Faxed 10/1/89

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

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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 wont be achieved by the few staff proposed for the Central Management Group trying to coordinate such an effort Australia wide. It also wont 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 Teritory 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 os 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  $\bf 1$  to  $\bf 2$  years will allow more dynamic and efficient management of a rapidly changing technology.