

## AARNet Advisory Board

### Report on CCIRN Meeting - 21/22 May, 1991 in Paris

I attended the biannual CCIRN (Coordinating Committee for Intercontinental Research Networks) meeting held in Paris in May 1991. My attendance was on behalf of AARNet as the Australian observer, following on from the attendance at the previous CCIRN meeting by Geoff Huston. Geoff is also very active on the technical front, via the IEPG, which was meeting concurrently with the CCIRN and it was proposed and approved that Australia should be represented on both bodies. Having attended the Paris meeting, I strongly recommend that the Australian representation on both bodies should continue, at least during the very formative period of the establishment of a global intercontinental network. Australia has much to learn from, and contribute to, this development.

The 21 May was devoted to a CCIRN meeting, the 22 May was taken up with a CCIRN meeting in association with the IEPG members. In this short paper I shall not repeat the overall picture on intercontinental networking already provided to the Board by Geoff Huston, an analysis which I support, but rather shall provide some overall opinions formed during the meeting along with a synopsis of the main points raised which may be of interest to the Board.

The discussion items were informative and important in assisting me to build up a picture of the major policy issues facing intercontinental networking and the implications for a small, but well developed networking, country like Australia.

Australia's major interest lies in the development of a strong networking infrastructure in the Pacific Rim - thus the strong need for our attendance at the PACCOM meetings. The specific challenges facing the Pacific are an interesting amalgam of those facing the other major areas - the US FNC, the European RARE, and the embryonic Latin American and Caribbean group.

The Pacific Rim is a collection of countries, similar to Europe and Latin America but has, I suspect, less diversity than Europe and more of the cohesion of the US Internet structure. It is, like Latin America, starting well down on infrastructure when compared to the US or Europe. Compared with Europe that could be a definite advantage. It is therefore important for Australia and the Pacific Rim to take a broad view of their networking requirements, especially Australia, given its vast distance from, and high interaction rate with, the major players. It should be expected, given its economic strength, that Japan will become much more active in the intercontinental networking structure.

I must pass the comment that Australia is very well placed and endowed as a cohesive national network structure. This is mainly due to the vision of AVCC in funding and setting up AARNet and aligning it initially with the strong network base of the Internet.

An item of particular interest coming from the meeting was the connection of the global networking into Eastern Europe and South East Asia, given that many of the countries in these regions are not signatories to international conventions, such as copyright protection, and are also on the list of Cocom proscribed countries. This is a major policy and clearance problem, especially for many of the American Federal Networking agencies.

Another interesting development is the emergence of commercial Internet service providers, opening up the possibility of purchasing Internet, rather than just carrier services, from commercial organisations.

I believe there is a need for the Australian and New Zealand research networks to become more integrated, without losing our individual national identities. The costs of developing new services common to both of us should be shared. I intend to raise this point at the annual Australian Computer Centre Directors meeting in July. This meeting is attended by the New Zealand Computer Centre Directors.

To strengthen the links with the CCIRN and its major players, I support AARNet inviting Bill Bostwick, Chair of the US FNC, to attend the Australian Networkshop to be held in Hobart in November. This should be seen as increasing the visibility of Australia and also used as an opportunity to explore the hosting of a future set of CCIRN and IEPG meetings in Australia.

One final point on the international visibility, there is interest in the US in providing videoconferencing with Australia. It is unlikely that this could occur until the speed of the US link approaches 512K and a part of the link could be scheduled as required for such a purpose.

Items from the CCIRN agenda which may be of interest to the Board were, in no particular order of importance:

- The European target is to replace their current plethora of network operational units with one RARE operational unit. The current internetworking between European countries and between their intercontinental partners could only be described as very fragmented and ad hoc. The EEC has agreed on the need for a pan-European policy body with long-term organisational and funding structures.

- In the US, there is a new organisational structure, the NREN, being set up to manage the Research and Education networks.
- From sampling carried out recently by the NSF, the volume of traffic to Australia ranks second, only to Canada, on traffic to and from the NSFnet, including transit traffic.
- The Japanese Ministry of Education is planning a 512K Internet backbone and is setting up a coordinating committee for the development of national networking.
- Canada is investigating upgrading its T1 network to a T3 network.
- Hong Kong, and thus indirectly China, and Korea are joining the international networks with links to the US.
- Ten South American and Caribbean countries have set up a R&D network organisation to develop networks within that region of the globe. There are likely to be the fourth group, the LACCIRN, around the CCIRN table after the US, Europe and the Pacific Rim.
- The CCIRN acknowledges and welcomes the emergence of providers of commercial Internet services. However, the CCIRN sees itself as a forum for research network users and does not intend to provide membership of the CCIRN to the commercial providers. However, the CCIRN will have to work closely with the commercial world to ensure that the latter provide services needed by the research community.
- The Western European countries, at government level, wish to build strong links into the new structure emerging in Eastern Europe. Some governments are proposing the sponsoring of network links from their network community into Eastern Europe. While this is welcomed by all CCIRN members, it does present problems for the US CCIRN representatives from Federal agencies, which have strict guidelines on communicating with, and providing services to, proscribed countries. This problem will arise very soon also in the South East Asian part of the Pacific Rim. This raised the problem of traffic from proscribed countries entering the US. The responsibility for filtering such traffic resides with the receiving network.
- A related problem was the ethics and responsibilities of each national network connected to the global network. Before connections are made, each new network should be aware of their responsibilities and need to uphold international agreements ( eg software copyright).
- The CCIRN would welcome coordination of CERTs (Computer Emergency Response Teams) and making them available to all on the global networks. Each major networking area should foster a community-specific CERT.
- There is not a great general groundswell of support for the X400 and X500 services, especially in the US. Use of these products seems to be contained within some European countries and a few US sites. I think the general view is that they are too complicated relative to the mushrooming requirement for simple services from an increasing population as the Internet expands around the globe.
- The question of the Chair of the IEPG was raised and it was agreed that it was likely that each of the three major regions should nominate a person to share the responsibility of driving the IEPG work agenda. Nomination carries a responsibility to have the support of the nominee's organisation and to provide real resources to the task, say 25% of the nominated person's time, towards progressing the IEPG goals.
- The CCIRN agreed that continental backbone networks should be the responsibility of the "local" region and that the role of the CCIRN was the design of the interlinking of these networks into a global network along with the statements of policies etc to be followed.

In summary, I believe that attendance at such meetings is beneficial to Australia at this stage of the development of intercontinental networks. We should strongly support the development of a Pacific Rim organisation, with suitable representation on the intercontinental committees.

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