

Networking Science and Information Division

by Paul Gioia

I suppose by now most people in the Division have heard that something funny has been going on at Woodvale.

Something about networks, something about cabling, something about a lot of money being spent on *them 'puters* when it could have been spent on a field trip to the Bungle Bungles or a third fuel tank for the Toyota. People probably said the same things about telephones when they were first installed.

So before people jump to any parochially inspired conclusion that Woodvale is getting more than its fair share of dollars let me fill you in on what has happened there and what will be happening in the rest of the Division.

Less than 12 months ago the then Research Division Policy Group approved a proposal from the Research Techniques Program to establish a local area network (LAN) in the four major research centres: Woodvale, the Herbarium, Manjimup and Como. One centre would be networked per financial year at roughly \$55,000 per centre.

To date Woodvale's LAN has been installed and the Herbarium's is on order and will be installed shortly. Specific costings for Manjimup will commence shortly.

SID's commitment to networking its PCs is in line with Information Systems Branch's (ISB) plan to network

the whole of CALM over a period of time.

Now I imagine some will say "*but we already have a network*" to which I would reply "*Yes, and doesn't it work well!*".

Our current "network" is antiquated not to mention flaky. Anyone in centre admin. (probably the biggest users of the network) will tell you how often it breaks down, how often the multiplexor needs to be reset while half a dozen other users are in the middle of a job.

The current system was designed for connecting dumb terminals to a mainframe. It cannot take advantage of the local processing power of PCs or other resources like printers.

To make matters worse the supply of spare parts for these multiplexor beasts is becoming a threatened species in itself.

In contrast, a true PC network allows far greater ability to share resources as well as providing electronic mail facilities, all at greatly higher speeds than the current network.

The move to install LANs in each of the major research centres within SID is being paralleled in other parts of CALM. The next major step will be to link each of these isolated LANs together to form a wide area network (WAN). This is dependent on funds being made available to ISB for this purpose.

In the not-too-distant future I

hope to see a researcher in the country being able to instantaneously mail a document to another researcher in the city. Memos could be sent to all staff throughout the division, the department or even outside the department - without a single sheet of paper being needed.

We could get different researchers in different centres doing analyses on data stored in one accessible computer, at the same time.

Yes, it does sound a bit like the mainframe environment. The difference is that data can be moved between PCs so much quicker and more accurately. If a network link falls over you will still have your own PC to be productive with.

There is no doubt in my mind that PC networks are the way to go. The days of the centralised, all-powerful all-encompassing computing centre, overlord at the helm, are numbered. And rightly so.

We need greater flexibility in utilising our existing PC base. A PC network can help provide that through quicker and easier communication between staff and more efficient usage of existing resources.

Not least we will be creating a career path for a new animal: *the network Administrator*.

If you have any queries regarding any aspect of the PC network feel free to contact myself or anyone else in the Research Techniques program.
