and management. Clearly AARNet will require the involvement of all states and individual institutions in operating a network of this scale: AARNet will require each site to be able to determine when their connection has failed, and be responsible for informing the appropriate operational contact of the problem after performing basic diagnostic activities. If regional management is primarily concerned with ensuring the operational support structures are appropriate within each region, then this is more conformant to the actual local requirements.

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?

I cannot determine what is the intent here.

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"*

This wording would be a source of considerable confusion, and creates greater levels of uncertainty than the current wording.

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.

I am unsure that this was indeed a resolution of the Steering Committee.

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.

This is perhaps the starting area for regional involvement: local responsibility of for the operation of a component of a national structure is a productive starting point. At present the contracts for the operational management of AARNet within each region are identified as being arrangements between each of the nominated institutions and the AVCC. It is perhaps more appropriate that this responsibility be by delegation from the AARNet Board to a Regional structure, which would then be responsible for the operational integrity of the local sector of AARNet. This approach would perhaps produce a better level of involvement from all those institutions who wished to play an active role within the network.

Chris Rusbridge
15 January, 1989

Geoff Huston
23 January, 1989

Q Model 9600

	B	C	D	E	F	G	H	I
4							Expenditure	
5	Location	Equipment	Notes	Qty	Capital	Recurrent	1990	1990
6								Subtotals
7								
8								
9								
10	Hub	AGS/2		1	\$14,996	\$1,575	\$14,996	
11		CSC-4T		0.5	\$4,943	\$519	\$4,943	
12		CSC-2E		0.5	\$2,331	\$245	\$2,331	
13		APP-LV4		2	\$12,004		\$12,004	
14		SW-BSA		1	\$2,506		\$2,506	
15		SW-XSA		1	\$4,221		\$4,221	
16		Ethernet Txvr, cable		2	\$1,400		\$1,400	
17		Applications Server		1	\$20,000	\$6,000	\$20,000	
18		PSE Connection		2		\$8,000	\$8,000	
19								\$70,401
20								
21		Facilities Management		1		\$25,000	\$25,000	
22		QUESTnet Regional Development		1		\$35,000	\$35,000	
23		QUESTnet Management		1		\$5,000	\$5,000	
24								\$65,000
25	UQ	CSC-2E		0.5	\$2,331		\$2,331	
26								\$2,331
27	QUT	Hybridge-D		1	\$13,126	\$1,378	\$13,126	
28		CSC-4T		0.25	\$2,472	\$260	\$2,472	
29		DDS 48K		1	\$2,760	\$12,984	\$2,760	
30		Existing ADS Service		1		\$1,500	\$1,500	
31		PSE Service		1		\$4,000	\$4,000	
32								\$23,858
33	GU	Hybridge-D		1	\$13,126	\$1,378	\$13,126	
34		CSC-4T		0.25	\$2,472	\$260	\$2,472	
35		Part cost of 2Mbps Service		1		\$12,984	\$12,984	
36								\$28,582
37	JCU	Hybridge-D		1	\$13,126	\$1,378	\$13,126	
38		CSC-4T		0.25	\$2,472	\$260	\$2,472	
39		DDS 48K		1	\$2,760	\$35,976	\$38,736	
40								\$54,334
41	UCCQ	MGS/2		1	\$12,004	\$1,260	\$12,004	
42		CSC-1E2S		1	\$6,002	\$630	\$6,002	
43		SW-BSA		1	\$2,506	\$0	\$2,506	
44		SW-XSA		1	\$4,221	\$0	\$4,221	
45		APP-LV2		1	\$396		\$396	
46		APP-LR1		1	\$99		\$99	
47		CSC-4T		0.25	\$2,472	\$260	\$2,472	
48		DDS 9600		1	\$2,075	\$10,716	\$12,791	
49								\$40,491
50	UCSQ	MGS/2		1	\$12,004	\$1,260	\$12,004	
51		CSC-1E2S		1	\$6,002	\$630	\$6,002	
52		SW-BSA		1	\$2,506	\$0	\$2,506	
53		SW-XSA		1	\$4,221	\$0	\$4,221	
54		APP-LV2		1	\$396		\$396	
55		APP-LR1		1	\$99		\$99	
56		CSC-4T		0.25	\$2,472	\$260	\$2,472	
57		DDS 9600		1	\$2,075	\$10,716	\$12,791	
58								\$40,491
59	UCGC	DDS 9600		0			\$0	
60								\$0
61	CSIRO	UQNET Service Fee		0			\$0	
62								\$0
63							\$325,486	\$325,486