

Appendix F

Taxonomy of government-assisted networks

As noted in Chapter 13, the Federal Government has a number of networking programs, the most extensive of which is the Business Networks Program announced in its 1994 White Paper *Working Nation*. Under this program \$25 million is to be spent on the formation of over 1000 networks in the coming four years. Business networks comprise three or more firms cooperating in an area of strategic business activity to improve international competitiveness.

But what of government-sponsored networks today?

As part of this study, the Bureau has undertaken a ‘stocktake’ of the networks that the government has assisted and are currently either in formation or operational¹. This information will prove useful in assessing the impact of the Business Networks Program and is also of public interest – it is the first time it has been collated and published.

The bulk of the networks identified for analysis in this chapter were funded under a pilot network program, the precursor to the Business Networks Program. We contacted the existing network coordinators in each state and asked for details about their networks. In some cases coordinators assisted in forming networks with funding from other programs such as FINA or OLM², and they provided information on these also.

We were able to identify a total of 144 networks Australia wide. The data collected from state coordinators, mainly from the National Industry Extension Scheme (NIES), provides information on the age, stage of development, focus and structure of each group and these are discussed in detail below³.

F.1 Number of networks

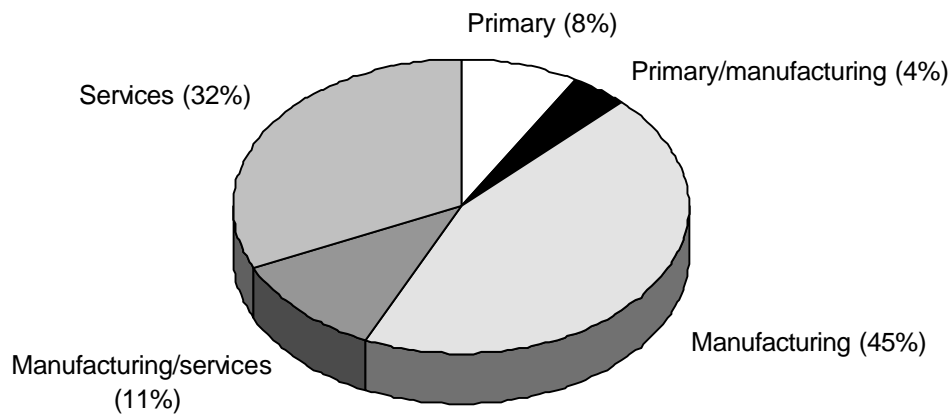
Figure F.1 shows that over half of all the identified networks are involved in manufacturing – 45 per cent are solely in the manufacturing sector, while another 11 per cent have both manufacturing and service sector aspects. Six of the networks are integrated across the primary and manufacturing sectors.

¹ The information in this appendix is the most recent available and was correct at December 1994.

² FINA is the Food Industries Networking for Asia Export program and OLMA is the Office for Labour Market Assistance.

³ We also collected data on the nature of government involvement (over and above simple funding) .

Figure F.1 Networks by sector



Source: State network coordinators

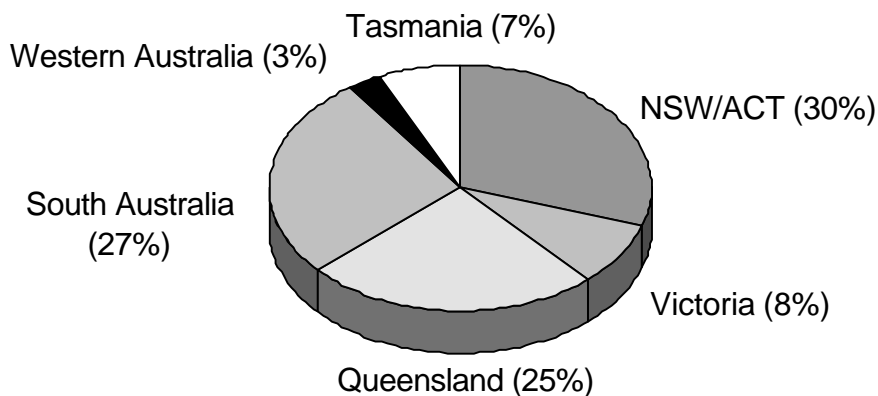
Around one-third of the networks are concentrated in the services sector, while a total of 62 (or 43 per cent) have some involvement with the services sector. More information on the products and services at the centre of networks can be found in Section 10.4

A related issue is the structure of networks along the value chain. Around 80 per cent of the networks identified in this study are horizontal in nature. Typically these networks are groupings of firms producing related goods or services working together to increase exports or for import replacement.

The remaining 20 per cent are vertical in nature, involving members along the value chain. Networks which involve members from both manufacturing and services sectors are clear examples of this type of network. An example of this type of network is AMASE which is a group aiming to supply turnkey hospital projects overseas. This group includes architects and project managers, manufacturers of hospital equipment, and firms specialising in training hospital workers. The focus of these groups are generally similar to that of horizontal networks, that is, increased exports or import replacement.

A break-up of the networks by state shows that NSW/ACT has the greatest number of networks, accounting for 30 per cent of the total of 144 (Figure F.2). The number of networks in Victoria is perhaps surprising given its relatively large business base. Of the 144 networks identified in this study, only twelve are in Victoria.

In contrast, South Australia with 39 networks has the highest number relative to its industrial base (see Figure F.2) and is the second largest networking state.

Figure F.2 Networks by state

Source: State network coordinators

Queensland has 36 networks, representing one-quarter of the total, while the Bureau could only identify four networks in Western Australia.

To put the number of networks in each state in context, it is interesting to examine how the figures compare when they are adjusted by the size of the industrial base in each state. Table F.1 shows the number of firms in each state per network. South Australia has the highest concentration of networks, with one for every 1700 firms. Tasmania also has a high number of networks relatively to the number of firms in the state, with one per 2000 firms. At the other end of the spectrum is Western Australia and Victoria with one network per 19000 and 17000 firms respectively.

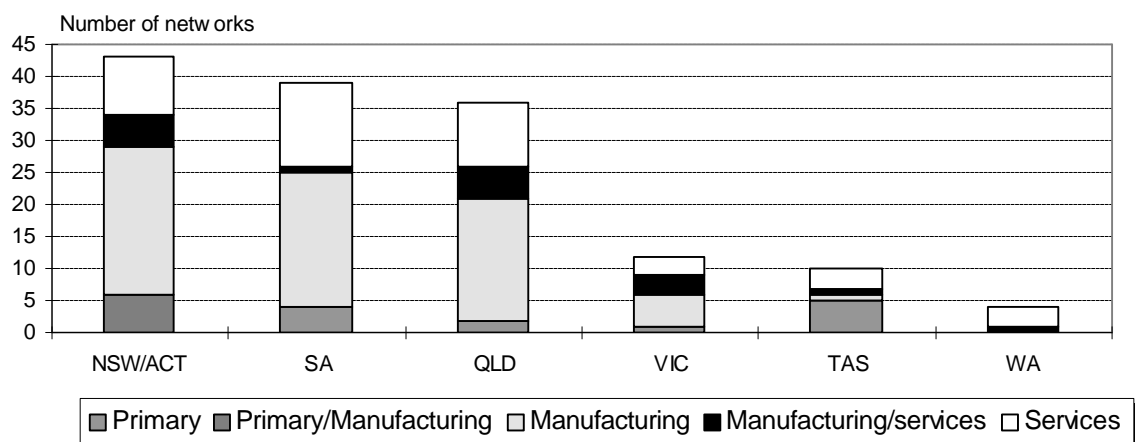
Table F.1 Number of firms per network

State	Number of Networks	Number of employing firms ('000)	Number of firms per network ('000)
WA	4	76.9	19.2
VIC	12	205.7	17.1
NSW/ACT	43	272.5	6.3
QLD	36	137.9	3.8
TAS	10	20	2.0
SA	39	65.4	1.7

Source: State network coordinators and DIST (1994c) p.6

Finally, Figure F.3 shows the distribution of the networks in each state by sector. One notable feature is that all the primary/manufacturing networks identified in the course of this study are located in NSW/ACT. Five of these networks are involved in food/wine and one revolves around health products.

Figure F.3 Number of networks by state and sector



Source: State network coordinators

Another point to note is the proportion of service networks in South Australia, accounting for one-third of that state's total number of networks (compared to an average of 28 per cent across Australia). Finally, half of the networks in Tasmania are in the primary sector. This largely reflects the importance of the primary sector in the Tasmanian economy. These networks are in several areas, including seafood, horticulture and plant propagation.

F.2 Network development

To assist in examining the development of networks, we have adopted the three stages of network development used in the Business Networks Program. The three stages are:

Stage A: Initial facilitation and feasibility report;

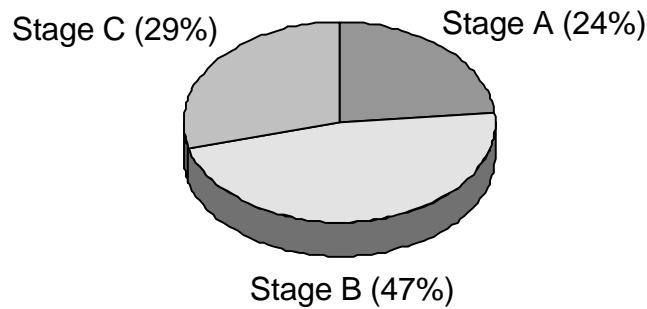
Stage B: The business planning stage in which a business plan is prepared and agreement between the participants is finalised;

Stage C: The implementation of the business plan (that is, the network is up and running).

More information on these stages can be found in Appendix E.

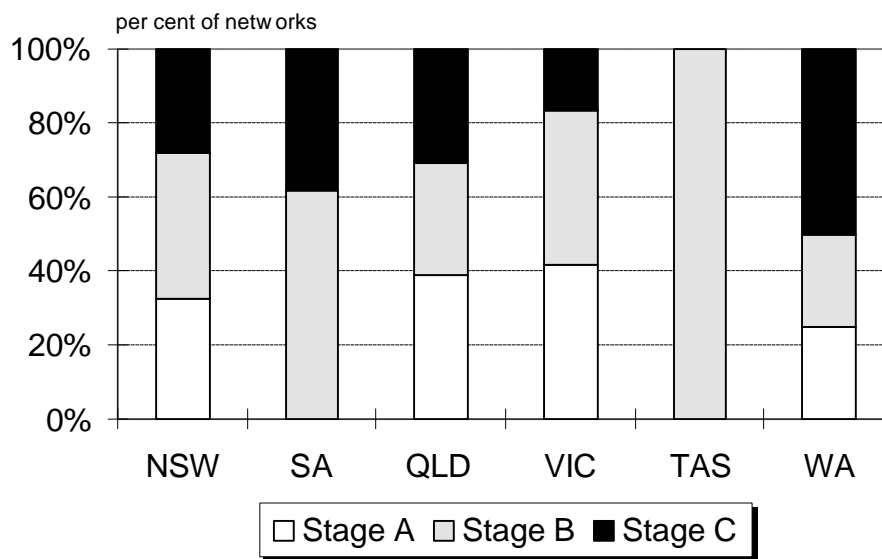
Figure F.4 shows the stage of development of networks in Australia. Close to half of the networks are in Stage B – they are not yet up and running, but have progressed past the feasibility stage and are developing a business plan.

Around 30 per cent of the networks have progressed passed this stage and are actively working towards the goals they have set for themselves. These networks are typically separate legal entities from the participant firms and business conducted via the network is usually viewed by members as distinct from their 'normal' business operations.

Figure F.4 Percentage of networks at each stage of development

Source: State network coordinators

Examining development on a state by state basis reveals that none of the networks in South Australia are in Stage A (Figure F.5). South Australia also has the highest proportion of networks that are up and running (ignoring the WA figures as this is only for four networks).

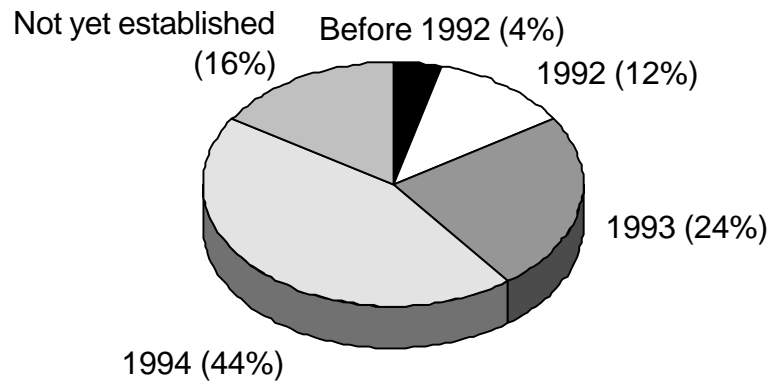
Figure F.5 Number of networks at each stage of development

Source: State network coordinators

Interestingly, every one of the 10 networks identified in Tasmania are in Stage B of their development. Some of these networks are more advanced than others, with a few almost at Stage C.

Of course, the stage of development a network is in largely reflects the length of time the members have been working together. Figure F.6 shows the age distribution of the networks. The networks in the 'not yet established' category are 'on the drawing board' but yet to formally complete the feasibility stage.

Figure F.6 Networks by age



Source: State network coordinators

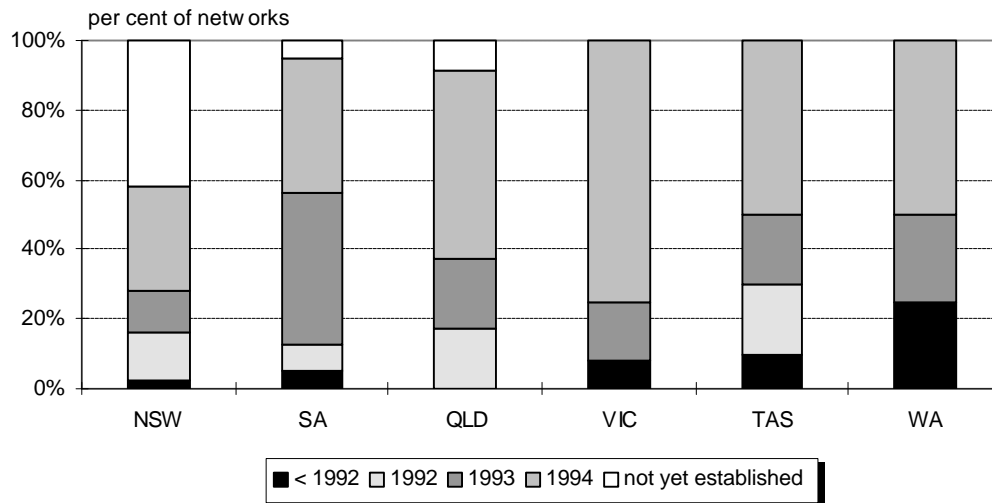
As noted above, the bulk of the networks covered by this study were formed under the networking pilot program run by NIES. This program was established in 1991 and the small number of networks established prior to 1992 reflects this.

The large number of relatively new networks (those established in 1994) is mostly due to the increases in funding for the pilot program. In 1994 funding for the program was almost tripled, from half a million dollars to \$1.3 million. With more money available, more networks could be established.

A final point to keep in mind is that these data relate only to those networks that are currently in formation or up and running. They do not show the number of networks which have made it to Stages A, B or C and since failed. Additionally, there may be networks that originally started under government programs but then become self supporting and are no longer documented by government.

On a state basis, three-quarters of Victoria's twelve networks were established in 1994 while one was established prior to 1992 (Figure F.7). Government-assisted networking in Victoria is a relatively new phenomenon compared to the other states.

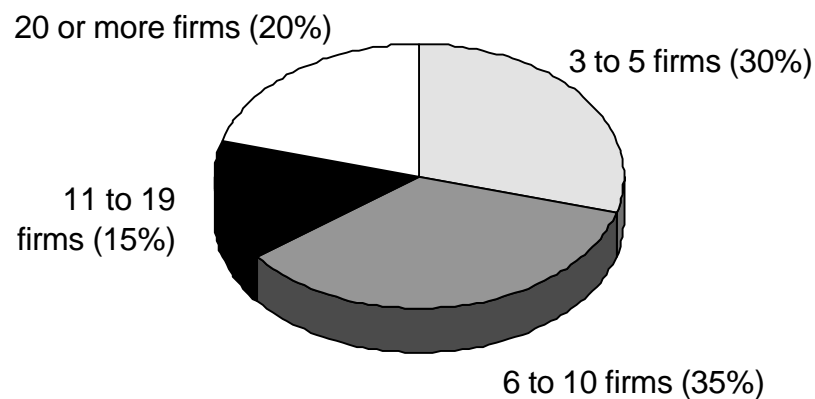
The bulk of the very newest networks are located in NSW/ACT which has 18 of the 23 networks yet to be established. This represents a little over 40 per cent of all networks located in this region.

Figure F.7 Networks by age and state

Source: State network coordinators

F.3 Network size

The total number of firms involved in the 144 networks is around one and a half thousand – an average of around ten firms per network. Figure F.8 shows that, in fact, 65 per cent of networks have less than ten firms. At the other end of the spectrum, one in five networks have 20 or more participants. Most networks in this group have between 20 and 40 members, although a few have more than 60. These are very large by normal business networking standards and are perhaps more akin to industry associations or regional organisations than networks.

Figure F.8 Networks by number of members^a

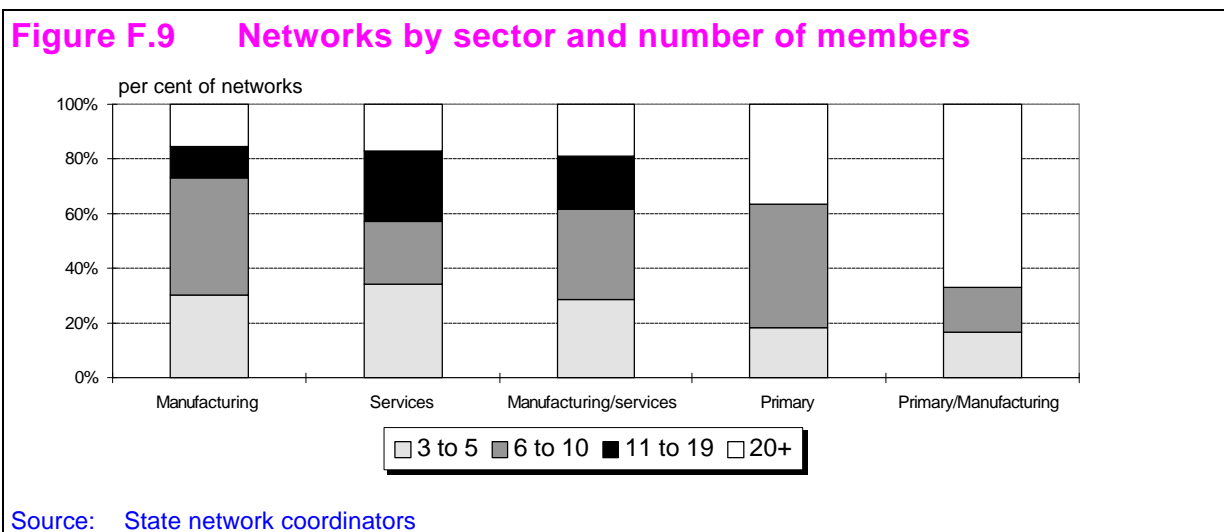
Note: (a) Information on member numbers was not available for 12 networks and thus the total number of networks shown is 132 rather than 144.

Source: State network coordinators

The fact that the majority of networks have ten or less members partly reflects the belief held by network program managers that smaller networks tend to work better. For example, the program guidelines for the Business Networks Program state:

Experience has shown that networks with a smaller number of members are more likely to succeed and are easier to operate.

Figure F.9 examines the size distribution of networks by sector. The networks involving the primary sector are notable for the number of very large networks. Eight of the 27 networks with twenty or more members are in the primary or primary/manufacturing sector.

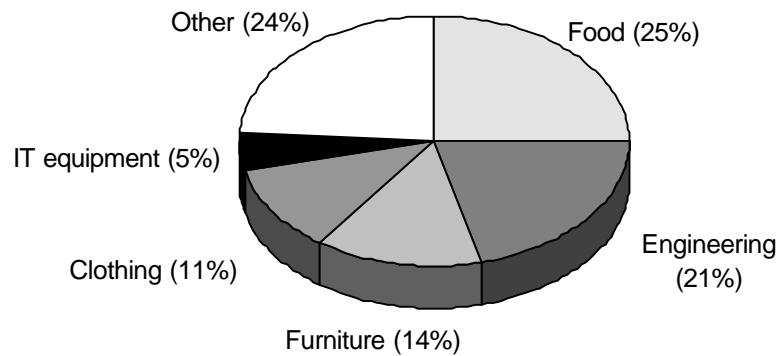


The other notable feature of Figure F.9 is the relatively large number of networks with ten or less members in the manufacturing sector. Around three-quarters of the networks in the manufacturing sector have ten or fewer members, which is ten percentage points higher than the all sectors average.

F.4 Network products and services

As shown in Section F.1, approximately half of all networks are involved in the manufacturing sector. Figure F.10 provides a more detailed description of what is produced (or planned to be produced in the case of networks not yet operational) in the manufacturing sector. Food, wine and agriculture account for 25 per cent of all networks in Australia.

One in five networks in the manufacturing sector are in engineering, while one in seven produce furniture. The 'Other' group includes fifteen networks producing separate and distinct products, including: auto, electronics, pharmaceuticals, agricultural machinery, boat building, building and construction, medical equipment, robotics and machine tools, timber products and toys.

Figure F.10 Networks in the manufacturing sector, by product

Source: State network coordinators

Networks in the services sector are spread widely across a range of services. By far the biggest category, however, is tourism. Ten of the 46 service networks were focused on tourism or related areas. Other examples of networks in the services sector included those focusing on product design, architecture, entertainment, education and training, and multimedia.

