18 July 1990

The Honourable P J Keating, M.P
The Treasurer
Parliament House
CANBERRA ACT 2600

Dear Treasurer

In accordance with Section 7 of the Industry Commission Act 1989, we have the pleasure in submitting to you the report on Aids and Appliances for People with Disabilities.

Yours sincerely

A S Cole
Chairman

Keith J Horton-Stephens
Commissioner
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ABBREVIATIONS:

ATO  Australian Taxation Office
CDU  Central Development Unit
CRS  Commonwealth Rehabilitation Service
CTCO  Commercial Tariff Concession Order
CTCS  Commercial Tariff Concession System
DC  Developing Country
DCS&H  Department of Community Services and Health
DVA  Department of Veterans’ Affairs
FLS  Free Limbs Scheme
HACA  Hearing Aid Council of Australia
ILC  Independent Living Centre
NAL  National Acoustic Laboratories
PADP  Program of Aids for Disabled Persons
RALAC  Repatriation Artificial Limb and Appliance Centre

GLOSSARY OF TERMS:

*aids and appliances* any items which are intended for use by or in relation to a person with a disability to overcome or alleviate functional difficulties (handicaps) arising from impairment and disability.

*orthopaedics* the treatment of deformities, diseases or injuries relating to bones, joints and other parts of the skeletal system

*orthosis* a brace or other orthopaedic device which supports the body or a limb, for example calliper, wrist brace, support bandage

*orthotics* concerned with the support and bracing of weak or ineffective joints or muscles

*prosthesis* artificial substitute for a part of the body, for example artificial limb, pacemaker

*prosthetics* concerned with the addition or application of artificial parts to the body
I, PAUL JOHN KEATING, in pursuance of Section 23 of the Industries Assistance Commission Act 1973 hereby:

1. refer aids and appliances for the disabled to the Commission for inquiry and report within nine months of the date of receipt of this reference

2. specify that the Commission report on

   (I) the question of tariffs and other measures subject to influence by Governments in Australia which affect the availability and costs of aids and appliances for the disabled

   (ii) the reasons for any high costs of imported aids and appliances within the Australian market

3. specify that the Commission is free to take evidence and make recommendations on any matters relevant to its inquiry under this reference.

P. J. KEATING

18 October 1989
Many Australians with disabilities do not have the aids and appliances they need to ameliorate the effects of their disability and to achieve a more satisfactory lifestyle.

The Commission has focused on whether these aids and appliances are produced and supplied efficiently, and on how the quality and range of goods and services can be improved and their costs reduced.

The Commission’s recommendations would not reduce any current entitlement to the free provision of aids and appliances. However, they would benefit people with disabilities, who are mainly on low incomes. They would also stretch further governments’ budgets for the provision of aids and appliances.

The production of disability equipment

A wide range of aids and appliances is produced or imported by many relatively small private firms, non-profit organisations, hospitals and government agencies. Governments are both major producers and buyers of aids and appliances. Private production consists mainly of low technology products for the small domestic market. Much is made-to-measure. Apart from the few firms producing high technology goods for the world market, there is little domestic research and development. Imports are significant for a variety of products, particularly highly specialised and technically advanced items.

Production of major items of equipment is fragmented among the States, providing little opportunity for achieving economies of scale. For items such as wheelchairs, this is partly a legacy of past State Government purchasing preference policies. Tariffs, and the involvement of government in production, reduce efficiency and increase the costs of some types of disability equipment. On the other hand, local private suppliers compete vigorously: the Commission has received no evidence of excessive mark-ups or monopolistic behaviour by them.
Commonwealth production is inefficient

The Commonwealth is the major supplier of hearing aids and services and artificial limbs. It prohibits competition with the National Acoustic Laboratories (NAL) under the Hearing Services Program. It restricts competition with the Repatriation Artificial Limb and Appliance Centres (RALACs) under the Free Limbs Scheme. This promotes inefficient production, leads to higher costs and prices, and limits the products and services available to consumers - both those who receive assistance and those who do not.

Hearing aids

At least one million Australians have a hearing impairment, yet only one in five of them have hearing aids, and perhaps a quarter of those hearing aids are seldom used, often because of concerns about unsightliness or perceptions about a stigma attached to their use.

Under the Hearing Services Program, hearing aids and services are supplied free of charge to children and eligible pensioners through NAL. NAL supplies nearly 65 per cent of the hearing aids fitted in Australia each year. Private sector and other suppliers compete for the remainder.

There is substantial public satisfaction with NAL services to children. But children comprise only about 10 per cent of NAL’s clients, and the present arrangements have led to problems both for clients of the Hearing Services Program and other hearing-impaired people. These include:

- delays of up to a decade in introducing new technology to the NAL product range;
- long waiting times for NAL hearing centres compared to private distributors;
- dissatisfaction with NAL products and the relatively low emphasis it gives to cosmetic aspects of hearing aids;
- people, who are eligible for the Hearing Services Program but choose to go outside NAL, having to pay the full cost of the alternative themselves; and
- higher prices for those not eligible for the Hearing Services Program.
Over recent months NAL has addressed some of these problems. For example it has reduced waiting times in all hearing centres and intends to provide more in-the-ear hearing aids in future. However, in the absence of competition there will be no ongoing pressure for NAL to lift its performance.

The Commission recommends that NAL cease to have a monopoly over supply to the Hearing Services Program clientele, and that other suppliers of hearing aids and services be permitted to compete for clients of the Hearing Services Program. NAL and other providers of hearing aids and services would be reimbursed by the Commonwealth for services provided to these clients. Those groups who are currently eligible for free treatment under the Hearing Services Program would remain so, whether or not the supplier was NAL.

The Commission recommends further that a schedule of fees be established for hearing aids and services provided to adults under the Hearing Services Program. The schedule should apply equally to NAL and to other suppliers. Development of the schedule of fees should be guided by the current fitting protocols of a range of suppliers including NAL. Payments to suppliers for services to children should be on the basis of full refunds for the cost of hearing aids and services provided.

Provided it is first reconstituted as a government business enterprise on a fully commercial basis, the Commission also recommends that NAL be allowed to compete for clients outside the Hearing Services Program.

Open competition between NAL and other service providers would allow patients to make their own judgments about such matters as whether they prefer assessment by audiologists or audiometrists, the significance of waiting times at clinics and the importance they place on the cosmetic features of hearing aids.

Hearing loss in children is difficult to assess and treat. But effective hearing is vital to language development and other learning. The Commission recommends that only medical practitioners and audiologists be allowed to provide services to children under the Hearing Services Program.

If NAL can operate successfully under the above arrangements, the Government could consider selling it to the private sector at some time in the future. If not, it may have to be wound up once the private sector has built up a sufficient range of skills to handle the needs of all hearing-impaired people, including children.
The Commission recommends that the current proposal to establish a collaborative arrangement between NAL and a private sector supplier be set aside. The proposal is dependent upon NAL maintaining its current monopoly as the supplier of free aids to two thirds of the market.

While the proposed collaborative arrangement aims to develop export-oriented local production, it is not clear that Australia has a comparative advantage in this activity. For many years local production has consisted almost entirely of the assembly of hearing aids from imported components. NAL would be locked in to one supplier for five years. Its clients are restricted to those aids which NAL considers to be suitable, and under the proposed collaborative arrangement they would be confined very largely to those aids supplied by NAL’s partner.

The Commission would have less concerns if its recommendations for increased competition in the supply of hearing aids and services and the establishment of NAL as a fully commercial business enterprise are taken up. In such circumstances, NAL’s negotiation of some form of supply arrangement may be consistent with its operation as a commercial enterprise. However, the decision as to whether to assemble hearing aids locally or import them fully made up should be based on commercial criteria only.

**Artificial limbs**

Most Australian residents requiring an artificial limb can obtain a ‘standard’ limb free of charge under the Free Limbs Scheme (FLS). Only the RALACs and a restricted number of private firms are permitted to manufacture limbs under the scheme. Some hospitals which already produce limbs are excluded. Such restrictions have adverse effects on the efficiency of limb production and the quality of services available to patients. The Commission recommends that the restriction on the number of approved producers be removed.

There is clear evidence of inefficiency in the performance of the RALACs. Moreover, their role as the administrator of the FLS, the scheme under which their
private sector competitors are reimbursed, allows them to escape the standards of accountability imposed on the private sector. Given the existence of a competitive private sector, the Commission recommends that the Commonwealth cease production of artificial limbs (and associated products and services), and dispose of the assets of the RALACs. Goods and services provided free under the FLS would then be sourced from other suppliers.

**Price-raising effects of tariffs**

There is a widespread view that tariffs raise significantly the prices of most aids and appliances. However, with a few notable exceptions, most disability equipment which can be readily identified in the Tariff is free of duty, either substantively or through tariff concessions.

Major exceptions are wheelchairs, pacemakers, mass-produced orthopaedic footwear and some incontinence aids. The tariff treatment of some footwear and incontinence aids is affected by their inclusion in the textiles, clothing and footwear sectoral plan, which provides very high assistance to local producers. The effects on consumers of these goods are substantial.

Lower tariffs on wheelchairs would provide significant benefits to some users in the form of reduced prices for imported wheelchairs and perhaps some downward pressure on prices of locally-produced wheelchairs. It should also assist in the rationalisation of wheelchair production, with Australia producing those wheelchairs for which it has an advantage. The Commission recommends that the General rate be reduced to 15 per cent on 1 July 1991 and reduced by a further five percentage points each year thereafter until it reaches zero.

The Commission also recommends that the tariff on pacemakers and defibrillators be reduced to zero on 1 January 1991. This will reduce costs to service providers. The Commission does not expect to see any major adverse effects on production or use of these goods resulting from this recommendation.

Many items of disability equipment are not separately identified in the Tariff. Removal of assistance for such items could have arbitrary and unforeseen economic effects and would be administratively costly. It would be inconsistent with the thrust of reform of Customs administration over the past decade.
Sales tax

Aids and appliances include goods specifically designed for and used by people with disabilities, general use goods which have particular applications which can improve quality of life, and goods designed for people with disabilities but occasionally used by others. Goods in the first category are generally exempt. Of the rest, some are and some are not taxable.

Item 123 of the Sales Tax (Exemptions and Classifications) Act exempts from sales tax items specifically designed for and used by people with disabilities, subject to two tests. One is that the goods are designed and manufactured expressly for people with sickness, disease or disablement. The second is that they are also goods ‘not ordinarily used by persons who are not suffering from sickness, disease or disablement’. This second test is a source of some confusion. To help overcome this, the Commission recommends that it be amended to refer to goods ‘of a kind predominantly used by persons with sickness, disease or disablement’.

A general exemption for any goods purchased by a particular group is likely to be open to abuse. It would be difficult to confine the exemption to people with disabilities, and to ensure that they do not purchase goods for relatives and friends, or for resale. However, Item 123A provides a conditional exemption for specific general use goods (including videotex and closed caption decoding devices) purchased by persons certified to be profoundly deaf, while Item 135A provides an exemption for motor vehicles used to transport people with disabilities to and from employment.

Most communications equipment which is specially designed for people with disabilities is already exempt under Item 123. The Commission recommends that computer equipment used as, or in conjunction with, electronic communications equipment also be made sales tax exempt.

The exemption on motor vehicles under Item 135A is discriminatory. It is available once every two years to those who purchase a new vehicle, irrespective of its value, for travel to work. The Commission recommends that the exemption be limited to...
vehicles which cost less than the ‘luxury car’ threshold under the current income tax arrangements, and that an exemption not be approved if the person concerned has received one in the previous four years.

Better consumer information needed

People with disabilities face real problems finding out what aids and appliances will do most to help them and which represent value for money. Shopping around for specialised products sold by small firms or voluntary agencies can be difficult for able-bodied people but is very much more so for those with disabilities.

Better information about equipment and suppliers would help the market for disability equipment to function more effectively and competitively. The Commission recommends that the Commonwealth provide funding to maintain and disseminate the database currently being prepared by the Independent Living Centre in Melbourne.

Government provision schemes

There is a myriad of programs, both Commonwealth and State, which provide equipment to people with disabilities. Discovering the existence of these programs, their coverage and eligibility criteria, is not straightforward.

Many of the schemes perform poorly against criteria of equity, efficiency, and good public administration. The coverage of disabilities and goods is very uneven. The needs of some people are relatively well catered for while others miss out completely. Moreover, eligibility criteria vary considerably. Some programs are means-tested, others are not. Some are available only to those in employment (or judged capable, with assistance, of gaining employment), while others are confined to welfare beneficiaries. There is some evidence of overservicing under free provision schemes.

There are potential benefits for the community as a whole in assisting people with disabilities to obtain equipment which enables them to live independently and, where possible, to work. Provision of the appropriate aids and appliances can
reduce expenditures in hospital and nursing homes, or on home care services. When the personal and social benefits of greater independence and ability to participate in the community are added, there is a strong case for a comprehensive review of equipment provision schemes and their place among the broader range of assistance programs for people with disabilities.
2 RECOMMENDATIONS

The Industry Commission recommends as follows.

Government provision of hearing aids

• The current segmentation of the market for hearing aids and services between NAL and other service providers in the public, non-profit and private sectors be ended, and competition be introduced across the whole market.

• NAL cease to have a monopoly over supply to the Hearing Services Program clientele, and other suppliers of hearing aids and services - whether public, non-profit or private - be permitted to compete to supply Commonwealth-funded clients of the Hearing Services Program.

• NAL be permitted to compete with other suppliers for non-Hearing Services Program clients provided it is first converted to a government business enterprise operating on a fully commercial basis. It should be separated from the Department of Community Services and Health, and funded by payments for the services it provides to Hearing Services Program clients and from revenue generated from sales to those not eligible for Commonwealth assistance.

• A schedule of fees be established for hearing aids and services provided to adults under the Hearing Services Program. The schedule should apply equally to NAL and other suppliers. Development of the schedule of fees should be guided by the current fitting protocols of a range of suppliers, including NAL. People should be free to choose more expensive services and pay the difference themselves.

• Only medical practitioners and audiologists be eligible to provide hearing aids and services to children (currently defined as persons under 21 years) under the Hearing Services Program. Payments to suppliers for services provided to children be on the basis of full refunds for the cost of hearing aids and services provided.

• Tenders be invited for the provision of non-commercial services provided under the Hearing Services Program, such as visits to schools for the hearing-impaired and special programs for Aboriginal people.
• The proposed collaborative arrangement between NAL and a private sector supplier be set aside.

(see Chapter 5)

**Government production of artificial limbs**

• The Commonwealth cease production of artificial limbs and associated products and services, and dispose of the assets of the RALACs.

• The current restriction on the number of producers permitted to manufacture artificial limbs under the Free Limbs Scheme (FLS) be removed.

• Accreditation of componentry be discontinued. Prescribers and prosthetists should recommend componentry they judge to be most appropriate for individual patients.

• A schedule of fees for each type of standard limb and associated services be developed, with patients free to choose more expensive componentry and pay the difference. The fees would need to be reviewed on a regular basis.

• The Central Development Unit be abolished.

(see Chapter 6)

**Tariffs on aids and appliances**

• The tariff on wheelchairs and other goods falling within Tariff Heading 8713 be set at 15 per cent General on 1 July 1991 and reduced by five percentage points a year until it reaches zero on 1 July 1994.

• The tariff on pacemakers, defibrillators and other goods falling within Tariff Heading 9021.50.00 be reduced to zero on 1 January 1991.

• The Additional Note to Chapter 90 which reads:

  `In 9021, "orthopaedic appliances", in relation to footwear, means footwear made to measure for a specific disorder'

be deleted from the Tariff.
• The Commonwealth develop proposed rewording of Heading 9021, which covers orthopaedic appliances, for consideration in the current review of Chapter 90 by the Customs Co-operation Council.

(see Chapter 7)

Sales tax exemptions

• Item 123 be amended to read:

‘Goods designed and manufactured expressly for, and of a kind predominantly used by, persons with sickness, disease or disablement.’

The list of goods eligible for sales tax exemption under Item 123A be extended by adding computer equipment used as, or in conjunction with, electronic communications equipment, provided certification is provided by a doctor or therapist.

• The sales tax exemption on motor vehicles under Item 135A of the Sales Tax (Exemptions and Classifications) Act be limited to vehicles which cost less than the `luxury car' threshold under current income tax arrangements. An exemption should not be approved if the person concerned has received an exemption in the previous four years. For the sake of consistency, the mobility allowance should not be payable to persons who have claimed the sales tax exemption on a new motor vehicle within the previous four years.

(see Chapter 8)

Information

• The Commonwealth provide funding to maintain and disseminate the database currently being prepared by the Independent Living Centre in Melbourne.

(see Chapter 3)

The Commission draws attention to:

• its comments on the specifications used by government bodies in inviting tenders for items such as wheelchairs, and on equipment standards (see Chapter 7); and

• its criticisms of current programs for the provision of aids and appliances to people with disabilities (see Chapter 9).
3 THE DEMAND FOR AIDS AND APPLIANCES

The demand for aids and appliances for people with disabilities depends on the number of people who have some form of disability and their capacity to purchase the aid(s) they need. This chapter examines the available information on the number of people with disabilities and the sorts of aids and appliances they use, and reports evidence on the extent of unmet demand. The chapter ends with observations on the crucial role of information in guiding the decision making of both buyer and seller.

3.1 Disabilities in Australia

How many people have disabilities?

Statistical information on the number of people in the community who have a disability is limited. The main sources of information are surveys conducted by the Australian Bureau of Statistics (ABS) in 1981 and 1988.1

The ABS drew a distinction between disabled and handicapped people for the purposes of its surveys. It defined a disabled person as a person with one or more of a group of disabilities which had lasted or was likely to last for 6 months or more. These include loss of sight (even when wearing glasses or contact lenses); loss of hearing; speech difficulties in native language; incomplete use of arms, feet or legs; restriction in physical activity; long term treatment or medication (where restriction was continued in some way by the condition being treated). A handicapped person was defined as a disabled person who had difficulty in performing self care, mobility or communication tasks and would be likely to need aids and appliances to assist them.

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The preliminary results from the 1988 ABS survey showed that an estimated 15.6 per cent of the Australian population (some 2.5 million people) had some form of disability compared with 13.2 per cent (about 1.9 million people) in the 1981 survey. Approximately 2.1 million people (84 per cent of the disabled population) considered themselves to be handicapped compared with 1.3 million in the 1981 survey.

Between 1981 and 1988 the total number of people identified as disabled increased by about 600 000. The ABS estimated that 55 per cent of the increase was due to changes in the size and age profile of the Australian population and the remaining 45 per cent to an increase in the proportion of people who identified themselves as disabled. The ABS noted that the increase may have resulted in part from people being better able to identify the causes of their disabilities, and from their greater willingness to be identified as having a disability.

Figure 3.1 shows the percentage of people with disabilities, by age group, in 1981 and 1988.

Figure 3.1: People with disabilities as a percentage of the population in each age group, 1981 and 1988

Source: ABS, Disabled and Aged Persons Australia, 1988, Preliminary Results, op. Cit.
As would be expected, the surveys indicated an increasing incidence of disability with age. The 1988 survey showed that the number of children aged fourteen or less with disabilities represented only six per cent of all children in that age group, while more than 80 per cent of those aged 85 or over had disabilities.

The primary disabling conditions most commonly reported in the 1988 survey were musculoskeletal diseases such as arthritis, disorders of the back and rheumatism (27 per cent), loss of hearing (14 per cent), and circulatory diseases such as heart disease and high blood pressure (20 per cent). As ACROD observed:

‘There is a great variety of disabling conditions which vary in their mix and severity of impact for particular persons at particular stages of their lives. The generalised concept of "the disabled" is quite an erroneous one’. 2

What type of aids do people use?

This inquiry encompasses a very wide range of goods. Some are specifically designed for people with disabilities. Others are also used generally (for example personal computers), or are adaptations of general consumer items. The goods concerned vary from the relatively small and inexpensive to major pieces of equipment such as lifting hoists and electric wheelchairs. Some aids are used daily and disposed of (for example, incontinence aids); others are designed to last for years.

The range of goods can be illustrated by referring to the list of products available under State or Commonwealth Government equipment schemes, or to be found at Independent Living Centres (ILCs) across Australia. The Independent Living Centre, New South Wales, said that it has 9 000 items on record, and a permanent display of some 2 000. Items can be categorised as:

- aids to daily living in areas such as the kitchen, laundry, bathroom and bedroom;
- mobility aids, including wheelchairs, walking frames and crutches; and

2 ACROD, Submission No. 218, p. 2.
• communications aids, such as computers, telephone typewriters and flashing alarm clocks.

The 1988 ABS survey provided some information on the use of aids by handicapped people. In that year, almost 840 000 people (about 40 per cent of all handicapped persons) used one or more aids or appliances to assist them. The main aids that they used are shown in Figure 3.2.

Figure 3.2: Handicapped persons using aids, most important aid, 1988

Source: Department of Social Security, Submission No. 143, Attachment A (special tabulation compiled by the ABS).

Why don’t people have the aids they need?

The 1981 ABS survey asked respondents why they had not acquired the aids they needed. Their answers are shown in Figure 3.3.
Cost was given as the main reason, although many people said that ‘it was too much trouble to obtain the aids’. The ABS noted that in younger and middle age groups the largest percentage of persons did not have the required aids because they were ‘too costly’, but in the older age groups the most common reason was that it was ‘too much trouble’ to get them. (The question was not repeated in the 1988 Survey and no further data are available.)

The costs of disability and income levels

Some studies have estimated the extra costs incurred by people who have a disability. For example, in 1988 the Paraplegic and Quadriplegic Association of New South Wales estimated what it called the ‘welfare goods requirements’ of a
male quadriplegic at about $4,500 per annum (or about $87 per week).³ A 1987 study of additional costs incurred by families with a disabled child found that the average mean total expenditure per family on aids, adaptations and accommodation was over $1,000 in the preceding year.⁴ In terms of what the study classified as ‘condition related expenses’, the highest item of expenditure was on incontinence aids at a mean cost of almost $550 in the preceding year. This expenditure was higher than expenditure on special foods and diets and prescribed medicines.

Many people with disabilities have low incomes. The single invalid pension rate as at June 1990 was $141.20 per week. As can be seen from Figure 3.4, the 1988 ABS survey showed that almost 80 per cent of those who identified themselves as handicapped had a total income of less than $200 per week.

Figure 3.4: **Handicapped persons by weekly total income, 1988**

![Handicapped persons by weekly total income, 1988](image)

*Source: Department of Social Security, Submission No. 143, Attachment A (special tabulation compiled by the ABS).*

³ Quoted by ACROD, Submission No. 218, p. 4.

3.2 Information

For any market to work efficiently there needs to be adequate information as to the identity of sellers and buyers, the range and quality of goods demanded and available, their prices, the respective merits of goods from different suppliers and so on.

However, in the case of disability equipment, many purchases are undertaken by people with disabilities or their careers, and they face greater difficulties than the rest of the community in seeking out information on their entitlements under various government assistance schemes, or the suitability and availability of goods.

In part this is the result of there being a plethora of programs, each with its own eligibility criteria and rules. Dissemination of information is not helped by the fragmentation of responsibilities for these programs, and by the lack of a central ‘shop front’ for helping people with disabilities and their carers to find their way through the labyrinth.

For example, there is no overall coordination of the services available for people with disabilities among Commonwealth Government Departments. The provision of artificial limbs is administered by the Department of Veterans’ Affairs, while hearing aids are provided through the Department of Community Services and Health, and the various educational assistance programs are overseen by the Department of Employment, Education and Training. The provision of wheelchairs and other aids and appliances is handled through the aids and equipment schemes which are administered by the States, with varying eligibility criteria for similar goods.

Several participants were unaware of the existence of government programs designed to assist them to obtain equipment, or to obtain it more cheaply, such as the availability of tariff and sales tax concessions for some groups of disabled people. A survey of 1 527 Victorian families carried out by the Action Group for Disabled Children showed that families lacked information and access to basic support services.\(^5\) For example, 64 per cent had not heard of the State Government’s Program of Aid for Disabled People schemes and almost two thirds

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were unaware of the multi-purpose taxi program which provides subsidised travel for people with disabilities in Victoria.

In recent years ILCs have been established in most States. They are akin to disability equipment showrooms and are staffed by health professionals, who guide people with disabilities in choosing the equipment which will best meet their needs. While they are relatively new and their role is still developing, they have begun to play an important part in the provision of information. Effectively, they act as a clearing house for information about Australian and imported equipment. There are ILCs in all capital cities except Hobart and Darwin, while mobile ILC units operate in Western Australia and South Australia.

In most States ILCs are funded totally or substantially by the State Health Departments. Where additional funding is obtained from other sources it usually comes from voluntary organisations, such as the Yooralla Society in Victoria. The total funding for ILCs was about $1.3m in 1989.

The ILC in Melbourne ‘provides aids and equipment display, advisory, information and educational services to over 20 000 disabled people, families, caregivers and professionals working with them each year’. It also operates the Microcomputer Applications Centre, which provides microcomputer information, assessment and training for users with disabilities. The centre is in the process of computerising its equipment database, using Commonwealth funding. Once completed, this will be made available to all other ILCs.

The Commission sees failure to disseminate information effectively as a significant problem. Buyers are not being fully informed what products are available and how they can obtain assistance in purchasing them. Equally, suppliers are not well informed as to the size and characteristics of the industry, and the importance of the component parts - hospital purchases, Health Department purchases etc. This makes meeting demand, or marketing new products, that much more difficult. While ILCs can provide some information, their responsibilities are limited in scope as are their resources.

In its draft report the Commission noted that one way to increase the availability of information would be through the provision of a comprehensive information database for public use, which could be updated periodically and sections published

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6 Yooralla Society of Victoria, Submission No. 54, p. 1.
in hard copy. It went on to propose that the Commonwealth provide funding to maintain and disseminate the database currently being prepared by the ILC in Melbourne. The Commission saw this as a low cost initiative which could produce significant and fairly immediate benefits in terms of the better flow of information to those who need it.

Many participants agreed with the Commission’s proposed recommendation. At the draft report hearings ACROD supported it:

‘because ... the whole area of better use of aids and appliances by people in the Australian community is much facilitated by the existence of Independent Living Centres and a great deal of duplication of effort can be stopped through the national on-line use of their database.’

The Victorian Deaf Society suggested that there is a need for a centralised database of information, resources and assistive technology for people who are deaf or hearing impaired. It should be linked to a general database on disability such as those maintained by the ILCs. Better Hearing Australia supported the proposal for funding for the ILC database but said that funding should be extended to specialised display centres for the hearing impaired.

Some participants were concerned that a database prepared in Victoria might have too much local content and not be as useful in other States. The Australian Group on Severe Communication Impairment (W.A. Branch) stated:

‘The recommendation to maintain and disseminate information from the database in Victoria needs to be extended to ensure that all States have a similar facility that both displays and provides advice for people, families and service providers, and also participates in collection and dissemination of information on an Australia wide basis.’

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7 ACROD, Transcript, Canberra, 22 May 1990, pp. 918-19.
8 Australian Group on Severe Communication Impairment (W.A. Branch), Submission No. 775, p. 3.
However, the Commission notes that ILCs in the various States already appear to communicate freely. It considers that the provision of funding for the Melbourne ILC’s database would encourage the exchange of information, not only among ILCs themselves, but also with other groups providing information for people with disabilities. *The Commission recommends that the Commonwealth provide funding to maintain and disseminate the database currently being prepared by the ILC in Melbourne.*
4 THE SUPPLY OF AIDS AND APPLIANCES

4.1 Introduction

Suppliers of aids and appliances engage in a range of activities, including assessment and prescription, design, manufacturing and/or adaptation of equipment, importing, and repair services. The nature of the organisations involved in the industry also varies significantly and includes public and non-profit organisations, commercial manufacturers, importers, and producers of custom built aids.

A fundamental question for this inquiry is the competitiveness of supply of disability equipment. Prices in Australia are affected by domestic costs of production, prices of imported goods and the effectiveness of competition among suppliers. One issue is the extent to which prices of disability equipment might be raised by inefficiencies in assessment and prescription processes or in the manufacture of the aids themselves.

The small size of the Australian market and the made-to-measure nature of some products can inhibit the ability to reap economies of scale and provide lower-priced goods. The efficiency of the system of supply can be gauged by the extent of competition among domestically produced and imported goods and services, the existence of entry barriers and fragmentation of production, the quality of service provided to consumers, and differences between prices and margins in Australia and overseas.

In a few cases, governments produce equipment and provide services in their own facilities. The constraints of operating within a public sector framework can reduce efficiency. This issue is examined in Chapters 5 and 6. Governments are also major purchasers of disability equipment and their purchasing policies have an effect on what is produced and how and when production is undertaken.

The efficient production of aids and appliances can also be inhibited by other government interventions which limit competition, restrict choices, raise prices and/or introduce rigidities in the provision of goods and services. The various
assistance schemes are important influences on the pattern of production and supply. The demand for products will clearly be greater where they are provided free of charge or at reduced cost by governments, hospitals or nursing homes. Tariffs and sales tax are discussed in Chapters 7 and 8, while the effects of assistance programs are examined in Chapter 9.

4.2 The pattern of supply

The Department of Community Services and Health (DCS&H) noted that:

‘Australian-made aids generally have simple or standard designs. Local production is concentrated towards products with a high demand, for example, crutches, splints, special beds, wheelchairs, bathing aids etc.’

It also said that:

‘Australia imports many of the technological aids required by people with disabilities. ... Some higher-technology products such as hearing aids and pacemakers are also produced in Australia’.1

Most aids and appliances are not separately classified in the official statistics, making it difficult to obtain reliable data on production, and imports and exports. For many items there are numerous small suppliers. In some cases, the production of aids and appliances forms only a small part of the total production of the firm concerned. Moreover, because of the small size of the market, economies of scale are generally not realised.

Evidence from submissions and industry visits suggests that local production is largely undertaken to serve the domestic market. With the exception of cochlea implants (bionic ears) and pacemakers, there are few exports. On the other hand, there are many imports. The Independent Living Centre, New South Wales, said that, of the 9 000 items it has on record, 65 per cent are imported.

Many aids and appliances are either designed specifically for the patient, or are made-to-measure modifications of a standard product - which may be either produced in Australia or imported. In the case of products such as artificial limbs and orthoses, production is akin to a craft industry. In such cases imports are limited, although imported componentry is often used.

1 DCS&H, Submission No. 152, p. 1.
In the case of more standard products, for example incontinence management products, the market is capable of being served by imports because there is little or no need for adjustment to suit the individual. This can result in local producers achieving only a small share of the market.

Some aids and appliances are prescribed, recommended or produced by health professionals, for example doctors, occupational therapists, audiologists, audiometrists and prosthetists. The nature of supply often requires close contact between the customer, the advising health professional and the manufacturer. Assessment and prescription procedures and the preference of prescribers for particular manufacturers or types of goods are therefore important influences on the pattern of production and imports. The location of a producer becomes important in determining the eventual cost to the consumer in terms of money, time and convenience, customer satisfaction with the product and its effective use. It is likely that suppliers who are closer to the market are better placed to satisfy these needs. This provides a degree of ‘natural protection’ to local manufacturers.

Many people with disabilities cannot be without an aid for any length of time or they will suffer a significant cost in terms of their independence. In such cases, access to repair facilities and timely availability of replacement parts is important in determining sources of supply. Some participants indicated a preference for local supply for these reasons.

In summary, private production of aids and appliances tends to be small scale and fragmented. Australian production is generally oriented to the domestic market. Firms suffer the usual difficulties of small businesses, including access to capital and limited scope for training of skilled labour and in-house research and development. With a few exceptions, advanced technology is imported from Western Europe and North America. This inquiry revealed a general perception that prices of aids and appliances are too high and service poor. Participants were particularly critical of product quality, the length of waiting times for initial supply, and delays in repairs or maintenance.

The inquiry received a number of indications that assessment, prescription, and training services could be improved. In some areas, there are significant delays before assessment begins. In other areas, clients are not adequately trained in the use of equipment, with the result that it is not used effectively and sometimes not at all. Participants said there is a high degree of assessment by disabled people of their own equipment requirements, particularly for mobility aids and incontinence management products. It was also alleged that medical practitioners, although
providing an important assessment service to users of aids, often do not have adequate knowledge of the range and qualities of equipment available.

4.3 Industry segments

In this inquiry, the Commission has focused on government interventions which influence the cost and availability of those aids and appliances which are used to ameliorate the effects of a disability. Goods such as spectacles have not been examined because they enable many users to completely overcome their disability. In each case, the Commission has described the nature of supply and sought to identify the government actions which affect supply. A more detailed statistical outline for hearing aids, artificial limbs and wheelchairs is provided in Appendix B.

Hearing aids

The Australian hearing aid industry comprises a government segment, serviced by the National Acoustic Laboratories (NAL), and a separate commercial segment. NAL accounts for about 65 per cent of the total market and in 1988-89 fitted 65 000 aids under the Hearing Services Program, most of them behind-the-ear aids. In the same period, the six major overseas laboratories which have assembly plants in Australia produced 31 000 aids for use by commercial distributors, most of them in-the-ear or in-the-canal aids. The private sector also distributed around 7 000 to 8 000 imported behind-the-ear aids.

Under the Commonwealth’s Hearing Services Program, eligible people - mainly those under 21 years of age and holders of pensioner health benefits cards - who wish to obtain a hearing aid free of charge must obtain that aid from NAL. Anyone, including those not eligible for the Hearing Services Program, who wishes to obtain an aid from another source must pay the full market price.
NAL and the private sector distributors supply both fully imported hearing aids, and those which are assembled in Australia from imported components. Hearing aids produced in Australia generally comprise imported electronics and locally-made ear moulds and external controls. Because of the increasing popularity of in-the-ear and in-the-canal type aids which require the production of ear moulds, there will always be some local manufacturing activity. In 1988-89, the main sources of imported hearing aids and parts were Switzerland, the United States and Denmark.

Artificial limbs

The Free Limbs Scheme (FLS) is the main influence on the structure of the artificial limb manufacturing industry. The scheme supplies limbs free of charge to most Australians requiring them. Through this scheme, the Commonwealth influences the number of producers, the type of limbs supplied and the prices received by manufacturers. The operation of the FLS is examined in Chapter 6.

There are currently ten Commonwealth Repatriation Artificial Limb and Appliance Centres (RALACs) and eight commercial producers providing limbs under the FLS. Unlike hearing aids, clients can obtain free limbs from either the public or private sector. In 1988-89, a total of 4,532 definitive limbs were produced for FLS clients by the RALACs and the commercial manufacturers. RALACs provided an additional 401 limbs to veterans. Commercial manufacturers provided 57 per cent of limbs for FLS clients. About 250 limbs were supplied to non-FLS clients, while hospitals produced about 200 definitive limbs.

Orthoses

Orthoses are devices to support the body or a limb, such as leg callipers, orthopaedic footwear, stockings and support bandages. They may be either custom-made or purchased off the shelf. They represent a significant proportion of the market for aids and appliances. In Western Australia, for example, 31 per cent of the 1988-89 budget for the Program of Aids for Disabled People (PADP) was devoted to orthotic equipment.2 Orthoses range in price from around $8 for a neck collar to $1,500 for a long leg calliper.

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2Health Department of Western Australia, Submission No. 148, p. iv.
Orthopaedic Appliances is the largest supplier of orthotic equipment in Australia. Orthoses are also produced by the RALACs, some commercial manufacturers whose primary business is the manufacture of artificial limbs, and by a number of hospitals. However, most orthotic equipment, in particular off-the-shelf adjustable parts, is imported.

The production of made-to-measure orthoses is highly labour intensive because of the individual nature of orthotic problems. The fitting of an orthosis involves ‘... the assessment of a patient, measurement, cast taking (often involving two people) and tracing of the anatomy. The appropriate orthosis is ... designed, constructed to a rough fit stage, a fitting is then done, adjustments made and then a final fitting’. Orthoses are also produced by the RALACs, some commercial manufacturers whose primary business is the manufacture of artificial limbs, and by a number of hospitals. However, most orthotic equipment, in particular off-the-shelf adjustable parts, is imported.

Reis Orthopaedic Services said a major problem in the orthotics field is insufficient opportunity for training. It said there are numerous ‘back yard type operations’ run by people with no training in orthotics and that even physiotherapists and occupational therapists at hospitals were inadequately trained in the fitting of complex orthoses. 4 The Children’s Hospital in Camperdown said lack of training had meant that there were ‘fewer qualified orthotists and more unqualified personnel resulting in a decline of the quality of service provided to the patient’. 5 Orthotists are trained at the Lincoln School of Health Sciences at La Trobe University.

Southern Prosthetics and Orthotics attributed the small number of trained orthotists to limited recognition of orthotic skills, and associated low salary levels in States other than Victoria. 6 It stated that, under the Victorian award, orthotists are paid considerably more than in other States. Southern Prosthetics and Orthotics saw a need ‘... for an upward adjustment of salary (in other States) to encourage graduates interstate’. 7

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3 Children’s Hospital Camperdown, Submission No. 455, p. 3
4 Reis Orthopaedic Services, Submission No. 200, pp. 1-2.
5 Children’s Hospital Camperdown, op. cit., p. 5.
6 Southern Prosthetics and Orthotics, Submission No. 203, p. 12.
7 Ibid.
Because of the restrictive eligibility criteria under equipment provision schemes, many users of orthoses receive no government assistance. Some participants argued that rebates for orthoses provided by private insurers were insufficient when compared with the cost of the device. For example, Reis Orthopaedic Services said ‘we recently had a patient who paid $1 500 for a long leg calliper and was told by her fund that she would receive $160 reimbursement’. Issues relating to the availability of assistance are discussed in Chapter 9.

**Orthopaedic footwear**

There are three types of orthopaedic footwear. Surgical footwear is made by hand, machinery being used only in finishing and stitching uppers. Extra depth footwear is mass produced and has an inner sole which can be removed or adjusted. Standard shoes may also be adjusted for orthopaedic use. Surgical footwear is priced around $400 to $600 a pair while extra depth footwear is priced at $130 to $150.

Extra depth and surgical footwear is produced by the RALACs and some commercial manufacturers. In 1989-90 the RALACs supplied 5 647 pairs of surgical footwear and repaired over 12 000 pairs. There are approximately 17 manufacturers of surgical shoes in the commercial sector. Several manufacturers of artificial limbs either build their own footwear or adapt standard footwear as a sideline. Some hospitals and other organisations also produce surgical footwear.

There are two main importers of extra depth footwear. J. S. Levy Shoe Company and Markell Shoe Centre import children’s shoes and extra depth shoes for adults from the United States. Adults shoes retail at $215 to $260 a pair and children’s shoes at $73 to $120 a pair.

The high level of assistance through tariffs and quotas provided to the Australian footwear industry is a major influence on the supply of orthopaedic shoes. Imported footwear which is not classified as orthopaedic under current Tariff rules is not eligible for duty free entry. Several participants said that as a result, the price of certain types of footwear used for orthopaedic purposes only was significantly increased. This issue is discussed in Chapter 7.

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8 Reis Orthopaedic Services, op. cit., pp. 1-2.
9 For example, the Crippled Children’s Association of South Australia (Regency Park) produces surgical footwear primarily for the children in its care.
Wheelchairs

Currently there are some 17 producers of wheelchairs in Australia. Twelve of these make manual chairs, seven produce four-wheel electric chairs and thirteen make three-wheel electric chairs. There are wheelchair manufacturers in all States except Tasmania. At the time of the Commission's last inquiry into wheelchairs in 1980 there were about 15 manufacturers.

In the most recent years for which ABS data are available, about 10 000 units per year have been supplied to the Australian market. There were 5 400 domestically-produced wheelchairs (with an ex-factory value of $4.3m) sold in 1986-87 (the last year for which official ABS statistics are available), an increase on the 2 900 units sold in 1979-80.  

There were 5 700 wheelchairs (valued at $2.4m) imported in 1988-89, an increase from 4 800 units in 1986-87 and 3 200 units in 1979-80. Almost 80 per cent of all imports of wheelchairs in 1988-89 were of manual chairs (see Table B.8 in Appendix B). Local manufacturers said that almost all import competition is in the area of standard wheelchairs. In terms of numbers, the main sources of imports were Taiwan, the United Kingdom and New Zealand. In terms of value, the main sources were the United Kingdom and New Zealand.

Local manufacturers held about 50 per cent of the market in volume terms in 1986-87, not markedly different from 1979-80 (see Table B.7 in Appendix B). Exports have been negligible.

The main influences on the number and type of wheelchairs supplied are the tariff (see Chapter 7), government purchasing arrangements (Chapter 7) and the rules which determine the availability of equipment under government provision schemes (Chapter 9).

Wheelchairs are sold to hospitals and nursing homes either for use in wards or for provision to patients or others eligible for assistance under equipment provision schemes. State Health Departments and the Department of Veterans’ Affairs are

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also major purchasers. One manufacturer estimated that governments were involved in over 85 per cent of its sales, either directly through contract sales or through equipment provision schemes. Manufacturers also sell directly to private buyers. Some lower priced wheelchairs are sold through pharmacies.

Electronic communication aids

Electronic communication equipment is used by people suffering from a wide range of disabilities. It includes aids which provide synthesised voice output, cochlea implants (also known as the ‘bionic ear’) for the profoundly deaf, telephone typewriters (TTYs), computer-based aids for the vision impaired, and switches for activating equipment where limb use is restricted. Most is fully imported.

There are few locally-based firms producing communication equipment specifically for use by people with disabilities. The cochlea implant is made in Australia by Cochlear which has a turnover of about $15m per year and exports 95 per cent of production. Robotron manufactures a personal computer for vision impaired people. About 75 per cent of Robotron’s production is exported. Quantum Technology manufactures and exports communications aids for the vision impaired.

Many participants said electronic communications aids are necessary if people with certain types of disabilities are to live a more normal life. They pointed to the high cost of this equipment, and requested that disabled people be exempted from sales tax when purchasing general use communications equipment. The Commission notes that communications aids designed and manufactured specifically for people with disabilities are exempt from sales tax. The issue of sales tax is addressed in Chapter 8.

Other participants referred to the difficulties in having imported equipment repaired and maintained. The Yooralla Society said devices often had to be returned overseas because of the absence of Australian distributors. The Society considered that greater availability of funding for communications devices through PADP and equivalent schemes would increase the level of demand and would encourage the establishment of distributorships in Australia.
Incontinence management products

Incontinence management products include pants and absorbent pads, urinary drainage bags, bed pads, incontinence collectors and pouches. The major users are institutions (about three-quarters of all sales) while the remainder are sold through pharmacies.

The size of the Australian market is estimated at approximately $11m, making it one of the largest industry segments. About 95 per cent of sales of incontinence pads are locally manufactured, with the remainder being imported specialty products. In contrast, pants and briefs which form part of the incontinence management system, are mostly imported, with 95 per cent of the market supplied from overseas.

The high level of assistance through tariffs and quotas provided to Australia’s textiles, clothing and footwear industries is a significant influence on the supply of incontinence management products. The tariff quotas applying to the bulk of apparel and footwear items increase the price of imported incontinence aids, although duty free entry can be permitted where there is no Australian producer of a substitutable product. However, there have been cases where the high level of assistance available to local manufacturers has resulted in substantial price increases to users when existing tariff concessions have been withdrawn. This issue is discussed further in Appendix C.

Specialised equipment

Some participants said they make equipment to meet particular needs which are not being met by commercial producers. Specialised wheelchair designs are an example. The Technical Aid to the Disabled groups also provide design and engineering services to produce a wide range of made-to-measure items which would not otherwise be available to people with disabilities.

The Technical Aid to the Disabled Federation and the Institution of Engineers suggested that the establishment of a Rehabilitation Engineering Service would assist in making the benefits of technological development available to people with disabilities. They proposed that these centres be established in each of the major population areas.
There are many individuals, and organisations such as Technical Aid to the Disabled involved in this type of work. Their achievement appears to be in designing specialised equipment to meet individual needs. The establishment of formal engineering centres would not necessarily increase the benefit for users of specialised equipment, although there may be advantages in better coordination and exchange of information between the various groups and individuals making the equipment.
5 HEARING AIDS AND SERVICES

The Commission received several hundred submissions on the issues discussed in this chapter. Most were submitted after the release of the draft report. Participants raised concerns in several inter-related areas, namely, the range and quality of services provided to hearing-impaired people by the National Acoustic Laboratories and the private distributors, and the cost and suitability of the products offered. This chapter examines these issues, but does not refer to each and every submission. Submissions are listed in Appendix A.

5.1 Arrangements for the supply of hearing aids and services

The Commonwealth provides hearing aids and audiological services free of charge to hearing-impaired people eligible for assistance under its Hearing Services Program. People who are not eligible must pay the full market price for their hearing aid. In 1989-90, the Budget allocation for the Hearing Services Program was about $32.5m.

All the hearing aids and services provided under the Hearing Services Program are supplied by the National Acoustic Laboratories (NAL). NAL accounts for 65 per cent of the total market and in 1988-89 dispensed almost 65,000 hearing aids. Pensioners, Veterans’ Affairs beneficiaries and children comprise 72, 16 and 10 per cent respectively of its clientele.

1 People eligible for free audiological services are those with hearing problems who are either under 21 years of age, Department of Social Security pensioners holding a pensioner health benefits card and their dependants, DVA pensioners, members of the Armed Services, people referred by the Commonwealth Rehabilitation Service, Commonwealth compensation clients, and people referred by the Commonwealth Medical Officer. The objectives of the Hearing Services Program are to assist eligible hearing-impaired people to function effectively and to reduce the incidence of hearing impairment in the community.

2 Private clients may receive some reimbursement of the cost of a hearing aid if they are a member of a health insurance fund, and contribute to the top cover.

NAL’s services are supplied through 44 permanent hearing centres and 65 visiting clinics. They are supported by the NAL Central Laboratory at Chatswood (New South Wales) which undertakes research into hearing loss, evaluates aids and other audiological equipment and procedures such as methods of fitting, and conducts hearing conservation services.

Private sector services are provided mainly by audiometrists and other hearing aid dispensers. Some services are also provided by medical practitioners and a small number of audiologists in private practice. There are around 70 commercial distributors of hearing aids and related services. The commercial firms range from sole proprietors to large organisations such as Angus and Coote, Hearing Aid Specialists, and Telex (Australia), which each have branches or franchised outlets in several States. In 1988-89, the commercial sector distributed around 38 000 hearing aids.

Services for hearing-impaired people are also provided by hospitals which have hearing clinics and a wide range of hearing support groups. An active non-profit sector has developed to meet those needs it sees as not being sufficiently met by existing service providers, whether private or public. Foremost among these are the need for better information and advice about wider aspects of hearing difficulties, and rehabilitation and teaching services. Organisations such as Lions Clubs, Self Help For Hard of Hearing (SHHH) People Australia, Better Hearing Australia and the various Deaf Societies (including the HEAR Service operated by the Victorian Deaf Society) are important providers of these services.

The hearing aids themselves are either produced/assembled in Australia or imported, primarily by Quadrant Instruments, Crystalaid, Starkey Laboratories Australia, Phonak (Australasia), Angus and Coote, and Dahlberg. Some of these companies have agreements for the supply of components or complete aids with overseas producers, while others buy from a range of suppliers. Hearing aids are also imported by several smaller distributors.

**Effects on industry structure**

The Hearing Services Program is a significant influence on the pattern of the supply of hearing aids and services within Australia. First, certain groups within the community - primarily pensioners and children - have access to hearing aids and services free of charge. Second, successive Commonwealth Governments have
decided that this service will be provided solely by NAL. That is, eligible people must obtain their aid from NAL if they wish to obtain a hearing aid and associated services free of charge. Third, NAL is not permitted to compete with the private sector in the provision of hearing aids or services to hearing-impaired people not eligible for assistance under the program.

Because recipients of assistance under the Hearing Services Program only receive free hearing aids and services if they are provided by NAL, private suppliers are limited to competing for about 35 per cent of the market. This has restricted opportunities for the private suppliers of both hearing aids and hearing-related services such as audiology, audiometry and rehabilitation to develop and broaden their range of skills and services. As a result, there is a clear division in the range of services available to those hearing-impaired people who are eligible for Commonwealth assistance and to those who are not.

**Prevalence of hearing impairment in Australia**

Recent data on the number of hearing-impaired people in Australia are not available, although some estimate can be obtained from earlier surveys into hearing problems and hearing aid use conducted by the Australian Bureau of Statistics (ABS). These surveys, undertaken in 1978\(^4\) and 1979\(^5\) showed that approximately 7 per cent of the Australian population aged 15 years and over and about 2 per cent of those aged 2 to 14 years had some form of hearing problem. Of those aged 15 years and over, 20 per cent possessed a hearing aid. According to the 1978 survey, almost one quarter of those aged 15 years or over who possessed a hearing aid never used it or used it less than once per week. The main reason was that the aid was a nuisance, uncomfortable or unsatisfactory in appearance.

These outcomes may underestimate the prevalence of hearing impairment. The survey methodology relied on self-disclosure of the hearing disability. It also

\(^4\) ABS, *Hearing and the Use of Hearing Aids (persons aged 15 years or more)*, September 1978, Cat. No. 4336.0.

\(^5\) ABS, *Sight, Hearing and Dental Health (persons aged 2 to 14 years)*, February - May 1979, Cat. No. 4337.0.
excluded persons in hospitals, nursing homes and other health institutions. Moreover, advances in the technology and design of hearing aids in the 12 years since the first survey may have changed usage patterns. Notwithstanding this, if the results are extrapolated to July 1990 there would be at least one million Australians, comprising around 930,000 people aged 15 years or over and about 75,000 people aged less than 15 years, with some degree of hearing loss. Approximately 200,000 people would currently own a hearing aid, and almost one in four would never use their aid or use it less than once per week.

5.2 Services to hearing-impaired people

There are a number of indicators of the effectiveness of the services currently provided to hearing-impaired people. The Commission examined whether service providers could supply suitable hearing aids which incorporate up-to-date technology and have cosmetic appeal, whether they could offer the type of assessment, fitting and post-fitting services demanded, the skill and training of providers, easy access to testing/fitting facilities, and the time which clients must wait before receiving their hearing aid. In view of the large number of people with some degree of hearing loss, perceptions of service quality will vary enormously.

The two quite separate arrangements for the supply of hearing aids and services influence patterns of supply, with the range of services available to hearing-impaired people depending on whether or not they are eligible for free services under the Hearing Services Program. Many participants praised the quality of the diagnostic, assessment and associated services available under the Hearing Services Program through NAL, particularly those for children. Some claimed that the existence of a central agency encouraged early diagnosis of hearing impairment, with doctors referring patients with suspected hearing loss to NAL. It was said that, because of NAL, hearing loss tends to be diagnosed sooner in Australia than in most other countries.

DCS&H acknowledged that there are periodical fluctuations in waiting times, and that there was a delay in the development of the Calaid FM and a failure to place sufficient emphasis on the appearance of hearing aids issued by NAL. It argued these should be weighed against NAL’s highly regarded assessment and fitting
services, extensive network of hearing centres, world standard research facility, and hearing aids which are specified, designed, manufactured and fitted to provide maximum assistance to the hearing of NAL’s clients. Moreover, the Department said NAL’s level of repair services is not matched by the vast majority of private hearing aid dispensers.\(^6\) It claimed that such a combination of activities is unique.

The Hearing Aid Council of Australia (HACA) stated that NAL normally offered most of its clients a lesser level of service than provided by the private sector.\(^7\) It said this is recognised by consumers, with up to 50 per cent of fittings by some distributors being for people eligible for a free hearing aid under the Hearing Services Program. The Council estimated that ‘at least 10 000 private sector hearing aids are fitted each year to people entitled to NAL’s free services’.\(^8\) Hearing Aid Specialists provided supporting evidence. The company said that a total of 405 adults eligible for free hearing aids visited two of its regional offices, one in Victoria and one in New South Wales, over a 12-month period. Of the 202 eligible people in Victoria, 118 did not have a hearing aid, while the remaining 84 had an aid from NAL. A total of 74 people, including 36 of those who already had an aid from NAL, chose to be fitted by Hearing Aid Specialists. Private fitting was chosen for a variety of reasons, including recommendation from friends, preference for the private sector hearing aid, and the shorter waiting period.\(^9\) From the 203 NAL-eligible people in New South Wales, 97 chose private fitting. Telex Hearing Aids and Australian Hearing Laboratories reported that sales to pensioners represented 31.5 per cent of their total sales in 1989-90. Moreover, the companies said that three quarters of the pensioners they fitted already had an instrument supplied by NAL, but had sought private treatment because of the slow service and inadequate products available from NAL.\(^10\)

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\(^6\) DCS&H, Submission No. 263, pp. 7-8.
\(^7\) HACA, Submission No. 253, pp. 5 and 8.
\(^8\) HACA, Submission No. 885, Part 2, p. 5.
Several participants claimed that evidence of extensive private fitting of adults eligible for free hearing aids through NAL was due to widespread ignorance of their entitlement to a free aid. For example, Better Hearing Australia (National Council) asserted that there are many eligible clients fitted privately ‘who are not aware of their entitlements’, and moreover, that ‘salespersons push their own products in preference to NAL aids and services’.\(^\text{11}\) DCS&H confirmed that it had only recently begun work to improve community awareness of the Hearing Services Program, but stated ‘that all recipients of Pensioner or Health Benefits Cards have information regarding the provision of hearing aids through NAL printed on their card’, and that the card is re-issued each year.\(^\text{12}\) The appointment cards of many private distributors require that clients signify that they have been made aware of their entitlements under the Hearing Services Program.

The Commission received a great deal of conflicting evidence concerning the quality of private sector hearing aid technology and after fitting services. The private distributors provided many testimonials to the technical and cosmetic attributes of their aids and assistive listening devices and to the professionalism of their assessment, fitting and counselling services. However, many other participants questioned the quality of service offered by the private sector, claiming that, while hearing aids supplied by the private sector might have cosmetic appeal, their technical performance was deficient. Some, such as the Queensland Branch of the Audiological Society of Australia, commented that NAL’s ‘hearing aid assessments are probably the most up-to-date technology-wise’,\(^\text{13}\) and that this was not always the case with the services offered by private distributors.

**Services for children**

Almost all of the several hundred submissions on NAL and the Hearing Services Program were strongly supportive of NAL’s continued involvement with children. Participants referred to the difficulties of diagnosis, fitting and rehabilitation of the very young, and praised the work of NAL in meeting these needs fully. DCS&H

\(^{\text{11}}\) Better Hearing Australia (National Council), Submission No. 741, p. 6.

\(^{\text{12}}\) DCS&H, Submission No. 842, p. 10.

\(^{\text{13}}\) Audiological Society of Australia, Queensland Branch, Transcript, Brisbane, 13 December 1989, p. 469.
emphasised that a high level of competence, skill and knowledge is required in the management of paediatric cases. Many participants noted that NAL employs only audiologists, including those who specialise in paediatric work. They argued that equivalent service is not available outside NAL because most assessment and fitting of hearing aids in the private sector is undertaken by audiometrists who have little experience of working with children.

NAL tests all children referred to it. Urgent cases, usually children with certain ‘risk factors’ apparent after initial screenings by doctors, health clinics, community nurses etc, are given highest priority and are usually seen within a week. The initial assessment procedure for children aged three years or less involves two audiologists, one of whom is a paediatric audiologist. Each child requires an average of 10 hours with audiologists when first diagnosed, then several hours per year thereafter. Each year, NAL fits hearing aids (often binaural) for the first time to about 1 000 children under 16 years, and also sees all of the 15 000 children in Australia who have hearing aids.

Many parents and teachers of hearing-impaired children praised the support which NAL provides to parents. For example, Furlong Park School and Preschool for Deaf Children said:

‘parents at an early intervention stage ... who are ... very confused, upset, not knowing where to go and also not absorbing advice given need a very constant place where they know money is not a factor behind ... service provision’.16

Few private distributors showed any interest in dealing with those under 21 years of age, preferring to concentrate on the older age groups with which they have considerable experience. The reluctance of the private sector is partly a reflection of the fact that its scope for involvement is limited by NAL’s monopoly on the under-21 age group. The HACA said ‘the private sector ... has not picked up and

14On average, four hours if hearing loss is less than 60 decibels; seven hours if greater (advice from NAL).
15Advice from NAL. The figure of 15 000 roughly accords with the 1979 ABS survey outcome extrapolated to 1990, and assuming that 20 per cent of children with hearing impairment wear a hearing aid.
run with children because the children have got a place to go and the parents can go there for nothing...'. 17 Nevertheless, some in the private sector do have patients under the age of 21, and others indicated they would fit children in the absence of NAL. For example, Mr K. Barrand said he would have no hesitation in fitting children if NAL did not exist, with the first step being to employ adequately trained staff. 18 Telex Hearing Aids and Australian Hearing Laboratories indicated they would employ an experienced audiologist for the examination and fitting of hearing aids to children and the after-care of children and adolescents if permitted access to NAL's clientele. 19

**Services for people ineligible for the Hearing Services Program**

The services received by patients who are not eligible for the Hearing Services Program depend upon how they seek help. In some cases this will be from a doctor. There are also audiologists and audiometrists in private practice, and they can be approached without referral from a doctor. Some, including the major audiometrists, advertise free hearing tests (on a no-obligation basis). Most private assessment and fitting is undertaken by audiometrists, although some companies employ audiologists to supervise and train audiometrists. 20

There was a great deal of debate during the inquiry as to whether audiometrists have the necessary skills or training to handle complex cases, with many participants contending that there were significant differences between the skills of audiologists and audiometrists. The Lions Hearing Centre of Western Australia, a private audiological clinic backed by the Lions Help to Hear Foundation, supplies hearing aids and audiological services. It argued:

‘There are no current clinical operations of NAL which could not adequately be carried out by the private sector. The research and development work performed by NAL Central should remain but should be streamlined to provide all audiologists with data and advice relevant to Australian patients. This it has not been doing adequately in the past.

17 HACA, Transcript, Sydney, 28 May 1990, p. 1 473.
18 ibid., p. 1 475.
19 Telex Hearing Aids and Australian Hearing Laboratories, op. cit., p. 8.
20 Mr G. Simmons, Angus and Coote, Transcript, Perth, 15 May 1990, p. 898.
Although the clinical activities of NAL could all be sustained by the private sector, they could not be entertained by the hearing aid dealers and their audiometrists.  

Several participants argued, however, that NAL provides a better service than that currently available to those not eligible for the Hearing Services Program because it was not a profit-making body. Some criticised the selling practices of private distributors, claiming that in some cases unprofessional means had been used to sell hearing aids. Examples cited included testing in unsuitable locations (such as private homes or country shows) or without properly soundproofed testing booths, failure to provide instruction in the use of the hearing aid, and selling expensive hearing aids to pensioner clients without making them aware of their free entitlement. However, the major audiometrists represented in this inquiry defended the professionalism of their services, adding that they offer warranties on their hearing aids, and have well-established procedures for advising eligible clients of their entitlements. They provided considerable evidence of consumer satisfaction with the standard of their services.

**Waiting times**

There was a great deal of comment concerning waiting times. Many participants saw excessive waiting times as the primary shortcoming of the services offered by NAL. For example, Dr W. Tonisson, a former NAL audiologist now in private practice and generally supportive of NAL, stated:

‘The primary shortcoming of NAL services is the lengthy waiting time for an appointment. It is quite unfair to deprive someone with a hearing impairment of a potentially substantial improvement in the quality of life which would come with the fitting of hearing aids’.  

In a submission to the inquiry dated 26 March 1990, DCS&H stated that it anticipated waiting times at NAL hearing centres would be close to or below 12 weeks by July 1990. At the public hearings, however, the HACA questioned whether NAL could achieve such a target. The HACA based its

21 Lions Hearing Centre of Western Australia, Submission No. 315, p. 4.
22 Dr W. Tonisson, Submission No. 747, p. 2.
scepticism on evidence contained in the September 1989 and March 1990 editions of the bi-monthly NAL publication, *The NAL Auricle*. This showed that although actual waiting times at some NAL hearing centres had fallen slightly, overall they were trending upwards. For example, the actual waiting time at Hurstville (New South Wales) had risen from 20 weeks in August 1989 to 37 weeks in January 1990, while for the same period actual waiting time at Orange had risen from nine to 22 weeks. Starkey Laboratories Australia also challenged the DCS&H statement. It said it had contacted a number of NAL hearing centres and was advised that the waiting time at some centres as of 29 May 1990 was as high as nine months.24

DCS&H stated that, at 30 December 1989, waiting times for adults at NAL hearing centres ranged from three weeks at Darwin and Alice Springs to 63 weeks at Hurstville, while at 30 May 1990 waiting times ranged from three weeks at Alice Springs to 33 weeks at Hurstville. The Department advised the Commission that, at 30 June 1990, waiting times exceeded the 12-week target in seven of NAL’s 44 hearing centres, with six centres having waiting times below nine weeks. However, as at 15 June 1990 the delays in the centres where waiting time exceeds 12 weeks range up to 25 weeks at Hobart and 26 weeks at Launceston - the only NAL centres in Tasmania - and 28 weeks at Hurstville.25

The Department said long waiting times are largely due to a lack of available trained staff. It advised the Commission that it has reduced waiting times through additional overtime and the appointment of more staff. It also stated that ‘long term strategies for maintaining reasonable waiting times include increasing the intake of audiology students, overseas recruitment and greater use of private sector staff’.26 It said that a recent overseas recruitment campaign has attracted a total of 40 suitable applicants.

24 Starkey Laboratories Australia, Submission No. 613, p. 1.
25 DCS&H, Submission No. 842, Attachment A.
26 DCS&H, op. cit., Attachment H.
Notwithstanding the delays at the various NAL hearing centres, DCS&H stressed that children and any adults who require prompt treatment are given a priority appointment. It added:

‘While not suggesting that ... (adults who are obliged to wait) ... should have to wait an excessive time, the longer than desirable waiting times that have previously prevailed have not been as detrimental to the well-being of NAL clients as may be thought.’

The Commission’s public inquiry process has enabled some scrutiny of this issue, and appears to have encouraged further action to reduce waiting times. However, excessive waiting times remain a chronic problem for those seeking hearing services through NAL. The Commission is not convinced that even the reduced waiting times achieved by NAL are satisfactory given that the private sector can assess adults and fit hearing aids much more quickly. Moreover, there is no guarantee that the reduction in waiting times achieved by NAL will be maintained.

**Access to service providers**

Participants stressed the value of easy access to hearing service providers. Many emphasised the importance of the regional and remote area services offered under the Hearing Services Program. For example, the Commission received many submissions from the Bendigo area where a NAL hearing centre was established in 1985. Hearing Aid Specialists has a permanently staffed office in Bendigo, while another four or five companies offer a visiting service.

State Government Departments providing health and education services for Aborigines and Torres Strait Islanders were concerned about the effects of any changes to NAL on the hearing health of this group. Ms S. Weeks, an audiologist employed by the Health Department of Western Australia, and the Queensland Department of Health Aboriginal Health Programme referred to the high rate of middle ear infection among Aboriginal people. The latter’s Hearing Conservation

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27 ibid., p. 1.

28 See, for example, Families and Friends of Hearing Impaired Children’s Support Group, Submission No. 409, and Wimmera Hearing Society, Submission Nos. 352, 692, and 748.
Unit screens people to detect those requiring medical, audiological and educational management, with all audiological management provided by NAL. Despite recognition of the high incidence of middle ear infection, the Aboriginal Health Programme said:

‘Aboriginal children continue to suffer educationally significant hearing loss ... and chronic, untreated ear infections continue to place young Aboriginal people at high risk for permanent ear damage resulting in hearing loss through adulthood. ... there is a need for research into effective medical treatments, into audiological aspects and hearing aid development’.29

Extensive services to regional areas are also provided by the private sector. The HACA stated that the 70 private distributors of hearing aids and services maintain 128 permanently staffed offices.30 It provided details of the services available in New South Wales and Western Australia. There are 47 permanently staffed private sector hearing centres in those two States alone, more than NAL has in the whole of Australia. In addition, the private sector provides regular visiting services to country areas. For example, the HACA said the private sector visits 76 centres in New South Wales at least monthly, and visits additional centres on a less frequent basis.31 Mr G. Simmons, the Perth manager of Angus and Coote, said his company visits every major provincial town in Western Australia every eight weeks, whereas NAL visits only a few large country towns and requires its patients to travel to these or to Perth.32

Hearing Aid Specialists has 20 permanently staffed metropolitan and country offices. It stated that it also provides ‘services on a regular visiting basis ... to medical centres in virtually every town in Australia and in many suburban medical centres (except in the Northern Territory)’.33 The company claimed that the accessibility of its offices results in a high demand on its services by people who are eligible for free hearing aids from NAL under the Hearing Services Program. It provided documentation of many of these cases to the Commission, and said it often

29 Aboriginal Health Programme, Queensland Department of Health, Submission No. 519, p. 1.
30 HACA, Submission 975, p. 2.
31 HACA, Submission No. 828, p. 3.
32 Mr G. Simmons, op. cit., pp. 900-902.
33 Hearing Aid Specialists, Submission No. 649, p. 6.
provides such services free of charge. Moreover, it claimed that when it provides ‘a service to a NAL client purely in that client’s interest such attempts are not uncommonly met with deliberate lack of cooperation from NAL’.  

Parents and teachers of hearing-impaired children stated that there is a need for intensive liaison between paediatric audiologists and educators of hearing-impaired students. The Association of Teachers of the Deaf, Queensland Branch, said it valued very highly the visits made by NAL audiologists. Moreover, it saw the need for a centralised coordinated system, arguing that this more readily enables:

‘maintenance of records, continual follow-up with children after initial diagnosis, consistency of testing procedures, a data base of information, support to parents of hearing-impaired children, early diagnosis, coordination with regard to the issuing of hearing aids, maintenance and repair of hearing aids and the unique needs of specific groups [to be] met: be it profoundly deaf children and Aboriginal children’.

The Association for Preschool Education of Deaf Children (Queensland Branch) also said that central organisation is necessary for the management of the use of FM hearing aids for classroom instruction. It said ‘the setting of frequencies on different FM models, from different suppliers, with children changing from one classroom to another, would be an organisational nightmare without the services of NAL’.

Participants also stressed the importance of on-going contact with the treating audiologist and the management difficulties which would result if several service suppliers are involved. For example, Ms K. Venard, a teacher of hearing-impaired children, emphasised the cost of providing hearing services to children. She stated:

‘Trouble shooting of FM aids in schools requires much time and maintenance. Speedy replacement of aids for infants is necessary, and hearing aids need to be monitored and upgraded ... about every six months to a year. With a child you may be using up batteries every two days, depending on the kind of aid and the kind of use the child has. ... when you

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34 ibid.
35 Association of Teachers of the Deaf, Queensland Branch, Transcript, Brisbane, 30 May 1990, p. 1 737.
36 ibid., p. 1 733.
37 Association for the Preschool Education of Deaf Children (Queensland Branch), Submission No. 482, p. 2.
deal with many agencies, it makes an almost impossible situation from the point of view of management.38

The Sydney Children’s Cochlear Implant Centre referred to the importance of DCS&H’s recent agreement to provide servicing through its hearing centres for children with cochlea implants.39 DCS&H has agreed to supply spare parts, speech processors, and to cover the cost of repairs to implants. The Department advised that the main cost involved will be the training of staff. The cost of the equipment necessary to service implantees Australia-wide is of the order of $55 000. NAL will ensure there is an audiologist and technicians trained in the servicing of cochlea implants at each of its hearing centres. There are currently about 225 implantees in Australia,40 with the number expected to rise by about 50 each year.

5.3 Technology and choice of hearing aid

Hearing aids dispensed by NAL are assembled locally using a case and mechanical parts made in Australia and electronic components such as microphones and receivers which must be imported from the producers which hold world-wide patents. NAL purchases most of its hearing aids by tender from producers/assemblers in Australia. Quadrant and Crystalaid currently supply under contract to NAL. The most recent tender, for the production of hearing aids from July 1990 to June 1992, has been won by Crystalaid.

Most in-the-ear aids supplied by the commercial sector are assembled in Australia from imported components. The small number of behind-the-ear aids sold by the commercial sector are generally imported. There will always be some local manufacturing activity associated with hearing aids because of the need for personalised fitting and production of a custom ear mould.

Research

NAL undertakes audiological and noise research. The former concentrates on matters related to the development of more comfortable, more easily operated and better functioning hearing aids, and assessment techniques. Noise research looks at the effects of noise on hearing, community reaction to environmental noise, noise measurement and prediction techniques, and the psychological and physiological effects of noise.

According to a report by the Australian Science and Technology Council (ASTEC), acoustic research is generally not a research strength in Australia.\(^{41}\) It does not appear to be one of NAL’s strengths, despite the facilities at Chatswood. ASTEC considered that the decision to develop the advanced acoustic facility at Chatswood to have been taken without adequate assessment of the objectives of NAL. Dr F. Rickards, a reader in the education of the hearing impaired at the University of Melbourne who is acting as a technical adviser to NAL, agreed NAL did not have a good reputation in pure acoustic research but considered NAL was among the world leaders in audiology research.\(^{42}\)

Several overseas universities and hospitals provided submissions attesting to the high quality of NAL’s research. For example, Dr D. N. Brooks of the University Hospital of South Manchester stated that ‘NAL has a very fine reputation for research in audiology’, that ‘NAL has also been responsible for some of the most authoritative and internationally recognised and acclaimed work on earmould acoustics and earmould production’, and that NAL’s ‘work on noise induced hearing loss has again an international reputation’.\(^{43}\)

The HACA said that the manufacturers whose hearing aids are imported into Australia are responsible for nearly all of the world’s successful research and development in hearing aid technology. It added that the results of this research are

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\(^{41}\) ASTEC, *The Advanced Facility at the National Acoustic Laboratories*, a Report to the Department of Community Services and Health on the Most Effective Use of the Facility, 1987.

\(^{42}\) Dr F. Rickards, Transcript, Melbourne, 24 May 1990, p. 1014.

\(^{43}\) Dr D. N. Brooks, University Hospital of South Manchester, Submission No. 802, pp. 2-3.
available for the use of Australian private sector distributors when selecting hearing aids.\textsuperscript{44} Further, the Council claimed that ‘for more than 20 years virtually every successful innovation in hearing aid technology used in Australia has been made by the private hearing aid distributors’.\textsuperscript{45} It provided several examples of where the introduction of new technology by NAL has lagged behind the private sector, sometimes by many years. These included post-auricular aids (introduced by the private sector in 1957 and by NAL in 1972), binaural fittings (private sector 1961, NAL 1971), compression circuitry (private sector 1967, NAL 1985), FM systems (private sector 1974, NAL 1985),\textsuperscript{46} all in-the-ear/canal aids, programmable aids, and remote control aids.\textsuperscript{47}

Hearing Aid Specialists considered that NAL’s research and development program has actually delayed innovation. It claimed that NAL ‘has consistently attempted to reinvent the wheel through attempts to duplicate or improve on existing private sector technology’, with particular examples being the FM hearing aid and the Calaid E. It said the acoustic performance and reliability of the Calaid E, which NAL fitted for several years, were found wanting and that it was ‘probably the ugliest hearing aid ever produced’.\textsuperscript{48} Hearing Aid Specialists said that these examples indicated that ‘NAL do not learn by their mistakes and do not take prompt action to rectify them’.\textsuperscript{49}

DCS&H said that there is no foundation to the HACA statement that successful innovations are made by the private sector rather than NAL, although it did not directly refute the HACA evidence. It stressed that NAL has been recognised as a world leader in research in hearing aid fitting for at least 15 years and that this research is consistently translated into benefits for NAL clients and other hearing-impaired people. The Department stated, for example, that ‘the issue of binaural fitting ... was contentious for many years until resolved by research in the early 1970s [and that] NAL was the largest contributor to that research’. It emphasised that ‘NAL’s research supports its service aim of fitting hearing aids according to

\textsuperscript{44} HACA, Submission No. 124, p. 6.
\textsuperscript{45} ibid.
\textsuperscript{46} The NAL/CSIRO Calaid FM has been issued to children since 1985. To date NAL has issued 1 876 commercial devices because of delays in developing its own FM hearing aid and because, initially, production was insufficient to meet demand. See DCS&H, Submission No. 842, p. 3.
\textsuperscript{47} HACA, op. cit., pp. 6-7.
\textsuperscript{48} Hearing Aid Specialists, Transcript, Sydney, 28 May 1990, p. 1 495.
\textsuperscript{49} ibid.
scientifically verifiable practices which are effective in terms of maximising benefits to the clients and yet are highly cost effective’.50

However, DCS&H admitted that NAL has had a problem in its product development cycle. It said NAL ‘is very good at identifying the needs and it is very good at assessing products at the other end, but it is that middle linkage, taking a specification and translating it into a design [is] where it is weakest, and that is the strength of the private sector’.51

**Choice of hearing aid**

Because NAL has guaranteed access to almost 65 per cent of the market for hearing aids in Australia, NAL audiologists have considerable influence over the types of hearing aids available to a large part of the total market. To date, almost all of NAL’s fittings have been behind-the-ear aids, although NAL imports about 10 000 aids a year for use where its standard aids are not appropriate.

Since beneficiaries of the Hearing Services Program must obtain their free aid from NAL, there is little pressure on NAL to provide hearing aids of a kind demanded by clients. Indeed, the type of aid supplied by NAL is different to that supplied by the private sector where consumers pay for the product of their choice. Most of the 31 000 aids produced/assembled by the six major laboratories for the commercial distributors are in-the-ear aids, which are individually moulded to fit the client’s ear.

The major private distributors import aids supplied by international manufacturers, usually making up a range of aids by selecting models from several manufacturers. They said this means they are able to offer a wider range of aids than NAL, and that the aids themselves are both technically superior and cosmetically more pleasing than those provided by NAL.52 There was a range of views on this question. Better Hearing Australia (National Council), for example, stated that it ‘is convinced that

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50 DCS&H, Submission No. 609, Attachment D.
52 Starkey Laboratories Australia submitted information which indicated that in-the-ear aids were in some cases better for patients suffering severe hearing loss.
NAL hearing aids are reliable, good quality products’. It acknowledged some dissatisfaction on the part of some NAL clients but said there is at least as much dissatisfaction with the products sold by private retail outlets. The Queensland Branch of the Audiological Society of Australia considered that ‘the NAL product tests out to be at least equivalent to, and is often superior to, commercial aids in terms of sound quality and special features’.

Hearing Aid Specialists stated that ‘the product they [NAL] fit has improved only by virtue of the fact that they have turned to fitting or copying commercially produced units’.

Dr W. Tonisson said he has established a laboratory to manufacture customised in-the-ear aids. He commented that, although the NAL range of aids caters in technical terms for probably the majority of hearing impairments, NAL does not have at present the range of styles. He outlined one instance in which he had fitted an intra-canal aid to a 16 year old girl who, because of self-consciousness, was not using a NAL hearing aid. DCS&H admitted that to some extent ‘NAL has not been as sensitive as it should have been in terms of the cosmetic side of some of the supply of aids’. The Department said it believed the proposed collaborative arrangement ‘is going to be a good way of not only detecting what consumers want but reacting in shorter times to what they want’.

The Lions Hearing Centre of Western Australia questioned whether the modular hearing aids which NAL would obtain through its proposed collaborative arrangement would best meet clients’ needs. Its audiologist stated:

‘I do not think that for some years there has been any excuse really, beyond the policies of NAL Central, to not fit in-the-ear hearing aids. In my own practice, more than three quarters of our hearing aids would be in-the-ear devices. I note also that the contract which NAL is seeking to make with suppliers was to produce modular in-the-ear hearing aids. ... Although

53 Better Hearing Australia (National Council), Submission No. 741, p. 5.
54 Audiological Society of Australia, Queensland Branch, Transcript, Brisbane, 30 May 1990, pp. 1 720-21.
55 Hearing Aid Specialists, Submission No. 649, p. 2.
56 Dr W. Tonisson, Transcript, Brisbane, 30 May 1990, p. 1 808.
57 DCS&H, op. cit., p. 1 360.
58 ibid.
that is an effective way to do it, it is not the way that usually produces the most cosmetic appeal and is not the most adaptable to people’s needs’.59

Despite recognising its past failure to devote sufficient attention to the cosmetic aspects of hearing aid design, DCS&H still does not appear to place much weight on the appearance of the aids it intends to supply in the future. It explained its specification of semi-modular hearing aids in the proposed collaborative arrangement as follows:

‘The lower repair rates for semi-modular aids coupled with the ease of replacing the hearing aid module for repairs are the main reasons why NAL has adopted the semi-modular approach over custom in-the-ear aids’.60

Delays in introducing technology

As discussed above, the HACA supplied many examples of how NAL has lagged behind the private sector in introducing new technology. In particular, the Council and the private hearing aid distributors were critical of NAL’s failure to provide commercial FM aids in sufficient quantity to children while it was developing its own FM unit. The FM hearing aid facilitates integration of a deaf child into a normal classroom by enabling the teacher’s voice to be received directly into the child’s hearing aid without interference from environmental noise. FM hearing aids have been available through the commercial sector since 1974, while the NAL/CSIRO FM system was finally developed in 1985, some five years behind schedule.61

Several private suppliers of hearing aids and services, and hearing aid componentry, also criticised the speed with which NAL adopted new technology. Quadrant Instruments, which currently supplies to NAL, stated:

‘During our twenty year association with the NAL, it is painfully obvious that they are not the ideal partners to enter a joint venture with. We have on many occasions approached the NAL in an attempt to persuade them to update the Calaid series of hearing aids. Our requests have always fallen on deaf ears.

59 Lions Hearing Centre of Western Australia, Transcript, Perth, 15 May 1990, p. 882.
60 DCS&H, Submission No. 842, p. 4.
61 ibid., pp. 2-3.
As an example, a new type of microphone was released two years ago. The private sector manufacturers in Australia immediately incorporated this new and vastly superior design into their hearing aids. The new unit was exactly the same dimension as the older version, had far superior performance, and was virtually the same price. Two years later, the NAL is still using the old model! Stories of this type are not the exception with the NAL, they are the rule.62

Micromax was also critical of NAL’s past technology purchases, stating that NAL placed undue emphasis on price, rather than technical performance. It said ‘any product which offers additional advantages such as better quality at only a very nominally increased price ... is not considered’.63 It cited several examples, including a 1987 contract for receivers which its overseas supplier Knowles Electronics had lost because its product was one cent more expensive.64 Micromax also confirmed the Quantum statement concerning the microphone currently used by NAL. It said microphones which perform better than the one currently used by NAL have been available for the past few years but not purchased by the Government in production quantities.

In relation to the claims that NAL does not use the latest componentry, DCS&H stated that ‘the important point is that the NAL behind-the-ear hearing aids are already providing performance well within the specified high standard of performance requirements and there is very little advantage to the client in changing the design; ... additional costs associated with the change over ... can not be justified’.65

DCS&H strongly defended NAL’s product range. It said behind-the-ear aids suited many of its clients, and that all of NAL’s current behind-the-ear models, which were released between 1985 and 1988, ‘include Output Compression Limiting, instead of the older Peak Clipping which is still used in the majority of commercial aids’.66 The Department said there have been improvements in the performance of in-the-

62 Quadrant Instruments, Submission No. 911, p. 2.
63 Micromax, Submission No. 452, p. 3.
64 The price of a receiver is $6-7. This is about 10 per cent of the cost of componentry used in the manufacture of a hearing aid.
65 DCS&H, Submission No. 977, p. 2.
66 DCS&H, Submission No. 842, p. 2.
ear aids in recent years and that it has issued 10 000 commercial in-the-ear aids in the last 18 months. It stated that its new in-the-ear aid, the Calaid J, 'has Output Compression Limiting, a feature found in very few commercial in-the-ear aids [and] more adjustments than many of the commercial aids'.67 Starkey Laboratories Australia challenged this claim, pointing out that for the past eight years it has offered hearing aids with Input Compression and Output Compression.68

DCS&H also defended hearing aids issued by NAL in the past. It said that the Calaid E criticised by Hearing Aid Specialists, was ‘innovative technology and a very successful aid at the time it was used ...’.69 The Department stated that the Calaid E was discontinued in 1974, and observed that NAL’s critics are going back many years for examples of alleged poor NAL technology.

However, DCS&H acknowledged there have been delays, admitting NAL should have taken more decisive action to provide commercial FM aids during the period it was developing its own FM system.70 DCS&H said, though, that there is now no commercial equivalent to the NAL/CSIRO FM hearing aid. Again, Starkey Laboratories Australia challenged this statement, saying that the NAL FM system is ‘ineffective and inappropriate’. It claimed that the NAL product is inferior to the commercial Phonic Ear Aid for two reasons: first, the low frequency wave length of the NAL unit reduces discrimination, and second, the low range of the NAL unit - around nine metres compared to the 150 metres of the Phonic Ear Aid - reduces the extent of hearing possible.71 The Victorian School for Deaf Children uses a range of FM systems, including the Calaid FM, commercial units supplied by NAL, and the Phonic Ear Aid, which was donated to the school.

DCS&H and others, however, saw some advantages in applying caution before committing resources to new technology. They referred to instances where the private sector had introduced new products with elaborate claims of technological breakthroughs only to have the product fail to meet expectations. Dr W. Tonisson

67 ibid.
68 Starkey Laboratories Australia, Submission No. 866, p. 1.
69 DCS&H, op. cit. p. 3.
70 NAL has issued 1 876 commercial FM hearing aids to date.
71 Starkey Laboratories Australia, Submission No. 759, p. 2.
gave as examples the Zeta noise block circuit, which was of assistance to only a small proportion of his clients, and the spectacle cros system.\textsuperscript{72} The Audiological Society of Australia (Queensland Branch) stated that ‘anything new is not necessarily an advance and must be thoroughly investigated and researched before being thrust onto an unsuspecting public’.\textsuperscript{73} The Australian Association of Audiologists in Private Practice claimed that, while the private sector can make decisions quickly and early, there are some advantages from the public’s point of view to a more cautious approach. The Association said that ‘if the public wishes to have reassurances it may be that it has to accept time lags’.\textsuperscript{74}

The Commission is not convinced by this argument. Many of the private sector suppliers provided information attesting to the technical quality of the hearing aids they distributed. Indeed, Starkey Laboratories Australia said that internationally there are very many hearing aids which have specifications equivalent or very similar to the instruments fitted by NAL. The Commission also viewed a considerable number of testimonials from adults fitted privately as to the performance of the aids they had received. Most importantly, however, even if it is accepted that NAL has overcome some of its previous problems in supplying up-to-date technology, there is no certainty that past problems will not re-emerge if current arrangements remain unchanged.

5.4 Prices

DCS&H and several private suppliers of hearing aids and related services provided details of current costings. Some of the major private suppliers also submitted detailed evidence as to the reduction in prices which would flow from the access to the current NAL clientele proposed by the Commission in its draft report. However, assessment of the evidence is made difficult by disagreements between DCS&H and the private suppliers as to which hearing aids and associated warranty provisions are considered to be equivalent products for the purposes of price comparisons.

\textsuperscript{72} Dr W. Tonisson, Transcript, op. cit., p. 1 802.
\textsuperscript{73} Audiological Society of Australia, Queensland Branch, op. cit., p. 1 721.
\textsuperscript{74} Australian Association of Audiologists in Private Practice, Transcript, Melbourne, 24 May 1990, p. 1 001.
Information provided by participants in submissions and at public hearings was subsequently challenged by other participants. NAL and many private suppliers or manufacturers of hearing aids examined the claims made by each other during the course of this inquiry, putting further views to the Commission. These primarily concerned whether or not particular hearing aids and related service packages were equivalent for the purposes of comparing prices. Nevertheless the key point is that there is a wide range of hearing aids which might be prescribed, and professionals may not always agree which model or manufacturer provides the most suitable product for particular hearing problems.

DCS&H provided information which indicated that the prices paid by NAL for hearing aids were lower than prices in a number of other developed countries. Although it is true that the NAL market is the third largest individual market in the world, the reasons for the lower prices paid by NAL for hearing aids are not clear. First, Australia is an importer of hearing aids and the United States and Switzerland, two countries where prices are allegedly higher, are major sources of imports to Australia. Second, NAL’s product largely consists of imported components assembled locally, and evidence submitted by other suppliers suggests that local assembly adds to costs. Third, most private distributors are linked to major overseas suppliers which have access to economies of scale in production in their overseas plants. Finally, there are no tariffs or sales taxes on hearing aids.

DCS&H engaged KPMG Peat Marwick Management Consultants to determine the cost of service delivery through NAL’s network of permanent and visiting hearing centres. Their analysis shows that, for NAL to achieve 100 per cent cost recovery, the price of a monaural aid fitted to an adult client would be $476, and $742 for a binaural fitting. The prices are derived from costs which relate only to the

75 DCS&H said the base price for an in-the-ear aid produced for NAL as at October 1989 was $195. This price includes an allocation for Departmental overheads but no component for profit. It reported that the prices of a similar aid in the United States, West Germany, Switzerland, Sweden and Japan were $226, $350, $350+, $425 and $381+ respectively. For a behind-the-ear aid, the NAL base price was $205 including overheads compared to $242 in the United States, $267 in West Germany, $350 in Switzerland, $359 in Sweden, and $381 in Japan. See DCS&H, Submission No. 609, p. 7.

Hearing Services Program,77 and DCS&H considers that they can be directly compared to private sector prices. The Commission notes, however, that no account was taken of ‘any costs directly related to the design, development and supply of specific NAL hearing aids’ and that ‘no provision has been allowed for profit’ in the analysis by KPMG Peat Marwick Management Consultants.78

DCS&H said NAL’s price reflects a number of factors. First, NAL achieves significant economies of scale in purchasing hearing aids and ancillary items and in the utilisation of its staff and facilities by virtue of its large market. According to the Department, the prices (below $150) offered to NAL under the proposed collaborative arrangement for future supplies of hearing aids clearly illustrate the advantage of bulk procurement from a limited number of suppliers.79 Second, NAL’s status as a government body means suppliers provide componentry and items such as batteries to NAL at prices which are lower than those available to the private sector.80 Third, NAL’s fitting costs are lower because its protocol involves less client contact time, an average for an adult client of 2.25 hours compared with between four and seven hours in the private sector.81 Finally, DCS&H stated that while NAL’s hearing aids are of a high standard, NAL’s expenditure on product development and advertising is low because it does not ‘sell into the commercial market where people are buying on the basis of cosmetics and a marketing program’.82

In contrast, the HACA quoted a price of $750 for fitting an in-the-ear monaural aid and providing ancillary services.83 This includes a component for the aid itself, on average $230 and $275 for an in-the-ear and a behind-the-ear instrument

77  The cost of NAL research activities, such as noise research and hearing conservation not concerned with the Hearing Services Program are excluded.
78  DCS&H, Submission No. 842, Attachment F.
79  ibid., p. 4.
81  DCS&H, Submission No. 609, p. 7.
83  This price includes the hearing aid plus initial testing, assessment, fitting and after fitting services, batteries, 12 month warranty, overheads and profit. (HACA, Submission No. 253, p. 5.)
respectively. The HACA stated that its average fitting price of $750 ‘includes a minimum of 3.5 hours fitting services and the other activities required to ensure a satisfactory fitting for the estimated five years life of the aid’, a level of service which is not provided by NAL at the price reported by DCS&H.

There was dispute about the prices quoted by the HACA. Mr L. Upfold, a former NAL audiologist now in private practice, stated that he attempts to use only hearing aids which have similar performance to those provided by NAL, and that he pays on average about $342 for an in-the-ear aid and about $370 for a behind-the-ear aid (including the ear mould). However, these prices are an average over the period January to May 1990 for a total of about 100 hearing aids purchased from three different sources. Economies from bulk purchasing would not accrue in such circumstances.

DCS&H claimed that the average price of a private sector monaural fitting at May 1990 was $825. It based this claim on evidence from a survey which it had commissioned from audiologists working with the Victorian HEAR Service and which it supplied to the Commission in confidence.

The Commission places little weight on the survey finding on prices. Many private sector hearing aid suppliers and manufacturers did not respond to the survey questionnaire. Starkey Laboratories Australia did not do so because it considered the HEAR Service, which fits hearing aids at cost to people not eligible for assistance under the Hearing Services Program, has ‘a certain conflict of interest’ with the private suppliers. The HACA said the major private sector distributors, including Hearing Aid Specialists, Angus and Coote, Laubman and Pank, Trevor Henderson, and Paxton Barrand, together responsible for providing more than two-thirds of private sector hearing aids, did not participate in the survey. It said the failure to participate was the result of concern with the independence of those undertaking the survey and because much of the information sought had already been provided to the Industry Commission.

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84 Mr L. Upfold, Submission No. 463, p. 2.
85 Starkey Laboratories Australia, Transcript, Brisbane, 30 May 1990, p. 1 847.
86 HACA, Submission No. 885, p. 2.
and Australian Hearing Laboratories also disputed the survey findings. They said:

‘Having spoken to many retailers and manufacturers, we have discovered that very few gave
details of prices because of the great variation in costs and products available. When
pressed, we gave a general figure over the telephone stressing that it was a ballpark figure
which depended very heavily on options and individual characteristics. We also stressed that
a difference of between $50-100 either side of our figure was entirely possible’. 87

Several private suppliers said they could realise significant bulk purchasing
discounts and economies in their assessment and dispensing operations if permitted
access to NAL’s 65 per cent segment of the market. Starkey Laboratories Australia
provided information suggesting that it could pass price reductions of about 15 per
cent to any of its customers who purchase 10 000 units over a 12-month period. 88
Angus and Coote stated that ‘quality hearing aids can be purchased at prices
comparable to the NAL tender ... for quantities ranging from 2 000 upwards,
depending on the type of aid and the supplier’. 89

The HACA claimed that the average cost of a private sector fitting could be reduced
by at least 25 per cent (to around $560), through both a reduction in the price of
hearing aids and greater utilisation of staff. 90 Angus and Coote claimed that if it
fitted an additional 14 000 hearing aids it could reduce the price of fitting a hearing
aid and providing related services (based on the NAL fitting time of 2.25 hours) by
32 per cent. 91 The company claimed that the price reduction would be 25 per cent
based on its own 3.5 hour fitting model. 92 It argued that it could achieve such price
reductions if it obtained 25 per cent of NAL’s eligible pensioner market. Hearing
Aid Specialists said it could reasonably expect to obtain 15 per cent of the NAL
adult pensioner market in the absence of NAL. This would more than double its

87 Telex Hearing Aids and Australian Hearing Laboratories, op. cit., p. 15.
88 Starkey Laboratories Australia, Submission No. 865, p. 1.
89 Angus and Coote, Submission No. 967, p. 2.
90 HACA, Submission No. 253, p. 8.
91 Angus and Coote, op. cit.
92 ibid.
current fitting rate, allowing it to supply and fit NAL-equivalent hearing aids to adults for almost the same price as NAL - a reduction on its current price of some 40 per cent.\textsuperscript{93} Telex Hearing Aids and Australian Hearing Laboratories said that access to the NAL clientele would allow them to reduce the price of a fitting by 23.5 per cent, even allowing for the employment of an audiologist and the acquisition of paediatric audiometers.\textsuperscript{94}

NAL disputed these claims. It argued that fragmentation in supply within the private sector market meant that, in an environment in which NAL does not exist, Australian suppliers would individually have insufficient sales increases to warrant more than a minimal discount - ‘nowhere near the 25 per cent suggested by the HACA’.\textsuperscript{95} It also contended that the specifications of many of the hearing aids supplied by the private sector do not match those of its own instruments. While this was strongly disputed by the private distributors, the Commission notes that price comparisons need not be for strictly comparable products. What should be considered is the potential for reduction in the prices of hearing aids which are currently prescribed to meet the variety of consumer needs.

### 5.5 The Commission’s assessment and recommendations

Although free hearing services and hearing aids under the Hearing Services Program have all been provided by NAL, they could be provided, like other health services, through a range of public, non-profit and private sector service providers, including clinics, doctors, audiologists and audiometrists.

NAL’s monopoly position has adversely affected the efficiency and performance of hearing services in many areas. First, it has restricted choice and led to long waiting times for clients of the Hearing Services Program. Second, those people eligible for assistance under that program who are not prepared to wait or who find the NAL aid unsuitable, have had to obtain private sector services at a cost to themselves of hundreds of dollars. Third, it has increased prices for those not eligible for the Hearing Services Program (by reducing bulk purchasing and other scale economies

\textsuperscript{93} Hearing Aid Specialists, Submission No. 887, p. 1.
\textsuperscript{94} Telex Hearing Aids and Australian Hearing Laboratories, op. cit., p. 17.
\textsuperscript{95} DCS&H, Submission No. 609. p. 7.
available to suppliers other than NAL), and has inhibited the growth of a wider range of hearing-related services for the entire Australian community.

The Commission considers that the objectives of the Hearing Services Program can be achieved with greater efficiency and equity. Its recommendations are designed to preserve the benefits available through that program but to introduce greater choice for those hearing-impaired people who are dissatisfied with the options they currently face. The key to achieving these aims is to introduce greater competition.

The Commission does not consider the continued separation of the market between NAL and other suppliers to be in the best interests of hearing-impaired people, whether they are eligible for assistance under the Hearing Services Program or not.

The Commission accepts that some groups now treated by NAL, in particular children, require specialised treatment. It also notes that many participants praised the quality of services provided to children by NAL audiologists, and expressed scepticism about the private sector’s ability to provide a suitable service to this group, especially in the short term.

Nevertheless it is clear that current arrangements have led to problems for both clients of the Hearing Services Program and for hearing-impaired people generally. These include long waiting times for appointments at NAL clinics, NAL’s lagging behind the private sector in making new technology available to its clients, and the relatively low emphasis given by NAL to cosmetic aspects of hearing aids. The Commission received convincing evidence that many people eligible for assistance under the Hearing Services Program seek private fittings.

Some of these problems have been acknowledged and to some extent addressed by DCS&H. While these improvements may reflect NAL’s increased commercial orientation, they may also have been a reaction to the increased scrutiny of the Hearing Services Program through the Commission’s public inquiry process. In any event, and notwithstanding promises made during this inquiry, any judgment about the best way to deliver assistance under the Hearing Services Program must take account of NAL’s track record. As long as the fundamental sources of NAL’s poor record - its monopoly and lack of exposure to market disciplines - remain unaltered, there is no firm basis to expect sustained improvement.
Is there a need for a separate institution to provide hearing aids and services to people who are eligible for government assistance? The issue is brought into sharper focus when there are long waiting lists for NAL, arguments about product choice, evidence of the potential for the private sector to provide improved services at lower cost were the size of its market increased, and indications that many aids remain unused because of concerns about unsightliness or perceptions about a stigma attached to their use.

In such circumstances, greater choice of services and hearing aid suppliers would permit hearing-impaired people to choose the services they judge to be most advantageous to themselves. Patients could make their own judgments about whether they prefer assessment by audiologists or audiometrists, the significance of waiting times at clinics, the importance of cosmetic features of hearing aids, etc. Many NAL-eligible people, particularly those in the over-65 age group, have already made the choice by obtaining services outside the NAL network, even though this means they have to pay the full cost of the alternative themselves.

The Commission recommends that the current segmentation of the market for hearing aids and services between NAL and other service providers in the public, non-profit and private sectors be ended, and that competition be introduced across the whole market. It recommends that NAL cease to have a monopoly over supply to the Hearing Services Program clientele, and that other suppliers of hearing aids and services - whether public, non-profit or private - be permitted to compete to supply Commonwealth-funded clients of the Hearing Services Program. Equally, NAL should be permitted to compete with other suppliers for non-Hearing Services Program clients, provided it is first converted to a government business enterprise operating on a fully commercial basis. It should be separated from the Department of Community Services and Health, and funded by payments for the services it provides to Hearing Services Program clients and from revenue generated from sales to those not eligible for Commonwealth assistance.

Under these arrangements, NAL might lose clients to the private sector (as it already does even though those clients currently have to pay for private sector services) because of waiting times for services or a preference for different products. Private sector prices should then be lower because of the greater throughput and increased competition. However, if NAL’s claims concerning
technology and prices of its products are correct, it should have little difficulty in maintaining its market share and might compete some clients away from the private sector on a fee-for-service basis.

Removal of NAL’s monopoly and permitting competition for both Hearing Services Program and other clients would provide the incentive for the development of a wider range of public, non-profit and private services. This might include practices offering audiological and audiometrical services, specialist audiologists, dispensers offering more complex services, etc. While it may take some time for paediatric services to develop outside of NAL and the major children’s hospitals, this option provides the scope for alternative suppliers to develop expertise in this field.

Those people who have misgivings about the quality of service they would receive from non-NAL suppliers would retain access to NAL audiologists. Equally, those who judge that their particular needs could be satisfactorily met by a private audiologist or audiometrist would be able to choose that option. In this way, people can make their own judgments about the value they attach to such questions as waiting times for services, which service provider they trust to provide quality services, or preference for hearing aids or other equipment with cosmetic or technical appeal.

The removal of NAL’s monopoly on the supply of hearing aids to those eligible under the Hearing Services Program may reduce its ability to obtain discounts in purchasing hearing aids. However, private sector suppliers of both hearing aids and hearing services would be able to compete for a market which would be two to three times the size of the current private market (in terms of hearing aids supplied annually, over 100 000 instead of the current 38 000). There is sufficient evidence that private sector dispensers would be able to achieve significant economies, both in their own purchasing and in their assessment and dispensing activities.

The Commission’s recommendations would not preclude NAL from entering into agreements permitting private firms to use its research findings, fitting protocols or to market hearing aids under the NAL name for appropriate royalties. Moreover, it would not preclude those firms from selling to non-NAL clients. However, any such decisions would then be commercially based, rather than dependent upon sole
access to NAL’s current client base. It would be a matter for NAL and any partner to decide whether manufacturing under such an arrangement should take place in Australia or elsewhere.

If NAL can operate successfully under these arrangements, the Government could consider selling it to the private sector at some time in the future. If not, it may have to be wound up once the private sector has built up a sufficient range of skills to handle the needs of all hearing-impaired people, including children.

*Community service obligations*

Those activities carried out by NAL which might be termed ‘community service obligations’ - that is, activities which are related to the social welfare objectives of governments and which would not be undertaken if strictly commercial criteria applied - would need to be separately funded. These include visits to schools for hearing-impaired children, special services for Aboriginal people and, possibly, some clinics in very remote areas of Australia.

Tenders should be invited from all types of service providers, including NAL, to carry out these services. Service providers could be invited to tender for particular services in particular geographical areas for a fixed period. The extent of subsidy payable would be minimised by accepting the lowest-priced conforming bid.

*The Commission recommends that tenders be invited for the provision of non-commercial services provided under the Hearing Services Program, such as visits to schools for the hearing-impaired and special programs for Aboriginal people.*

*Implementing competition*

If NAL and other suppliers are to compete to supply hearing aids and services under the Hearing Services Program, a mechanism needs to be put in place to administer the scheme and to establish those services and fees against which payments can be made from the Commonwealth to the supplier concerned.

Suppliers under the Hearing Services Program would first need to be registered with the administering authority. Interested suppliers should be invited to seek
registration as service providers under the program. They should be requested to supply information on such matters as the qualifications and experience of their staff, current fitting protocols and areas of specialisation. Suppliers not registered under the Hearing Services Program would be able to continue to supply private clients as they do now.

This list of registered suppliers, complete with details of the services they offer, should be a public document which is made readily accessible to interested persons. It would provide a service guide to persons eligible for treatment under the Hearing Services Program, and would also be of value to other hearing-impaired people. One approach would be to disseminate such information through community health centres, hearing support groups and so on. This should go at least some way towards overcoming the problem of poor information which has been raised repeatedly during this inquiry. It is of particular concern that, under current arrangements, some who are eligible for free treatment under the Hearing Services Program are not even aware of that entitlement.

Registered suppliers would provide hearing aids and services free of charge to Hearing Services Program clients, and be refunded by the Commonwealth for services rendered. No charge would be made to the client unless additional services were requested. Any such additional costs would need to be made clear to the client at the outset.

A foremost consideration in the administration of the scheme would be to monitor the quality of service provided, and to minimise incentives for overservicing, such as prescription of unnecessarily expensive hearing aids or needless visits to the clinic. A schedule of fees would also need to be established against which payments could be made to suppliers. These matters are considered in turn.

*Ensuring quality services*

Over time, the market process will impose a discipline on service standards because clients will move towards providers with high reputations and away from those reputed to provide poor service.

However, as suppliers offering services to the public under the Hearing Services Program would be providing those services on behalf of the Commonwealth, and as
inappropriate service can cause considerable inconvenience and distress, if not injury, the Commonwealth would have a responsibility to ensure that incompetent or unethical service providers under that program were weeded out quickly.

An important component of such an approach would be a readily-accessible and well-publicised avenue for complaints. As with suspected cases of overservicing, these should be followed up thoroughly and promptly. Where service provision was found unsatisfactory, that supplier’s registration under the Hearing Services Program would be removed. With monitoring that was seen to be effective, there would be an incentive for suppliers to advertise that they were registered suppliers under the program, and this would have value in competing for both Hearing Services Program and other clients.

This approach is preferable to direct supervision of the suppliers concerned, or specification of what equipment they might or might not use. Such specification can inhibit new developments and innovation, and put a stamp of approval on one particular product or way of delivering services. It is better to leave such matters to the judgment of individual service providers (and the choices made by their clients) and to closely monitor any complaints which subsequently arise.

Purchasers of hearing aids and services can also use generally available consumer protection legislation in cases of disputation. However there was some criticism of these avenues during this inquiry. The procedures were said to be hard to understand, and the personnel administering them slow to follow up complaints. Some also noted that the people involved, generally the elderly, are more vulnerable and less likely to pursue complaints. This makes it even more important that any new mechanisms are readily accessible and can be demonstrated to be effective.

Some participants argued for licensing of hearing aid suppliers because of concerns about unqualified personnel dispensing hearing aids, or unethical practices not being discouraged. One reason why governments have not licensed suppliers of
hearing aids and services is that there have been few complaints from the public. Moreover, there is a large literature which urges caution when establishing licensing regimes, and when reviewing existing arrangements, because of the potential for anti-competitive behaviour. For example, studies in the United States of a number of occupational groupings, including optometrists, have shown that where licensing has been introduced the result has been higher prices with little or no difference in the quality of services provided.

The arguments for and against licensing of audiologists and audiometrists, and the appropriate role of each, are not fully examined in this report. The Commission's primary concern is the means by which the Commonwealth can be assured that the services it provides, whether by NAL or through the private sector, are delivered to the satisfaction of the client and in a cost effective manner.

There is scope for the professional bodies covering audiometrists and audiologists to engage in voluntary accreditation, and indeed this is now done to some extent. At the draft report hearings, the Hearing Aid Audiometrists Society of Australia, while arguing for formal accreditation by governments, said that its current voluntary code of ethics offers reassurance of quality service to clients. It said that its registration board, the existence of which is advertised, can be the focus of any complaints. Moreover, some members advertise as being members of the Society.

The Society said that its members offer warranties involving refunds where the product is unsatisfactory, and it has a procedure for receiving and investigating complaints about its members. It said this attests to the professionalism of its members, and provides a guarantee of ethical services. Clearly it is in the interests of the better practitioners to pursue such approaches, particularly in view of the increased demand for private sector services which should result from implementation of the recommendations of this report.

The Commission considers that all services under the Hearing Services Program, other than those which involve services to children, should be able to be supplied by a wide range of service providers in the public, non-profit and private sectors. Indeed, the recommendations of this report should encourage the development of a

96 Some participants said that this means little. For example, the Lions Hearing Centre of Western Australia said that ‘there may be a low formal complaint rate ... but there is a huge failure and rejection rate of hearing aids ...’. Submission No. 315, p. 5.
wider range of services and service specialisations, to the benefit of hearing-impaired people generally. Over time the current distinction between the skills of various provider groups may not persist. However, the Commission recommends that only medical practitioners and audiologists be eligible to provide hearing aids and services to children (currently defined as persons under 21 years) under the Hearing Services Program.

**Deterring overservicing**

A related issue is the need to ensure that unnecessary or excessive services are not prescribed. Because hearing aids and related services are provided free of charge to Hearing Services Program clients, the usual factor discouraging overservicing - the client’s concern that his or her money is well-spent - is absent. It is not clear how much overservicing occurs under current arrangements. It has been argued that NAL’s limited budget prevents overservicing and that the long waiting list for NAL services indicates it is low. However, long queues are characteristic of free service provision and cannot be seen to indicate absence of overservicing.

An effective mechanism for limiting incentives to overservicing is some form of patient contribution. This discourages recipients from seeking unnecessary services, and makes them more discriminating in the services they ‘purchase’. A patient contribution makes it harder for suppliers to prescribe services which clients perceive as unnecessary or excessive, and makes it more likely that they will seek out other suppliers in cases where this is suspected. One of the reasons for the large number of unused hearing aids reportedly in the community is that NAL patients pay nothing towards them. There is reduced incentive to attempt to obtain redress if the aid does not perform to expectations, and perhaps a greater willingness in the first place to accept an aid which may not be the most suitable.

The case for one group being completely subsidised and the other group completely unsubsidised needs to be raised in this context. One approach to this inequity could be a patient contribution - either a direct payment or by way of provision of these services via Medicare. This issue is discussed further in Chapter 9. However in this
inquiry the Commission has not explored the issue in detail and will not recommend any changes to the availability of free services under the Hearing Services Program.

There are well-developed techniques, such as those used by the Health Insurance Commission, to monitor service provision and to deter overservicing. These include comparative statistical analysis of claims experience to detect apparent cases of unnecessary provision of services. Direct follow-up with the service provider should take place where, for example, claims analysis suggests possible overservicing or where complaints have been made by clients. Public confidence in the scheme will be enhanced if it is seen as effective in removing unethical suppliers.

*Establishing a schedule for payment to private sector suppliers*

Another issue is to establish those services and fees against which payments would be made from the Commonwealth to suppliers, and the mechanisms for payment.

For the purposes of payments to suppliers, services could remain ‘bundled’, as is generally the case in the private sector, or ‘unbundled’ in a manner more akin to medical services. Under a bundled system, different fees would have to be set for different service types - for example, binaural fitting, monaural fitting, body aid, etc.

Most adults eligible for assistance under the Hearing Services Program would present similar hearing problems to adults fitted privately. It should be practicable to establish an average ‘bundle’ of hearing aid(s) and services which could form the basis of a ‘standard’ price for adults. There could be a range of such ‘standard’ prices, set to take account of the cost of a hearing aid (whether single, binaural, body aid, etc as required) plus an average cost of a bundle of related services. In practice, some patients would need more treatment than the average, others less, but the return to the supplier should average out over time.

Alternatively, if hearing aids and related services were to be unbundled, the current practice whereby a fixed number of services is built into the cost of the aid would be replaced by one where different services are separately costed and itemised. A more detailed schedule of fees would have to be developed. Suppliers would be
able to provide services and hearing aids from that list and charge the Commonwealth accordingly.

One effect of unbundling would be to encourage greater competition at each level of service provision - that is, providers who specialise in one or more of assessment, testing, fitting, follow-up, rehabilitation and so on. This provides greater scope for specialisation, and for the exercise of choice by the patient as to where to go for which service. For example, it would not be necessary for all aspects of rehabilitation or after-care services such as repairs to be provided at the same location at which the initial assessment and testing was undertaken. The greater specialisation possible under an unbundled approach might also accelerate advances in fitting protocol and other procedures.

It is not clear to the Commission whether incentives to overservicing would be greater if hearing aids and services were bundled or unbundled. The Health Insurance Commission should be able to provide useful advice on the design of a system which will reduce the incentives to overservicing and aid in its policing.

Either way, it is desirable that suppliers not be prevented from offering a range of services outside of the scheduled services, and charging for these as appropriate. Provided patients were fully informed, it would then be open to them to choose a more expensive package of services and make up the difference in price themselves.

*The Commission recommends that a schedule of fees be established for hearing aids and services provided to adults under the Hearing Services Program. The schedule should apply equally to NAL and other suppliers. Development of the schedule of fees should be guided by the current fitting protocols of a range of suppliers including NAL.*

Because hearing is an essential element of language development and other learning, it is crucial that children continue to have access to whatever hearing aids and services they require. As noted earlier, only medical practitioners and audiologists should be eligible to provide services to children under the Hearing Services Program. Moreover, bundling of services for the purposes of setting refundable fees would not be appropriate for children’s services. *The Commission*
recommends that payments to suppliers for services provided to children should be on the basis of full refunds for the cost of hearing aids and services provided.

5.6 Proposed future supply arrangements

On 21 December 1989, the Commonwealth Government announced that NAL’s Central Laboratory in Sydney would be placed on a commercial footing so that it operated on a user pays basis.\(^7\) As part of the announcement, the Commonwealth called for expressions of interest from a number of Australian and international companies interested in entering into a collaborative arrangement with NAL. The broad objectives of the arrangement are to:

- ensure cost effective hearing aid supply for an initial five year period;
- ensure long term cost effective supply of hearing aids to current NAL clientele;
- utilise the concentration of professional and technical expertise of NAL in helping hearing-impaired people to function effectively;
- retain and enhance hearing aid design, development and manufacturing expertise in Australia;
- maximise the Australian content of hearing aids manufactured in Australia as part of the collaborative arrangement with NAL;
- maximise the opportunities for export of hearing aids from Australia;
- take advantage of potential commercial opportunities for NAL’s products, services and reputation in Australia and overseas.\(^8\)

Collaboration in product design would initially cover the period July 1990 to June 1995, and the manufacture and supply of hearing aids would be for the period July 1992 to June 1997, with consideration given to a longer-term arrangement. Prices

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\(^8\) Department of Administrative Services, Invitation to Register Interest and Submit a Proposal to Enter into a Collaborative Arrangement with the National Acoustic Laboratories R120/11110J-1, January 1990, pp. 5-6.
for the five years would be adjusted for changes in the Consumer Price Index and the exchange rate. 99

The Commission’s concerns

The Commission expressed a number of concerns in its draft report about the proposed collaborative arrangement and the way it has been developed. In the draft report hearings, several participants commented on these concerns and on the likely effects of the proposed arrangement.

Setting up a local hearing aid industry

In effect, the proposal attempts to achieve simultaneously a number of social welfare and industry policy objectives. NAL invited expressions of interest on the basis that the future partner develop a domestic export-oriented hearing aid industry. Indeed, the Ministerial news release makes this clear:

‘NAL’s new approach was expected to lead to commercial arrangements which could significantly enhance Australia’s capacity to manufacture and export world class hearing aids.’ 100

Given that the history of the Australian hearing aid industry has been one of local assembly of mainly imported components or importation of complete hearing aids, it is likely that locally produced hearing aids will be more expensive. For example, the requirement for maximisation of Australian content could exclude lower cost foreign components, increasing the cost of hearing aids. 101 Moreover, DCS&H sought prices on the basis of local production only, and did not investigate alternative strategies such as selling the rights to use the NAL fitting protocol, research output or name.

DCS&H, however, claimed that the proposed arrangement will permit NAL to purchase locally-made hearing aids at about 40 per cent below the price of the same

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100 Ministers for Community Services and Health and Industry, Technology and Commerce, op. cit.
101 For example, DCS&H reported that four out of five recent component contracts were let overseas, with the overseas product in some cases half the cost of the Australian product. See DCS&H, Submission No. 152, p. 9.
product manufactured overseas. It said an Australian hearing aid industry is made viable by current Australian wage rates, access to NAL’s market, and access to NAL’s design, research and product testing expertise. The Department provided advice from Australian Hearing Aids that the tender price quoted in its expression of interest in the proposed arrangement would have been $60 higher for a fully imported, rather than locally made, hearing aid. Similarly, the Department stated that its advice from the Siemens Audiologische Technik GmbH and Phonak AG partnership was that the tender price would have been $50 higher for a fully imported product. 102

The Commission is not convinced by claims that it would be cheaper to produce hearing aids locally than source them from overseas. Access to NAL’s market and to its expertise would be available whether the hearing aid is locally made or imported. It is difficult to believe that the difference in Australian and European labour costs would account for a price difference of $50-60 in a product priced at less than $150. This is particularly the case given that the cost of freighting hearing aids would be low.

In any event, the Commission is concerned that the arrangement might lead to a domestic manufacturing industry largely dependent on long term access to a protected market. Indeed, several participants claimed there is currently spare capacity in the world hearing aid manufacturing industry. Quadrant Instruments said it had spoken to many companies in Europe and the United States and all had arrived at the same conclusion - that ‘the collaborative arrangement cannot be, will not be, of any benefit to anyone except the commercial company. The reason they will benefit is that they will be in a position to totally dominate the private sector market. There will be no exports of any significance’. 103

Many other manufacturers and distributors of hearing aids and components supported Quadrant Instruments’ view. Micromax believed ‘the prospects for exports are extremely limited’. 104 It said ‘the world market is currently saturated with many well known and established manufacturers who are all

102 DCS&H, Submission No. 977, p. 3.
103 Quadrant Instruments, Submission No. 911, p. 2.
104 Micromax, Submission No. 452. p. 5.
competing in a flat market’. The company saw the future as ‘an environment where the established manufacturers will all be fighting aggressively for market share in order to lift lagging sales’.\footnote{Micromax, Submission No. 773, pp. 2-3.} It said it was hardly surprising that NAL had received export guarantees when the Government had set these as a condition for a successful bid.\footnote{Micromax, Submission No. 726, p. 3.} Oticon stated that it ‘believes there is already spare production capacity in the industry, and that the industry is already making use of ... export opportunities ... in South East Asia’.\footnote{Angus and Coote, op. cit., p. 3.} The HACA said ‘the Department’s proposed manufacturing scheme will establish a local industry requiring and receiving high de facto protection through its absolute dependence on the Department as its customer’.\footnote{HACA, Submission No. 781, p. 2.} Moreover, the Council claimed that once an industry based on NAL is established it will be very difficult to close down, with the result that ‘NAL, with all its chronic problems will be carried on indefinitely’.\footnote{ibid.}

Australian Hearing Aids disputed these views.\footnote{Australian Hearing Aids is a joint venture between Crystalaid of Brisbane and Ascom Audiosys of Switzerland. It is one of the groups which has submitted an expression of interest in the proposed NAL collaborative arrangement.} It stated that, if it is selected as the NAL collaborative partner, it would manufacture hearing aids for the protected market of NAL clients and to meet an export target of 40 000 units, and would also compete for a share of the private domestic market. It considered that resulting economies of scale would bring hearing aid prices down for all Australians.\footnote{Australian Hearing Aids, Submission No. 322, p. 6.}

Dr F. Rickards argued that the collaborative agreement would provide the hearing aids manufactured in Australia with an advantage in export markets, especially given that ‘NAL has come up with a set of specifications which go beyond what most hearing aid manufacturers are producing’.\footnote{Dr F. Rickards, Transcript, Melbourne, 24 May 1990, p. 1 018.}

DCS&H also denied that export prospects are limited. It considered that all the evidence points to the viability of an Australian hearing aid industry, particularly with access to ‘all the services which NAL can provide’. It stated:

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\footnote{105 Micromax, Submission No. 773, pp. 2-3.}
\footnote{106 Micromax, Submission No. 726, p. 3.}
\footnote{107 Angus and Coote, op. cit., p. 3.}
\footnote{108 HACA, Submission No. 781, p. 2.}
\footnote{109 ibid.}
\footnote{110 Australian Hearing Aids is a joint venture between Crystalaid of Brisbane and Ascom Audiosys of Switzerland. It is one of the groups which has submitted an expression of interest in the proposed NAL collaborative arrangement.}
\footnote{111 Australian Hearing Aids, Submission No. 322, p. 6.}
\footnote{112 Dr F. Rickards, Transcript, Melbourne, 24 May 1990, p. 1 018.}
‘In addition to the detailed information on overseas markets provided by the five companies (submitting expressions of interest), we also commissioned our own market survey which supported the information provided by the companies, viz. that there is a world sales market potential of 3 to 4 million hearing aids per annum, with Asian countries growing at between 7 to 10 times the rate of growth of the more established markets in North America.

Another reason why manufacturing in Australia is viable is the competitiveness of the Australian wage rate and the shortage of skilled staff overseas. In addition, ... many European hearing aid factories are operating at peak capacity and face continuing growth markets in Eastern Bloc countries. To cover the growth markets in Europe and the Asian and Pacific regions Australia is seen as the preferred location for the expansion of manufacturing. It is clear that the services which NAL can provide to support an Australian export-oriented hearing aid industry is a major factor in the decision of companies to come to Australia’.113

Finally, the Department noted that ‘the cost of the establishment of an Australian hearing aid industry, via the collaborative arrangement, will be borne totally by the successful NAL partner’.114 It argued that ‘there does not seem to be good reason why anyone other than importers and/or assemblers of hearing aids should be concerned about the viability of an Australian and overseas partnership, particularly when the overseas company is providing the capital and technology transfer’.115

As the success of the joint venture is predicated on sole access to the current NAL market, there will be pressure on DCS&H to renew its contract with the collaborating partner or for the Commonwealth to provide alternative forms of assistance. The result may be to create an industry which is not viable in the longer term without ongoing government assistance.

Effect on the competitiveness of the local industry

The manufacturer winning the NAL contract would have exclusive access to

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113 DCS&H, Submission No. 842, pp. 7-8.
114 ibid., p. 8.
115 ibid., p. 7
almost 65 per cent of the Australian market until 1997 and could be placed in an advantageous position to dominate the private market as well. DCS&H said the arrangement ‘will lead to the supply of a cost equivalent aid for current NAL clients, and also the provision of a cheaper alternative to that portion of the market not covered by NAL’s client base’. Indeed, DCS&H stated that ‘if the arrangement goes ahead and we have an Australian-based hearing aid industry, ... there would be more competition in the private market-place and ... non-NAL clients could well benefit’. It said that ‘our partner manufacturer could well capture a larger share of the Australian market. It really is a question of market forces’.

*Tied to a single supplier for five years*

The proposed arrangement would cover a five year period. Although NAL would have access to its own audiological research resources and those of the collaborating firm, a consequence of such a time frame may be the isolation of NAL clients from technological developments achieved by other firms.

Starkey Laboratories Australia said ‘the technology changes that are taking place in the world today are from a variety of companies ... ; [its] concern with the collaborative agreement is ... that Australia gets itself tied into one set of technology for up to five or seven years ... and that would deprive ... the hard of hearing in Australia of technology that is available’. Micromax was also concerned that the proposed arrangement might restrict NAL’s access to technological advances where these were achieved by companies other than the collaborative partner.

However, NAL said it ‘would expect that the collaborative partner would have ... most of any new technology that comes about’ and that the contractual arrangement would specify ‘flexibility throughout the period of supply’. It said that in practice

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116 DCS&H, Submission No. 152, Attachment B.
118 Starkey Laboratories Australia, Transcript, Sydney, 28 May 1990, p. 1 490.
the collaborative partner would have access to almost all new developments and that NAL could issue a direction to its partner to incorporate these. In addition, NAL would still continue its program of purchasing special aids where clients have special needs.

In view of the nature of the collaborative arrangement, there must be some doubt that technological developments achieved by firms other than the NAL partner will in practice be available to Hearing Services Program clients. It is unlikely that technological advances made by companies other than the collaborative partner could always be so readily incorporated, particularly where such developments are patented. NAL’s history of delays in introducing new technology, and the reasons for this, were discussed earlier in this chapter. In the Commission’s view the recommendations in this report will make it much more likely that technological advances become available more quickly to hearing-impaired people.

The price of hearing aids to be supplied to NAL

Under the proposed arrangement, the prices of hearing aids supplied to NAL would be set by the tender procedure, with adjustments only for movements in the Consumer Price Index and the exchange rate.\textsuperscript{121} While much of the information relating to the arrangement is confidential, DCS&H advised that it had received firm prices from five companies which ‘are below overseas prices for the same products’. The Department said the major reasons for this are the five year contractual period, NAL being the third largest single annual purchaser in the world, and the association with NAL for design, development and testing.\textsuperscript{122} The Department considered the quoted prices to be ‘excellent’.

The Commission notes, however, that prices were sought on the basis of establishing a manufacturing plant in Australia and that at least one major company, Starkey Laboratories Australia, was not invited to submit an expression of interest. Under such circumstances, there can be no certainty that the prices obtained by NAL are as low as they might have been under a fully competitive tender

\textsuperscript{121} DCS&H, Submission No. 842, p. 7.
\textsuperscript{122} ibid.
Moreover, in an environment where the world price of hearing aids appears to be falling, the collaborative arrangement will tie NAL to a price which can only be adjusted by formula.

The tendering procedure

A further concern of the Commission is the tendering procedure followed by DCS&H. As noted above, the exclusion of Starkey Laboratories Australia means that there is no guarantee that the price obtained by NAL is as low as it might otherwise have been.

Moreover, strong objections to the time frame allowed for lodgement of an expression of interest were raised by the HACA. It stated that interested companies initially had only about two weeks between the receipt of product specifications and the requirement to lodge a written expression of interest, with a further three weeks for the preparation of a final proposal. It said this was particularly difficult for those companies with an overseas partner which had to be involved in the preparation of the expression of interest. Although there was a subsequent extension of about six weeks in the time allowed for companies to submit a final expression of interest, the HACA said this was accompanied by more information on the scope and cost of the proposed arrangement which further complicated the task of the prospective tenderers. DCS&H commented that the expression of interest ‘is not a normal tender process’, and that companies were able to expand on their proposals during the assessment process throughout April and May 1990.

Recommendation

The Commission concludes that, under the current arrangements for the provision of hearing aids and services to Commonwealth clients, the proposed collaborative arrangement would not be in the community’s best interests. The Commission recommends that the proposed collaborative arrangement be set aside.

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123 HACA, Submission No. 249, Appendix 2, p. 16.
124 DCS&H, Submission No. 263, p. 10.
The Commission would have less concern if its recommendations for increasing competition in the supply of hearing aids and the establishment of NAL as a fully commercial government business enterprise are taken up. In such circumstances, which include the end of NAL’s monopoly under the Hearing Services Program, NAL’s negotiation of some form of supply arrangement may be consistent with its operation as a commercial enterprise. However, the decision as to whether to assemble the hearing aids locally or import them fully made up should be based on commercial criteria only.
6 ARTIFICIAL LIMBS

6.1 Introduction

The Commonwealth Government has been involved in the manufacture of artificial limbs through the Repatriation Artificial Limb and Appliance Centres (RALACs) since 1918. RALACs are located in each of the State capital cities, with sub-centres in Canberra, Newcastle, Albury, Townsville and Darwin. In some States, the RALACs are the only manufacturers of artificial limbs. The Central Development Unit (CDU) was established in 1962 to conduct research and development into limb componentry and train RALAC staff.

The Commonwealth originally provided limbs and associated rehabilitation services for veterans with war-related disabilities.1 Since 1973, it has provided ‘standard’ limbs free of charge to most amputees through the Free Limbs Scheme (FLS).2

The regulations underpinning the FLS have been a significant influence on the structure of artificial limb production in Australia. They require that commercial firms manufacturing limbs under the FLS be licensed and that components used in the production of limbs be accredited. Amputees can obtain their free limb from a RALAC or from a commercial manufacturer. There are currently eight commercial manufacturers licensed to produce for the FLS. Three are located in New South Wales, two in Queensland, and one each in Victoria, South Australia and Western Australia.

As a result of the Government’s decision to provide limbs free of charge, the normal market mechanisms for determining price are absent. The Commonwealth reimburses the commercial manufacturers for the cost of limbs produced for FLS

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1 Veterans and other entitled beneficiaries are provided with all medical entitlements under the Veterans Entitlement Act 1986.

2 ‘Standard’ limbs comprise basic mechanical components. Amputees may choose more technologically advanced componentry. However, where the use of such components increases the cost above that of a standard limb, amputees must meet the additional cost themselves. Amputees entitled to compensation are not eligible for reimbursement under the FLS.
patients on the basis of a formula, while the RALACs are funded directly by the Department of Veterans’ Affairs (DVA). Some hospitals also provide limbs as an extension of in-patient services, but are not licensed under the FLS and therefore do not receive reimbursement for the cost of the limbs they manufacture.

There are thus two issues to be addressed. The first is the effect of restrictions on competition in artificial limb manufacture on the cost, availability and quality of limbs. The second is the role of government in the production and distribution of limbs. While the Commission does not intend that the assistance currently available under the FLS be reduced, consideration of these issues is important in judging whether the FLS is cost-effective and providing the greatest benefit to amputees.

Review of the Free Limbs Scheme

When the FLS was introduced in 1973 it was anticipated that the private sector would supplement production until RALAC facilities expanded sufficiently to meet the demand for artificial limbs. However, greater than expected demand for limbs meant that private manufacturers have continued to produce for the FLS. In 1981, the Commonwealth increased the number of private manufacturers licensed to provide limbs under the FLS. This was based on its assessment that the private sector offered a more cost effective service.\(^3\) As a result, a number of experienced staff left the RALACs and joined private companies.

The escalating costs of private manufacture during 1983 led DVA to review the pricing mechanism which determines remuneration to private producers, and to limit the number of commercial manufacturers under the FLS. Since 1984 there has been considerable disagreement between DVA and commercial manufacturers about the level of remuneration paid to commercial manufacturers. Commercial manufacturers claim that the RALACs are able to avoid the accountability imposed upon themselves since the RALACs are funded directly by DVA. For its part, DVA

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\(^3\) DVA, Submission No. 155, pp. 5-7.
noted that ‘... there is a recognised need to improve the services, quality of output and efficiency of both the RALACs and the CDU’.4

These various concerns led to a review of the administration and operations of the FLS, announced by the Minister for Veterans Affairs in April 1989.5 The draft report released by the Review Panel in April 1990 contains 96draft recommendations.6 Their thrust is highly regulatory, aiming to improve the operation of the FLS through close specification of procedures and creation of more supervisory bodies. The draft recommendations include the restructuring of the CDU (to become the National Unit for Prosthetics and Orthotics) and the creation of two new regulatory bodies (a part-time National Limb Board and a FLS Secretariat) to make policy, monitor performance, oversee research and development, disseminate information and administer the FLS.

The draft report also recommends the licensing of hospitals to produce limbs, and remuneration for the manufacture of interim limbs under the FLS. The Review Panel considers this would improve the quality of treatment received by FLS clients, and encourage the use of latest techniques of manufacture. Decentralisation of the RALACs is recommended as a means of improving both their overall manufacturing performance and ease of accessibility for amputees. The draft report also recommends that current payment levels to private manufacturers be increased. The final report is due to be sent to the Government in mid-August 1990.

6.2 Arrangements for the supply of limbs

Repatriation Artificial Limb and Appliance Centres

There has been considerable criticism of the manufacturing performance of the RALACs. The commercial sector argued that its productivity, as measured by the

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4 DVA, Submission to the Review of the Free Limbs Scheme, Part 1, p. 59.
5 Minister for Veterans’ Affairs, News Release 89/21, 12 April 1989.
rate of output per technician, is on average twice that of the RALACs. An audit of the RALAC in Melbourne noted that its average production time per limb was considerably greater than the average time taken by a private limb manufacturer. Prior to this audit, there was no external monitoring of the performance of the RALACs. As a result of the audit, DVA decided that it would require the RALACs to achieve output levels similar to those achieved by the private sector. Sydney RALAC stated that there has since been ‘a substantial increase in productivity, something in the order of 50 per cent in the Sydney RALAC alone’.9

On the basis of the figures available to the Commission, it is clear that the commercial manufacturers outperform their public sector counterparts. Production and repair of limbs per technician in the larger RALACs is approximately half that of the private manufacturers, with the lowest productivity levels recorded at Melbourne, Sydney and Brisbane, the three largest RALACs. However, the rates of limb production per technician achieved at the Darwin and Newcastle sub-centres are similar to those achieved in the private sector. DVA said ‘the smaller centres, by and large, have long been more productive...’11

Commercial manufacturers contended that, when all costs of the RALACs are taken into account, the average cost of production of limbs for the RALACs is significantly higher than for themselves. Some commercial manufacturers alleged that the RALACs do not include all of their overheads in their costings. The report of KPMG Peat Marwick Management Consultants commissioned by the Review of the FLS found that the standard hourly cost (total production costs, excluding componentry, divided by total production standard hours) achieved by the

7 Southern Prosthetics and Orthotics, Submission No. 104, p. 3. See also Appendix B.
9 Sydney RALAC, Transcript, Canberra, 22 May 1990, p. 938.
10 KPMG Peat Marwick Management Consultants, Repatriation Artificial Limb and Appliance Centres Output and Cost Review, Report to the Review of the Free Limbs Scheme, 1990, p. 5. See also Appendix B.
11 DVA, Transcript, Canberra, 15 December 1989, p. 647.
12 See, for example, Southern Prosthetics and Orthotics, op. cit., p. 2.
RALACs in 1988-89 was $62.07, whereas the rate at which the private manufacturers were reimbursed under the FLS was $45.35.\(^{13}\)

Both the Sydney and Melbourne RALACs acknowledged their productivity is low. They argued that this is a result of the operational constraints imposed by their status as a government enterprise. They stated that the requirement to pay only award wages (without the possibility of other financial incentives) means that it is difficult to obtain skilled staff and that existing employees transfer to the private sector where over-award wages are paid. They added that their limited budgets mean that overtime is generally not performed, while public sector employment practices limit the capacity to ‘hire and fire’. They also maintained that their obligation to provide clinics in country areas reduces productivity.\(^{14}\) DVA noted that one quarter of RALAC work is generated from its 13 visiting clinics to country centres and this has a significant effect on production statistics and waiting times.\(^{15}\)

Available evidence suggests that productivity is not necessarily affected by obligations to provide services to country areas. In New South Wales for example, the RALAC subcentre at Newcastle obtains one-third of its work from servicing country clinics but its production of limbs per technician is relatively high. Similarly, Southern Prosthetics and Orthotics devotes considerable time to its visiting country clinics, but attains high productivity.

The RALACs argued that the older age of their clients means that limb fitting and associated patient counselling is more time consuming than it is for the commercial manufacturers.\(^{16}\) The Appliance and Limb Centre (International) disputed this, arguing that young active patients also present difficult cases.\(^{17}\)

The RALACs also pointed to the importance of their production of orthopaedic footwear. DVA stated that this ‘is not insignificant’, with 48 staff and an annual value of output of over $3m. In 1989-90, the RALACs made 5 647 pairs of

\(^{13}\) KPMG Peat Marwick Management Consultants, op. cit., p. 9.

\(^{14}\) Sydney RALAC, Submission No. 211, pp. 1-2, and Transcript, Canberra, 22 May 1990, pp. 937-44, Melbourne RALAC, Submission No. 788, pp. 2-3.

\(^{15}\) DVA, Submission No. 303, p. 2.

\(^{16}\) Sydney RALAC, Transcript, Canberra, 22 May 1990, p. 936. The average age of RALAC patients is 64 while that of private sector patients is 52.

\(^{17}\) Sydney RALAC, Transcript, Canberra, 22 May 1990, p. 936. The average age of RALAC patients is 64 while that of private sector patients is 52.
surgical footwear, with approximately 70 per cent of production occurring at the Sydney and Melbourne RALACs.\textsuperscript{18} In some States, the RALACs contract production of the ‘upper’ section of surgical footwear to private manufacturers.\textsuperscript{19}

There are approximately 17 commercial manufacturers of orthopaedic footwear in Australia. One of these, Gadean Footwear, criticised the lack of technological development among Australian manufacturers of orthopaedic/surgical footwear. It questioned whether ‘the footwear currently manufactured by RALACs really needs to be hand-made when a vast range is available through specialty shops’. Gadean Footwear considered that, if the RALACs continue in their current direction, they will require increasing government funding.\textsuperscript{20}

At the draft report hearings, a number of participants disagreed with the Commission’s proposed recommendation to terminate RALAC operations. DVA said that in some areas this would lead to the loss of the only available service and suggested as an alternative that the RALACs remain under public ownership but be required to operate more efficiently.\textsuperscript{21} The Sydney RALAC stressed the importance of the services it offered, including the production of footwear, and contended that the same services would not be provided by the private sector. The Limbless Soldiers Association (New South Wales) endorsed this view saying that ‘RALAC service to our members has always been of the highest standard. Patient care and requirements have always received the most detailed attention ...’\textsuperscript{22} The Returned Services League of Australia said that ‘... commercial limb manufacturers would not provide similar services’.\textsuperscript{23}

However, other participants believed that the high cost and low productivity of RALAC operations required a change to the current structure of amputee services. The Victorian Branch of the Australian Orthotic and Prosthetic Association (AOPA) considered that the private sector and hospitals were the most appropriate

\textsuperscript{18} DVA, Submission No. 199, p. 4, Submission No. 976, p. 1.
\textsuperscript{19} Some depth footwear is made at the Melbourne RALAC, although it is more common for the RALACs to adjust mass-produced standard footwear.
\textsuperscript{20} Gadean Footwear, Submission No. 969, p. 5.
\textsuperscript{21} DVA, Submission No. 303, p. 4.
\textsuperscript{22} Limbless Soldiers’ Association (New South Wales), Submission No. 436, p. 1.
\textsuperscript{23} Returned Services League of Australia, Submission No. 404, p. 5.
bodies to manufacture for the FLS. The Queensland Branch, however, argued that the best outcome would be achieved by maintaining the RALACs as a provider of artificial limbs but on the same operational basis as the private sector. Most thought that any changes should be undertaken gradually, to ensure that services to amputees were adequately maintained.

**Number of suppliers**

The number of companies permitted to manufacture definitive limbs under the FLS has been restricted since 1983, apparently as a measure to control the cost of the scheme. According to DVA, the restriction ‘... reflected the Minister’s concern that payments to the commercial limb manufacturers were increasing at a rate disproportionate to their increase in market share’. DVA advised the Commission that in the past 18 months, at least three private firms have applied to supply limbs under the FLS but have had consideration of their applications delayed pending the outcome of the Review of the FLS. Some hospitals currently producing interim and definitive limbs have also applied for permission to manufacture under the FLS.

The restriction of the number of manufacturers licensed under the FLS reduces the level of competition, both among private producers and between the private and public sectors. Indeed, New South Wales and Queensland are the only States where there is any competition among commercial manufacturers. This has implications for waiting times, limb quality, and patient care and convenience. For example in 1988-89, the average delivery time at the Sydney RALAC was 10.5 weeks, but considerably higher (14.7 weeks) at the Melbourne RALAC. The Sydney RALAC claimed that competition among suppliers in Sydney has led to the standard of limbs manufactured in New South Wales being better, for the most part, than in the rest of Australia.

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24 DVA, Submission No. 155, p. 9.
25 KPMG Peat Marwick Management Consultants, op. cit., 1990, Table 1.
26 Sydney RALAC, Transcript, Canberra, 22 May 1990, p. 947.
The hospitals seeking to be licensed under the FLS reported that co-location of the medical procedure which led to the need for a limb, the fitting and manufacturing process, and patient rehabilitation brings significant benefits to the amputee. They said manufacture of limbs at the hospital facilitates consultation between members of the team treating the amputee, primarily the physiotherapist, occupational therapist, nurse, prosthetist and medical practitioner and minimises travel by the patient for fitting and adjustment of limbs. One outcome of this is that the time required for the recovery and discharge of amputees from hospital is reduced.27

Benefits to patients were observed by the FLS Review Panel, which in its draft report stated that ‘the Ballarat model, with a prosthetist working as a member of the hospital-based amputee rehabilitation team ... offers optimum rehabilitation outcomes for amputees’.28

Some participants expressed concern about the licensing of hospitals to produce limbs for the FLS. The Sydney RALAC said that the output of limbs per technician in hospitals is in some cases lower than that of the RALACs. Commercial manufacturers argued that hospitals are not as cost effective as private manufacturers, and that costs such as rent and insurance are absorbed by hospital budgets rather than attributed to the hospital prosthetic clinic.29 Southern Prosthetics and Orthotics considered that licensing of hospitals may result in ‘... the RALAC situation as it is now, inefficient, expensive, non-accountable and serviced by inexperienced staff’.30 Ms R. Jarvis questioned whether the licensing of hospitals would reduce the level of rehabilitative services provided by hospitals.31

27 Previously, interim limbs were made out of plaster of Paris and were fitted by physiotherapists. The hospitals reported that this meant physiotherapists spent less time on patient rehabilitation. Often the interim limbs were not satisfactory, increasing the time spent by the patient in hospital. The hospitals also said that in Victoria delays in obtaining definitive limbs from the manufacturers, as well as problems with the quality of those limbs, meant it is cost effective to employ prosthetists to manufacture definitive limbs in the hospital. When this is done, average patient bedstay is considerably reduced. The Queen Elizabeth Geriatric Centre in Ballarat estimated it had reduced the average length of in-patient stay by at least 3 weeks.

Ms R. Jarvis, Submission No. 19, p. 2.


29 See, for example, Orthopaedic Techniques, Submission No. 750, p. 1.

30 Southern Prosthetics and Orthotics, Submission No. 363, p. 1.

31 Southern Prosthetics and Orthotics, Submission No. 363, p. 1.
However, hospitals contended they would not manufacture limbs unless they found it cost effective because they do not have an unlimited budget.  

Some participants also expressed concern that the removal of current licensing restrictions will result in too many suppliers under the FLS. The CDU stated it did not believe the field of prosthetics could sustain an increased number of manufacturers. It argued that there would be fragmentation of the current expertise and that transfer of knowledge would be adversely affected if the number of suppliers under the FLS were increased. Orthopaedic Techniques said they ‘... do not think that there are enough limbs made and repaired in Victoria to keep ... (an expanded industry)... viable for very long’.

DVA’s original rationale for limiting the number of manufacturers was in part to control the cost of the FLS. However, this has restricted competition by excluding hospitals and some commercial manufacturers. Lengthy waiting times in the provision of limbs, particularly in Victoria, suggest there is considerable scope for new manufacturers. Furthermore, it is unlikely that manufacturers would seek licensing under the FLS unless they consider it commercially viable to do so.

Administration of the FLS is the responsibility of DVA and is undertaken through the RALACs. This dual role as controller and competitor is the source of considerable friction. Brisbane Prosthetics and Orthotics said ‘...it is unusual for the regulatory body to also be a manufacturer and supplier of the services which it supervises and controls. Most problems in the industry seem to have arisen from the apparent conflict of interest’. DVA agreed that the role of RALACs as the controller of the FLS and a competitor is unsatisfactory and that responsibility will be separated if the RALACs remain under public ownership.

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32 See, for example, Queen Elizabeth Geriatric Centre, Transcript, Melbourne, 25 May 1990, p. 166.
35 Brisbane Prosthetics and Orthotics, Submission No. 270, p. 7.
36 DVA, Submission No. 303, p. 4.
Pricing

Under the FLS, private manufacturers are reimbursed for their direct material costs and for the production time at an hourly rate based on a formula which takes into account the cost of labour, administration, indirect material costs and overheads. Reimbursement for componentry is determined according to the FLS componentry pricing schedule, which lists a range of standard componentry and the associated reimbursement. The level of reimbursement is adjusted according to National Wage Case decisions and movements in the Consumer Price Index.

A very different arrangement applies to RALACs. They are not remunerated for limbs produced, but funded on the basis of an annual budget through DVA. The differing funding arrangements are reflected in their production costs. The KPMG Peat Marwick Report estimated that in 1988-89 the cost of RALAC limb production for both the FLS and the veterans, excluding the cost of componentry, was $5.5m. Commercial manufacturers were reimbursed $4.3m in total, that is including componentry costs, although they accounted for 57 per cent of all limbs produced for the FLS.

Commercial manufacturers said that the current pricing formula provides insufficient remuneration for the cost of producing a limb. They claim that the allowances for overheads and labour costs in particular are too low. They said the latter does not recognise the need to pay over-award wages to attract or retain skilled staff or allocate funds for training, and that past National Wage Case outcomes (3 per cent employer funded superannuation and a productivity-based wage increase) have not been incorporated. In its submission to the Review of the FLS, the Victorian Government stated that ‘the standard reimbursement provided by

37 The formula has two components, one for direct labour and another which accounts for other costs. Remuneration for each type of limb produced and repaired is paid according to a standard number of hours for production multiplied by the formula rate.

38 KPMG Peat Marwick Management Consultants, op. cit., p. 9, and DVA, Submission No. 199, pp. 2 & 4. See also Appendix B.
the FLS means that private providers must operate on much tighter profit margins than is the case with other providers.\textsuperscript{39}

The question of whether the pricing formula accurately reflects the cost involved in the production of limbs and the market price is a complex one. The KPMG Peat Marwick Report commissioned by the Review of the FLS said ‘we formed the clear impression from both RALAC management and the private manufacturers that the standard hours are, on balance, considered to be somewhat generous’.\textsuperscript{40} The commercial manufacturers disputed this assessment. Orthopaedic Techniques said manufacturers were only able to remain in the industry because ‘they work 60 plus hours a week and demand superior efficiency of their staff’.\textsuperscript{i41} The commercial manufacturers also said they could not afford to employ inexperienced staff to provide on the job training as a result of the low level of remuneration from the DVA pricing formula (see Section 6.5).

If the pricing formula artificially constrains the return received by the commercial manufacturers below that which they would have received in the marketplace, the consequence will be a reduction in the number of limb manufacturers. Following the Commonwealth encouragement of private sector limb producers in 1981, several new companies undertook limb production for the FLS. However, some companies then discontinued production, citing a variety of reasons. More recently, there do not appear to have been significant effects on the structure of the industry. While one company has recently rescinded its licence to manufacture under the FLS, three commercial manufacturers have applied for licences.

### 6.3 Accreditation of componentry

The CDU was established in 1962 by the then Repatriation Commission ‘with the specific intention of improving and standardising the levels of treatment offered in the RALACs by undertaking research and development of artificial limbs and

\textsuperscript{39} Victorian Government, Submission to the Review of the Free Limbs Scheme, p. 7.
\textsuperscript{40} KPMG Peat Marwick Management Consultants, op. cit., p. 6.
\textsuperscript{i41} Orthopaedic Techniques, Submission No. 277, p. 3.
componentry and training RALAC medical and production staff.\textsuperscript{42} There are currently six staff employed at the CDU, including a mechanical engineer and two prosthetists.

Since the introduction of the FLS, the CDU has expanded its responsibilities. It now performs a number of functions, notably, the evaluation of new componentry and dissemination of information regarding failed componentry, research into new methods and materials in the prosthetic/orthotic field, training of prescribing clinicians, and teaching of specialised manufacturing techniques. The CDU developed the FLS component list which lists components which can be used in standard limbs. Prescribers can choose componentry from the FLS list or non-standard componentry. Where the latter is chosen, the amputee must meet any cost above that of the standard limb.

Limiting the range of componentry available to FLS clients is intended to ensure that artificial limbs provided through the scheme:

- are of adequate function;
- are durable and serviceable; and
- have due regard to the costs borne by the Australian taxpayer.\textsuperscript{43}

**Accreditation and access to new developments in componentry**

Through the FLS component list, the CDU effectively has control over the application of products developed by the private sector to FLS patients. Several manufacturers argued that FLS clients' access to improvements in technology is unduly delayed by the slowness of the CDU accreditation process. The performance of the Prosthetics Advisory Committee, which assists the task of accreditation,\textsuperscript{44} was also criticised by participants. Indeed, DVA agreed that the achievements of that committee have been below initial expectations.\textsuperscript{45}

\textsuperscript{42} Review Panel, op. cit., p. 38.
\textsuperscript{43} DVA, Submission No. 155, p. 8.
\textsuperscript{44} The Prosthetics Advisory Committee also provides advice to the Department on the operations of the CDU, the RALACs and the FLS and suggests priorities for the CDU.
\textsuperscript{45} DVA, Submission to the Review of the Free Limbs Scheme, op. cit., p. 30.
Several participants questioned whether the apparent slowness in accreditation is the result of the CDU’s failure to recognise componentry approved overseas. AOPA (Queensland Branch) said that ‘.. we see the CDU as virtually reinventing the wheel when it comes to accrediting prosthetic componentry. They have already been through very stringent tests’.\textsuperscript{46} DVA commented that the CDU evaluation process had rejected some poor quality components.\textsuperscript{47} However, the Department has also noted that ‘funding pressures, lack of resources and perceptions within the industry ... have resulted in the conduct of slow, drawn out and, at times, inconclusive trials and evaluations of component types’.\textsuperscript{48}

The CDU stated that ‘if somebody comes to us with recognised accreditation from another country we will certainly investigate that accreditation and make sure that it has been performed’.\textsuperscript{49} It said it had ‘not actually tested structurally components which have been otherwise tested in other recognised institutions’.\textsuperscript{50} It maintained that extended periods of testing were warranted where questions such as durability were under consideration. The role of the CDU in recommending componentry to be included on the FLS standard list continues to be a source of contention between the CDU and those manufacturing limbs for the FLS.

\textbf{Limb quality}

Some participants expressed concern that the quality of limbs would be reduced without accreditation of componentry by the CDU. The CDU said that ‘deregulation of componentry ... can directly endanger patients’.\textsuperscript{51} AOPA (Queensland Branch) argued for the licensing of facilities and the registration of prosthetists as mechanisms for ensuring minimum standards.\textsuperscript{52} However, the

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\item \textsuperscript{46} AOPA (Queensland Branch), Transcript, Brisbane, 30 May 1990, p. 1713.
\item CDU, op. cit., p. 196.
\item \textsuperscript{47} DVA, Submission No. 241, p. 2.
\item \textsuperscript{48} DVA, Submission to the Review of the Free Limbs Scheme, op. cit., p. 50.
\item \textsuperscript{49} CDU, op. cit., p. 196.
\item \textsuperscript{50} ibid., p. 193CDU, Submission No. 391, p. 2.
\item \textsuperscript{51} CDU, Submission No. 391, p. 2.
\item \textsuperscript{52} AOPA (Queensland Branch), Submission No. 446, p. 4.
\end{itemize}
Queen Elizabeth Geriatric Centre which is not currently licensed under the FLS, said it provided a ‘high quality, cost efficient service’, in part because its ‘... prosthetists are able to prescribe and fit the limb the client needs, using whatever componentry is judged as the most appropriate’. It does not confine itself to the components accredited and methods developed by the CDU.

Current procedures provide some assurances on quality. Components used in the manufacture of limbs are the subject of warranty for 12 months. The Review of the FLS argued that warranty provisions would be sufficient to cover any defects. The Therapeutic Goods Act 1989, administered by the Department of Community Services and Health (DCS&H), established national standards on therapeutic goods. Prosthetic componentry falls under the coverage of this legislation, although DCS&H said ‘...external appliances will receive a lower priority than implantable, or life threatening or maintaining devices’. The AOPA (Queensland Branch) said it believes the Therapeutic Goods Act ‘... offers strong guarantees for the quality of the products’. DVA saw an ongoing role for the CDU as a national research and standards body, but said it should be transferred to the newly established Therapeutic Devices Branch of DCS&H. DVA said the Therapeutics Goods Act means that the CDU would have a continuing role in componentry evaluation because there is no other facility to conduct the work. The Commission does not believe a mechanism of the scale of the CDU is necessary to fulfil the requirements of the Therapeutic Goods Act.

Most limb componentry used in Australia is imported from Western Europe and North America. International standards, such as the Philadelphia and British Social Security Standards for limb componentry, provide a reference point for limb

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53 Queen Elizabeth Geriatric Centre, Transcript, Melbourne, 25 May 1990, p. 1 166.
54 For example, it fits ‘definterim’ limbs, where modular componentry is used to transform an interim limb into a definitive limb. The socket only is replaced as the stump adjusts over time and a cosmetic cover provided.
57 AOPA (Queensland Branch), Transcript, Brisbane, 30 May 1990, p. 1 713.
58 DVA, Submission to the Review of the Free Limbs Scheme, op. cit., p. 51.
59 DVA, Submission No. 303, p. 3.
manufacturers. Some commercial manufacturers advised the Commission that the componentry they import conforms to these international standards, although there is no requirement that this be the case. A review of the various international standards, to incorporate recent technological developments, is currently underway. The CDU said the international standards only tested the structural aspects of limb componentry. It stated that clinical testing is also necessary. The CDU explained that such testing is normally only undertaken by the overseas manufacturer and that, as a result, it is necessary for the CDU to evaluate the clinical performance of the component.60

The existence of competition among suppliers serves to encourage a high quality product and service. Since amputees do not actually pay for standard limbs provided under the FLS, product quality and service is the basis for competition. Orthopaedic Techniques, for example, said that ‘if quality is not provided by a private sector company, people do not come back’.61

**Access to non-standard componentry**

The availability of only standard limbs under the FLS was criticised by a number of participants. Workers compensation patients and veterans, who are not subject to prescriptive restrictions, were said to be routinely provided with higher-performance componentry considered more appropriate to their needs.62 According to the Austin Hospital:

> ‘patients compensable under Transport Accident Commission or Workcare have a state of the art lightweight limb and may be side by side in the same rehabilitation programme with a patient with exactly the same condition who, because they are covered by the FLS, have a heavy, old fashioned prosthesis entirely unsuited to their needs ... componentry should be the choice of the prescribing/manufacturing centre within a reasonable cost schedule’.63

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60 CDU, Transcript, Melbourne, 25 May 1990, pp. 1 549-50.
62 Royal Children’s Hospital Melbourne, Submission No. 224, p. 4.
63 Austin Hospital, Submission No. 716, p. 7.
DVA recognised the difficulties associated with the restriction of components under the FLS, and pointed out that until 1987 it had been Departmental policy to provide non-standard limbs free of charge on specific approval. However, the Department argued that this policy could lead to pressure for non-standard components to be provided free. It said, for example, that ‘tied’ relationships between some clinics and manufacturers could lead to unnecessary prescription of non-standard componentry, with patients pressured to accept such products and pay the difference.64 Despite this, the Department considered that there are special cases where standard componentry is not appropriate, and where clients should have access free of charge to non-standard componentry.65 Commercial manufacturers strongly denied that amputees are pressured to accept non-standard componentry. Orthopaedic Techniques said ‘... non-standard componentry was only provided after thorough medical investigation and justification’.66

**Life of limbs**

There is some evidence that the introduction of the FLS has reduced the average life of limbs. According to statistics provided by the Sydney RALAC, the average life of limbs prior to the FLS was five years. Since the inception of the FLS, average limb life has been reduced to approximately two years.67

DVA stated that there is evidence of too frequent or premature replacement of limbs, and that the present scheme does not encourage prescribers to be cost conscious. It considered that attempts to educate prescribers in their responsibilities under the FLS had not been well received. The Department thought the solution lay in cultivating a greater sense of cost consciousness in both patient and prescriber. It suggested, for example, that payment details be recorded in a form which enables

64 DVA, Submission to Review of the Free Limbs Scheme, op. cit., p. 29.
66 Orthopaedic Techniques, Submission No. 277, p. 4.
67 Sydney RALAC, Submission No. 751, p. 1.
external scrutiny (with the details provided the patient and the prescriber) and the introduction of some form of patient contribution.\textsuperscript{68}

The Canberra RALAC Subcentre noted that incorporation of technological developments often now required replacement of the whole limb. It said ‘patients now realise they can have their limb replaced or repaired ... at somebody else’s expense...’.\textsuperscript{69} Southern Prosthetics and Orthotics thought that the shorter life of limbs was understandable as prior to the FLS ‘amputees replaced their prostheses when they could afford to, not when it was needed and hence they put up with sub-standard fitting and function...’.\textsuperscript{70} If limbs are provided free of charge, there is no incentive for consumers to be cost conscious in their use.

\section*{6.4 Research and product development}

The CDU said it actively undertakes research and development in the prosthetic/orthotic field, and claimed that the results of its research are made available to commercial manufacturers. The CDU said it had prepared many research papers in recent years, including presentations to the International Society of Prosthetists and Orthotists (ISPO) and Australian Council for Rehabilitation Medicine. Since 1986, the CDU has provided two workshops and a number of seminars on product development for commercial manufacturers.

Some participants said that, while private firms adopted ideas from overseas, they had no proven record of independent research. The Queen Elizabeth Geriatric Centre suggested that the funding currently allocated to the CDU could ‘.. be applied to a research and development fund, managed in a similar way to the National Medical Research Council, and available to any organization which puts forward appropriate protocols’.\textsuperscript{71}

The commercial manufacturers argued, however, that product development in Australia is more likely to occur where ‘innovative ideas from overseas are

\textsuperscript{68} DVA, Submission to the Review of the Free Limbs Scheme, op. cit., pp. 24-7.
\textsuperscript{69} Canberra RALAC Subcentre, Transcript, Canberra, 22 May 1990, p. 962.
\textsuperscript{70} Southern Prosthetics and Orthotics, Submission No. 363, p. 1.
\textsuperscript{71} Queen Elizabeth Geriatric Centre, Submission No. 388, p. 5.
evaluated, experimented with and introduced where and when applicable by private manufacturers at their own expense’. Reis Orthopaedics stated that ‘it is the private manufacturer who is first on the market with new technology but this new technology is always held back because of bad administration of the CDU’. Commercial manufacturers, at their own expense, participate in overseas conferences which they claim are important sources of new information.

Moreover, the commercial manufacturers considered that the research undertaken by the CDU is not adequately disseminated to the private sector. They said that, although the CDU published 60 papers between 1984 and 1986, they had not seen the outcome of this research and that as a result any benefits had not been translated through to limb production. DVA itself said that it is not necessarily an advantage to restrict the research and development of limb componentry only to CDU facilities. The CDU defended its performance saying that, in June 1989, it had presented the titles of its publications to commercial manufacturers, and had offered to send copies to any interested manufacturer. It added that it is developing a system which will better disseminate the results of its work, although commercial manufacturers do not appear to be interested in its research.

The association between the Austin Hospital and the Lincoln School of Health Sciences (Lincoln School) offers a potential research facility. Austin Hospital is a major teaching hospital affiliated with the University of Melbourne for medical teaching and with other institutions including the Lincoln School for the teaching of allied health matters. It operates a large rehabilitation program at its Royal Talbot campus. It has reached preliminary agreement with the Lincoln School for the relocation of the Lincoln School to Royal Talbot, a move which the hospital claims will develop the concept of integrated manufacturing and facilitate undergraduate teaching.

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72 Southern Prosthetics and Orthotics, op. cit., p. 13.
73 Reis Orthopaedics, Submission No. 105, p. 4.
74 Appliance and Limb Centre (International), Submission No. 122.
75 DVA, Submission to the Review of the Free Limbs Scheme, op. cit., p. 50.
76 CDU, Transcript, Sydney, 29 May 1990, p. 1563.
77 Austin Hospital, op. cit., p. 2.
6.5 Skilled labour and training

Participants said that changes in technology and the development of new techniques in amputation and fitting means limb production now involves two types of skilled personnel, the prosthetist and the prosthetic technician. Many participants, including DVA, considered that the number of prosthetists currently available is insufficient for the industry’s needs and that the situation will inevitably deteriorate as current personnel retire.78

Tertiary training of prosthetists is provided by the Lincoln School. However, few graduates remain in prosthetics. According to the Lincoln School, in 1989 there were 99 prosthetist graduates of whom 23 were working in predominantly prosthetist positions.79 Prosthetic technicians are trained in the workplace, although some participants said a TAFE course would encourage consistency in training across States, as well as enhancing the skill of technicians. AOPA (Queensland Branch) said formalised training would assist mobility among the Commonwealth, private and State sectors.80

Commercial manufacturers said the DVA formula did not recognise the need to pay over-award wages to attract or retain skilled staff or provide on-the-job training. Orthopaedic Techniques, for example, said ‘the level of remuneration is inadequate to allow for the employment of skilled staff, training of future service providers or recognition of the profession as a highly accountable para-medical service provider’.81 It said the formula does not provide adequate reimbursement to cover the period while new Lincoln graduates ‘gain technical skills and therefore commercial cost-effectiveness’.82 AOPA (Queensland Branch) argued that ‘the level of remuneration ... for private sector participants in the FLS is nowhere adequate enough and does not reflect the highly skilled role of the prosthetist and the prosthetic technician in the provision of a prosthesis’.83

78 See, for example, DVA, Submission to the Review of the Free Limbs Scheme, op. cit., p. 12.
79 Lincoln School, Submission No. 386, p. 2.
80 AOPA (Queensland Branch), Transcript, Brisbane, 30 May 1990, p. 1 717.
81 Orthopaedic Techniques, Submission No. 197, p. 3.
82 Orthopaedic Techniques, Submission No. 277, p. 3.
83 AOPA (Queensland Branch), Submission No. 446, p. 6.
The career structure and salaries for prosthetists employed in the RALACs were examined in the 1988 National Wage Case. Although a new career structure for RALAC employees was approved in June 1989, the associated increase in prosthetists’ salaries is yet to be ratified by the Industrial Relations Commission. The salary increases, which were agreed on the basis of improved productivity, will not apply to the awards determining payment to commercial sector prosthetists. The commercial manufacturers argued that it was inequitable for the increases not to apply to the commercial sector and consequently for the labour component of the DVA formula not to be adjusted upwards. DVA said it is not anticipated the career structure changes (and salary increases) will flow to the private sector as the changes relate only to the award covering Commonwealth prosthetists.

Training by the Central Development Unit

Apart from its seminars on product development for commercial manufacturers, the CDU provides two training courses each year: one for RALAC prosthetic personnel and one for prescribing doctors. CDU staff also occasionally lecture at tertiary institutions.

The Queen Elizabeth Geriatric Centre questioned the role of the CDU in providing training. It said it does ‘... not see that it is the CDU or the government’s responsibility to be providing workshops and education programs for prosthetists’. It suggested that organisations such as AOPA, ISPO and the Lincoln School are more appropriately placed to undertake that responsibility.84

6.6 The Commission’s assessment and recommendations

Many of the problems which arise in this industry derive from the way in which the FLS operates.

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84 Queen Elizabeth Geriatric Centre, Transcript, Melbourne, 25 May 1990, p. 1 164.
First, it is clear that the production requirements which determine the remuneration of the commercial manufacturers are not met by the major RALACs where productivity is lower and costs of production higher.

Second, restriction on the entry of new manufacturers, including the hospitals which are already making limbs as part of post-operative care, reduces competition and consequently the level of service to consumers. In particular, the failure to license regional hospitals has limited services in country areas.

Third, much of the work undertaken by the CDU is unnecessary or has had little effect. The process of determining and updating the list of approved components impedes product development and consequently affects the quality of limbs and client services. CDU research output is not widely disseminated nor seen as very useful by the commercial manufacturers and the hospitals.

Fourth, DVA, through the RALACs, administers the scheme under which the private sector competitors of the RALACs receive remuneration. This dual role is the source of considerable friction, as the commercial enterprises perceive the RALACs to be exempt from the accountability imposed upon the private sector.

Fifth, the formula arrangement which determines the hourly rate payment to private producers is the subject of much disagreement. In effect, the Commonwealth is regulating the price of artificial limbs. While some such approach is necessary if costs to the taxpayer are to be controlled, there appears to be considerable scope for improvement.

**Recommendations**

There are several ways in which the free provision of limbs could be improved. The Commission recommends that:

- the Commonwealth cease production of artificial limbs and associated products and services, and dispose of the assets of the RALACs.

The Commission sees no justification for the continued operation of the RALACs by the Commonwealth. Evidence suggests that the commercial
manufacturers are considerably more efficient than the major RALACs in the provision of limbs.

While the Commission has not examined in detail the production of footwear by the RALACs, there is evidence that footwear could be adequately provided by the commercial sector. There appears to be no justification for continued government production.

The quality of service currently available to veterans should continue to be provided. The Commission believes this can be achieved through the commercial manufacturers and hospitals.

The skilled staff currently employed by the RALACs would be available to new or expanding private firms and hospitals involved in limb production.

In its draft report, the Commission canvassed the possibility that the RALACs remain under public ownership. The Commission considered that, if this were to occur, the RALACs should be required to meet financial targets and compete on the same terms as the commercial sector, with payment for limbs determined in the same way as for the commercial sector. Responsibility for administration of the FLS and the operation of the RALACs would also need to be separated.

While there would be gains from increased competition between public and private limb manufacturing facilities and a more competitive public sector, the Commission believes that a better outcome would be achieved if the Commonwealth was no longer involved in the manufacture and fitting of limbs.

- the current restriction on the number of producers permitted to manufacture artificial limbs under the Free Limbs Scheme be removed.

This would permit new entrants, and enable hospitals and others currently making artificial limbs to expand. As a result, there would be greater choice for patients, an increased flow of information among those involved in the treatment of amputees, and greater incentive for firms to offer a high quality product. For example, manufacturers would be encouraged to devote additional resources to product development.

Country services could be contracted out to commercial operators or encouraged by providing additional remuneration under the FLS to those companies or hospitals which provide regional services.
• **accreditation of componentry be discontinued.** Prescribers and prosthetists should recommend componentry they judge to be most appropriate for individual patients.

• **a schedule of fees for each type of standard limb and associated services be developed, with patients free to choose more expensive componentry and pay the difference.** The fees would need to be reviewed on a regular basis.

Overseas standards for componentry provide a reference point for information about the quality of prosthetic componentry. Moreover, prosthetic componentry falls within the coverage of the Therapeutic Goods Act 1989. Most importantly, the more competitive environment which would result from an increased number of suppliers would put pressure on manufacturers of lower quality products. Prescribers would refer their clients to manufacturers they consider to offer a better product.

• **the CDU be abolished.**

Many of the functions performed by the CDU are not highly valued or could be better delivered by other means. With the end of componentry accreditation, there would be no role for the CDU in research and product development. Teaching hospitals and the Lincoln School offer a facility for research, while the evidence suggests that product development is better handled by the commercial manufacturers. In-service training could be provided by the Lincoln School.
7 TARIFFS, GOVERNMENT PURCHASING AND EQUIPMENT STANDARDS

7.1 Introduction

The prices of disability equipment, like those of many other products in Australia, can be affected by tariffs and other forms of assistance to industry, and sales tax. A number of submissions attributed the high costs of disability equipment to such imposts, and argued that, as they bear heavily on some of the most disadvantaged people in the community, they should be removed. If the price of aids were to fall, it is said, more would be able to buy them. Some participants also said that the profit margins taken by importers of aids and appliances were excessive and contributed to their high prices.

The Commission was asked in the terms of reference to report on the reasons for any high cost of imported aids and appliances. It examined a number of products, to assess the extent to which tariffs, sales tax and other factors contributed to prices. This is reported in Appendix B.

This chapter is confined to issues concerning tariffs and other industry assistance. Sales tax is considered in Chapter 8.

7.2 Tariffs

Tariffs on disability equipment

Tariffs on aids and appliances used by people with disabilities vary considerably. Many, including orthopaedic appliances and hearing aids, are duty free. At the other extreme, certain incontinence pants are dutiable at 55 per cent plus $0.45 per
garment, and some boots used by spina bifida sufferers are dutiable at 45 per cent plus $8.75 per pair.\footnote{This is indicative only, and represents the duty on goods imported outside of quota. As the goods concerned both fall within the textiles, clothing and footwear sectoral plan, the duty payable depends upon the availability of quota.}

Items of disability equipment which are separately identified within the Tariff are:

- wheelchairs;
- orthopaedic appliances, including crutches, surgical belts and trusses;
- splints and other fracture appliances;
- artificial parts of the body; and
- hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect or disability.

All of this group are duty free, other than pacemakers (dutiable at 15 per cent General) and wheelchairs (dutiable at 17 per cent General, phasing to 15 per cent).

Goods which can be separately identified within the Tariff represented about $78m of imports in 1988-89. Table 7.1 lists those items and shows the duty rates applying, the value of imports and the duty paid. While there was a widespread perception among participants that many aids and appliances were subject to large duties, it can be seen from the table that only 1.1 per cent of the total value of imports of those goods was paid as duty.

Table 7.1 does not contain a comprehensive list of disability equipment. Many other aids and appliances used by people with disabilities are not separately identified within the Tariff, but are classified with goods used by the community at large. Appendix C provides a more extensive list of disability equipment in widespread use, and shows the tariff rates which apply unless the goods concerned are accorded duty free entry under a tariff concession (tariff concessions are discussed later in this chapter).
Table 7.1: **Tariff rates, value of imports and duty paid for a range of disability equipment, 1988-89**

<table>
<thead>
<tr>
<th>Item</th>
<th>Duty rate (%)</th>
<th>Value of imports ($'000)</th>
<th>Duty paid ($'000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheelchairs, powered</td>
<td>18% General a</td>
<td>1 273</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>13% Dca</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheelchairs, manual</td>
<td>Free NZ</td>
<td>1 116</td>
<td>165</td>
</tr>
<tr>
<td>Parts and accessories</td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for wheelchairs</td>
<td>Free NZ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artificial joints</td>
<td>Free NZ</td>
<td>381</td>
<td>0</td>
</tr>
<tr>
<td>Other orthopaedic or fracture appliances</td>
<td>Free NZ</td>
<td>1 822</td>
<td></td>
</tr>
<tr>
<td>Artificial parts of the body</td>
<td>Free NZ</td>
<td>30 9777</td>
<td>0</td>
</tr>
<tr>
<td>Hearing aids</td>
<td>Free NZ</td>
<td>19 347</td>
<td>0</td>
</tr>
<tr>
<td>Pacemakers</td>
<td>Free DC</td>
<td>4 440</td>
<td>487</td>
</tr>
<tr>
<td></td>
<td>15% General DC</td>
<td>4 414</td>
<td></td>
</tr>
<tr>
<td>Parts and accessories for hearing aids</td>
<td>Free DC</td>
<td>4 441</td>
<td>0</td>
</tr>
<tr>
<td>Other parts and accessories</td>
<td>Free NZ</td>
<td>9 489</td>
<td>0</td>
</tr>
</tbody>
</table>

77 700 883

a phasing to: 17 per cent General and 12 per cent for Developing Countries from 1 July 1990, 16 per cent General and 11 per cent for Developing Countries from 1 July 1991, and 15 per cent General and 10 per cent for Developing Countries from 1 July 1992.


Within the same tariff item, differences in duty rates may arise from Australia’s trade agreement obligations. Preferential access to the Australian market is provided to goods from a number of countries under these agreements. For example, imports from New Zealand are free of duty. Australia also provides a five percentage points margin of preference to sources eligible for Developing Country (DC) status.

Thus import duties payable will vary according to the source country. In the case of wheelchairs, for example, the major sources of imports include the United Kingdom
(dutiable at 17 per cent), Taiwan (dutiable at the DC rate of 12 per cent) and New Zealand (duty free).  

Over time, the effects of tariff assistance will be reduced under a program announced by the Government in May 1988. Tariffs are being phased down across the board to 15 or 10 per cent by 1 July 1992. The program is aimed at:

‘promoting structural change within the manufacturing sector, contributing to improved efficiency of resource use by encouraging investment, marketing, product development and research and development in areas which have the strongest commercial prospects in the international economy’.

Thus, with the exception of some orthopaedic/surgical footwear and incontinence aids which fall within the scope of sectoral plans, tariffs are either free or are being phased down to 15 or 10 per cent, and DC rates to 10 and 5 per cent.

The effects of tariffs

Tariffs increase the price of imported equipment, and thereby permit Australian producers of similar or competing products to raise their prices. Participants cited a number of instances where tariffs serve to increase the prices of goods used by people with disabilities, and noted that such people often have very low incomes.

By way of example, Table 7.2 shows the effects of import duty on the average dutiable price of some imported wheelchairs in 1988-89. It is evident that the amount of duty payable on wheelchairs imported from Taiwan and New Zealand was small in absolute terms (about $20 per unit from Taiwan and nil from New Zealand) but much higher on imports from the United Kingdom ($322 on a powered wheelchair).

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2 In 1980, the tariff on imports from the United Kingdom rose by 19 percentage points when the British Preference was ended. Imports from New Zealand, dutiable at concessional rates in 1980, are now duty free under the Australia New Zealand Closer Economic Relations Trade Agreement.

Table 7.2: Import duty payable on average fob prices of wheelchair imports from selected sources, 1988-89

<table>
<thead>
<tr>
<th>Source</th>
<th>Quantity</th>
<th>Average price($)(^a)</th>
<th>Duty Rate(%)(^b)</th>
<th>Duty payable($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Powered</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>282</td>
<td>1 791</td>
<td>18</td>
<td>322</td>
</tr>
<tr>
<td>New Zealand</td>
<td>186</td>
<td>1 150</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td><strong>Manual</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>2 221</td>
<td>171</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>UK</td>
<td>832</td>
<td>411</td>
<td>18</td>
<td>74</td>
</tr>
<tr>
<td>New Zealand</td>
<td>565</td>
<td>476</td>
<td>nil</td>
<td>nil</td>
</tr>
</tbody>
</table>

\(^a\) valued on a free-on-board basis  
\(^b\) phasing down to 15 per cent General and 10 per cent for DCs by 1 July 1992


Scope for tariff reductions

Many participants requested that tariffs on aids and appliances be removed to reduce the burden on people with disabilities. Were this to be done, imports would be cheaper and local prices would need to be reduced to compete with imported substitutes. If assistance for local producers was still judged to be desirable, the loss of tariff assistance would have to be replaced by some other form of protection.

Altering tariffs on goods used expressly by people with disabilities would require that these goods be separately specified in the Tariff. In most cases, this would necessitate creating further subdivisions in the existing Tariff classifications for the hundreds of highly specialised goods used by people with disabilities, and require incorporation within the Tariff of detailed descriptions of particular goods. Such action, if undertaken for a large number of products, would fragment the Tariff, increasing its complexity. This in turn would increase the costs of both Customs
administration and of private importers and agents for what are relatively small volumes of imports.⁴

Moreover, because many of the items for which requests for lower assistance have been made are used generally within the community, some of the additional subdivisions would need to be accompanied by some form of end-use criterion. In the past, Customs has argued that it is difficult to determine the end use of particular goods, and thus that tariff rates differentiated by end use are impractical, costly to administer and largely unenforceable.

At times Customs requires the collection of securities to ensure that the goods imported at a lower tariff rate under such arrangements are not used for other purposes. In addition, companies may be subjected to inspections of their premises by Customs officers to ensure they are complying with the conditions determining end use. Even so, there is some doubt as to whether these conditions are enforceable in practice. The net result is that the tariff is effectively reduced to the lower level for all goods imported under the classification, and not just the ‘end use’ goods.

The IAC examined the issue of end-use under-security provisions in its report on the Commercial By-Law System. It concluded that:

‘End-use under-security by-laws lead to different rates of duty being paid on the same product by different importers depending on the use to which it is put. Such price differences can have an impact on resource allocation ... The validity of entry under these by-laws depends on there being safeguards to ensure that by-law imports are used only in the specified end-use. This creates significant administrative difficulties and is costly to police.’⁵

The Commission recommended that the practice of issuing commercial by-laws with end-use under-security provisions be terminated. The Government decided that requests for end-use by-laws would no longer be dealt with under the Commercial Tariff Concession System (CTCS), that existing concessions would be

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⁴ See, for example, IAC, Harmonization of the Customs Tariff, Report No. 381, AGPS, Canberra, 1986 on the costs associated with fragmentation of the Tariff.

reviewed against the new criteria for Commercial Tariff Concession Orders (CTCOs) and that any new requests would be considered for reference to the IAC.6

This philosophy was also reflected in the development of the Harmonized Tariff, introduced in 1988. Classifications which provided different treatment for different end uses were removed, except for sectoral policy industries such as passenger motor vehicles. Since then, end-use conditions have almost disappeared from the Tariff. The reintroduction of end-use criteria for goods used by people with disabilities would not only be difficult to administer in practice, but also inconsistent with the thrust of reform of Customs administration over the past decade.

**Tariff classification issues**

The Customs Tariff classifies all goods into categories according to rules specified in an international agreement to which Australia is a signatory. These rules are intended to reduce classification disputes and clearance costs because the export classification in the country of origin is identical to Australia’s import classification. The classification is structured according to both the type of goods and the materials from which goods are made and, unless concessional entry is available, the classification determines the rate of duty payable.

For example, bed pans can be made of steel, porcelain or plastic, and they will be classified to those chapters dealing with items of steel, porcelain or plastic respectively, and hence dutiable at the rates specified for those groups of goods. Lifting hoists for people with disabilities are classified with other forms of lifting and handling equipment, while special knives and forks are classified with all other cutlery and therefore dutiable at the same rate.7

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7 Unless concessional entry is available under Schedule 4 of the *Customs Tariff Act*. This is discussed later in this chapter.
The implications of this were discussed by the Independent Living Centre, New South Wales, which said:

“We understand that some aids specific to disabled people are included under general material headings of - for example - "Sanitary Items". Sanitary items include moulded plastic or fibreglass insert bath seats or bath boards, which are used exclusively by people with disabilities - but are subject to a duty of 25 per cent because of their classification. In addition, bread/spiked boards and teapot tippers, used by people with the use of only one hand, or with impaired hand function due to a disability such as arthritis, are included under "Timber" generally. Currently, Mobile Patient Lifters are classified as "Lifters" (rather than Patient Lifters). This classification subjects them to the same tariff as lifters used in industry ...8

As noted, Australia has agreed to use the Harmonized Tariff classification and the associated rules for classifying goods to those classification categories. While this reduces the discretion which Customs has in classifying goods, it does not mean that disputes cannot arise, and there are appeal procedures in place. Participants raised some instances during this inquiry.

Walking aids

At the initial public hearings Easywalker Australia said it would challenge the classification by Customs of its ‘Easywalker’ product to the iron and steel chapter of the Tariff, where it would have been dutiable at 18 per cent (13 per cent from Developing Countries), phasing to 15 per cent (10 per cent from Developing Countries). The company claimed that its product is designed primarily as a walking aid and, being an orthopaedic appliance, should be classified to Heading 9021, under which it would be duty free.

The initial classification was based on the judgment that the product was not designed to prevent or correct bodily deformity, or hold organs in place, and that there were few differences between the ‘Easywalker’ and an ordinary shopping trolley. It was not considered to be a walking stick (free of duty) because it has wheels. However, subsequent to the public hearings, Easywalker advised the Commission that Customs has now reclassified the product to 9021 and would refund any duty paid as a result of the original ruling.

8 Independent Living Centre, New South Wales, Submission No. 6, p. 2.
 Orthopaedic footwear

The Spina Bifida Association of Queensland and Tascare raised the case of the ‘Baby Marche’ orthopaedic boots and sandals for babies and young children with weak or paralysed feet. They said that very small sizes of suitable boots were not manufactured in Australia. Prior to Australia adopting the Harmonized Tariff in 1988, these boots could be imported free of duty as orthopaedic appliances. However, from that date the definition of orthopaedic appliances was altered and the boots are now dutiable at 45 per cent plus $8.75 per pair.

The Arthritis Foundation of Australia and the Western Australian Arthritis and Rheumatism Foundation said that people with arthritis require footwear which is wide fitting or extra depth to accommodate feet with swollen joints or feet with joint deformities. As this footwear is not specifically designed for people with arthritis, it is not covered by 9021 and not exempt from duty.9

Heading 9021 allows duty free entry of ‘orthopaedic appliances’.10 However, the international explanatory notes to the tariff classification system (the Brussels Explanatory Notes) excludes footwear which is not made-to-measure from the definition of orthopaedic footwear. Any footwear which is mass-produced is classified with general footwear in Chapter 64. Consequently, because the textiles, clothing and footwear sectoral policy provides very high levels of assistance to Australian footwear manufacturers, the goods become dutiable at very high rates.

The Administrative Appeals Tribunal (AAT) reviewed the place of the Brussels Explanatory Notes in Australian law. It said that, as the Tariff was a document used in everyday commerce, it was important that the words in it be given their ordinary

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9 Arthritis Foundation of Australia, Submission No. 170, p. 2; Western Australian Arthritis and Rheumatism Foundation, Submission No. 191, p. 2.
10 The full Heading title is:
‘Orthopaedic appliances, including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect or disability;’
meanings and that frequent recourse to legal arguments not be required. In a series of decisions concerning orthopaedic footwear prior to 1 January 1988, the AAT found that orthopaedic footwear for ‘correcting bodily deformities’ was properly classified to Heading 9021, regardless of the restricted Brussels Notes. These decisions allowed duty free entry.

• **Additional Note to Chapter 90**

In order to give legal standing to the restrictions in the Brussels Notes, and thereby overcome the AAT rulings, Customs inserted a special ‘Additional Note’ into the Harmonized Tariff in 1988, which reads:

‘In 9021, "orthopaedic appliances", in relation to footwear, means footwear made to measure for a specific disorder’.

In a letter to a supplier of footwear designed for use with plaster casts, the Department of Industry, Technology and Commerce said:

‘the present wording [defining orthopaedic footwear] was designed to prevent circumvention of the footwear assistance arrangements and is part of the textiles, clothing and footwear (TCF) plan.’

As a result of the Additional Note, mass-produced footwear such as ‘Baby Marche’ boots were subsequently excluded from Chapter 90 and became dutiable. However other mass-produced footwear is still imported under 9021. Markell Shoe Centre

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11 AAT, Repco Ltd and Collector of Customs (Vic), Re (1986) and Hayman-Reese Pty Ltd and Collector of Customs (Vic), Re (1986), 5 AAR 113. The AAT said that ‘one must start with the statute to be construed ... it is the language employed by Parliament which must first be given meaning’. It quoted the Acts Interpretation Act, which permits recourse to ‘materials not forming part of the Act being interpreted where the provision is ‘ambiguous or obscure’ or where the ordinary meaning conveyed leads to an ‘absurd or ... unreasonable’ result. The AAT said that, where the meaning conveyed by the statute is quite clear, ‘the justification for consulting extrinsic materials may be more contentious’.

12 In a 1978 decision the AAT classified certain ready made shoes to what is now 9021. The Customs Tariff Act was subsequently amended to require that footwear classifiable to Heading 9021 be ‘for correcting bodily deformities’ or ‘made to measure for a specific disorder’. However, in a 1984 decision the AAT again classified certain ready made footwear to Heading 9021 on the grounds that they met the first test. The 1988 Additional Note now effectively requires that both tests be met.
said that after investigations by Customs in 1988 and 1989 into the imports of footwear by J. S. Levy Corporation and itself, the classification of its imported shoes was confirmed as Heading 9021. Although mass-produced, the goods were (after some argument) determined to be substantially complete orthopaedic appliances. The Commission understands that the reason for the different treatment of these goods is that the ‘Baby Marche’ boots are mass-produced and not adjustable, notwithstanding the claim by users that their purpose is to correct bodily deformities.

An unfortunate consequence of this approach by Customs has been an increase in the already very high assistance to footwear manufacturers at the expense of people with disabilities. The Spina Bifida Association of Queensland said that it has ceased importing the ‘Baby Marche’ boots as a result of the tariff impost. The Western Australian Arthritis and Rheumatism Foundation said:

‘people with arthritis pay from $125 to $250 for a pair of wide fitting or extra depth shoes. ... Wide fitting and extra depth shoes are all imported to Australia. The customs tariff on these shoes is 40% plus $10.50 per pair.’

In the draft report the Commission proposed that the Additional Note to Chapter 90 be removed. Its primary purpose is to add to the assistance given one of Australia’s most highly protected industries. The Commission supports the AAT’s view that the words in the Tariff should be given their ordinary meaning, and considers that importers should not have to resort to the AAT to obtain commonsense interpretations of the Tariff nomenclature. The Additional Note gives undue weight to the ‘not made-to-measure’ criterion. In cases where the goods are clearly orthopaedic - either within the terms of Chapter 90 and the Chapter Notes, or as that wording is interpreted by the AAT - this should be sufficient to assure classification to Heading 9021.

Customs expressed concern that removing the Additional Note would cause it difficulties in identifying and classifying some types of orthopaedic footwear, and would create a loophole allowing non-orthopaedic footwear duty free entry. It said that it had examined samples of Baby Marche boots and does not agree that they

13 Western Australian Arthritis and Rheumatism Foundation, Submission No. 191, p. 2.
have any identifiable features which would allow them to be classified as orthopaedic footwear. 14

Customs added:

‘While the ACS accepts that identifiable goods for the disabled should be treated generously, there is a difficulty in applying this approach to highly protected areas such as footwear ... The initial efforts to tighten up the definition were triggered by mass-produced children’s footwear which was available in fractional fittings with shaped insole to encourage the growth of healthy feet.’ 15

As Customs noted, changes to the wording of 9021 can only be made by the Customs Co-operation Council (CCC), as Australia is a signatory to the Harmonized Tariff. While the Additional Note to Chapter 90 can be deleted without consulting the CCC (as it is an Australian addition), Customs said it would be reluctant to do so as it would ‘create a loophole for non-orthopaedic footwear to be incorrectly admitted free of duty or quota’. 16

The outcome of these endeavours to prevent erosion of the current high assistance provided to the Australian footwear industry is the imposition of significant costs on some people with disabilities.

In an attempt to overcome interpretation problems, Markell Shoe Centre proposed rewording of the Additional Note along the following lines:

‘classification of ... extra depth footwear within 9021 could be made certain by the insertion of a chapter note with the effect of including: "Footwear specially designed to accommodate medically prescribed orthopaedic [orthotic] devices".’ 17

The Commission does not endorse the suggested rewording of the Additional Note. The rewording may still restrict the types and amount of orthopaedic footwear able to enter under 9021 and may result in further interpretation problems. Nevertheless, the current wording restricts the amount of orthopaedic footwear which can enter duty free under 9021, thus maintaining the high levels of protection afforded Australia’s footwear industry at considerable cost to some people with disabilities.

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14 Australian Customs Service, Submission No. 752, p. 4.
15 ibid.
16 ibid.
17 Markell Shoe Centre, Submission No. 868, p. 4.
The Commission recommends deleting the Additional Note to Chapter 90.

- Review of Chapter 90

The wording of the Brussels Explanatory Notes used in relation to Chapter 90 is archaic, particularly when it refers to specific design features and methods of production. Notwithstanding that the new Tariff came into operation only two years ago, the wording of Chapter 90 is currently under review in the Customs Co-operation Council in Brussels. In its draft report the Commission proposed that the Commonwealth develop possible rewording of Heading 9021 for consideration in that review. In response, Customs stated:

‘the ACS is prepared to consider rewording of 9021 in the context of the current review of Chapter 90 being undertaken by the Customs Co-operation Council. It must be noted however, that any change to this heading could not take place until at least 1 January 1996.’ 18

Nevertheless, the current review of Chapter 90 provides such an opportunity and rewording may assist in resolving some classification difficulties. The Commission recommends that the Commonwealth develop possible rewording of Heading 9021 for consideration in the Customs Co-operation Council review.

Tariff concessions

Australia has an extensive set of tariff concessions for particular purposes to reduce the burden of Customs duties.

The most widely-used form of concessional entry is the Commercial Tariff Concession System, provided for in Item 50 in Schedule 4 of the Tariff. The underlying objective of the CTCS is that import duties should not apply to goods where a tariff has no protective effect on Australian industry.

In addition, Item 12 provides concessional entry for goods specially designed and imported for the use of the blind, deaf or dumb, when imported by governing bodies

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18 Australian Customs Service, Submission No. 752, p. 2.
of public institutions having the care thereof. It also lists some goods which can be imported duty free by anyone.

Goods imported by Commonwealth Departments or an authority or body established for the purpose of the Commonwealth are duty free under Item 1. In contrast, State Governments, which are major suppliers of aids and appliances through free provision schemes or through hospitals and nursing homes, are liable to pay duty on their imports. Hence the RALACs and NAL can import all components and complete goods duty free, while private sector manufacturers cannot. Moreover, aids and appliances supplied under Commonwealth schemes can be imported duty free, while those provided under State-run schemes cannot.

The Government has forwarded a reference on the Commercial Tariff Concession and By-Law Systems to the Commission for public inquiry. Broader questions such as the principles underlying the CTCS, and questions of administrative process, will be taken up in that context. Submissions which raised these matters have been forwarded to that inquiry.

The Commercial Tariff Concession System

Goods may be imported free of duty under Item 50 where the importer can demonstrate that ‘goods serving similar functions’ are either not produced in Australia or are not capable of being produced in Australia in the normal course of business.

Concerns expressed by participants are discussed in Appendix C, which includes examples of goods which have been accorded concessional entry under the CTCS. In essence, Customs is required to consider whether the goods concerned compete against one another in the marketplace. Against this test, questions of technical or quality differences do not necessarily mean that the goods are not competitors.

Concessional entry under Item 12

Since the turn of the century, provision has been made in the Tariff for concessional entry of certain types of disability equipment. In today’s Tariff, this concession is provided by way of Item 12 of Schedule 4. It comprises two parts.
First, there is a Table listing specific goods which can be imported duty free by anyone. These are listed in Appendix C, and include such goods as artificial larynxes, reading machines and hand-held sensors.

Second, Item 12 also provides for the free importation of

‘goods, specially designed and imported for the use of the blind, deaf and dumb, when imported by governing bodies of public institutions having the care thereof’.

The wording of the criteria for concessional entry under Item 50 is relatively non-discretionary in the sense that any goods which meet those criteria should be accorded duty free entry. The administration of Item 12, by contrast, is much more discretionary. For example, the Minister has the power to determine who is or is not a governing body of a public institution having the care of the ‘blind, deaf or dumb’.

While Item 12 assists some people with disabilities, there are problems with this concession as it now stands:

- the existence of the concession is not widely known. The main users of Item 12 are societies representing the blind. The inquiry has revealed that many other bodies which would be eligible to use Item 12 do not know of its availability;

- individuals and organisations representing the ‘blind, deaf or dumb’ but not qualifying as ‘governing bodies of public institutions having the care thereof’ do not benefit from the concession. For example Deafness Resources Australia, a non-profit organisation, is ineligible to import under one of the Item 12 by-laws because it does not qualify as ‘a public institution having care of blind, deaf or dumb people’;19

- it discriminates against those organisations representing people having other disabilities; and

- it also discriminates against commercial importers of goods used by the ‘blind, deaf or dumb’ who have to pay duty on imports and consequently sell them at

19 Deafness Resources Australia, Submission No. 928, p. 9.
higher prices. A competitive commercial importing industry is a significant factor in ensuring that products meet consumer requirements, both in terms of price and quality.

There are several ways in which these inequities could be addressed.

1. **Item 12 concessions could be extended to include goods specifically designed for the use of people with other disabilities.**

   However, Item 12 effectively removes tariff assistance from producers of any goods which are accorded duty free entry by the Item. This may not be a major concern with Item 12 as it now stands because of the limited use of the item by only a few groups in the community, but it would have greater effects on industry if its coverage were to be widened. In effect, it would then cover all goods designed for people with disabilities. It would be tantamount to subdividing tariff classifications: the problems in doing that were discussed earlier.

   Another concern with this proposal is that it is difficult to administer the kind of end-use criteria which it implies. This has been discussed earlier in this Chapter. It is less of a problem at present because the concession is restricted to one group and the usage of the item is low.

2. **Item 12 could be widened to include general use goods.**

   Many participants pointed to the duties applying to imports of general purpose goods which can aid the quality of life of people with disabilities. However, there would be major difficulties in policing a provision which allowed duty free importation of general purpose goods by particular groups. The scope for abuse would be considerable, and the cost of administering the Item - to both Customs and the private importer or buyer - would be significant.

3. **Item 12 could be deleted.**

   Item 12 is not widely used, and tariffs are in any case coming down. The item creates inequities between different goods and between different forms of disability. Expanding it to cover a wider range of goods or disabilities would create further problems. Nevertheless, the Commission is reluctant to propose withdrawal of this concession in the context of this inquiry as it confers a small but long-accepted benefit to one group.
The Commission notes that the Minister for Industry, Technology and Commerce has announced that the Government will sign the United Nations Educational, Scientific and Cultural Organisation Agreement on the Importation of Educational, Scientific and Cultural Materials (known as the Florence Agreement) and the Protocol to the Agreement (known as the Nairobi Protocol). More information on the Agreement and its Protocol is set out in Appendix C.

Accession to these arrangements obliges Australia to ensure that, subject to some restrictions, items used by people with disabilities are admitted free of duty when imported by approved institutions or organisations. Item (i) of Annex E to the Protocol includes a range of goods for the blind (see Appendix C) while Item (ii) of the Annex covers ‘all materials specially designed for the education, employment and social advancement of other physically or mentally handicapped persons, directly imported by institutions or organisations concerned with the education of, or assistance to, such persons ... provided that equivalent objects are not being manufactured in the importing country’.

It is not yet clear what items will be affected by the Government’s decision. A working party comprising the Department of Industry, Technology and Commerce and Customs has been established to ‘identify more precisely, in consultation with industry, the goods and tariff items affected’. Among other things, the working party will have to define the meaning of ‘specially designed for the education, employment and social advancement...’ and of ‘institutions or organisations concerned with the education of, or assistance to...’ handicapped persons.

However, a reasonable reading of Items (i) and (ii) of Annex E to the Protocol is that much of what is proposed for duty free entry is already available under either Item 12 or under the CTCS as it now stands. As noted above, the current Item 12 in Schedule 4 of the Tariff already provides for duty-free entry of goods specially designed for the ‘blind, deaf and dumb’ when imported by the governing bodies of public institutions. (Concessions provided under the Agreement and Protocol for people with disabilities extend to all institutions and organisations, not just public institutions.) Item 12 also includes a further list of goods specially designed for use by the blind, deaf and dumb which can be imported by anyone.

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Most important, perhaps, will be the interpretation placed on the qualification in Item (ii) of Annex E to the Protocol: ‘that equivalent objects are not being manufactured in the importing country.’ Australia’s CTCS already permits duty free entry of any goods where ‘goods serving similar functions are not produced in Australia ... in the normal course of business’. If, for example, this part of the Protocol were interpreted in the same manner as the CTCS criteria, there would be little effect on the ability of people with disabilities to obtain duty-free importation.

Indeed, such an outcome would be broadly consistent with the recommendations in this chapter, since the Commission has already noted the disadvantages of either broadening Item 12 or of introducing a new tariff concession for people with disabilities.

**Bounties versus tariffs**

Bounties are an alternative way of providing assistance to local manufacturers. Their effects on production are similar to those resulting from the imposition of a tariff. Domestic production is subsidised and encouraged to expand while imports are discouraged, and assisted industries are better placed to attract resources away from other domestic industries which receive relatively less assistance.

However, bounties differ from tariffs in their effect on consumption. Bounties do not raise the price of the assisted product, whereas tariffs increase the price of imports and thus allow the price of similar domestically-produced items to rise. For this reason, some participants suggested that bounties be used in place of tariffs.

There are costs associated with bounties. The direct costs include the revenue required to pay bounties plus, where the good would have otherwise been dutiable, the cost of revenue forgone from the Tariff. Bounties also impose compliance costs on industry, such as the administrative costs of keeping records to verify sales and costs. For small producers in particular, these can be significant relative to the value of the bounty, particularly if some form of value added bounty were proposed.

There are various forms of bounties and each has different effects. A specific output bounty is paid as a fixed dollar amount per unit of physical output. An ad valorem output bounty is paid as a fixed dollar amount per dollar value of output, and a value added bounty is paid on the difference between the value of output and the value of inputs, variously defined.\(^\text{21}\)

\(^{21}\) For a discussion of the advantages and disadvantages of different forms of bounty assistance, see IAC, *Bounty Assistance to Australian Industry*, AGPS, Canberra, 1984.
The adoption of bounties for aids and appliances for people with disabilities has been examined in three previous IAC reports.\textsuperscript{22} The Commission examined the effects of a bounty for hearing aids and concluded there would be problems with eligibility and administration, depending on the type of bounty implemented. In the report on medical and scientific equipment the Commission concluded:

‘one problem for a bounty scheme is potential classification difficulties and administrative costs for Australian Customs Service and producers, for example, in verifying sales or costs.’\textsuperscript{23}

It also noted

‘the likelihood that in an economy where tariff assistance is still the primary instrument of protection, they will introduce their own distortions in consumption and use.’\textsuperscript{24}

In its 1980 report on wheelchairs, the Commission also considered whether assistance to wheelchair manufacturers would best be provided by tariff or bounty, and recommended in favour of a tariff. Following completion of the report, the Government requested that the Commission further explore bounty options with respect to nature, level and cost. Subsequently, the Government accepted the Commission’s recommendation to maintain tariff assistance and to phase it down to 20 per cent.\textsuperscript{25}

**Bounty arrangements for the goods under reference**

The Bounty (Computers) Act 1984 provided assistance to producers of computer equipment by way of a bounty of 20 per cent of value added. This computer bounty

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{23} IAC, *Medical and Scientific Equipment*, op. cit., p. 147.
\item \textsuperscript{24} ibid., p. 150.
\item \textsuperscript{25} IAC, *Wheelchairs*, op. cit.
\end{itemize}
\end{footnotesize}
was due to cease on 5 July 1990. The Government announced on 12 June 1990 that
the bounty would be continued for a further five years. It will be progressively
reduced from a rate of 17 per cent (from 6 July 1990), to 9 per cent (from 1 July
1994) and then ended on 31 December 1995.

Telectronics, which manufactures pacemakers and defibrillators, and Cochlear
which manufactures the 22 channel cochlea implant (bionic ear), are paid a bounty
under this scheme. Telectronics said that receipt of the previous computer bounty:

‘... enables Telectronics to reduce unit prices (of defibrillators) by around $966.' 26

It added that removal of the 15 per cent tariff would permit a potential price
reduction of about $1 080 from the current $12 000, provided the bounty were
maintained.

Telectronics said that the 20 per cent computer bounty paid on the microprocessor
incorporated into the pacemaker enabled the selling price to be reduced by $79 to
$2 650. It added that:

‘by removing the duty on imported products, the apparent reductions in the price of
pacemakers on the Australian market would be $322 at 20 per cent and $241 at 15 per
cent.'27

Telectronics said it would reduce the price of locally made pacemakers in the event
that the computer bounty was retained and tariffs were removed.28

At the initial hearings, Telectronics noted that the tariff on pacemakers was due to
be reduced to 15 per cent (DC 10 per cent) on 1 January 1990, and said that:

‘... if the imported pacemaker that is paying the tariff at present reduces its price, then
Telectronics will need to do that to maintain its market share.'29

However, in early 1990, Telectronics announced that it was moving its pacemaker
design and production facilities to the United States.

26 Telectronics, Submission No. 146, p. 5.
27 ibid., p. 3.
28 ibid.
Besides these comments on the computer bounty, some other participants suggested that bounties might be used in place of tariff assistance, notably for wheelchairs. However, at the initial hearings Denyers, one of the largest wheelchair producers in Australia, argued against replacing existing tariffs on wheelchairs with bounties. It noted that the issue was raised during the IAC’s inquiry in 1980, and said that:

‘since the bounty [would be] based upon what you paid - on what your costs were - you would actually have to follow through the individual cost of every item ... in order to claim your bounty and the conclusion that fortunately the chairman came to was that ... the bounty would not be worth claiming. The cost of claiming the bounty would exceed the value of bounty. You would have to keep such records ...’

In summary, the Commission does not propose to recommend that tariff assistance be replaced with bounties for goods covered in this inquiry. The current bounty on microprocessor inputs to pacemakers is part of a larger scheme of assistance to the computer industry, and must be considered in that context.

**Rates of duty**

**Wheelchairs**

The tariff on wheelchairs will be reduced to 15 per cent General and 10 per cent from Developing Countries by 1992.

Denyers said that:

‘It is doubtful whether any worthwhile Australian wheelchair industry will be left by the time those [tariff] levels ... are reached’.

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30 Denyers, Transcript, Melbourne, 7 December 1989, pp. 73-4.
31 Denyers, Submission No. 24, p. 8.
However, evidence suggests that the previous reduction in tariffs has had little effect on the structure of the industry.\textsuperscript{32} It remains generally small-scale and fragmented. The number of local wheelchair producers has in fact increased, while their market share has remained about the same in volume terms. One explanation may be that factors such as the purchasing patterns of hospitals, the made-to-measure nature of some wheelchairs and closeness to customers for both initial sale and any subsequent repairs provide a significant natural advantage to local wheelchair manufacturers.

Further reductions in the tariffs on wheelchairs should assist in the rationalisation of wheelchair production, with Australia producing those wheelchairs for which it has an advantage. If some resources move out of wheelchair production as a result of lower tariffs, the effect on the overall performance of the economy depends upon whether the resources move to activities which are assisted at higher or lower levels than wheelchairs, and any adjustment costs associated with that movement. Some other goods produced by wheelchair manufacturers are duty free while others are dutiable at higher rates.\textsuperscript{33} Many other activities which might expand are dutiable at about the same rate as wheelchairs are now.\textsuperscript{34} Thus, while the Commission expects that removal of tariff assistance for wheelchair production will increase its efficiency, the effects on production elsewhere are less certain but unlikely to be significant.

At the draft report hearings, Denyers, Sibbing Industries, H & M Equipment and Met-a-Lite argued in a joint presentation that removal of tariff assistance would threaten the most profitable part of the wheelchair market. It would thus jeopardise Australian production of ‘special’ or custom-made wheelchairs, for which there is little return to the manufacturer. They asked that the present protective duties be maintained indefinitely and that the Developing Country preference for Taiwan be

\textsuperscript{32} In the past 10 years, the General tariff on wheelchairs has fallen from around 35 per cent to 18 per cent and the DC tariff from 20 per cent to 13 per cent. The New Zealand rate has been reduced to free.

\textsuperscript{33} Walking frames are duty free while hospital equipment such as beds and furniture is dutiable at 24 per cent General and 19 per cent DC, phasing down to 15 per cent General and 10 per cent DC.

\textsuperscript{34} For example, a wide range of metal-working and other manufacturing activities are assisted by tariffs which are phasing down to 15 or 10 per cent General.
eliminated. They also said:

‘If any wheelchair manufacturer is reduced to making what we call the specials or semi-specials then I doubt if he would want to stay in business.’

They added that changes in the value of the Australian dollar vis-a-vis other currencies since 1980 had increased the assistance available to the local wheelchair industry and inhibited rationalisation. They said:

‘Using the $US as the standard and taking the current rate of exchange of the $A as $US0.75 the depreciation of the Australian $ has been 31.8%. The reduction in exchange has therefore considerably more than offset the gradual drop in the protective duty from the original 35% to its present 18%’.

The Commission notes, however, that currency changes have affected all Australian industries. In the same period some other industries have undergone substantial rationalisation.

In the Commission’s view a reduction in tariffs would be unlikely to lead to the cessation of local manufacture of wheelchairs. There appears to be a strong natural advantage held by Australian producers, even for basic models, generated by the ready availability of service and spare parts. As shown in Table 7.2 above, the existing duty does not add greatly to importers’ costs for cheaper models which seems to be a main concern of the local manufacturers (about $20 on average for a wheelchair imported from Taiwan in 1988-89).

The Victorian Association of Occupational Therapists said:

‘The VAOT does not believe that as a result of reduction on tariffs on imported wheelchairs, the Australian wheelchair industry will disintegrate. Since the introduction of P.A.D.P., increased supply of wheelchairs for people with disabilities has been made easier for many, and statistics support the notion that local manufacturers maintain their share of the market. As previously stated, Occupational Therapists do not discount the advantages of availability of customization, and those other benefits of dealing with locally based manufacturers.’

37 Victorian Association of Occupational Therapists, Submission No. 857, p. 3.
Lower tariffs would provide significant benefits to some users in the form of reduced prices for imported wheelchairs and perhaps some downward pressure on prices of locally-produced wheelchairs. As a result, consumers could have more money to spend on other goods and services. The total demand for wheelchairs may not increase markedly, although sales of some ‘specials’ may increase with lower prices. The Austin Hospital noted that:

‘Lower tariffs, by providing reduced prices for imported chairs, will be of benefit since a significant proportion of the chairs purchased are imported. The resultant savings will be reallocated to areas of high priority within the hospital.

It is not envisaged, however, that the proportion of imported chairs purchased will increase as a result of lower prices. Since needs are rarely standard, the ability to have a specifically tailored chair is most important and overseas manufacturers could not provide such a service in the time-frame required’.38

One way of implementing lower tariffs would be to further phase down tariffs on wheelchairs once the General rate reaches 15 per cent on 1 July 1992. An alternative approach, which the Commission recommends, is to accelerate phasing by reducing the General rate to 15 per cent on 1 July 1991 and reduce it by five percentage points each year thereafter until it reaches zero. Under both options, the DC rate would automatically reduce in line with reductions in the General rate.

Several wheelchair manufacturers requested that the DC preference for Taiwan be eliminated. The Commission considers Taiwan’s continuing DC status to be outside the scope of this inquiry.

Pacemakers

The production of pacemakers and defibrillators falling within Tariff Heading 9021.50.00 is assisted by a tariff of 15 per cent (DC 10 per cent). Some inputs used in the manufacture of pacemakers and defibrillators are also eligible for a bounty of 17 per cent of value added. The bounty rate will progressively decrease over the next five years. Telelectronics said that the previous computer bounty of 20 per cent of value added allowed the company to reduce its prices of pacemakers by $79 and defibrillators by $966.

38 Austin Hospital, Submission No. 716, p. 9.
The market for pacemakers in Australia, consists of one domestic producer (Telectronics) which holds 50 per cent of the domestic market, with the remaining 50 per cent met by imports. Telectronics claimed to be internationally competitive in the production of pacemakers. It said that it holds about 15 per cent of major overseas markets and was placed between number two and number three in world pacemaker production. Company representatives said:

‘bounty assistance ... was the major form of assistance being received by the company - the tariff really, given the fact that most of the production is exported, does not have considerable impact’.

The Commission further notes that Telectronics approached Customs for a reclassification of defibrillators to Heading 9021.90.00, under which they would be duty free. This was rejected on the grounds that they perform the same function as pacemakers.

Telectronics supported the Commission’s recommendation to reduce tariffs on 90.21.50. In response to the Commission’s draft recommendation Telectronics stated:

‘Telectronics emphasises, nevertheless, that even if the computer bounty is not continued, the company supports the Commission’s proposal to remove the protective tariff on pacemakers from 1 January 1991’.

The Commission recommends that all goods falling within Tariff Heading 9021.50.00 be reduced to zero on 1 January 1991. The Commission does not expect to see any major adverse effects on production flowing from its recommendation. Goods using broadly similar resources face widely varying assistance arrangements. Some are dutiable at tariff rates which are reducing to 15 per cent while others receive no or negative assistance. Telectronics is an internationally competitive company which exports 90 per cent of its turnover. It has announced that it will cease making pacemakers in Australia, so that there will be no local production of that product and the effects on the production of other goods is likely to be minimal. As pacemakers and defibrillators are provided free under Medicare arrangements, a tariff reduction will not affect the ultimate price for the goods paid by the consumer. However, it will lower costs to providers.

40 Telectronics, Submission No. 677, p. 2.
Other goods

For other products used by people with disabilities, reducing tariffs would involve splitting the Tariff as the items concerned are not separately identified. As noted earlier in this chapter, such action would fragment the Tariff, increasing both its complexity and the costs of Customs administration, and could affect patterns of production and use.

At the draft report hearings ACROD stated:

‘even though the recommendations of the Commission on a few things are most welcome, particularly on removal of tariff on wheelchairs and pacemakers, defibrillators, ... we are disappointed that the arguments of administrative complexity and problems for the bureaucracy were used as the main reason for not going further once the Commission obviously had taken the view that it was appropriate to further tinker with these systems’. 41

However, the Tariff is primarily an instrument to provide assistance to industry. Administrative considerations aside, removal of tariffs on goods removes assistance to local producers. The Commission has considered both the case for lower assistance and the administrative costs involved in determining its stance on the tariff levels for the goods under reference. For goods other than those mentioned above, the Commission remains of the view that the benefits of further subdivisions in the Tariff are outweighed by the administrative and industry assistance costs which fragmentation would bring in train.

It is difficult to address welfare considerations in the Tariff, not only because of administrative difficulties in applying end-use criteria but also because Australia is bound by the International Treaty to the Harmonized Tariff, which sets out mandatory headings. While it may be possible to propose changes in these headings, the decision to make any changes would ultimately rest with the Customs Co-operation Council, which is an international organisation, and may take many years to put in place. Customs argued that it may be more efficient to provide relief from duty by way of social security payments - a disability allowance, for example. Customs proposed that ‘such an allowance could be calculated to factor in a component for duty payable and the payments could be made through existing

41 ACROD, Transcript, Canberra, 22 June 1990, p. 915.
social welfare payments systems’. This matter is discussed briefly in Chapter 8.

7.3 Government purchasing

Governments are major purchasers of disability equipment whether for their own use or for distribution to disabled people. Their purchasing policies can have a significant effect on what is produced and how and when production is undertaken.

The Commonwealth Government operated a scheme which afforded preference to purchases of goods and services of Australian or New Zealand manufacture over those from foreign suppliers until November 1989, when the scheme was abolished. However, it remains Commonwealth Government policy to ‘buy Australian’ where the Australian product is of comparable price and quality.

Until 1986, State Governments operated schemes offering home State producers a margin of preference against interstate and overseas producers. In some States there was also a margin of preference for interstate producers against foreign suppliers. As State preferences have only recently been abandoned, it is likely that the current structure of industry still reflects this policy.

Government purchasing preferences provided an advantage similar to that arising from tariffs for many manufacturers of disability aids, particularly those such as wheelchair manufacturers supplying public hospitals. Orders may have been diverted from lower cost foreign suppliers to higher cost domestic producers, causing an expansion of the domestic industry at the expense of imports. Moreover, since preferences applied only to the public sector, producers may have been encouraged to focus their operations more on the public sector than would otherwise have been the case.

42 Australian Customs Service, Submission No. 752, p. 1.
43 The preference was equivalent to a notional discount of 20 per cent on the Australian/New Zealand content of tender prices. It was additional to any import duties which applied. While the Commonwealth Government imports on a duty free basis, duties had to be taken into account when comparing local and foreign tender prices.
Denyers claimed that major users of wheelchairs, such as hospitals, favour local manufacturers through their purchasing policies, saying:

‘Australian manufacturers would have the major part of this highly competitive market (institutions) with price a very significant factor unless a particular manufacturer has an individual and wanted design. Each State tends to favour its own State manufacturers.’\(^{44}\)

Denyers added that high freight charges reduce the ability of manufacturers to compete in interstate markets.\(^{45}\) Some manufacturers who tender for wheelchair sales to State Government bodies and to the Department of Veterans’ Affairs (DVA) said that purchasers in the different States have different design requirements for what is really the same basic wheelchair design and that this added to production costs.

The Yooralla Society of Victoria said:

‘Government departments should more fully consult their ILCs. Discussion with ILC professional staff may well result in more common bulk purchases through purchasers’ greater understanding of their needs and the market.’\(^{46}\)

Differences in design requirements mean that manufacturers cannot supply the same item to more than one State without some modification. In a market where governments are major buyers, manufacturers’ ability to achieve economies of scale is reduced and the cost of equipment is increased. It is also likely that manufacturers will be discouraged from submitting tenders in more than one State. Specifications based on performance rather than design should facilitate greater standardisation between the States and the Commonwealth, and would provide some potential for lower prices and greater competition in supply. Even then, freight and other costs will limit the scope for significant reductions in costs and prices.

\(^{44}\) Denyers, Submission No. 24, p. 4.
\(^{45}\) ibid., p. 5.
\(^{46}\) Yooralla Society of Victoria, ILC & Microcomputer Applications Centre, Submission No. 669, p. 4.
7.4 Equipment standards

ACROD said that it supported the need for the development of Australian standards for a whole range of aids and appliances. It added that ‘research in the area indicates that adherence to standards results in substantial savings in maintenance of equipment such as wheelchairs over their lifetime’.47

Standards Australia said Australia is in the process of adopting the International Standard for overall wheelchair dimensions intended to ensure that wheelchairs complying with that standard will be able to be used in buildings which comply with Australian Standard AS 1428.1.48 Standards Australia also said that a new series of standards covering performance aspects such as stability and braking efficiency are being progressively published and are expected to be finalised by December 1991. These standards will be based on overseas standards developed by the International Standards Organisation, with local input from a working group comprising representatives of the Standards Association, users and the industry.

In their draft report submission, four local wheelchair manufacturers, Denyers, Sibbing Industries, H & M Equipment and Met-a-Lite requested that the Commission recommend that the forthcoming Australian Standard for wheelchairs be made a mandatory standard with which all manufacturers and importers would have to comply.49 The Crippled Children’s Association of South Australia also supported the introduction of standards for wheelchairs. It said that its preliminary results for electric wheelchairs show that the costs of upgrading to standards quality ‘are recouped many times over in terms of reduced maintenance costs during the life of the wheelchair’.50

In the Commission’s view the benefits of introducing mandatory standards are not clear-cut. For example, the maintenance costs over the life of a wheelchair is a matter which should be taken into account by the buyer when making the decision to purchase. Moreover, there is clearly a market for wheelchairs of varying prices

47 ACROD, Submission No. 353, p. 5.
48 Standards Australia, Submission No. 185, p. 2.
50 Crippled Children’s Association of South Australia, Submission No. 296, p. 4.
and qualities and mandatory standards may exclude from the market some wheelchairs which may be adequate for their intended purpose.

This might be of particular concern if the mandatory standard were to be set at a very high level. At the public hearing the Crippled Children’s Association of South Australia said that ‘no chair that we have tested - whether Australian or imported - has met the standards first go’. It added that local manufacturers are in a better position to modify their chairs to meet the standard than importers. The Commission considers that, as the cheaper wheelchairs are mostly imported, mandatory standards should not be allowed to become a de facto form of import protection for the local industry.

The end result of introducing mandatory standards might well be to limit the freedom of choice and increase the costs of some users without providing any substantial benefits. On the other hand, those manufacturers and importers who choose to comply with a non-mandatory standard can advertise their products as such, and may thereby gain a competitive advantage over non-compliers. This may be reflected in increased sales or the ability to charge a price premium for their goods.

While the Commission accepts that voluntary standards are useful in providing consumer information, it will not recommend that such standards should be mandatory.

51 Crippled Children’s Association of South Australia (Regency Park Centre for Young Disabled), Transcript, Adelaide, 14 May 1990, p. 668.
8 SALES TAX

8.1 Introduction

Sales tax is imposed by the Commonwealth on goods either newly produced in Australia or imported, new or second-hand, for domestic consumption. The purpose of the tax is to raise revenue, whereas the aim of the Tariff is to provide industry assistance. Many submissions argued that sales tax imposes a major cost on people with disabilities, many of whom are on low incomes.

Goods used by people with disabilities may be grouped as follows:

- goods specifically designed and manufactured for people with disabilities and not used by others in the community (for example, surgical boots, braces and irons, artificial limbs and hearing aids). Such goods are sales tax exempt;
- general use goods which may also serve to improve the quality of life of people with disabilities (for example, computers, microwave ovens). Such goods are generally taxable; and
- goods specifically designed and manufactured for people with disabilities but which are used by the broader community (for example, flashing alarm clocks which are mainly used by those with hearing difficulties but are also purchased by others). Such goods may or may not be taxable.

Current exemptions

Sales tax exemption for goods used by people with disabilities is available under the following items in the First Schedule to the Sales Tax (Exemptions and Classifications) Act:

- Item 42 comprises a list of specified surgical appliances and parts. With the exception of wigs and hair-pieces, exemption applies to any purchaser;
• Item 42B covers appliances used by persons suffering from physical impairment for the purpose of alleviating or treating that impairment. The exemption applies to any purchaser;

• Item 123 covers all goods `designed and manufactured expressly for use by' people with disabilities, provided they are not ordinarily used by people who are not suffering from disabilities. Again, the exemption applies to any purchaser;

• Item 42C covers components or parts such as special foot and hand controls which are incorporated in a motor vehicle (new or second hand) to permit it to be driven by someone with a disability. It is conditional in that it applies only to goods for use in modifying vehicles;

• Item 123A covers videotex systems, teletext decoders and so on for use by persons certified by the Department of Community Services and Health as being profoundly deaf. Hence exemption is conditional on the identity of the purchaser;

• Items 135 and 135A provide exemption which is conditional upon the type of user. Item 135 provides exemption for the purchase of motor vehicles to be used by veterans who have lost the use of a leg or both arms. Item 135A concerns vehicles purchased to transport to and from gainful employment persons who have lost the use of one or both legs to the extent that they are permanently unable to use public transport.

Further details of these items are provided in Appendix D.

8.2 Sales tax exemption issues

Most of the evidence received by the Commission concerned perceived inconsistencies in the range of exemptions available and the sales tax treatment of general use goods.

For example, it was pointed out that, as sales tax is not payable on second-hand goods, exemption from the tax assists those who purchase new goods which are taxable, but provides no assistance to purchasers of second-hand goods. It was claimed that the price of second-hand goods reflects the tax-inflated price of new goods for general sale, so that the concession is not passed on to the second-hand market.
Motor vehicles

Exemption under Item 135A is available for the purchase of new but not second-hand motor vehicles for use in transporting people to and from ‘gainful employment’. There were about 750 exemption approvals under this item for 1988-89. The sales tax saving was about $3 000 per vehicle on average, and about $2.3m in total. This measure confers more assistance the higher the value of the (new) vehicle purchased. However, it is of no assistance to those not able to work, to those who work but cannot afford a new vehicle, or to those who use other forms of transport. Disabled Motorists (Vic) requested that the concession be widened to include all disabled citizens who cannot use public transport. It also requested that the exemption be in addition to the mobility allowance.

This issue was also raised in submissions on the draft report and at the draft report hearings. Some participants commented that motor vehicles are necessary to maintain a person with disabilities in the community. The Independent Living Centre (ACT) said:

‘under present regulations only people with disabilities who require a motor vehicle for transport to and from work are entitled to sales tax exemption. This rule discriminates against people who are unable to work because of their disability, disabled women who choose to stay at home and are supported by their non disabled husbands, retired people with disabilities and parents of children with disabilities. Many people are unable to use public transport which adds weight to their need for sales tax exemption on motor vehicles’.

1 It is not essential for the applicant to be the owner or driver of the vehicle. Moreover, ‘gainful employment’ includes courses of study in relation to which a grant or allowance is received. Examples and eligibility criteria are listed in ATO, Submission No. 260, pp. 2-4.
2 ibid., p. 2.
3 Disabled Motorists (Vic), Submission No. 110, p. 1.
4 The Government provides a mobility allowance of $11 a week to disabled people who are gainfully employed or undertaking vocational training and who cannot use public transport without substantial assistance. The allowance is not payable if sales tax exemption on a new motor vehicle was received during the previous two years. In 1988-89, the mobility allowance was paid to 12 756 people at a total cost of $7.4m.
5 Independent Living Centre (ACT), Submission No. 166, p. 3.
The Horsham Disabled Persons Association said, ‘the tax on vehicles is unjust when country people have no public transport and no other way of getting around’.6

The Australian Taxi Industry Association (ATIA) asked that sales tax exemption be given to taxis utilising specialised equipment to provide services to people with disabilities. It said:

‘the Metrocab, which is eminently suitable to provide services to disabled people and the general population, suffers from an excessive cost burden created by a protective tariff which is currently 42 per cent, a luxury sales tax which has been recently increased from 30 per cent to 50 per cent and a cost limit on the level of depreciation acceptable for taxation purposes’.7

The Australian Taxation Office’s (ATO) view on a sales tax concession is that:

‘it is considered unlikely that the Government would agree to such an exemption. There is no exemption in the law for motor vehicles on the basis that they are for commercial use. Taxcabs are specifically included in the description of motor vehicles covered by Item 1 in the Fifth Schedule to the Sales Tax (Exemptions and Classifications) Act, which are taxable at the general rate of 20 per cent. While the Metrocabs have facilities to carry a person confined to a wheelchair, they will also be used extensively to carry persons without disabilities. It would create an anomaly to exempt Metrocabs from tax when they will be operating in competition with other taxicabs which are taxable’.8

Recent amendments to the Sales Tax (Exemptions and Classifications) Act have made motor vehicles fitted out for transporting people with disabilities taxable at the general rate of 20 per cent.9 Therefore Metrocabs will be taxable at the same rate as other taxicabs, that is the general rate of 20 per cent, not the 50 per cent luxury tax.

ATIA advised the Commission that in 1989 the cost of the Metrocab, before duty and tax was $27,660 but that once the tariff and sales tax was added the cost was $53,419, (whereas the cost of a taxi cab not equipped to carry people with disabilities is around $22,000 on the road). The Metrocab also has to be

7 ATIA, Submission No. 450, p. 10.
8 ATO, Submission No. 405, p. 3.
9 ibid.
considerably modified (after importation) to meet Australian conditions.

ATIA also stated that the importer of the Metrocab was looking to import possibly two Metrocabs a week if the tariff and taxes were removed, as the company sees these as ‘the future’. ATIA said:

‘... by the year 2000, every taxi in London will have to have a wheelchair capacity. That is now law in the UK. ... I believe that if we are going to look to the future in this country, with our ageing population and people with disabilities, we are looking at a situation like that.’

There is clearly a substantial price difference between the Metrocab and ordinary taxis. However, for most of the time the Metrocab will be carrying out the same duties as an ordinary taxi. While some Metrocabs operate under a normal licence, in New South Wales the majority operate under Special Purpose Taxi (SPT) licences and thereby receive an additional taxi plate to offset the cost of running the SPT. The Commission considers that where governments see merit in providing services to improve the mobility of people with disabilities by, for example, subsidising the costs of Metrocabs or other special vehicles, then this is best done by direct subsidy. This should be targeted at providing the type and amount of service considered appropriate.

The Commission was criticised for its draft recommendation that Item 135A exemption be limited to vehicles which cost less than the ‘luxury car’ threshold and that exemption should not be approved if the person concerned has received an exemption in the previous four years. Disabled Motorists (Vic) claimed:

‘some severely disabled people need large vans with electric hoists and other expensive equipment. Their costs can easily cross the ‘luxury car’ threshold. Many need larger cars to

11 SPTs also include Nissan Urvans and stretched Ford Limousines. There are currently 76 SPTs with a further 12 licences to be issued shortly.
12 There are already some measures in place to assist people with disabilities. For example, in New South Wales the Urban Transit Authority provides disabled people with transport vouchers which are used to pay half of any taxi fare up to a maximum of $25. The Commonwealth’s mobility allowance for people with disabilities was noted in footnote 4 in this chapter.
take their wheelchairs and other equipment. While these may not yet be in the luxury class, inflation could well see them rise to that level.\textsuperscript{13}

As mentioned above, recent amendments to the sales tax legislation mean that vehicles specially fitted out to transport people with disabilities will not be subject to the luxury car threshold but will be taxable at the general rate of 20 per cent.\textsuperscript{14}

Disabled Motorists (Vic) also said:

‘doubling the time between purchases also discriminates against disabled drivers. Apart from the veterans all groups that obtain sales tax exemption on cars get this benefit after 2 years or 40 000 kms.’\textsuperscript{15}

At the initial public hearings, the Commission received evidence of people with disabilities replacing their car every two years; using the sales tax exemption to offset the depreciation of the vehicle, they are able to exploit the concession. In the Commission’s view, increasing the period of exemption from two to four years is unlikely to add significantly to vehicle running costs, but it would remove the opportunity to use the concession for unreasonable personal benefit.

The Commission appreciates that extending the period for sales tax exemption under Item 135A from two to four years would create an anomaly among groups eligible for sales tax concessions on vehicle purchases. The Commission considers that it would be reasonable for the period for the sales tax exemption for all such groups to be increased from two to four years. However, that question is not under reference in this inquiry.

**Other goods**

Many participants called for a broadening of the sales tax exemption to cover certain goods not specifically designed for people with disabilities but considered necessary to enable them to enjoy a more independent lifestyle. Examples given

\textsuperscript{13} Disabled Motorists (Vic), Submission No. 289, p. 1.

\textsuperscript{14} ATO, Submission No. 405, p. 3.

\textsuperscript{15} ibid.
include microwave ovens, electric can-openers, air conditioners, computers and other communications equipment. All of these goods are currently subject to sales tax, often at 20 per cent. Participants argued that this is an unnecessary tax on people with disabilities, that it impacts most heavily on lower income groups, and that it deters people from acquiring goods which would make a significant difference to their independence or well-being by partly ameliorating the effects of a disability. For example, electric beds and hoists were said to be necessary for some people with disabilities, such as those suffering from motor neuron disease, but they are classified as ‘general use’ goods for taxation purposes. A letter sent by the ATO to Mrs M. Lindupp stated:

‘although the Tormo electric adjustable bed offers therapeutic relief for people suffering from spinal problems and other body ailments, it is considered to be goods of a kind ordinarily used by persons not suffering from disease or disablement. Accordingly the Tormo electric adjustable bed is taxable at 10 per cent under item 1(a) in the Third Schedule to the Sales Tax (Exemptions and Classifications) Act’.

The Lindupps appealed against this decision but were told by the ATO that:

‘from the literature forwarded by your supplier, the product is designed to provide greater comfort for normally healthy people in addition to use by persons suffering from sickness, disease or disablement. ... Whilst the bed is distinguishable from a ‘normal bed’, the distinguishing characteristics - its adjustability - are not expressly designed for disabled people but rather to enhance the bed’s general level of comfort - to provide more comfort, less stress, more relaxation and more versatility. ... Item 123 as it is worded is limited in its application by both the use of the word ‘expressly’ in the context of the design and manufacture of the goods and by the qualification to exclude ‘goods of a kind ordinarily used by persons not suffering sickness, disease or disablement’. Both of these factors preclude exemption applying to the Tormo bed.’

Provision for exemption of some ‘general use’ goods already exists in the sales tax legislation. For example, primary producers may claim exemption on a wide range of goods such as pumps and tanks. Items 123A and 135A provide qualified exemption for some ‘general use’ goods, such as videotex systems and motor vehicles, which are used by people with disabilities.

16 See, for example, the Australian Quadriplegic Association, Submission No. 50; Quantum Technology, Submission No. 40; and Yooralla Society of Victoria, Submission No. 54.
17 Mr J. Lindupp, Submission No. 388, p. 3.
18 ibid.
Participants suggested a number of options for the administration of a broader range of sales tax exemptions. These included an exemption certificate which could be validated by a medical practitioner or a registered body such as the Royal Institute for the Blind or an Independent Living Centre, and a system of exemptions administered via equipment provision schemes. Participants argued that sales tax revenue forgone would be small and, because of the existing exemptions, administrative costs would not be significant.

The issue of sales tax exemptions was debated in Parliament in 1989. The Government argued against extending current exemptions for people with disabilities on the grounds of administrative difficulty, the open-ended nature of extension proposed and the possibility of abuse. At the draft report hearings ACROD commented:

‘... in that debate in November and December in the Senate of last year ... the Government had prepared an amendment to extend the sales tax exemptions to both computers and airconditioners used by people with disabilities as a counter amendment if in fact the long-standing Democrat amendment on wider exemptions had got the support of the Opposition’.

The ATO responded:

‘an amendment was inadvertently circulated by the Government during the debate in the Senate on the Sales Tax (Exemptions and Classifications) Amendment Bill (No. 2) 1989. The position was that the Government has always held concerns about granting sales tax exemptions for general purpose goods for use by the disabled. The major concerns, which are well documented, are that sales tax concessions are not the most equitable form of relief or assistance and that conditional exemptions involve considerable costs to both the ATO and taxpayers as well as opening up the law to abuse’.

19 Senate, Hansard, 11 December 1989. The Australian Democrats sought to amend the Sales Tax (Exemptions and Classifications) Act, proposing the addition of the following item:

‘123AA. (1) Goods, not covered by any other item in this Schedule, for use as special aids, and not for sale for that purpose, by people with physical or intellectual disabilities, in respect of whom a medical practitioner or a qualified or registered occupational therapist has certified that the use of the goods as special aids is necessary...’

20 ACROD, Transcript, Canberra, 22 May 1990, p. 916.

21 ATO, Submission No. 892, p. 1.
Administration and private compliance costs

The ATO said that few problems have been encountered with the administration of sales tax exemptions where the named goods are unconditionally exempt, that is, where the exemption applies irrespective of who the purchaser is.\(^{22}\) In such cases, administration is relatively simple. The major items in this category are Items 42\(^{23}\) and 123.

On the other hand, where exemption is conditional upon the type of buyer or on the number of items bought in a particular period, the ATO’s administration costs and the private sector compliance costs rise significantly. In the case of Item 123A, the ATO said that it ‘has been costly to administer for the relatively small amount of tax saving to the hearing impaired person’.\(^{24}\)

The ATO added that, for conditionally exempt goods, the private compliance costs are also high. It said that, as goods would generally be purchased from retailers holding tax-paid stocks:

‘there is a considerable amount of paperwork involved in processing a claim for exemption and the ATO has for many years received numerous complaints from business people about the cost of processing exemption claims for no reward other than for the goodwill of the business’.\(^{25}\)

The ATO also stated that there are difficulties with the administration of existing conditional exemptions, and that these difficulties would be substantially increased in the case of general use goods. ‘Without adequate controls it would be relatively simple for the disabled person to purchase goods tax-free for families or friends’.\(^{26}\) It added that:

‘an exemption for general purpose goods would be difficult to administer and involve business people in additional paperwork and costs at a time when the Government is looking to reducing the regulatory costs of business, particularly small business. In many cases it is the small business that bears the brunt of conditional exemption claims because it does not have the capacity to process the claims’.\(^{27}\)

\(^{22}\) ATO, Submission No. 225, p. 2.

\(^{23}\) With the exception of Item 42(17) which deals with wigs and hair-pieces.

\(^{24}\) ATO, op. cit., p. 5.

\(^{25}\) ibid., p. 6.

\(^{26}\) ibid.

\(^{27}\) ibid., pp. 6-7.
However, the ATO considered that extension of Item 123A, by listing specific goods which would be exempt from sales tax, would be workable. It said that a specific listing would ‘avoid the interpretative problems of deciding whether particular goods fall within a prescribed class of goods, which in the past has given rise to some uncertainty and inconsistency in the classification of particular goods’.28

The Commission’s conclusions and recommendations

Many goods of concern to people with disabilities are exempt from sales tax as they are specifically designed for them. Requests for extension of these concessions mainly concerned goods that would help someone with a disability, but which are of a kind used by others without a disability.

Extending the sales tax exemption would involve considerable administrative costs and difficulties and would increase the scope for abuse. Moreover, sales tax exemption is not the optimum way to provide assistance to people with disabilities. However, various items already exist in the Sales Tax (Exemption and Classification) Act which make allowances for social welfare considerations. In view of this the Commission considers some changes are desirable.

First, in view of the confusion among participants as to the rules concerning the sales tax treatment of particular goods, the Commission proposed in its draft report that the ATO should publish a leaflet explaining the available sales tax exemptions for people with disabilities, and claiming procedures. The ATO subsequently advised the Commission that it was in the process of publishing a leaflet, which it intends to distribute widely.

Second, the Commission recommends that exemption on motor vehicles in Item 135A be limited to vehicles which cost less than the ‘luxury car’ threshold under current income tax arrangements. An exemption should not be approved if the person concerned has received an exemption in the previous four years. These changes should be embodied in the legislation, not just in the administrative rules.

28 ATO, Submission No. 405, p. 2.
The Commission notes that, for the sake of consistency, eligibility for the mobility allowance would need to be amended so that it would not be available if sales tax exemption on a motor vehicle had been received during the previous four years (rather than two years as at present). The Commission appreciates that this will create an anomaly among groups eligible for the concession. However, while it considers this requirement should be adopted for all eligible groups it can only recommend with respect to people with disabilities in this report.

Third, the Commission recommends that the wording of Item 123 be changed to allow for exemption of goods which are ‘designed and manufactured expressly for use by’ persons with sickness, disease or disablement but occasionally used by others. The current restriction of the exemption to goods ‘not ordinarily used by persons who are not suffering from sickness, disease or disablement’ could be modified to read ‘of a kind predominantly used by persons with sickness, disease or disablement’. The Commission notes that, although this will not necessarily result in expanding exemptions under the current item, it may help clarify the wording in borderline cases, for example, alarm clocks with flashing lights predominantly used by hard of hearing people.

Fourth, the Commission received many submissions requesting that certain general use goods be exempt from sales tax. These included electrically adjustable beds, automatic doors and general household items required by people with disabilities to enable them to live independently, such as airconditioners and microwaves. However, in view of the difficulties in restricting any concession for general use goods, the Commission will not recommend a general exemption for goods used by people with disabilities.

Several participants requested that computer equipment required to operate electronic communication aids be exempt from sales tax. These are costly items necessary for profoundly disabled people to ameliorate the effects of their disabilities. The Commission notes that most communications equipment which is specially designed for people with disabilities is already exempt under Item 123. It

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29 The Yooralla Society of Victoria requested that the change in wording of Item 123 recommended by the Commission be extended to remove the words ‘are suffering from’ and replace them with ‘have’, so as to read ‘persons who have sickness, disease or disablement’. Yooralla Society of Victoria, ILC & Microcomputer Applications Centre, Submission No. 669, p. 4.
recommends a limited extension to the list of goods eligible for sales tax exemption by adding computer equipment used as, or in conjunction with, electronic communications equipment to Item 123A, where certification is provided by a doctor or therapist. A time period should be specified during which the exemption may not be claimed again. The equipment should include the computer and major items of related hardware such as disk drive, printer and ‘mouse’.
9 PROGRAMS OF ASSISTANCE FOR PEOPLE WITH DISABILITIES

9.1 Introduction

There are numerous programs which aim to assist people with disabilities to acquire the aids and appliances they need. Some are operated by the Commonwealth, others by the States, and a number of hospital-based schemes are provided for jointly under the Commonwealth-State hospital finance arrangements.

Eligibility criteria vary from scheme to scheme. Many participants noted that the amount of assistance provided by the various schemes depends on the kind of disability, the nature of equipment needed, whether or not the person concerned is in employment (or had the potential to work), their age, income and so on. Virtually no two schemes operate in the same way.

For most schemes, equipment is provided free of charge to eligible people, although a few involve client contributions, particularly for upgraded equipment. In contrast, those people with disabilities who are not eligible for assistance must rely on private health insurance or their own resources for equipment purchases. Charitable organisations also play a role.

The terms of reference require the Commission to report on the ‘cost and availability’ of aids and appliances, and it has concentrated on this issue, rather than broader questions of income assistance to people with disabilities. Nevertheless, many participants argued that the best way to assist people with disabilities is through pensions, income tax rebates or other forms of cash assistance. These matters are briefly commented on in Section 9.4.

9.2 Overview of the programs

The Commonwealth operates a range of schemes including the Commonwealth Rehabilitation Scheme (CRS), the Hearing Services Program, the Free Limbs Scheme (FLS), the Stoma Appliance Scheme and equipment schemes for veterans.
The States are also major suppliers of aids and appliances through the programs they established to replace the Commonwealth's Program of Aids for Disabled Persons (PADP), and through public hospitals. Appendix E provides some information on the major schemes.

Some aids and appliances are provided under other Commonwealth programs such as the Home and Community Care Program (HACC) and in nursing homes and hostels. Such programs are primarily service-oriented, but provide some equipment necessary to ensure service operation. However, the outlays involved are relatively small and aids are generally provided on a loan basis.

In 1987 the Commonwealth transferred responsibility for the PADP scheme to the States. In 1987-88 Commonwealth funding of the scheme was about $10m.

Some of the programs which provide income support or services to people with disabilities are listed in Table 9.1. As noted later in this chapter, there is a tradeoff between expenditures under the various programs. For example, part of the rationale for establishing programs such as the Home and Community Care Program was to provide alternative services to people who might otherwise need hospital or nursing home care.1 Equally, assisting people to obtain appropriate aids and appliances may reduce demands on home care and nursing services. The key issue is how to obtain the maximum amount of benefit for each dollar spent.

Aids and appliances are also provided through hospitals, under State programs such as PADP, or in State institutions such as hospitals. Hospitals provide a wide range of surgically-implanted prostheses and other disability equipment free of charge to patients while in hospital or when they leave.

For example, surgically-implanted prostheses such as pacemakers, knee replacements and hip implants are provided free to Medicare patients in public hospitals. Pacemakers costing $2 650 to produce ($9 650 when medical and hospital procedures are included) fall within this category.2 Effectively, patients in public hospitals receive them free, while others are refunded under Medicare/private insurance arrangements.3

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2 Telectronics, Submission No. 146, p. 2.
3 Under the National Health Act 1953, Basic Table benefits for prostheses are determined by the Minister for Community Services and Health.
Table 9.1: Assistance to people with disabilities under selected Commonwealth programs, 1988-89, $m

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invalid pensions and allowances</td>
<td>2415.6</td>
</tr>
<tr>
<td>Other payments for the disabled</td>
<td>98.3</td>
</tr>
<tr>
<td>Disability Services Program</td>
<td>323.3</td>
</tr>
<tr>
<td>Home and Community Care Program</td>
<td>349.6</td>
</tr>
<tr>
<td>Nursing home subsidies</td>
<td>1500.8</td>
</tr>
<tr>
<td>Home nursing service</td>
<td>62.8</td>
</tr>
<tr>
<td>Domiciliary nursing care</td>
<td>30.1</td>
</tr>
</tbody>
</table>

Note: This table is for illustrative purposes only. It does not purport to list all programs which help people with disabilities, or to separately identify people with disabilities from other recipients of assistance such as elderly people.

a Includes sheltered employment, rehabilitation and mobility allowances.
b Comprises subprograms for accommodation, employment, rehabilitation, community participation and hearing services.
c Includes expenditure by Commonwealth ($205.1m) and State Governments ($144.5m).
d Commonwealth only.


It is difficult to obtain detailed information about expenditure on aids and appliances provided to patients under State-operated schemes or in hospitals or nursing homes. A number of hospitals contacted by the Commission indicated that such data are kept only in aggregate form. However, some were able to compile data for the purposes of this inquiry.

9.3 Effectiveness of current programs

A large part of government non-institutional spending is on equipment covered by free provision schemes such as the Hearing Services Program, the FLS, and State programs set up to replace the earlier Commonwealth PADP scheme.
Effects on consumption

Free provision schemes can significantly increase access to equipment by people with disabilities. Consumers are able to obtain more than if they had to pay for the equipment. This is clearly the central objective of the programs. From the viewpoint of industry, the schemes also increase demand for those aids.

In many cases there is a direct tradeoff between the amount spent on aids and appliances and the need for hospital or nursing home care. Spending on self-help equipment, or on appliances such as hoists to help carers to assist people with disabilities, can mean that they can be cared for at home. They therefore can remain out of the hospital/nursing home system, and may be less reliant on home care assistance provided by governments. This would not only reduce their dependence upon institutions but would also reduce total government outlays on health.

The Hornsby Ku-Ring-Gai Hospital provided examples where the supply of aids through PADP had reduced overall costs by allowing patients to remain in their homes rather that be admitted to hospitals and nursing homes. For example, it said that many clients suffering urinary incontinence, ‘one of the main causes of nursing home admissions’, are able to stay in their own homes when the appropriate aids are supplied.

The Review of the Provision of Aids and Equipment in Victoria said that provision of aids and equipment resulted in reduced admission to nursing homes, hostels and public hospitals, and earlier discharge home from hospital, thus reducing per person bed days and correspondingly reducing waiting lists. It compared the once-only cost of approximately $1 000 for a lifting device/hoist to assist in the care of a disabled person with cerebral palsy or quadriplegia to the cost of approximately $12 740 per annum for two people to provide one hour of home help or nursing care on a daily basis under current Workcare requirements. It added:

‘Similarly, the $3 000 cost of home/bathroom modifications to enable self care, safety and independence compares to the average cost of a six month stay in a nursing home of approximately $14 560, six months hospitalization at approximately $72 000 or two hours home help per day for six months at $6 370.4

In addition the provision of aids and appliances may permit some people to enter the workforce. Again, in economic terms alone, it is good sense to have people who want to work not prevented from so doing by lack of access to disability equipment. Incentives to people with disabilities to enter the workforce are reduced for two main reasons. First, they have to acquire the aids or appliances which enable them to work and those items can be costly. Second, because programs are generally means tested, recipients lose most of their entitlements and discounts for aids and appliances once in the workforce.

This evidence suggests that the provision of aids and appliances may be a lower cost way of meeting the needs of some people with disabilities. The recipients are better off, and the total cost to the taxpayer is reduced. To the extent that increases in the efficiency with which needs are met can be achieved, funds are released. These in turn can be used to provide additional services in the health care area - and gaps have been identified in the coverage of existing programs - or for other purposes.

However, free provision may lead to inefficiencies in the form of overuse or overprescription. For example, the Department of Veterans’ Affairs (DVA) said that:

‘The present [FLS] does not encourage prescribers to be cost conscious. It has been reported that prescribers frequently prescribe a replacement [limb] where a repair would suffice, or prematurely [prescribe] a primary limb in cases where a patient’s stump is not mature’.\(^5\)

It added that:

‘This situation is not surprising since the cost of prostheses are not obvious to the prescriber, clinic or the patient’.\(^6\)

Sydney RALAC said that prior to the FLS the average life of a limb was about five years, but this has now fallen to about two years.

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\(^6\) ibid.
Effects on efficiency

Chapters 5 and 6 explained how the Hearing Services Program and the FLS have led to productive inefficiency and less competition in both the private and public markets. Demand for free services has exceeded supply for some years. However, even though there have been long waiting lists, competition from the private sector has remained restricted. Where goods are provided free and competition is restricted, prices do not operate as a market signal to either producers or consumers. The result is that the options available to people with disabilities are reduced.

These problems reflect management constraints imposed by public sector procedures and a lack of accountability which has been allowed to persist, hidden away in large health expenditures at both Commonwealth and State levels. On the other hand, while government operation in goods markets has led to productive inefficiency and delays in the delivery of goods and services, the quality of assessment and clinical services is sometimes highly regarded.

The administrative rules under which government equipment provision programs operate can affect the efficiency of the industries and markets supplying aids and appliances for people with disabilities. This is more evident when government purchases account for a large share of the market. For example, the introduction of the Commonwealth PADP scheme increased demand for wheelchairs. Limits on the value of aids and appliances available under free provision schemes will also influence industry structure.

In Queensland, for example, the arrangement whereby equipment valued at less than $100 is not provided free of charge will discriminate against manufacturers/importers of lower-cost aids and in favour of the higher-priced products. It may also induce suppliers to artificially raise the price of their equipment. It might also encourage overservicing, since prescribers will tend to recommend aids costing $100 or more in preference to cheaper items, so as to ensure free provision to their clients. Several participants reported that the $950 upper limit for wheelchairs under PADP in Victoria had resulted in the wheelchair industry concentrating on chairs of this value. Dr R. Llewellyn said that limits on the value of items available under PADP had effectively put price ceilings on those products.
Effects on equity among categories of disability

Chapter 3 looked at the needs of people with disabilities, their income levels and some reasons why they did not have the aids and appliances they need. This section considers how the eligibility criteria for the current programs for provision of equipment vary, and the effects this has on equity among groups of people in different circumstances.

While the schemes achieve their objective of increasing the access of people with disabilities to equipment, there is significant discrimination in terms of who gets what equipment, and how much they get. Some are well-covered, while others receive nothing. For example Ms P. Bowman, the acting director of Speech Pathology at the Royal Adelaide Hospital, said that communication aids are excluded from interim funding for the South Australian version of the PADP scheme because ‘communication is not considered to be an activity of daily living’.7

Moreover, where assistance is provided, the form varies:

- some goods are provided free;
- some are provided only to particular groups (hearing aids and CRS- and PADP-supplied equipment), while others are not limited (artificial limbs are available to anyone who needs one, irrespective of capacity to pay or other considerations). Differing concessions apply to groups such as invalid pensioners and the unemployed;
- NAL hearing aids and services are provided free by DCS&H to those under 21 with no means testing. Most pensioners are means-tested. Those not eligible for NAL products must either buy privately and pay the full commercial price, or do without;
- for limbs, a standard limb is provided free by either RALACs or private suppliers. For higher-standard limbs the patient only pays the additional cost;
- some programs concentrate assistance on those attempting to join, or already in, the workforce:
  - those people accepted into the CRS as likely to re-enter the workforce can receive communications aids to the value of $5 000 (on loan for as long as is required) and home modifications to the value of $10 000. However, persons with non-rehabilitative disabilities and not in the scheme, but also

requiring communications aids, must pay for those aids themselves. As they are not working, their financial prospects are not as good as for those accepted into the CRS;

- the sales tax concession on new motor vehicle purchases also assists only those who can work, and can afford to purchase new motor vehicles;

- residents of nursing homes and hostels have access to aids and appliances (albeit on loan), while those living independently will only receive them under free provision schemes if they meet the eligibility criteria; and

- a rebate of income tax is available when net medical expenditures, including expenditure on equipment such as wheelchairs, exceeds $1 000 per annum. However this is of little use to people on low incomes, who pay minimal income tax.

Private insurance makes some contribution towards some goods. Up to 85 per cent of the cost of prostheses which are not surgically implanted can be recovered through private health insurance. However, for other goods such as hearing aids, benefits can only be obtained where the person concerned has been paying the highest level of insurance for a specified number of years. Moreover, cover for a wide range of goods such as wheelchairs and callipers is either very limited or simply not available.

In summary, those eligible under the various schemes can obtain free of charge items such as artificial limbs, hearing aids, stoma appliances and, to the extent that funds are available, a wide range of equipment under the CRS, PADP and so on. However, in other cases, for example, for those ineligible for free provision, the person requiring the aid must purchase it without assistance.

By way of illustration, a person may obtain an artificial hip free of charge under Medicare but, if callipers or other orthoses or a wheelchair were also needed, they would have to be purchased privately. Whether or not items were available under PADP or similar schemes would depend on whether that person met the eligibility criteria.
The DCS&H said that:


The Council of Social Welfare Ministers resolved that the Commonwealth, States and Territories reach formal agreement regarding respective roles and responsibilities. Preliminary discussions have been held with the States and Territories and a framework for further discussion has been developed’.8

**Administration**

Assistance schemes vary in the degree of discretion accorded the administering authority. Eligibility for free hearing aids and artificial limbs is well-defined. By contrast, both the amount and form of assistance provided under the various PADP schemes and under the CRS depends in large part on the assessments made by the supervising therapists. This means that the assistance provided depends largely on the views of those therapists as to whether an individual is amenable to rehabilitation, and arguments can arise as to what this means in practice. The result is that large amounts of assistance are provided to some, with others missing out completely.

Moreover, most of the non-pension assistance delivered to people with disabilities is in the form of personal services under such schemes as the HACC. The tradeoffs between the provision of aids and appliances which confer a greater degree of independence, and the costs of such services, have been noted earlier. The separate administration of service and equipment schemes only serves to disguise the options which are available to assist those with disabilities, and the choices which could be presented to them.

Reviews of such programs as State PADP schemes and HACC indicate the problems encountered in determining what funds are spent on, and how the schemes fall short of the objectives laid down for them. The review of

Western Australia’s PADP scheme noted that:

‘Experience with the scheme to this time revealed a number of difficulties; in controlling costs, consumer and issuing authority confusion about available aids/equipment and eligibility, the open ended nature of the Scheme and the need for the State to fund shortfalls in the Scheme’s funding’.  

Difficulties also arise because of different rules operating in different States. For example, whether the provision of aids and appliances to outpatients is the responsibility of the treating hospital or of PADP (or its equivalent) varies between States. The Ovens and Murray Hospital for the Aged, which operates near the border between Victoria and New South Wales, said that:

‘In New South Wales, patients can be discharged from hospital with aids funded under the PADP scheme, whilst in Victoria the treating hospital is obliged to provide this equipment, and clients are not eligible for equipment under PADP for approximately six months’.

This causes problems where a patient resides in one State but is treated in the hospital of another State. The list of items made available under the different PADP schemes also varies. Indeed, within the same PADP scheme there can be differences between regions in their budget allocations and hence their ability to meet calls made on them.

Commenting on these issues, which were raised in the draft report, the Austin Hospital said:

‘The issues raised in relation to the inadequacies of the current system are strongly endorsed. The lack of equity and funds in the present system place unreasonable pressure on this hospital …’

Better information about products and programs is likely to lead to greater efficiency in the production of goods and services for people with disabilities, and a better matching of available assistance to those eligible for help. Several participants said that information about assistance programs is also difficult to come by, and it was noted in Chapter 3 that information about the attributes and

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9 Health Department of Western Australia, Submission No. 148, pp. 24-6.
10 Ovens and Murray Hospital for the Aged, Submission No. 192, p. 1.
11 Austin Hospital, Submission No. 716, p. 9. Austin Hospital, Submission No. 716, p. 9.
availability of equipment is generally poor. While improved information services do not come without cost, they can help markets function more efficiently than they would if disabled clients and their carers found it difficult to get dispassionate and authoritative information. The Commission’s recommendation in Chapter 3 is an attempt to address this problem.

9.4 A better way?

Current government assistance schemes have developed in a haphazard fashion over many years. Some, such as the Hearing Services Program and the FLS, are having adverse effects on productive efficiency. Free provision may also lead to overuse or overprescription. Moreover, there are inequities in that people suffering some types of disability get no assistance at all. Hence, it may be that some eligible people are overserviced while the ineligible are underserviced.

How currently operating schemes might be improved is difficult to answer. Tackling the problems so far identified in anything better than an ad hoc way requires the community to confront some fundamental issues. Judgments have to be made as to:

- what goods should be covered;
- who should receive assistance. Current schemes vary as to who benefits from free provision - eligible pensioners (some PADP schemes), selected groups (Hearing Services Program, veterans, CRS), or all residents (the FLS, Stoma Appliance Scheme\(^\text{12}\));
- how much of taxpayers' money should be allocated for such purposes (more or less than at present?);
- how assistance can be most efficiently and equitably delivered. Is a patient contribution, as is provided for under Medicare and the Pharmaceutical Benefits Scheme, appropriate and if so at what level?; and
- whether greater reliance could be placed on private insurance, either generally, or to cover particular risks. Current available cover appears to be limited to a

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\(^{12}\) Recipients must be members of voluntary ileostomy or colostomy associations - see Appendix E.
narrow range of disabilities, generally accident-related. The extent to which there is scope for this to be improved, and any factors which may prevent or impede this process, would need to be considered.

Answering these questions requires much better information than has been made available to the Commission on matters such as how and where monies are spent under the current programs. As noted earlier, it is very difficult to track down the pattern of spending on aids and appliances, because of the ways in which the various programs operate. The Health Department of Western Australia noted the need for better administrative systems and controls to increase flexibility and accountability, and recommended the introduction of a management information system ‘that will allow accurate monitoring and controlling of the PADP scheme’.13

The fragmented information available to the Commission suggests that many, if not all, of the schemes for the provision of aids and appliances suffer similar information problems. Moreover, there is very little useful information available about those products which might be included in new schemes. These information gaps make it difficult to assess the effectiveness of current programs, and to judge the cost of overcoming some of the gaps and inconsistencies in the coverage and assistance provided.

In view of this, the following discussion raises some preliminary observations based on what has come to light about existing programs. Further work addressing these matters would need to take place outside of this inquiry.

**How could the programs be improved?**

Assistance under any scheme ought to be delivered in a manner which is simple and easy to understand, open to scrutiny, and predictable and consistent in operation. It should not discriminate among disabilities. Current disability equipment programs do not rate highly against such criteria.

If it is desired that all disability equipment be provided under the same rules covering means-testing, patient contributions and so on, this effectively means

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13 Health Department of Western Australia, op. cit., p. 68.
laying down principles or guidelines for a new scheme. The mainstream health care programs, Medicare and the Pharmaceutical Benefits Scheme (PBS), give little guidance as they also vary in their operation. An alternative approach might be to replace assistance to users of aids and appliances with some form of income support, such as a disability allowance. The discussion which follows some observations about each of these matters.

Medicare and the Pharmaceutical Benefits Scheme - are they useful guides?

Some aids and appliances are effectively provided to patients in public hospitals free of charge. These are surgically-implanted prostheses which are available irrespective of their cost or the patient’s capacity to pay for them. On the other hand, the Sydney Children’s Cochlear Implant Centre said that cochlea implants are not provided free in public hospitals. It added that in New South Wales funding for eight to ten cochlea implants a year is provided through an Enhancement Grant by the State Health Department, but that the level of funding for implants varies from State to State.14

In the case of services provided by medical practitioners and optometrists, the Medicare Benefits Schedule provides for the Government to pay 85 per cent of the scheduled fee. The patient pays the difference between this and the actual fee charged.

In contrast, for items available under the Pharmaceutical Benefits Scheme, the patient pays up to a maximum of $11 each for the first 25 items each year, with the Government paying the rest and meeting the full cost of additional items. Patients pay market prices for pharmaceuticals not covered by the PBS. Concessions are also provided to some groups such as aged and invalid pensioners or the unemployed.15

Because each scheme operates differently, different effects would arise if either was used as a guide for the provision of aids and appliances. For example, a model

14 Sydney Children’s Cochlea Implant Centre, Submission No. 782, p. 5.
15 Concessions are provided by way of Health Care Cards, Health Benefit Cards and Pensioner Health Benefit and Concession Cards. These apply to different groups and accord different levels of concession.
based on surgically implanted prostheses implies free provision, irrespective of means, whereas a model based on the Medicare Benefits Schedule suggests setting a price akin to a ‘scheduled fee’ and refunding 85 per cent of this. A scheme based on PBS lines requires judgments to be made as to the levels of initial and total patient contributions.

While Medicare is intended primarily to provide benefits in respect of the professional services of medical practitioners, some participants suggested that hearing services could be added to the Medicare Benefits Schedule. In this way, hearing services would be linked to established Medicare procedures, with its own payments, administration and policing procedures. This proposal would require 100 per cent refunds to be made under the Hearing Services Program if there were to be no patient contribution. Benefits would need to be limited to those currently eligible under the Hearing Services Program, and would be payable directly to the supplier of the service, with the patient not being involved in the payment.

The DVA, in its review of the FLS, said that its preferred approach is to include artificial limbs in the Medicare Benefits Schedule. Benefit levels could be set so as to cover the cost of the present range of standard limbs. Thus, if the patient were a veteran or a health card holder, the standard limb would remain free, while other patients would make some contribution under the usual Medicare rules.

A major concern with any proposal to increase the scope of Medicare would be the added cost this would involve. Concerns about cost increases lay behind successive decisions by the Commonwealth to resist claims to include new services in Medicare.

Any new program which might replace existing schemes could involve a wider range of goods than is now covered, to overcome the gaps and inequities which now exist. Its cost would depend on such questions as the products to be included, the groups to be targeted, the nature and extent of means testing required and whether a patient contribution were to form part of the program (and at what level). Savings from introducing patient contributions to existing free schemes, and the extent to which greater provision of equipment led to reduced calls on hospital and home and community care services, would be important influences on the total cost to the community.
Introduce a disability allowance?

Several participants requested that the Commission recommend or endorse the concept of a disability allowance. For example, ACROD said at the draft report hearing that ‘it is far more appropriate to address [exemptions from tariffs and sales taxes] through a disability allowance’.\textsuperscript{16} The Social Security Review proposed a disability allowance as a supplementary payment to recognise the additional costs of disabilities.\textsuperscript{17} That Review did not see the allowance as replacing other community services to people with disabilities.

Analysis of this proposal needs to confront several issues. People with disabilities vary in their need for assistance, whether in the form of aids and appliances or income support. This makes design of an allowance difficult. Whether or not such an allowance should be means tested needs to be addressed. The Review made recommendations on some of these matters.\textsuperscript{18} The Commission has not analysed this issue in any detail, as it falls outside the inquiry’s terms of reference.

Concluding comments

In light of the above discussion, there are many policy questions which need to be answered before useful conclusions could be drawn: for example, what should the criteria be for assistance? and how much assistance does society want to provide for programs to supply aids and appliances to people with disabilities? Moreover, the quality of information about existing programs, and about goods not currently covered by any program, is so poor that the costs of alternative proposals cannot be estimated.

Nevertheless, for the purposes of this inquiry, the Commission draws attention to its observations as to the shortcomings of existing programs and the inequities they create. Future reviews of welfare programs will need to take these considerations into account.

\textsuperscript{16} ACROD, Transcript, Canberra, 22 May 1990, p. 915.
\textsuperscript{18} ibid., ch. 10.
B  STATISTICAL BACKGROUND ON MAJOR ITEMS OF DISABILITY EQUIPMENT

This appendix first provides some general information on demand and supply of hearing aids, artificial limbs and wheelchairs. It then examines specific products which participants said were highly priced in Australia in comparison to overseas.

B1 Hearing aids

National Acoustic Laboratories

The National Acoustic Laboratories (NAL) provides audiological services free of charge to hearing impaired people eligible for assistance under the Hearing Services Program. Under this program, NAL undertakes a range of activities, including:

- audiological assessment of eligible clients;
- selection and fitting of the hearing aid/ear mould;
- counselling on the use of the hearing aid;
- provision of batteries and maintenance of the hearing aid; and
- research into hearing aid design, audiology and acoustics research.

NAL fitted about 65,000 hearing aids, accounting for almost 65 per cent of the market, in 1988-89. NAL supplies its products and services through 44 permanent hearing centres and 65 visiting clinics located in major towns and cities in all States and Territories.

NAL’s main client groups are persons who are holders of Pensioner Health Benefit cards and their dependants, persons referred by the Department of Veterans' Affairs (DVA) and service personnel, and persons under the age of 21 years.
Table B.1: NAL client groups, 1988-89

<table>
<thead>
<tr>
<th>Age group</th>
<th>No. of aids supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New</td>
</tr>
<tr>
<td>Under 21 years</td>
<td>2 195</td>
</tr>
<tr>
<td>21 to under 65 years:</td>
<td></td>
</tr>
<tr>
<td>. eligible for NAL aids</td>
<td>478</td>
</tr>
<tr>
<td>65 and over:</td>
<td></td>
</tr>
<tr>
<td>. eligible for NAL aids</td>
<td>31 315</td>
</tr>
<tr>
<td>Total</td>
<td>33 988</td>
</tr>
</tbody>
</table>

Source: DCS&H, Submission No. 231, p. 2.

The commercial segment

There are six major producers/assemblers of hearing aids in Australia: Quadrant Instruments; Crystalaid; Starkey Laboratories Australia; Phonak (Australasia); Angus and Coote; and Dahlberg. In 1988-89, these companies produced/assembled 31 000 aids for use by commercial dispensers. Currently, Quadrant and Crystalaid also produce hearing aids for NAL under contract.

The commercial segment has been distributing hearing aids for at least 60 years. There are around 70 distributors - the major ones being Angus and Coote which has an agreement for supply from Oticon, Hearing Aid Specialists, and Telex (Australia) which has a collaborative agreement with Phonak. The distributors supply aids purchased from producers/assemblers established in Australia and from overseas manufacturers.

Number and type of hearing aids distributed

There were over 100 000 hearing aids distributed by NAL and the commercial distributors in 1988-89. Over 90 per cent of the aids distributed by NAL were behind-the-ear aids. In contrast, about 75 per cent of the aids distributed by the commercial sector were in-the-ear/canal aids, with the remainder being imported behind-the-ear aids.
More than 90 per cent of the aids produced/assembled in Australia by the major commercial laboratories for use by the commercial sector were in-the-ear/canal aids.

Table B.2: **Hearing aids distributed in Australia, 1988-89**

<table>
<thead>
<tr>
<th></th>
<th>Commercial</th>
<th>NAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-the-ear aids</td>
<td>18 965</td>
<td>2 253</td>
</tr>
<tr>
<td>In-the-canal aids</td>
<td>10 149</td>
<td>-</td>
</tr>
<tr>
<td>Behind-the-ear aids</td>
<td>8 500a</td>
<td>60 787</td>
</tr>
<tr>
<td>Other aids</td>
<td>1 055</td>
<td>1 506</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38-40 000</strong></td>
<td><strong>64 546</strong></td>
</tr>
</tbody>
</table>

a The private sector distributed 972 locally-assembled behind-the-ear aids and about 7 000 to 8 000 imported behind-the-ear aids.


**Imports**

Imports of hearing aids (including parts) were valued at $9.5m in 1988-89, with the main sources being Switzerland (41 per cent), the United States (25 per cent) and Denmark (19 per cent).

Hearing aids are imported duty free. However, many electronic components are dutiable at rates varying from 12 per cent for coils and telecoils up to 19 per cent for potentiometers. Tariff concessions apply for some parts such as microphones and resistors, enabling duty free entry.

Imports of complete aids are used by both NAL and the commercial segment. Many imported aids are actually faceplates, that is complete hearing aids minus the moulded plastic case. These are used in the assembly of in-the-ear aids.
B2 Artificial limbs

Artificial limbs are made by the Commonwealth Government-operated Repatriation Artificial Limb and Appliance Centres (RALACs), eight private manufacturers licensed under the Free Limbs Scheme (FLS), and some hospitals which produce limbs used in post-operative care. In addition, a few limbs are produced at the Lincoln School of Health Sciences which provides training for prosthetists and orthotists.

RALACs are located in each of the State capital cities, with sub-centres in Canberra, Newcastle, Albury, Townsville and Darwin. The licensed private manufacturers are located in New South Wales (Sydney, Newcastle and Port Kembla), Queensland (two), and Victoria, South Australia and Western Australia. The largest private manufacturer of limbs is Appliance and Limb Centre (International) Pty Ltd, which holds about 35 per cent of the market in New South Wales, and employs some 15 staff full time on limb production.

There were approximately 5 400 limbs produced in 1988-89. Of these, 4 532 were produced for FLS clients by the RALACs (including sub-centres) and commercial manufacturers (see Table B.3). Commercial manufacturers produced 57 per cent of FLS limbs. Some 250 limbs were produced for non-FLS clients by the RALACs and the commercial manufacturers, while the hospitals produced almost 200 definitive limbs. The RALACs, in addition to the limbs produced for FLS clients, manufactured 401 limbs for veterans. Further, the RALACs and the commercial manufacturers performed repairs to more than 14 000 limbs in 1988-89.

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1 There are nine licensed private manufacturers. However, one company, Reis Orthopaedic Services Pty Ltd has recently advised its decision to cease prosthetic services.

2 Estimated from information supplied by Austin Hospital and Queen Elizabeth Geriatric Centre, See Austin Hospital, Submission No. 870, p. 2, and Queen Elizabeth Geriatric Centre, Submission No. 742, p. 1.
Table B.3: **Production and repair of limbs under the Free Limbs Scheme, 1988-89**

<table>
<thead>
<tr>
<th></th>
<th>RALACa</th>
<th></th>
<th>COMMERCIAL</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arms</td>
<td>Legs</td>
<td>Repairs</td>
<td>Arms</td>
<td>Legs</td>
<td>Repairs</td>
</tr>
<tr>
<td>NSW</td>
<td>17</td>
<td>578</td>
<td>1380</td>
<td>30</td>
<td>1168</td>
<td>4532</td>
</tr>
<tr>
<td>Vic</td>
<td>39</td>
<td>541</td>
<td>2708</td>
<td>37</td>
<td>658</td>
<td>865</td>
</tr>
<tr>
<td>Qld</td>
<td>13</td>
<td>193</td>
<td>589</td>
<td>26</td>
<td>554</td>
<td>933</td>
</tr>
<tr>
<td>WA</td>
<td>4</td>
<td>118</td>
<td>419</td>
<td>25</td>
<td>169</td>
<td>543</td>
</tr>
<tr>
<td>SA</td>
<td>17</td>
<td>215</td>
<td>876</td>
<td>13</td>
<td>163</td>
<td>713</td>
</tr>
<tr>
<td>Tas</td>
<td>7</td>
<td>128</td>
<td>352</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NT</td>
<td>8</td>
<td>61</td>
<td>128</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105</td>
<td>1834</td>
<td>6452</td>
<td>181</td>
<td>2412</td>
<td>7586</td>
</tr>
</tbody>
</table>

a  Excludes limbs produced for veterans.

*Source: DVA, Submission No. 199, p. 5.*

Table B.4 ranks the commercial firms licensed under the FLS by annual value of limb production, averaged for the period 1984 to 1988.

Table B.4: **Commercial manufacturers of limbs, by value of production, 1984 to 1988 (average)**

<table>
<thead>
<tr>
<th>Firms</th>
<th>Average value of production ($'000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliances &amp; Limb Centre (International)</td>
<td>968</td>
</tr>
<tr>
<td>Orthopaedix Techniques</td>
<td>516</td>
</tr>
<tr>
<td>Artificial Limbs &amp; Appliances</td>
<td>424</td>
</tr>
<tr>
<td>Prosthetics &amp; Orthotics</td>
<td>362</td>
</tr>
<tr>
<td>Reis Orthopadixs</td>
<td>329</td>
</tr>
<tr>
<td>Prostek</td>
<td>297</td>
</tr>
<tr>
<td>Orthotics &amp; Prosthetics Western Australia</td>
<td>262</td>
</tr>
<tr>
<td>Southern Prosthetics &amp; Orthotics</td>
<td>261</td>
</tr>
<tr>
<td>Wright Orthopaedics</td>
<td>101</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>391</strong></td>
</tr>
</tbody>
</table>

*Source: DVA.*
Market share

The market share of limbs under the FLS reflects the geographical location of RALACs and private manufacturers. The RALACs’ share of the market is smallest in New South Wales and Queensland where it has most competition from commercial manufacturers. The share of the market held by the RALACs and the commercial producers in 1988-89 is shown in Table B.5

Table B.5: RALACs and commercial manufacturers, market share, 1988-89 (percentage)

<table>
<thead>
<tr>
<th>State</th>
<th>RALAC</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>33</td>
<td>67</td>
</tr>
<tr>
<td>Vic</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>Qld</td>
<td>26</td>
<td>74</td>
</tr>
<tr>
<td>WA</td>
<td>39</td>
<td>61</td>
</tr>
<tr>
<td>SA</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>Tas</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>NT</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>ACT</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Total Australia</td>
<td>43</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: Derived from DVA, Submission No. 199, p. 5.

Relative performance of the RALACs and the commercial sector

In most commercial enterprises, productivity as measured by the annual output of limbs per technician, is at least double that achieved in the major RALACs. However, the performance of the RALAC sub-centres at Newcastle and Darwin have matched that of most private manufacturers. The relative performance of the RALACs and the commercial manufacturers during 1988-89 is shown in Table B.6.
### Table B.6: Output of limbs per technician, 1988-89

<table>
<thead>
<tr>
<th>RALAC</th>
<th>Commercial</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NSW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sydney</td>
<td>21 Appliance and Limb Centre (International)</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Reis Orthopaedic Services</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Southern Prosthetics and Orthotics</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Wright Orthopaedics</td>
<td>55</td>
</tr>
<tr>
<td>Sub Centres:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albury</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Newcastle</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td><strong>Vic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melbourne</td>
<td>23 Orthopaedic Techniques</td>
<td>64</td>
</tr>
<tr>
<td><strong>Qld</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brisbane</td>
<td>22 Artificial Limbs and Appliances</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Brisbane Prosthetics and Orthotics</td>
<td>60</td>
</tr>
<tr>
<td>Sub-Centre:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Townsville</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td><strong>WA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perth</td>
<td>20 Orthotics &amp; Prosthetics Western Australia</td>
<td>49</td>
</tr>
<tr>
<td><strong>SA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adelaide</td>
<td>30 Prostek</td>
<td>60</td>
</tr>
<tr>
<td><strong>Tas</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hobart</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td><strong>NT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Centre:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Darwin</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td><strong>ACT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Centre:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canberra</td>
<td>43</td>
<td></td>
</tr>
</tbody>
</table>

B3 Wheelchairs

Industry structure

There are 17 local manufacturers of wheelchairs. Most of these make a basic range of chairs which may be modified to meet the requirements of private or Government purchasers. Several manufacturers said they also make ‘specials’ - wheelchairs to order to the requirements of individual purchasers using a mixture of standard and special parts. The Commission also received submissions from people who had built their own wheelchairs to meet personal design criteria which they said could not be met by either locally-made or imported wheelchairs.

The wheelchair market

There were approximately 10 000 wheelchairs supplied to the Australian market each year from 1983-84 to 1986-87, a considerable increase on the 6 000 units supplied in 1979-80 (see Table B.7). In 1986-87 local producers held about 50 per cent of the market in volume terms, not markedly different from 1979-80.

The ABS estimated that the ex-factory value of sales of locally-produced wheelchairs was $2.9m in 1983-84, $2.6m in 1984-85 and $4.3m in 1986-87. However, these estimates cannot be directly compared to the import data reported in Table B.8. Hence, it is difficult to accurately determine the proportion of the value of total sales which are accounted for local producers.

Hospital ward chairs are sold on a contract basis to State Governments (as in New South Wales or Queensland) or to hospitals either under contract or directly as in the other States. DVA also purchases standard wheelchairs under separate contracts in each State. Other sales of standard wheelchairs are made to private buyers as private sales, or through hospitals or support organisations and financed through equipment provision schemes. Imported wheelchairs at the lower end of the market are commonly sold through pharmacies.

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3 In its 1980 report, the IAC said that ABS data understated domestic sales of Australian-produced wheelchairs. On the basis of the evidence submitted at that inquiry, the IAC estimated that almost 2 900 Australian produced wheelchairs were sold locally.
Special wheelchairs are sold direct to private buyers or provided by hospitals or support organisations under government equipment provision schemes.

A large proportion of manufacturers’ sales are made through the Program of Aids for Disabled People (PADP) scheme or equivalent schemes either through direct sales or via hospitals. One manufacturer said that about 85 per cent of its sales involved government, either by direct sales or through the PADP scheme.

Table B.7:  **Wheelchairs supplied to the Australian market, market share by volume, 1979-80, 1983-84 to 1984-85, and 1986-87**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Local sales</td>
<td>2 864</td>
<td>(47)</td>
<td>6 209</td>
<td>(59)</td>
</tr>
<tr>
<td>Imports</td>
<td>3 187</td>
<td>(53)</td>
<td>4 354</td>
<td>(41)</td>
</tr>
<tr>
<td>Total market</td>
<td>6 051</td>
<td>(100)</td>
<td>10 563</td>
<td>(100)</td>
</tr>
</tbody>
</table>

a Data for 1979-80 were estimated by the IAC in its 1980 inquiry.

b Includes a few wheelchairs produced for export.


**Imports**

Official statistics for imports of wheelchairs are shown in Table B.8. The number of wheelchairs imported increased by almost 20 per cent between 1986-87 and 1988-89, but the total value of imports was fairly steady. Almost 80 per cent of imports in 1988-89 were manual chairs. Local manufacturers said that almost all import competition is in the area of standard chairs, with virtually no import competition for special chairs.

This changing pattern to some extent reflects alterations in the relationships between duty rates on imports from the various supplying countries. For example, prior to 1 January 1980, imports from the United Kingdom were dutiable at 17 per
cent. Suppliers from the United Kingdom thus enjoyed a considerable advantage
over those from General rate sources, who faced a duty rate of about 35 per cent.
When this preference was withdrawn, the duty on wheelchairs from the United
Kingdom rose by some 18 percentage points. Imports from New Zealand, which
were dutiable at concessional tariff rates in 1980, became duty free following the
Australia New Zealand Closer Economic Relations Trade Agreement of 1983.

Table B.8: Imports of wheelchairs cleared for home consumption, 1986-87 to
1988-89

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Value</td>
<td>No.</td>
</tr>
<tr>
<td></td>
<td>($'000)</td>
<td>($'000)</td>
<td>($'000)</td>
</tr>
<tr>
<td>Powered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>364</td>
<td>54</td>
<td>561</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>341</td>
<td>608</td>
<td>367</td>
</tr>
<tr>
<td>New Zealand</td>
<td>142</td>
<td>120</td>
<td>480</td>
</tr>
<tr>
<td>Other</td>
<td>362</td>
<td>278</td>
<td>381</td>
</tr>
<tr>
<td>Total powered</td>
<td>1 209</td>
<td>1 060</td>
<td>1 789</td>
</tr>
<tr>
<td>Manual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>1 359</td>
<td>200</td>
<td>1 400</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1 044</td>
<td>413</td>
<td>669</td>
</tr>
<tr>
<td>New Zealand</td>
<td>700</td>
<td>277</td>
<td>818</td>
</tr>
<tr>
<td>Other</td>
<td>485</td>
<td>293</td>
<td>394</td>
</tr>
<tr>
<td>Total manual</td>
<td>3 588</td>
<td>1 183</td>
<td>3 281</td>
</tr>
</tbody>
</table>

B4 Disability equipment case studies

During the course of the inquiry participants told the Commission that some imported products appeared to be more highly priced in Australia than overseas. The Commission investigated these cases, seeking to establish the basis for the prices observed by participants. The outcomes of these investigations are reported below.

Special cushions and mattresses

Special cushions and mattresses are used for the prevention and therapy of pressure related ulcers. The Australian Quadriplegic Association Victoria Ltd said Ro-Ho cushions, Jay cushions and similar devices are a critical part of the daily medical treatment of people suffering disabilities resulting from spinal cord injuries.4 The Australian Spina Bifida Association said that ‘the real advantage of the (Ro-Ho) cushion is that it is an ultra-light air cushion that is easily transferable’.5

There was a common perception among participants that cushions and mattresses were relatively more expensive in Australia than overseas. Some said the difficulties for users are exacerbated because the items are currently not available in some States through equipment provision schemes. Because the items are imported, participants thought that import duty might be contributing to the high price. However, both the cushion and the mattress are imported under a tariff concession, which means that they are imported duty free. They are also exempt from sales tax under Item 123 of the Sales Tax (Exemptions and Classifications) Act.

The Ro-Ho Dry Flotation Cushion

Ro-Ho cushions are made in the United States. There is one Australian importer who sells wholesale to a network of distributors. This importer also sells on a retail basis.

The Commission obtained retail price information for the Ro-Ho cushion from the United States, the United Kingdom and West Germany. This showed that at March

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4 Australian Quadriplegic Association Victoria Ltd, Submission No. 727, p. 3.
5 Australian Spina Bifida Association, Submission No. 103, p. 3.
1990, the cushion was priced at $A535 in Australia, about $A630 in West Germany and about $A740 in the United Kingdom. The cushion is available more cheaply in the United States where it is manufactured. There the recommended retail price was about $A415.

**Tracheo-oesophageal puncture prostheses**

Tracheo-oesophageal voice prostheses are devices which are implanted into the neck of people who have undergone a laryngectomy operation to enable them to produce a voice. There are several different brands of prosthesis.

The Speech Pathology section of the Queen Elizabeth Hospital (South Australia) expressed some concern about the low pressure voice prosthesis. It said this prosthesis retails for around $55, and that patients may require up to six a year. It added that many of its patients are not eligible for free provision of this prosthesis and must pay for it themselves.

The primary source of the prosthesis is the United States. Because of this, Speech Pathology felt that import duty might be a significant contributor to the costs facing purchasers of the prosthesis. However, voice prostheses are imported duty free (see Appendix C). They are also exempt from sales tax under Item 42B(1) of the *Sales Tax (Exemptions and Classifications) Act* (see Appendix D).

**The electro-larynx**

The electro-larynx is an electronic device which is carried by the user. It has a vibrating unit which is held against the neck to produce a voice, unlike the tracheo-oesophageal puncture prosthesis which is surgically implanted. It has a useful life of six to ten years.

The Speech Pathology section of the Queen Elizabeth Hospital was concerned about the high price of the electro-larynx. It considered that import duty may be a significant contributor to the costs facing purchasers of the larynx. As with the tracheo-oesophageal puncture prosthesis, however, the electro-larynx is imported duty free. It is also exempt from sales tax under Item 42B(1) of the *Sales Tax (Exemptions and Classifications) Act*. 
The Servox is the top-of-the-range electro-larynx. It is manufactured in West Germany and is sold as a complete unit comprising the artificial larynx (which is the vibrating unit), transformer, battery, battery charger, and carry case. The artificial larynx and some parts are imported, and assembled in Australia where they are sold as the Servox.

There is one company located in Melbourne which imports and assembles the Servox. It sells directly to hospitals and individuals and advised the Commission that the price of the Servox (at March 1990) when purchased directly from them is $984. This company said the Servox was cheaper in Australia than overseas. This was disputed by Speech Pathology which said that prices in Australia were comparable to overseas. There is also an agent in Sydney who sells the Servox for $1 150.

The Skillbuilders Floor Sitter

The Skillbuilders Floor Sitter is a device used to support the body in a seated position. It comprises a wedge base and foam chair with a waterproof coating. It is made in the United States.

The Spastic Society of Victoria expressed concern about the price of the Skillbuilders Floor Sitter, saying ‘... a Skillbuilders Floor Sitter retails in the United States for $US140; its selling price in Australia is $A585’.6

One former importer of the Skillbuilders Floor Sitter advised the Commission that costs were such that it now no longer sold the floor sitter in Australia. Freight costs are high because of the size of the item, although the company is looking at alternative ways of packaging. However, the importer was concerned at the rate of duty applying to the feeder seat and the floor sitter base. The items are dutiable at 21 per cent, phasing down to 15 per cent in 1992.

An importer of the Preston Floor Sitter told the Commission that the retail price of the product is $520. It said that packaging and handling within the United States, as well as freight to Australia and duty, add considerably to the Australian price.

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6 Spastic Society of Victoria, Submission No. 229, p. 2.
Electric wheelchairs

Several participants expressed concern that the price of high technology electric wheelchairs is significantly increased as a result of the requirement for duty to be paid on imported chairs. They considered that the payment of duty is inappropriate because chairs which could provide an equivalent level of performance are not produced in Australia.

The Independent Living Centre of New South Wales said that ‘while there should be tariff protection on economically priced wheelchairs from Taiwan to protect local manufacturers, overall high tariff duties on some ‘hi-tech’ wheelchairs is restricting the choice of people with disabilities.’

The Spastic Welfare Association of Western Australia, in conjunction with private sponsors, imports five Turbo chairs directly from the United Kingdom each year. It said it could place 30 Turbos each year if it had sufficient funds to purchase that number. It said the landed duty paid price of the Turbo is $15 000, and that duty represents a severe impost. According to the Association, no wheelchair equivalent to the Turbo is currently produced in Australia and there is ‘nothing that looks as if it is about to be introduced in the next few years’. It requested the immediate removal of tariffs applying to wheelchairs rather than the four year phased reduction of tariffs proposed by the Commission in its draft report. The Association said the immediate removal of duty would mean that it could purchase an additional three chairs over the next four years.

According to the Electric Wheelchair User Group, the most commonly sold electric wheelchairs retail in Australia for around $5 000 to $6 000. More specialised chairs, such as the Turbo, are more expensive. By way of illustration of the impost on the consumer, the duty payable on an average electric wheelchair from the United Kingdom, which retails in Australia for $5 000, is about $350. Duty of about $750 is payable on wheelchairs which retail for $10 000 and duty of about $1 800 is payable on wheelchairs, such as the Turbo, for which the landed duty free

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7 Independent Living Centre of New South Wales, Submission No. 6, p. 2.
price is $15,000. Wheelchairs are not able to be imported free of duty under a tariff concession because chairs serving similar functions are considered by Customs to be either manufactured or capable of being manufactured in Australia. Issues relating to the tariff on wheelchairs and admission under the CTCO System are addressed in Chapter 7 and Appendix C.

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9 Wheelchairs are dutiable at a General rate of 17 per cent (12 per cent for Developing Countries) reducing to 15 per cent in 1992 (10 per cent for Developing Countries). Imports from New Zealand are free of duty.
B STATISTICAL BACKGROUND ON MAJOR ITEMS OF DISABILITY EQUIPMENT

This appendix first provides some general information on demand and supply of hearing aids, artificial limbs and wheelchairs. It then examines specific products which participants said were highly priced in Australia in comparison to overseas.

B1 Hearing aids

National Acoustic Laboratories

The National Acoustic Laboratories (NAL) provides audiological services free of charge to hearing impaired people eligible for assistance under the Hearing Services Program. Under this program, NAL undertakes a range of activities, including:

- audiological assessment of eligible clients;
- selection and fitting of the hearing aid/ear mould;
- counselling on the use of the hearing aid;
- provision of batteries and maintenance of the hearing aid; and
- research into hearing aid design, audiology and acoustics research.

NAL fitted about 65 000 hearing aids, accounting for almost 65 per cent of the market, in 1988-89. NAL supplies its products and services through 44 permanent hearing centres and 65 visiting clinics located in major towns and cities in all States and Territories.

NAL’s main client groups are persons who are holders of Pensioner Health Benefit cards and their dependants, persons referred by the Department of Veterans' Affairs (DVA) and service personnel, and persons under the age of 21 years.
Table B.1: NAL client groups, 1988-89

<table>
<thead>
<tr>
<th>Age group</th>
<th>No. of aids supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New</td>
</tr>
<tr>
<td>Under 21 years</td>
<td>2 195</td>
</tr>
<tr>
<td>21 to under 65 years:</td>
<td></td>
</tr>
<tr>
<td>. eligible for NAL aids</td>
<td>478</td>
</tr>
<tr>
<td>65 and over:</td>
<td></td>
</tr>
<tr>
<td>. eligible for NAL aids</td>
<td>31 315</td>
</tr>
<tr>
<td>Total</td>
<td>33 988</td>
</tr>
</tbody>
</table>

*Source: DCS&H, Submission No. 231, p. 2.*

The commercial segment

There are six major producers/assemblers of hearing aids in Australia: Quadrant Instruments; Crystalaid; Starkey Laboratories Australia; Phonak (Australasia); Angus and Coote; and Dahlberg. In 1988-89, these companies produced/assembled 31 000 aids for use by commercial dispensers. Currently, Quadrant and Crystalaid also produce hearing aids for NAL under contract.

The commercial segment has been distributing hearing aids for at least 60 years. There are around 70 distributors - the major ones being Angus and Coote which has an agreement for supply from Oticon, Hearing Aid Specialists, and Telex (Australia) which has a collaborative agreement with Phonak. The distributors supply aids purchased from producers/assemblers established in Australia and from overseas manufacturers.

Number and type of hearing aids distributed

There were over 100 000 hearing aids distributed by NAL and the commercial distributors in 1988-89. Over 90 per cent of the aids distributed by NAL were behind-the-ear aids. In contrast, about 75 per cent of the aids distributed by the commercial sector were in-the-ear/canal aids, with the remainder being imported behind-the-ear aids.
More than 90 per cent of the aids produced/assembled in Australia by the major commercial laboratories for use by the commercial sector were in-the-ear/canal aids.

Table B.2:  **Hearing aids distributed in Australia, 1988-89**

<table>
<thead>
<tr>
<th></th>
<th>Commercial</th>
<th>NAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-the-ear aids</td>
<td>18 965</td>
<td>2 253</td>
</tr>
<tr>
<td>In-the-canal aids</td>
<td>10 149</td>
<td>-</td>
</tr>
<tr>
<td>Behind-the-ear aids</td>
<td>8 500a</td>
<td>60 787</td>
</tr>
<tr>
<td>Other aids</td>
<td>1 055</td>
<td>1 506</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38-40 000</strong></td>
<td><strong>64 546</strong></td>
</tr>
</tbody>
</table>

a The private sector distributed 972 locally-assembled behind-the-ear aids and about 7 000 to 8 000 imported behind-the-ear aids.


**Imports**

Imports of hearing aids (including parts) were valued at $9.5m in 1988-89, with the main sources being Switzerland (41 per cent), the United States (25 per cent) and Denmark (19 per cent).

Hearing aids are imported duty free. However, many electronic components are dutiable at rates varying from 12 per cent for coils and telecoils up to 19 per cent for potentiometers. Tariff concessions apply for some parts such as microphones and resistors, enabling duty free entry.

Imports of complete aids are used by both NAL and the commercial segment. Many imported aids are actually faceplates, that is complete hearing aids minus the moulded plastic case. These are used in the assembly of in-the-ear aids.
B2  Artificial limbs

Artificial limbs are made by the Commonwealth Government-operated Repatriation Artificial Limb and Appliance Centres (RALACs), eight private manufacturers licensed under the Free Limbs Scheme (FLS),¹ and some hospitals which produce limbs used in post-operative care. In addition, a few limbs are produced at the Lincoln School of Health Sciences which provides training for prosthetists and orthotists.

RALACs are located in each of the State capital cities, with sub-centres in Canberra, Newcastle, Albury, Townsville and Darwin. The licensed private manufacturers are located in New South Wales (Sydney, Newcastle and Port Kembla), Queensland (two), and Victoria, South Australia and Western Australia. The largest private manufacturer of limbs is Appliance and Limb Centre (International) Pty Ltd, which holds about 35 per cent of the market in New South Wales, and employs some 15 staff full time on limb production.

There were approximately 5 400 limbs produced in 1988-89. Of these, 4 532 were produced for FLS clients by the RALACs (including sub-centres) and commercial manufacturers (see Table B.3). Commercial manufacturers produced 57 per cent of FLS limbs. Some 250 limbs were produced for non-FLS clients by the RALACs and the commercial manufacturers, while the hospitals produced almost 200 definitive limbs.² The RALACs, in addition to the limbs produced for FLS clients, manufactured 401 limbs for veterans. Further, the RALACs and the commercial manufacturers performed repairs to more than 14 000 limbs in 1988-89.

¹ There are nine licensed private manufacturers. However, one company, Reis Orthopaedic Services Pty Ltd has recently advised its decision to cease prosthetic services.

² Estimated from information supplied by Austin Hospital and Queen Elizabeth Geriatric Centre, See Austin Hospital, Submission No. 870, p. 2, and Queen Elizabeth Geriatric Centre, Submission No. 742, p. 1.
Table B.3: Production and repair of limbs under the Free Limbs Scheme, 1988-89

<table>
<thead>
<tr>
<th></th>
<th>RALACa</th>
<th>COMMERCIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arms</td>
<td>Legs</td>
</tr>
<tr>
<td>NSW</td>
<td>17</td>
<td>578</td>
</tr>
<tr>
<td>Vic</td>
<td>39</td>
<td>541</td>
</tr>
<tr>
<td>Qld</td>
<td>13</td>
<td>193</td>
</tr>
<tr>
<td>WA</td>
<td>4</td>
<td>118</td>
</tr>
<tr>
<td>SA</td>
<td>17</td>
<td>215</td>
</tr>
<tr>
<td>Tas</td>
<td>7</td>
<td>128</td>
</tr>
<tr>
<td>NT</td>
<td>8</td>
<td>61</td>
</tr>
<tr>
<td>Total</td>
<td>105</td>
<td>1834</td>
</tr>
</tbody>
</table>

a Excludes limbs produced for veterans.
Source: DVA, Submission No. 199, p. 5.

Table B.4 ranks the commercial firms licensed under the FLS by annual value of limb production, averaged for the period 1984 to 1988.

Table B.4: Commercial manufacturers of limbs, by value of production, 1984 to 1988 (average)

<table>
<thead>
<tr>
<th>Firms</th>
<th>Average value of production ($'000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliances &amp; Limb Centre (International)</td>
<td>968</td>
</tr>
<tr>
<td>Orthopaedix Techniques</td>
<td>516</td>
</tr>
<tr>
<td>Artificial Limbs &amp; Appliances</td>
<td>424</td>
</tr>
<tr>
<td>Prosthetics &amp; Orthotics</td>
<td>362</td>
</tr>
<tr>
<td>Reis Orthopadix</td>
<td>329</td>
</tr>
<tr>
<td>Prostek</td>
<td>297</td>
</tr>
<tr>
<td>Orthotics &amp; Prosthetics Western Australia</td>
<td>262</td>
</tr>
<tr>
<td>Southern Prosthetics &amp; Orthotics</td>
<td>261</td>
</tr>
<tr>
<td>Wright Orthopaedics</td>
<td>101</td>
</tr>
<tr>
<td>Average</td>
<td>391</td>
</tr>
</tbody>
</table>

Source: DVA.
**Market share**

The market share of limbs under the FLS reflects the geographical location of RALACs and private manufacturers. The RALACs’ share of the market is smallest in New South Wales and Queensland where it has most competition from commercial manufacturers. The share of the market held by the RALACs and the commercial producers in 1988-89 is shown in Table B.5

Table B.5: **RALACs and commercial manufacturers, market share, 1988-89 (percentage)**

<table>
<thead>
<tr>
<th>State</th>
<th>RALAC</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>33</td>
<td>67</td>
</tr>
<tr>
<td>Vic</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>Qld</td>
<td>26</td>
<td>74</td>
</tr>
<tr>
<td>WA</td>
<td>39</td>
<td>61</td>
</tr>
<tr>
<td>SA</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>Tas</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>NT</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>ACT</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Total Australia</td>
<td>43</td>
<td>57</td>
</tr>
</tbody>
</table>

*Source: Derived from DVA, Submission No. 199, p. 5.*

**Relative performance of the RALACs and the commercial sector**

In most commercial enterprises, productivity as measured by the annual output of limbs per technician, is at least double that achieved in the major RALACs. However, the performance of the RALAC sub-centres at Newcastle and Darwin have matched that of most private manufacturers. The relative performance of the RALACs and the commercial manufacturers during 1988-89 is shown in Table B.6.
Table B.6:  **Output of limbs per technician, 1988-89**

<table>
<thead>
<tr>
<th>RALAC</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NSW</strong></td>
<td></td>
</tr>
<tr>
<td>Sydney</td>
<td>Appliances and Limb Centre (International)</td>
</tr>
<tr>
<td></td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Reis Orthopaedic Services</td>
</tr>
<tr>
<td></td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Southern Prosthetics and Orthotics</td>
</tr>
<tr>
<td></td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Wright Orthopaedics</td>
</tr>
<tr>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Sub Centres:</td>
<td></td>
</tr>
<tr>
<td>Albury</td>
<td>28</td>
</tr>
<tr>
<td>Newcastle</td>
<td>61</td>
</tr>
<tr>
<td><strong>Vic</strong></td>
<td></td>
</tr>
<tr>
<td>Melbourne</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Orthopaedic Techniques</td>
</tr>
<tr>
<td></td>
<td>64</td>
</tr>
<tr>
<td><strong>Qld</strong></td>
<td></td>
</tr>
<tr>
<td>Brisbane</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Artificial Limbs and Appliances</td>
</tr>
<tr>
<td></td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Brisbane Prosthetics and Orthotics</td>
</tr>
<tr>
<td></td>
<td>60</td>
</tr>
<tr>
<td>Sub-Centre:</td>
<td></td>
</tr>
<tr>
<td>Townsville</td>
<td>33</td>
</tr>
<tr>
<td><strong>WA</strong></td>
<td></td>
</tr>
<tr>
<td>Perth</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Orthotics &amp; Prosthetics Western Australia</td>
</tr>
<tr>
<td></td>
<td>49</td>
</tr>
<tr>
<td><strong>SA</strong></td>
<td></td>
</tr>
<tr>
<td>Adelaide</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Prostek</td>
</tr>
<tr>
<td></td>
<td>60</td>
</tr>
<tr>
<td><strong>Tas</strong></td>
<td></td>
</tr>
<tr>
<td>Hobart</td>
<td>39</td>
</tr>
<tr>
<td><strong>NT</strong></td>
<td></td>
</tr>
<tr>
<td>Sub-Centre:</td>
<td></td>
</tr>
<tr>
<td>Darwin</td>
<td>63</td>
</tr>
<tr>
<td><strong>ACT</strong></td>
<td></td>
</tr>
<tr>
<td>Sub-Centre:</td>
<td></td>
</tr>
<tr>
<td>Canberra</td>
<td>43</td>
</tr>
</tbody>
</table>

B3 Wheelchairs

Industry structure

There are 17 local manufacturers of wheelchairs. Most of these make a basic range of chairs which may be modified to meet the requirements of private or Government purchasers. Several manufacturers said they also make ‘specials’ - wheelchairs to order to the requirements of individual purchasers using a mixture of standard and special parts. The Commission also received submissions from people who had built their own wheelchairs to meet personal design criteria which they said could not be met by either locally-made or imported wheelchairs.

The wheelchair market

There were approximately 10 000 wheelchairs supplied to the Australian market each year from 1983-84 to 1986-87, a considerable increase on the 6 000 units supplied in 1979-80 (see Table B.7). In 1986-87 local producers held about 50 per cent of the market in volume terms, not markedly different from 1979-80.

The ABS estimated that the ex-factory value of sales of locally-produced wheelchairs was $2.9m in 1983-84, $2.6m in 1984-85 and $4.3m in 1986-87. However, these estimates cannot be directly compared to the import data reported in Table B.8. Hence, it is difficult to accurately determine the proportion of the value of total sales which are accounted for local producers.

Hospital ward chairs are sold on a contract basis to State Governments (as in New South Wales or Queensland) or to hospitals either under contract or directly as in the other States. DVA also purchases standard wheelchairs under separate contracts in each State. Other sales of standard wheelchairs are made to private buyers as private sales, or through hospitals or support organisations and financed through equipment provision schemes. Imported wheelchairs at the lower end of the market are commonly sold through pharmacies.

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3 In its 1980 report, the IAC said that ABS data understated domestic sales of Australian-produced wheelchairs. On the basis of the evidence submitted at that inquiry, the IAC estimated that almost 2 900 Australian produced wheelchairs were sold locally.
Special wheelchairs are sold direct to private buyers or provided by hospitals or support organisations under government equipment provision schemes.

A large proportion of manufacturers’ sales are made through the Program of Aids for Disabled People (PADP) scheme or equivalent schemes either through direct sales or via hospitals. One manufacturer said that about 85 per cent of its sales involved government, either by direct sales or through the PADP scheme.

Table B.7: Wheelchairs supplied to the Australian market, market share by volume, 1979-80, 1983-84 to 1984-85, and 1986-87

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Local sales</td>
<td>2 864</td>
<td>(47)</td>
<td>6 209</td>
<td>(59)</td>
<td>4 188</td>
<td>(45)</td>
<td>5 422</td>
<td>(53)</td>
</tr>
<tr>
<td>Imports</td>
<td>3 187</td>
<td>(53)</td>
<td>4 354</td>
<td>(41)</td>
<td>5 039</td>
<td>(55)</td>
<td>4 797</td>
<td>(47)</td>
</tr>
<tr>
<td>Total market</td>
<td>6 051</td>
<td>(100)</td>
<td>10 563</td>
<td>(100)</td>
<td>9 227</td>
<td>(100)</td>
<td>10 219</td>
<td>(100)</td>
</tr>
</tbody>
</table>

a Data for 1979-80 were estimated by the IAC in its 1980 inquiry.
b Includes a few wheelchairs produced for export.

Source: ABS, Manufacturing Commodities Principal Articles Produced, Australia, op. cit., ABS, Overseas Trade Statistics, op. cit., and IAC, Wheelchairs, op. cit.

Imports

Official statistics for imports of wheelchairs are shown in Table B.8. The number of wheelchairs imported increased by almost 20 per cent between 1986-87 and 1988-89, but the total value of imports was fairly steady. Almost 80 per cent of imports in 1988-89 were manual chairs. Local manufacturers said that almost all import competition is in the area of standard chairs, with virtually no import competition for special chairs.

This changing pattern to some extent reflects alterations in the relationships between duty rates on imports from the various supplying countries. For example, prior to 1 January 1980, imports from the United Kingdom were dutiable at 17 per
cent. Suppliers from the United Kingdom thus enjoyed a considerable advantage over those from General rate sources, who faced a duty rate of about 35 per cent. When this preference was withdrawn, the duty on wheelchairs from the United Kingdom rose by some 18 percentage points. Imports from New Zealand, which were dutiable at concessional tariff rates in 1980, became duty free following the Australia New Zealand Closer Economic Relations Trade Agreement of 1983.

Table B.8: **Imports of wheelchairs cleared for home consumption, 1986-87 to 1988-89**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Value (S$'000)</td>
<td>No.</td>
</tr>
<tr>
<td>Powered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>364</td>
<td>54</td>
<td>561</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>341</td>
<td>608</td>
<td>367</td>
</tr>
<tr>
<td>New Zealand</td>
<td>142</td>
<td>120</td>
<td>480</td>
</tr>
<tr>
<td>Other</td>
<td>362</td>
<td>278</td>
<td>381</td>
</tr>
<tr>
<td>Total powered</td>
<td>1 209</td>
<td>1 060</td>
<td>1 789</td>
</tr>
<tr>
<td>Manual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>1 359</td>
<td>200</td>
<td>1 400</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1 044</td>
<td>413</td>
<td>669</td>
</tr>
<tr>
<td>New Zealand</td>
<td>700</td>
<td>277</td>
<td>818</td>
</tr>
<tr>
<td>Other</td>
<td>485</td>
<td>293</td>
<td>394</td>
</tr>
<tr>
<td>Total manual</td>
<td>3 588</td>
<td>1 183</td>
<td>3 281</td>
</tr>
<tr>
<td>Total wheelchairs</td>
<td>4 797</td>
<td>2 243</td>
<td>5 080</td>
</tr>
</tbody>
</table>

*Source: ABS, Overseas Trade Statistics, Microfiche MCO4.*
B4 Disability equipment case studies

During the course of the inquiry participants told the Commission that some imported products appeared to be more highly priced in Australia than overseas. The Commission investigated these cases, seeking to establish the basis for the prices observed by participants. The outcomes of these investigations are reported below.

Special cushions and mattresses

Special cushions and mattresses are used for the prevention and therapy of pressure related ulcers. The Australian Quadriplegic Association Victoria Ltd said Ro-Ho cushions, Jay cushions and similar devices are a critical part of the daily medical treatment of people suffering disabilities resulting from spinal cord injuries.4 The Australian Spina Bifida Association said that ‘the real advantage of the (Ro-Ho) cushion is that it is an ultra-light air cushion that is easily transferable’.5

There was a common perception among participants that cushions and mattresses were relatively more expensive in Australia than overseas. Some said the difficulties for users are exacerbated because the items are currently not available in some States through equipment provision schemes. Because the items are imported, participants thought that import duty might be contributing to the high price. However, both the cushion and the mattress are imported under a tariff concession, which means that they are imported duty free. They are also exempt from sales tax under Item 123 of the Sales Tax (Exemptions and Classifications) Act.

The Ro-Ho Dry Flotation Cushion

Ro-Ho cushions are made in the United States. There is one Australian importer who sells wholesale to a network of distributors. This importer also sells on a retail basis.

The Commission obtained retail price information for the Ro-Ho cushion from the United States, the United Kingdom and West Germany. This showed that at March

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4 Australian Quadriplegic Association Victoria Ltd, Submission No. 727, p. 3.
5 Australian Spina Bifida Association, Submission No. 103, p. 3.
1990, the cushion was priced at $A535 in Australia, about $A630 in West Germany and about $A740 in the United Kingdom. The cushion is available more cheaply in the United States where it is manufactured. There the recommended retail price was about $A415.

**Tracheo-oesophageal puncture prostheses**

Tracheo-oesophageal voice prostheses are devices which are implanted into the neck of people who have undergone a laryngectomy operation to enable them to produce a voice. There are several different brands of prosthesis.

The Speech Pathology section of the Queen Elizabeth Hospital (South Australia) expressed some concern about the low pressure voice prosthesis. It said this prosthesis retails for around $55, and that patients may require up to six a year. It added that many of its patients are not eligible for free provision of this prosthesis and must pay for it themselves.

The primary source of the prosthesis is the United States. Because of this, Speech Pathology felt that import duty might be a significant contributor to the costs facing purchasers of the prosthesis. However, voice prostheses are imported duty free (see Appendix C). They are also exempt from sales tax under Item 42B(1) of the *Sales Tax (Exemptions and Classifications) Act* (see Appendix D).

**The electro-larynx**

The electro-larynx is an electronic device which is carried by the user. It has a vibrating unit which is held against the neck to produce a voice, unlike the tracheo-oesophageal puncture prosthesis which is surgically implanted. It has a useful life of six to ten years.

The Speech Pathology section of the Queen Elizabeth Hospital was concerned about the high price of the electro-larynx. It considered that import duty may be a significant contributor to the costs facing purchasers of the larynx. As with the tracheo-oesophageal puncture prosthesis, however, the electro-larynx is imported duty free. It is also exempt from sales tax under Item 42B(1) of the *Sales Tax (Exemptions and Classifications) Act*. 
The Servox is the top-of-the-range electro-larynx. It is manufactured in West Germany and is sold as a complete unit comprising the artificial larynx (which is the vibrating unit), transformer, battery, battery charger, and carry case. The artificial larynx and some parts are imported, and assembled in Australia where they are sold as the Servox.

There is one company located in Melbourne which imports and assembles the Servox. It sells directly to hospitals and individuals and advised the Commission that the price of the Servox (at March 1990) when purchased directly from them is $984. This company said the Servox was cheaper in Australia than overseas. This was disputed by Speech Pathology which said that prices in Australia were comparable to overseas. There is also an agent in Sydney who sells the Servox for $1 150.

**The Skillbuilders Floor Sitter**

The Skillbuilders Floor Sitter is a device used to support the body in a seated position. It comprises a wedge base and foam chair with a waterproof coating. It is made in the United States.

The Spastic Society of Victoria expressed concern about the price of the Skillbuilders Floor Sitter, saying ‘... a Skillbuilders Floor Sitter retails in the United States for $US140; its selling price in Australia is $A585’.

One former importer of the Skillbuilders Floor Sitter advised the Commission that costs were such that it now no longer sold the floor sitter in Australia. Freight costs are high because of the size of the item, although the company is looking at alternative ways of packaging. However, the importer was concerned at the rate of duty applying to the feeder seat and the floor sitter base. The items are dutiable at 21 per cent, phasing down to 15 per cent in 1992.

An importer of the Preston Floor Sitter told the Commission that the retail price of the product is $520. It said that packaging and handling within the United States, as well as freight to Australia and duty, add considerably to the Australian price.

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6 Spastic Society of Victoria, Submission No. 229, p. 2.
Electric wheelchairs

Several participants expressed concern that the price of high technology electric wheelchairs is significantly increased as a result of the requirement for duty to be paid on imported chairs. They considered that the payment of duty is inappropriate because chairs which could provide an equivalent level of performance are not produced in Australia.

The Independent Living Centre of New South Wales said that ‘while there should be tariff protection on economically priced wheelchairs from Taiwan to protect local manufacturers, overall high tariff duties on some ‘hi-tech’ wheelchairs is restricting the choice of people with disabilities.’

The Spastic Welfare Association of Western Australia, in conjunction with private sponsors, imports five Turbo chairs directly from the United Kingdom each year. It said it could place 30 Turbos each year if it had sufficient funds to purchase that number. It said the landed duty paid price of the Turbo is $15,000, and that duty represents a severe impost. According to the Association, no wheelchair equivalent to the Turbo is currently produced in Australia and there is ‘nothing that looks as if it is about to be introduced in the next few years’. It requested the immediate removal of tariffs applying to wheelchairs rather than the four year phased reduction of tariffs proposed by the Commission in its draft report. The Association said the immediate removal of duty would mean that it could purchase an additional three chairs over the next four years.

According to the Electric Wheelchair User Group, the most commonly sold electric wheelchairs retail in Australia for around $5,000 to $6,000. More specialised chairs, such as the Turbo, are more expensive. By way of illustration of the impost on the consumer, the duty payable on an average electric wheelchair from the United Kingdom, which retails in Australia for $5,000, is about $350. Duty of about $750 is payable on wheelchairs which retail for $10,000 and duty of about $1,800 is payable on wheelchairs, such as the Turbo, for which the landed duty free

7 Independent Living Centre of New South Wales, Submission No. 6, p. 2.
price is $15 000. Wheelchairs are not able to be imported free of duty under a tariff concession because chairs serving similar functions are considered by Customs to be either manufactured or capable of being manufactured in Australia. Issues relating to the tariff on wheelchairs and admission under the CTCO System are addressed in Chapter 7 and Appendix C.

9 Wheelchairs are dutiable at a General rate of 17 per cent (12 per cent for Developing Countries) reducing to 15 per cent in 1992 (10 per cent for Developing Countries). Imports from New Zealand are free of duty.
C TARIFF AND TARIFF CONCESSIONS

C1 Tariff classification and rates of duty

Australia’s classification of items in the Tariff is bound by international treaty to the Harmonized Commodity Description and Coding System which Australia adopted on 1 January 1988. This system aims to provide international uniformity in the classification of items in Customs Tariffs and thereby facilitate international trade.

The Harmonized Tariff consists of 96 chapters which are divided into over 1 000 headings (each with a four digit tariff reference number). These have been further sub-divided into over 5 000 sub-headings with six digit references. These headings and sub-headings are mandatory, that is, they must be used without addition or modification.

The Harmonized System does allow for domestic sub-headings beyond the 6-digit level. Any classification changes Australia wishes to make could only be to its domestic sub-headings. There are already several thousand domestic sub-headings in the Australian Tariff.

Attachment 1 to this Appendix lists some goods used by disabled people, the relevant tariff classification and the rates. The goods which would be used by people with disabilities are shown in italics.

C2 Concessional entry

There are a number of ways in which goods can be imported at concessional duty rates.

Tariff concessions under Item 1

Item 1 of Schedule 4 of the Customs Tariff provides duty free entry to:
'Goods that, at the time they are entered for home consumption, are owned by the Commonwealth and are not intended to be used for the purposes of trade, being:

(a) goods for use by a Department within the meaning of the Public Service Act 1922 prescribed by by-law in relation to those goods; or

(b) goods for use by an authority or body established for a purpose of the Commonwealth, being an authority or body prescribed by by-law in relation to those goods.'

Item 1A states:

'Goods that, at the time they are entered for home consumption, are owned by the Commonwealth and exemption from duty of which is, in the opinion of the Minister, in the national interest.'

**Tariff concessions under Item 12**

The Minister has power to grant by-laws under the Customs Act. Policy by-laws permit concessional entry where the general criteria for Commercial Tariff Concession Orders (CTCOs) do not apply (see C.2.3 below). They are generally confined to imports by certain groups.

Item 12 of Schedule 4 of the Customs Tariff provides duty free entry to:

'Goods, as prescribed by by-law, specially designed for the use of blind, deaf or dumb persons.'

There are two parts to Item 12. Firstly there is ‘The Table’ (see Attachment 2 to this Appendix), which lists certain goods specially designed for use of blind, deaf or dumb persons which can be imported by anyone.

The second part of Item 12 is a policy by-law which states:

'Goods, specially designed and imported for the use of the blind, deaf and dumb, when imported by governing bodies of public institutions having the care thereof.'

Issues concerning Item 12 are discussed in Chapter 7.
The Commercial Tariff Concession System (Item 50)

Goods may be imported free of duty under Item 50 where the importer can demonstrate that ‘goods serving similar functions’ are either not produced in Australia or are not capable of being produced in Australia in the normal course of business. Attachment 3 lists examples of Commercial Tariff Concession Orders (CTCOs) approved for aids and appliances for people with disabilities.

There are two tests in any application for a CTCO:

1. Do the foreign goods serve similar functions to goods which are produced in Australia?

   If they do, concessional entry is not permitted. If they do not, a second test is applied before concessional entry is approved.

2. Do the foreign goods serve similar functions to goods which are capable of being produced in Australia in the normal course of business?

   If they do, concessional entry is not permitted.

Thus the first test examines goods now available and essentially asks whether they compete in the same marketplace. The second test revolves around deciding whether such goods could be made in Australia in the normal course of business.

The expression ‘goods serving similar functions’ is defined in the Customs Tariff Act thus:

‘goods shall be taken to serve similar functions to other goods unless the Comptroller is satisfied that, if both goods were readily available for sale throughout Australia, there would be no significant part of Australia in which there would be significant cross-elasticity of demand between the goods.’

Similarly the expression ‘capable of producing goods in the normal course of business’ is also defined in the Act:

‘For the purposes of this Part a person shall be taken to be capable of producing goods in the normal course of business if, in the normal course of business, he is prepared to accept orders for the supply of such goods that have been, are being or are to be produced by him.’

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2 ibid., Section 269B(7).
Several participants said that concessional entry through the CTCS for particular goods was either not available or had been withdrawn because there were goods available from local manufacturers which, although basically similar to the imported goods, were not as technically advanced in some way.

An example was provided by Sancella Pty Ltd, Australia’s principal supplier of incontinence management products. It imports stretch pants which form part of its Softeze incontinence management system. Until September 1987 the product was able to be imported at the then concessional rate of 2 per cent. The concession was withdrawn on the objection of Posi Pour Wholesalers, an Australian manufacturer of an absorbent washable brief, which it claimed served a similar function to the imported item. The Sancella product then became fully dutiable. Sancella said that the Comfi Pad manufactured by Posi Pour does not meet the requirements of most users and that the loss of the concession has meant large increases in the price of the Sancella product. Sancella stated that:

‘owing to its design and cost, the Posi Pour product has limited appeal and would have an absolute market potential of no more than 2-3 per cent of the total market. (Its current market share is less than 1 per cent ...)

Sancella added that the average unit price of its product had increased by 40 per cent above 1987 levels as a result of withdrawal of the concession.3

Posi Pour contested Sancella’s claims, saying that, while its sales have been lower than anticipated, its product has been well-received by nursing homes. It acknowledged that there are some cases of incontinence where the product would be less suitable.4

At the draft report hearings, the Independent Living Centre, South Australia, said that another Australian producer has recently commenced production of incontinence pants. They said that the pants were better than ones they has been importing, and that they had been well-received by people who need them.5

3 Sancella Pty Ltd, Submission No. 75, p. 6.
The manufacturer, Inconticare Products, said that local production was only supported by the very high duties applying to these goods. In the absence of duty they would be imported from the United States at lower prices.

Another example was provided by Simpla Plastics Australia, an importer of drainage bags and leg drainage bags. It said its products are not eligible for concessional entry because of the existence of a local manufacturer. Simpla Plastics said the local product:

‘has only a small share of the market and yet its presence in the market causes all other brands to be sold at a much higher price than would otherwise be necessary, but for the Customs Tariff’.6

Several participants argued that particular goods should have been accorded duty free entry under Item 50 where the product is unable to be produced in Australia because of patent restrictions or the like. Others argued that the imported good was in some way technically superior to the local product. The Independent Living Centre, New South Wales, said that concessional entry should be available for some ‘high-tech’ wheelchairs.7 It gave as examples wheelchairs with carbon fibre frames which it said could not be manufactured in Australia and a French-made lever-driven wheelchair for one-handed users which was covered by a world-wide patent and thus could not be manufactured in Australia.

The test which Customs is required to impose in all cases is whether there are local goods which serve similar functions. This can be assessed by examining whether the imported goods concerned compete against local products in the marketplace. Would duty free entry of the imported item affect the Australian market for that product? Technical or quality differences do not necessarily mean that the goods are not competitors.

ACROD was critical that concessional entry is prevented if ‘goods serving similar functions’ are available locally. It said that:

‘the suggestion that one electric wheelchair is the same as another makes little sense to a consumer who has rejected a particular item as not meeting his/her needs and is then, in effect, told that it does’.8

---

7 Independent Living Centre, New South Wales, Submission No. 6, p. 2.
8 ACROD, Submission No.
Participants also said that in some cases manufacturers claim to be capable of producing a similar product but then either produce a very limited quantity or fail to produce it at all. ACROD said that:

‘manufacturers may well state quite correctly that they could produce a comparable item. But this does not ensure that they do, nor constitute a promise to do so in the future.’

The Independent Living Centre, New South Wales requested that:

‘tariff protection be reviewed to ensure that manufacturers who declare that they “could” produce a product locally, similar in quality and design to an imported product, do so within a given time frame (such as one year - for example). The tariff protection in its present form restricts the choice of people with disabilities, while at the same time ensuring that products are prohibitive due to excessive cost.’

Under the CTCS, a claim by a manufacturer that it is capable of producing goods serving similar functions in the normal course of business is not in itself sufficient to revoke or refuse a concession. The person or manufacturer must, to the satisfaction of Customs, demonstrate an ability to produce the product in question. Preparedness to accept orders for the supply of the goods is accepted as evidence of capacity to produce. There are no formal guidelines for determining whether a person is capable of producing goods in the normal course of business as this will vary among commodities. Customs examines each case on its merits.

**Separate review of the CTCS**

There are clear difficulties in using the CTCS to reduce the impact of tariffs on people with disabilities since the normal criteria under which the system is administered will rule out those applications where locally produced goods are not technically similar but are judged to serve similar functions. Customs said:

‘... the ACS strongly believes that the Commercial Tariff Concession System is not an appropriate vehicle for the duty free entry of aids and appliances. There is no scope in the

---

9 ibid.
10 Independent Living Centre, New South Wales, op. cit., p. 3.
legislation for social welfare considerations to be taken into account when processing applications for tariff concessions, and so regrettably, many such applications are unsuccessful.12

The Government has now forwarded a reference on the Commercial Tariff Concession and By-Law Systems to the Commission for public inquiry. Broader questions such as the principles underlying the tariff concession system, and questions of administrative process, will be taken up in that inquiry.

C3 The Florence Agreement and its Nairobi Protocol

The Florence Agreement (1950) and its Nairobi Protocol (1976) are UNESCO arrangements which specify free trade in goods of an educational, scientific or cultural nature. The Government decided on 13 June 1990 that Australia would sign the Florence Agreement and the Nairobi Protocol.

The adoption of the Florence Agreement and the Nairobi Protocol will mean that effect will have to be given to their provisions in Australian tariff legislation. The Department of Industry, Technology and Commerce expects that these will be implemented from 1 July 1991.

Of particular interest to this inquiry are the provisions in the Florence Agreement for duty free entry for ‘articles for the blind’ and the extension of these provisions under the Nairobi Protocol to ‘articles for the blind and other handicapped persons’. Annex E of the Nairobi Protocol defines ‘articles for the blind and other handicapped persons’ which are eligible for duty-free entry as:

‘(i) All articles specially designed for the educational, scientific or cultural advancement of the blind which are imported directly by institutions or organisations concerned with the education of, or assistance to the blind, approved by the competent authorities of the importing country for the purpose of duty-free entry of these types of articles, including...’.

(a) Talking books (discs, cassettes or other sound reproductions) and large print books:

(b) Phonographs and cassette players, specially designed or adapted for the blind and other handicapped persons and required to play the talking books;

12 Australian Customs Service, Submission No. 752, p. 1.
(c) equipment for the reading of normal print by the blind and partially sighted, such as electronic reading machines, television-enlargers and optical aids;

(d) equipment for the mechanical or computerised production of braille and recorded material, such as stereo-typing machines, electronic braille, transfer and pressing machines; braille computer terminals and displays;

(e) braille paper, magnetic tapes and cassettes for the production of braille and talking books;

(f) aids for improving the mobility of the blind, such as electronic orientation and obstacle detection appliances and white canes;

(g) technical aids for the education, rehabilitation, vocational training and employment of the blind, such as braille watches, braille typewriters, teaching and learning aids, games and other instruments specifically adapted for the use of the blind.

(ii) All materials specially designed for the education, employment and social advancement of other physically or mentally handicapped persons, directly imported by institutions or organisations concerned with the education of, or assistance to such persons, approved by the competent authorities of the importing country for the purpose of duty-free entry of these types of articles, provided that equivalent objects are not being manufactured in the importing country.'
CERTAIN GOODS USED BY PEOPLE WITH DISABILITIES - TARIFF CLASSIFICATION AND DUTY RATES

Note: goods which may be used by people with disabilities are shown in italics.

<table>
<thead>
<tr>
<th>Tariff Classification</th>
<th>Description of Goods</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3904</td>
<td>Polymers of vinyl chloride or of other halogenated olefins, in primary forms:</td>
<td></td>
</tr>
<tr>
<td>3904.22.00</td>
<td>--Plasticised</td>
<td>15%, DC 10%, Can 10%</td>
</tr>
<tr>
<td></td>
<td><em>Grippistrip Reels</em></td>
<td></td>
</tr>
<tr>
<td>3924</td>
<td>Tableware, kitchenware, other household articles and toilet articles, of plastics:</td>
<td></td>
</tr>
<tr>
<td>3924.90.00</td>
<td>-Other</td>
<td>15%, DC 10%, Can 10%</td>
</tr>
<tr>
<td></td>
<td><em>Tooth paste dispenser</em></td>
<td></td>
</tr>
<tr>
<td>3926</td>
<td>OTHER ARTICLES OF PLASTICS AND ARTICLES OF OTHER MATERIALS OF 3901 TO 3914.00.00</td>
<td></td>
</tr>
<tr>
<td>3926.90.10</td>
<td>---Of plastics, as follows:</td>
<td>15%, DC 10%, Can 10%</td>
</tr>
<tr>
<td></td>
<td>(a) of polymers of ethylene;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(b) of polymers of propylene;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(c) of polymers of styrene or of vinyl chloride, being:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) air cushions, mattresses, pillows and other inflatable articles;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ii) <em>artificial eyes</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iii) clips, tags, rings and the like for identification of animals, birds or fish;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iv) curtains;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(v) <em>ileo-colostomy drainage bags</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(vi) watch glasses</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Price Details</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4014</td>
<td>HYGIENIC OR PHARMACEUTICAL ARTICLES (INCLUDING TEATS), OF VULCANISED RUBBER OTHER THAN HARD RUBBER, WITH OR WITHOUT FITTINGS OF HARD RUBBER:</td>
<td></td>
</tr>
<tr>
<td>4014.90.00</td>
<td>-Other</td>
<td>July ’90 19%, DC 14%</td>
</tr>
<tr>
<td></td>
<td><em>Latex urinary drainage condoms</em></td>
<td>July ’92 15% DC 10%</td>
</tr>
<tr>
<td>6107</td>
<td>MEN’S OR BOYS’ UNDERPANTS, BRIEFS, NIGHTSHIRTS, PYJAMAS, BATHROBES, DRESSING GOWNS AND SIMILAR ARTICLES, KNITTED OR CROCHETED:</td>
<td></td>
</tr>
<tr>
<td>6107.12.00</td>
<td>--Of man-made fibres</td>
<td>Sch 5</td>
</tr>
<tr>
<td></td>
<td><em>Softeze stretch pants</em></td>
<td>55% &amp; $0.45 each, PNG: $0.45 each, FI: $0.45 each, DC 50% &amp; $0.45 each.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July ’95 55%, DC 50%</td>
</tr>
<tr>
<td>6108</td>
<td>Women’s or girls’ slips, petticoats, briefs, panties, nightdresses, pyjamas, negliges, bath robes, dressing gowns and similar articles, knitted or crocheted:</td>
<td></td>
</tr>
<tr>
<td>6108.22.00</td>
<td>--Of man-made fibres</td>
<td>Sch 5</td>
</tr>
<tr>
<td></td>
<td><em>Softeze stretch pants</em></td>
<td>55% &amp; $0.45 each, PNG: $0.45 each, FI: $0.45 each, DC 50% &amp; $0.45 each.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July ’95 55%, DC 50%</td>
</tr>
<tr>
<td>6307</td>
<td>Other made up articles, including dress patterns:</td>
<td></td>
</tr>
<tr>
<td>6307.90.29</td>
<td>----Other</td>
<td>25%, DC 20%</td>
</tr>
<tr>
<td></td>
<td><em>Knitted stump socks</em></td>
<td></td>
</tr>
<tr>
<td>6307.90.99</td>
<td>----Other</td>
<td>25%, DC 20%</td>
</tr>
<tr>
<td></td>
<td><em>Elasticised shoe laces</em></td>
<td></td>
</tr>
</tbody>
</table>
6403  FOOTWEAR WITH OUTER SOLES OF RUBBER, PLASTICS, LEATHER OR COMPOSITION LEATHER AND UPPERS OF LEATHER:

6403.91.00  --Covering the ankle  Baby Marche Boots  Sch 5  
45% & $8.75/pair,  
DC 40% & $8.75/pair.a  
July '95 45%, DC 40%

6602  WALKING STICKS, SEAT STICKS, WHIPS, RIDING-CROSSES AND THE LIKE  Free

6912  CERAMIC TABLEWARE, KITCHENWARE, OTHER HOUSEHOLD ARTICLES, AND TOILET ARTICLES, OTHER THAN OF PORCELAIN OR CHINA  
- other, Special crockery  
July '90 17%, DC 12%,  
July '92 15%, DC 10%

8205  HAND TOOLS (INCLUDING GLAZIERS’ DIAMONDS), NOT ELSEWHERE SPECIFIED OR INCLUDED; BLOW LAMPS; VICES, CLAMPS AND THE LIKE, OTHER THAN ACCESSORIES FOR AND PARTS OF, MACHINE TOOLS; ANVILS; PORTABLE FORGES; HAND OR PEDAL-OPERATED GRINDING WHEELS WITH FRAMEWORKS:

8205.59.00  --Other  Easy reachers  
July '90 17%, DC 12%  
July '92 15%, DC 10%

8517  ELECTRICAL APPARATUS FOR LINE TELEPHONY OR LINE TELEGRAPHY, INCLUDING SUCH APPARATUS FOR CARRIER CURRENT LINE SYSTEMS:

8517.10.00  -TELEPHONE SETS  Variable Volume telephone  
July '90 19%, DC 14%  
July '92 15%, DC 10%
8533 ELECTRICAL RESISTORS (INCLUDING RHEOSTATS AND POTENTIOMETERS), OTHER THAN HEATING RESISTORS:

8533.40.00 -Other variable resistors, including rheostats and potentiometers

8543 ELECTRICAL MACHINES AND APPARATUS, HAVING INDIVIDUAL FUNCTIONS, NOT SPECIFIED OR INCLUDED ELSEWHERE IN THIS CHAPTER:

8543.80.90 ---Other
Electronic reading machines
for the blind or partially sighted

8544 INSULATED (INCLUDING ENAMELLED OR ANODISED) WIRE, CABLE (INCLUDING CO-AXIAL CABLE) AND OTHER INSULATED ELECTRIC CONDUCTORS, WHETHER OR NOT FITTED WITH CONNECTORS; OPTICAL FIBRE CABLES, MADE UP OF INDIVIDUALLY SHEATHED FIBRES, WHETHER OR NOT ASSEMBLED WITH ELECTRIC CONDUCTORS OR FITTED WITH CONNECTORS:

8544.41.90 ---Other
Cords and telecoils

8708 PARTS AND ACCESSORIES OF THE MOTOR VEHICLES OF 8701 TO 8705:

8708.99.90 ---Other
Hand control unit to enable a motor vehicle to be driven by a disabled person
8713 INVALID CARRIAGES, WHETHER OR NOT MOTORISED OR OTHERWISE MECHANICALLY PROPELLED:

8713.10 - Not mechanically propelled
- July 90 17%, DC 12%
- July 92 15%, DC 10%

8713.90 - Other
- July 90 17%, DC 12%
- July 92 15%, DC 10%

8714 PARTS AND ACCESSORIES OF VEHICLES OF 8711 TO 8713:

8714.20.00 - Of invalid carriages
- July 90 17%, DC 12%
- July 92 15%, DC 10%

9018 INSTRUMENTS AND APPLIANCES USED IN MEDICAL, SURGICAL, DENTAL OR VETERINARY SCIENCES, INCLUDING SCINTIGRAPHIC APPARATUS, OTHER ELECTRO-MEDICAL APPARATUS AND SIGHT-TESTING INSTRUMENTS:

9018.90.10 ---Goods, as follows:
(a) apparatus for the administration of anaesthetic gases;
(b) defibrillators;
(c) drainage appliances (including calibrated drainage bags) with, or designed to be used with, a catheter;
(d) incubators for babies;
(e) infusion or transfusion sets for blood or other fluids
(f) suction apparatus

--- 15%, DC 10%
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>9021</td>
<td>Orthopaedic appliances, including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect or disability:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Artificial joints and other orthopaedic or fracture appliances:</td>
<td></td>
</tr>
<tr>
<td>9021.1</td>
<td>-- Artificial joints                                     Free</td>
<td></td>
</tr>
<tr>
<td>9021.11.00</td>
<td>Other                                               Free</td>
<td></td>
</tr>
<tr>
<td>9021.19.00</td>
<td>Other                                                Free</td>
<td></td>
</tr>
<tr>
<td>9021.2</td>
<td>Artificial teeth and dental fittings:</td>
<td></td>
</tr>
<tr>
<td>9021.21.00</td>
<td>-- Artificial teeth                                    Free</td>
<td></td>
</tr>
<tr>
<td>9021.29.00</td>
<td>Other                                                Free</td>
<td></td>
</tr>
<tr>
<td>9021.30.00</td>
<td>Other artificial parts of the body                    Free</td>
<td></td>
</tr>
<tr>
<td>9021.40.00</td>
<td>Hearing aids, excluding parts and accessories           Free</td>
<td></td>
</tr>
<tr>
<td>9021.50.00</td>
<td>Pacemakers for stimulating heart muscles, excluding parts and accessories</td>
<td>15%, DC 10%</td>
</tr>
<tr>
<td>9021.90.00</td>
<td>Other                                                Free</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parts and accessories for hearing aids</td>
<td></td>
</tr>
<tr>
<td>9401</td>
<td>Seats (other than those of 9402), whether or not convertible into beds, and parts thereof:</td>
<td></td>
</tr>
<tr>
<td>9401.80.00</td>
<td>Other seats                                          July '90 21%, DC 16%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bathseats of moulded Plastic                          July '92 15%, DC 10%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skillbuilders floor sitter                             July '90 21%, DC 16%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>July '92 15%, DC 10%</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>9402.90.00</td>
<td>-Other&lt;br&gt;&lt;i&gt;Hospital beds&lt;/i&gt;</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DC 16%</td>
</tr>
<tr>
<td>9403.20.00</td>
<td>-Other metal furniture&lt;br&gt;&lt;i&gt;Reading units for holding a book in position to enable a patient to read while resting&lt;/i&gt;</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DC 16%</td>
</tr>
</tbody>
</table>

a This is indicative only, and represents the duty on goods imported outside of quota. As the goods concerned fall within the textiles, clothing and footwear sectoral plan, the duty payable depends upon the availability of quota.

Note: This list is not exhaustive.

Unless otherwise indicated, NZ, PNG, FI and DC rates are free.
ATTACHMENT 2 TO APPENDIX C

CONCESSIONAL ENTRY FOR CERTAIN GOODS UNDER ITEM 12

The goods listed in this table are specially designed for the use of blind, deaf or dumb persons, and can be imported under Item 12. A further list of goods covered by the policy by-law under Item 12 is administered separately. This is discussed in Chapter 7.

THE TABLE

<table>
<thead>
<tr>
<th>Description</th>
<th>BL Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM SYSTEMS, designed for use as, or with, hearing aids, consisting of the following:</td>
<td></td>
</tr>
<tr>
<td>(a) Chargers/carrying cases;</td>
<td>8531956</td>
</tr>
<tr>
<td>(b) FM microphones/transmitters;</td>
<td></td>
</tr>
<tr>
<td>(c) FM receivers with or without in-built microphones</td>
<td></td>
</tr>
<tr>
<td>INFORMATION HANDLING OR PROCESSING SYSTEMS, braille, capable of ALL of the following:</td>
<td></td>
</tr>
<tr>
<td>(a) editing;</td>
<td>8535648</td>
</tr>
<tr>
<td>(b) displaying on screen;</td>
<td></td>
</tr>
<tr>
<td>(c) printing;</td>
<td></td>
</tr>
<tr>
<td>(d) retrieving;</td>
<td></td>
</tr>
<tr>
<td>(e) storing</td>
<td></td>
</tr>
<tr>
<td>LARYNXES, artificial</td>
<td>8531957</td>
</tr>
<tr>
<td>MOBILITY DEVICES, spectacle frame mounted, capable of converting reflected high frequency sounds into audible stereophonic signals</td>
<td>8531948</td>
</tr>
<tr>
<td>READING MACHINES, capable of converting printed matter into tactile images thus enabling the blind to read by the sense of touch</td>
<td>8531981</td>
</tr>
<tr>
<td>READING MACHINES, capable of converting printed matter into speech</td>
<td>8531961</td>
</tr>
<tr>
<td>READING SYSTEMS, capable of scanning printed matter and reproducing the enlarged text on a screen</td>
<td>8732195</td>
</tr>
<tr>
<td>SENSORS, hand held, capable of indicating obstacles in the user's path</td>
<td>8531950</td>
</tr>
<tr>
<td>SOUND REPRODUCERS OR SOUND REPRODUCERS AND SOUND RECORDERS, having a power output rms of less than 2.5 W, using a magnetic tape as the recorded or recording medium, monophonic, DC or AC/DC operated, designed for carrying in the hand or on the person, with colour coded, raised symbol control keys and dual playing speeds</td>
<td>8531958</td>
</tr>
</tbody>
</table>
SOUND REPRODUCERS OR SOUND RECORDERS AND REPRODUCERS, in which the tape can be played at up to double normal speed without a change in tape voice pitch  
BL 8531984

TAPES, paper, wood-free, machine glazed, coated with heat reactive dye  
BL 8531962

TELECOMMUNICATION EQUIPMENT, being integrated units incorporating ALL of the following:  
(a) keyboard;  
(b) visual display screen;  
(c) printer  
BL 8531955

VIEWERS, microfiche, having in-built fluorescent lighting  
BL 8531982
ATTACHMENT 3 TO APPENDIX C

CERTAIN AIDS AND APPLIANCES AVAILABLE UNDER CTCOs

The following is a list of CTCOs which are readily identifiable as aids and appliances for people with disabilities. The list is not exhaustive.

<table>
<thead>
<tr>
<th>Tariff Reference</th>
<th>Description of Goods</th>
<th>TC NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3924.10</td>
<td>Tableware, designed for use by disabled persons</td>
<td>8533435</td>
</tr>
<tr>
<td>3926.90</td>
<td>Incontinence Collectors, faecal, incorporating a skin barrier</td>
<td>8807471</td>
</tr>
<tr>
<td>3926.90</td>
<td>Incontinence Pouches, female urinary, incorporating a skin barrier and drain</td>
<td>8803990</td>
</tr>
<tr>
<td>4011.99</td>
<td>Tyres, size 200mm by 50mm designed for use with wheelchairs</td>
<td>8340560</td>
</tr>
<tr>
<td>4013.90</td>
<td>Tubes, for tyre size 200mm by 50mm, designed for use with wheelchairs</td>
<td>8533659</td>
</tr>
<tr>
<td>4014.90</td>
<td>Cushions, designed for prophylaxis or therapy of decubitus ulcers</td>
<td>8732538</td>
</tr>
<tr>
<td>4014.90</td>
<td>Bags, ostomy</td>
<td>8433824</td>
</tr>
<tr>
<td>4016.99</td>
<td>Mats, non-slip, being tableware designed for use by disabled persons</td>
<td>8533438</td>
</tr>
<tr>
<td>4911.99</td>
<td>Rolls, paper or mylar, printed of a kind used with automated reading aid machines</td>
<td>8340553</td>
</tr>
<tr>
<td>6911.10</td>
<td>TABLEWARE, designed for use by disabled persons</td>
<td>8533436</td>
</tr>
<tr>
<td>7323.93</td>
<td>Guards, plate, being tableware designed for use by disabled persons</td>
<td>8533439</td>
</tr>
<tr>
<td>7324.29</td>
<td>Baths, incorporating any of the following:</td>
<td>8341331</td>
</tr>
<tr>
<td></td>
<td>(a) hydraulic lifting device</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(b) patient transport system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(c) shower</td>
<td></td>
</tr>
<tr>
<td></td>
<td>being designed for handicapped people</td>
<td></td>
</tr>
<tr>
<td>Tariff Code</td>
<td>Description</td>
<td>HS Code</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>8211.91</td>
<td>Knives, being tableware designed for use by disabled persons</td>
<td>8533434</td>
</tr>
<tr>
<td>8215.99</td>
<td>Cutlery, being tableware designed for use by disabled persons</td>
<td>8533433</td>
</tr>
<tr>
<td>8423.10</td>
<td>Scales, platform type, invalid carriage, having roll on, roll off treads for the invalid carriage</td>
<td>8532742</td>
</tr>
<tr>
<td>8479.89</td>
<td>Page turning machines, designed to be used by disabled persons</td>
<td>8439045</td>
</tr>
<tr>
<td>8479.89</td>
<td>Patient Bathing Systems, comprising wheelchair, lifting device and combination bath or therapy tub</td>
<td>8439048</td>
</tr>
<tr>
<td>8479.89</td>
<td>Reading Aid Machines, capable of winding rolled printed matter and the like at predetermined speeds</td>
<td>8434686</td>
</tr>
<tr>
<td>8479.89</td>
<td>Washing appliances, human body, incorporating suction drying, designed for washing bed ridden patients</td>
<td>8530875</td>
</tr>
<tr>
<td>8713.10</td>
<td>Invalid carriages, non-motorised, designed specifically for the transportation of people down stairways</td>
<td>8334791</td>
</tr>
<tr>
<td>9506.99</td>
<td>Therapy ball units, consisting of flexible plastic hollow balls, foam panels and accessories, of a kind used for psychotherapy treatment of disabled children</td>
<td>8332311</td>
</tr>
</tbody>
</table>
Sales tax is levied at the point of last wholesale sale. It is generally paid by manufacturers, wholesale merchants and importers who must be registered with the Australian Taxation Office in the State or Territory in which the manufacturer or wholesaler operates. Sales tax legislation comprises a number of Acts and regulations. These include Sales Tax Assessment Acts (Nos 1-11) and Sales Tax Acts or Rating Acts (Nos 1-11) which specify the rate at which tax is payable. Where goods pass from one registered person to another, the seller does not pay sales tax on the goods. Sales tax is paid when goods pass from a registered person (such as a wholesaler) to an unregistered person (such as a retailer).

D1 Value for sales tax purposes

Sales tax is levied on the ‘sale value’, which is generally the wholesale price of the good (plus a margin for associated costs such as freight and administration). On imported goods, the sale value is the value of the goods for customs duty purposes, plus the customs duty payable on the goods, plus a further 20 per cent. Sales tax is payable 21 days after the close of the month during which the transactions, acts or operation, subject to tax have taken place. For imported items, date due for payment is date of entry where goods are used for home consumption.

D2 Sales tax exemptions

There are five schedules in the Sales Tax (Exemptions and Classifications) Act. The rates of sales tax for these schedules are as follows:

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>Exempt</td>
</tr>
<tr>
<td>Second</td>
<td>30%</td>
</tr>
<tr>
<td>Third</td>
<td>10%</td>
</tr>
<tr>
<td>Fourth</td>
<td>20%</td>
</tr>
<tr>
<td>Fifth</td>
<td>20%</td>
</tr>
</tbody>
</table>
If a good is not covered by any item in the various schedules then it is subject to sales tax at the general rate of 20 per cent.

Goods which are covered in the first schedule may be either unconditionally or conditionally exempt. Most foods and medicines for human use are unconditionally exempt. Goods are conditionally exempt because they are used for particular purposes or by particular persons. To obtain these goods free of sales tax the buyer is required to provide to the seller an ‘Exemption Certificate’ (a form addressed to the Commissioner of Taxation and the Commonwealth).

The Exemption Certificate should state precisely the exempt or conditional classification purpose for which the goods are obtained in accordance with the terms of the relevant provision under which the exemption is claimed. Certificates must be signed by the person claiming exemption. There is no formula for working out whether any particular goods are exempt. Exemption depends on the specification of the particular goods in legislation.

The main item of the Sales Tax (Exemptions and Classifications) Act under which people with disabilities can obtain exemptions on aids and appliances is Item 123 which states:

123(1) ‘Goods designed and manufactured expressly for use by persons suffering from sickness, disease or disablement (whether sickness, disease or disablement, generally, or a particular kind, or one or more particular kinds, of sickness, disease or disablement), being goods of a kind not ordinarily used by persons who are not suffering from sickness, disease or disablement’.

123(2) ‘Parts for goods covered by sub-item (1)

For the purposes of this item, ‘disablement’ includes blindness and deafness’.

Item 123 parts (1) and (2) are unconditional exemptions. That is, once it has been established that the good was designed and manufactured for people with disabilities, exemption applies to any purchaser, even if they do not have a disability.

Other items under which people with disabilities can obtain sales tax exemptions are the following:
**Item 41**

Surgical instruments and appliances (including parts) and surgical materials which are of a kind -

(i) sold exclusively or principally by manufacturers or distributors of such instruments, appliances and materials; and

(ii) used exclusively or principally in hospitals or by medical practitioners, optometrists or physiotherapists.

**Item 42**

Surgical appliances (including parts therefor), as follows:

1. Abdominal belts
2. Absorbent cotton wool, gauzes and lint
3. Adhesive plaster and strapping
4. (Omitted 1979)
5. Artificial eyes
6. Artificial limbs
7. Bandages and bandage winders
7A. Bath seats of a kind used by invalids or aged persons
7B. Colostomy, ileostomy and supra-pubic appliances; urinals made principally of rubber or other pliable material
8. Crutches
9. Elastic bandages, knee caps and stockings
10. Invalid chairs, invalid carrying chairs, invalid wheeled lounges and lounge chairs, invalid tricycles including motor propelled invalid wheel chairs and invalid tricycles; spinal carriages and other invalid hand carriages; wheeled beds of the kind used by invalids
11. Spectacles and eye glasses (and cases and wipers therefor), but not including goggles, sunglasses, field glasses or similar optical goods.
(12) Surgical boots, braces and irons
(13) Surgical, medical and first-aid outfits
(14) Trusses
(15) Umbilical belts
(16) Uterine supports, including surgical pessaries
(17) Wigs and hair-pieces for use by a person in respect of whom a legally qualified medical practitioner has certified that the use of a wig or hair piece is necessitated by the loss of hair through sickness or disease (other than naturally occurring baldness) or the effects of the treatment of sickness or disease

**Item 42A**

Battery-chargers for use exclusively or principally in recharging the batteries of goods covered by sub-item (10) of Item 42

**Item 42B**

(1) ‘Medical or surgical appliances of a kind used exclusively or principally by persons suffering from sickness, disease or physical impairment for the purpose of alleviating or treating that sickness, disease or impairment or the effects of that sickness, disease or impairment’.

(2) Parts for goods covered by sub-item (1)

With the exception of wigs 42(17), Items 42, 42A and 42B are unconditional exemptions.

**Item 42C**

‘Goods to be used in the modification of a motor vehicle solely for the purpose of adapting it for driving by a person who is suffering from a physical impairment’.
Item 42C is conditionally exempt. Exemption only applies to goods, such as special hand or foot controls, which are used in modifying a car, for use by a person with disabilities.

**Item 123A**

‘Goods of the following kinds, namely-

(a) interactive and broadcast videotex systems;
(b) broadcast teletext decoding devices;
(c) closed caption decoding devices; and
(d) systems or devices similar to systems or devices of a kind referred to in paragraph (a), (b) or (c),

whether or not of a kind used in or in connection with appliances for the reception of television programs, being goods for use and not for sale by a person in respect of whom there is in force a certificate given for the purposes of this item by the Secretary to the Department of Health, or by an officer appointed by him for the purpose, that certifies that the person’s hearing is impaired to such an extent that the person is, or is to be taken to be, profoundly deaf’.

Item 123A is a conditional exemption. Exemption is only granted to purchasers, who have been certified by the Department of Community Services and Health, to be profoundly deaf.

**Item 135**

‘Motor vehicles (and parts for motor vehicles) for use in his personal transportation, and not for sale, by a person who has served in the defence force or in any other armed forces of Her Majesty and who, as a result of that service -

(a) has lost a leg or both arms or has had a leg, or both arms rendered permanently and wholly useless; or
(b) is in receipt of a pension under Part II of the Veterans’ Entitlements Act 1986 and is a veteran (within the meaning of that Part) to whom section 24 of that Act applies’

**Item 135A**

‘Motor vehicles (and parts for motor vehicles) for use in the transportation to and from gainful employment of a person in respect of whom the Secretary to the Department of Community Services, or an officer appointed by him for the purpose, has certified that he has lost the use of one or both legs to such an extent that he is permanently unable to use public transport, not being goods for sale’

Items 135 and 135A are conditional exemptions.
This appendix contains an overview of some State and Commonwealth assistance schemes which provide aids and appliances for people with disabilities. Included are a number of rehabilitation and employment programs, and the disability programs operated by Telecom.

**E1 Commonwealth Government programs**

**Commonwealth Rehabilitation Scheme**

The Commonwealth Rehabilitation Scheme (CRS) provides aids and appliances, including home and work site modifications, without charge for people with disabilities who are of working age and who are assessed as likely to make substantial progress to independence or employment.

The aim of the scheme is to assist people to lead as normal a life as possible. Clients have access to equipment, including high technology and computer-based equipment to a limit of $5,000, and home/work modifications to a limit of $10,000. Items are issued on loan to the clients for as long as they have need. When the rehabilitation program has been completed, the person is required to buy the equipment, or apply for other government assistance.

Those who ‘require on-going medical treatment or other assistance of a maintenance nature, and are not likely to substantially increase their capacity to obtain or retain employment or to live independently’ are not eligible for the CRS. Most assistance is given to people who are victims of accidents. Eligible persons must be between 14 and 65 years of age.
There is no means test, although those receiving compensation payments must pay for the equipment provided by the CRS. A person on the scheme can receive a rehabilitation allowance, which is payable at the same rate as the invalid pension, and subject to the same income test. Also available is a living away from home allowance and a work training scheme. The work training scheme subsidises employers through a training allowance, as well as providing any necessary clothing or tools for employment, for a period of up to 12 weeks.

In 1988-89 a total of 15 268 people received assistance under the CRS. The cost of this was $57.5m. Aids and appliances accounted for $3.1m (see Table E.1).

Table E.1: **Aids and appliances supplied under the Commonwealth Rehabilitation Scheme, 1988-89**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (S’000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home modifications</td>
<td>560</td>
</tr>
<tr>
<td>Work modifications</td>
<td>21</td>
</tr>
<tr>
<td>Vehicle modifications</td>
<td>115</td>
</tr>
<tr>
<td>Work aids</td>
<td>291</td>
</tr>
<tr>
<td>Training aids</td>
<td>1 031</td>
</tr>
<tr>
<td>Mobility aids</td>
<td>317</td>
</tr>
<tr>
<td>Independent living aids</td>
<td>782</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3 118</strong></td>
</tr>
</tbody>
</table>

*Total does not add due to rounding.*

*Source:* DCS&H, Submission No. 152, p. 10.

**Stoma Appliance Scheme**

This scheme provides stoma appliances and pharmaceuticals free of charge to persons who are members of ileostomy or colostomy associations. Once a patient has undergone an operation and consequently requires a stoma aid they become eligible for membership.

The scheme is funded through the Health Insurance Commission in conjunction with the Pharmaceutical Benefits Scheme. Association members obtain their supplies on a monthly basis, with limits determined by the Government on the basis of normal medical usage of supplies. If a person requires more that the allowed quota, they can obtain a medical certificate for extra supplies.
Individual associations purchase the supplies at Government-determined prices, supply them to their members, and are then reimbursed by the Health Insurance Commission.

In 1988-89 there were approximately 20 000 registered on the scheme, and total expenditure was $9m.

**Home and Community Care Program**

Under the *Home and Community Care Act 1985*, the Commonwealth, in conjunction with the States and Territories, provides services to the frail elderly and younger disabled persons and their carers. The program objective is to ‘provide a comprehensive and integrated range of services to people who would otherwise be at risk of premature or inappropriate long term residential care’.\(^1\)

Commonwealth guidelines for the scheme do not specify the supply of aids and equipment, other than home modifications, since these are considered to be covered by State schemes. In practice, some aids are provided through this program if they cannot be obtained through alternative sources and are considered necessary for the operation of the program’s services. Any aids and appliances provided are on a loan basis.

**Accommodation programs**

About 73 000 people live in 1 400 nursing homes and about 43 000 live in 1 000 hostels around Australia. While aged persons comprise the majority of residents, there are 65 nursing homes and hostels specifically for people with disabilities. Residents of these are provided with the aids and appliances they require.

A number of participants questioned the adequacy of the present provision of aids and appliances through nursing homes. According to the South Australian

Government ‘if a resident requires an aid or appliance for permanent use, like an electric wheelchair, the resident is not allocated a stock aid (and) must purchase the required aid independently or go without’. This view was supported by the Victorian Review of the Provision of Aids and Equipment which found there were ‘nursing home residents with unmet needs for aids and equipment due to non-provision by the respective nursing home’.

**Hearing Services Program**

The Hearing Services Program provides audiological services, hearing aids, batteries and repairs of aids to persons under 21 years of age, pensioners holding a health benefit card, members of the Armed Services, ex-servicemen with war-related hearing loss and persons receiving supporting parent or sickness benefit allowances.

In 1988-89, the total cost of the Hearing Services Program was $29m. Details of the program are given in Chapter 6.

**Telecom**

Many participants in the inquiry commented, often critically, on the services provided by Telecom for people with disabilities. There was also criticism of Telecom’s failure to provide certain goods and services necessary for people with disabilities.

In 1988-89 Telecom established the Disability Programs Unit with the aim of providing better access for people with disabilities to Telecom and telecommunication products and services. The unit has a national office in Melbourne and disability centres in each capital city. The unit encourages the product areas of Telecom to ensure products meet the need of people with disabilities and to provide information to community and professional groups about available telecommunications products. The disabled community is represented by

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2 South Australian Government, Submission No. 221, p. 2.
Disabled People’s International (Australia) on Telecom’s [Australia] Consumer Council. Disabled People’s International said:

‘Telecom has made significant steps in the last two years towards improving telecommunications services to people with disabilities. ... [But] telecommunications for people with disabilities are still very expensive’.5

Telecom said that it spends approximately $5m each year on the provision of goods and services for people with disabilities.6 The Touchfone 200 has a volume control version for people with hearing disabilities. Both it and the Nomad Plus cordless telephone have an inbuilt inductive coupling for use with hearing aids. Telephones are also available with voice aids for people with speech difficulties, the Touchfone 200 finger guide is available for people with sight disabilities, and there are plastic-free telephones for people with allergies to plastic. Telecom also provides a Telephone Typewriter (TTY) directory free of charge.

At the initial round of public hearings participants raised the issue of the cost of a volume control for telephones used by people with hearing disabilities. Until recently people with disabilities paid two thirds of the rental and installation charges on special equipment and full price for items which were purchased. Telecom has now announced that under new pricing arrangements, people with disabilities will receive special recognition. As of 4 July 1990 Telecom-supplied telephone equipment, which includes items such as the new Touchfone 200, telephone tone ringer, volume control expander and voice aid, will be provided at the same cost as a standard service. The arrangement also applies to extension telephones, where aids will be provided at no extra cost.7

The Victorian School for Deaf Children questioned whether the needs of people with disabilities were being considered adequately. It claimed:

‘The recent decision made by Telecom to change the design of their units from round ear and mouth pieces to square ones has disadvantaged TTY users. The new square telephones are not compatible with existing TTYs. The telephone does not fit snugly into the TTY couplers

5 Disabled People’s International (Australia), Submission No. 52, p. 7.
6 Telecom, Submission No. 147, p. 5.
7 Telecom Australia, News Release, HQPR 41/90.
which means that the visual message can be distorted. Square couplers to replace the round ones on TTYs are available at an additional cost.  

Many participants argued that TTYs and other specialised devices should be available from Telecom either on a rental basis or free of charge. The Australian Deafness Council said that telephone typewriters should be treated in the same way as volume controls, tone ringers, etc, and provided at standard Telecom rates. The Deafness Foundation stated:

‘... the telephone typewriters ... cost between $500 and $800 each at the moment and you need more than one because they can only communicate with another TTY. Telecom in its wisdom chooses not to rent these devices’.  

At the initial public hearings, Telecom said it is concerned with all people with disabilities and not just those with hearing disabilities. It said:

‘... the profoundly deaf [are a] small, significant sector of the disabled community. The profoundly deaf that can use a typewriter ... is very small, because the profoundly deaf, a lot of them, do not go deaf until they are over 50. By then they can not learn to read the type - to type, and also it is very hard to read the print that is printed out on the particular TTYs that are available. So by the time you go deaf ... or you need to use a TTY, your body can not cope with it. But this is an area that needs to be looked at’.  

At the draft report hearings, Deaflink said:

‘Telecom’s own services, apart from the triple zero service - for example service difficulties and faults, bill inquiries, account inquiries, and so on, all those services are not accessible by the TTY, and likewise, all the free services, the 008 numbers, are not available via the TTY. Telecom have made some indications that they ... intend to visit the United States and have a look at what sort of services are available’.  

In response to criticisms raised at the draft report hearings, Telecom said:

‘Telephone Typewriters are privately imported and supplied and the implications of Telecom making special arrangements in a competitive market which is subject to rapid technological

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8 Victorian School for Deaf Children, Submission No. 55, p. 3.
innovation, such as personal computers emulating TTYs, will need to be carefully considered as will the extent to which any such arrangements could be taken as part of Telecom’s Community Service Obligations (CSOs).\textsuperscript{13}

Telecom also added that a representative was currently overseas appraising the TTY situation in the United States and the United Kingdom, and that Telecom would be in a position to report in September 1990.\textsuperscript{14}

**Provision for veterans**

Disability equipment and rehabilitation are provided free to veterans and their dependants. Income support is provided through a disability pension and disability allowances. Expenditure on aids and appliances through the Community Health Care Services Program was $14.7m in 1988-89.\textsuperscript{15}

**Free Limbs Scheme**

Under the Free Limbs Scheme, Australian residents requiring an artificial limb (except those receiving compensation) are provided with a standard limb free of charge. Beneficiaries range from children with congenital limb deficiencies to elderly amputees. The aim of the scheme is to assist the rehabilitation of amputees and to remove the financial disadvantage they would suffer through having to purchase their own prosthesis. There are currently 25 000 amputees receiving assistance under this scheme. Details of the scheme are given in Chapter 6.

**Employment, education and training programs**

The Department of Employment Education and Training offers a range of income assistance programs to people with disabilities. The Department does not directly supply aids and appliances, other than an allowance of $2 000 for modifications to a workplace in order to facilitate employment or training.

\textsuperscript{13} Telecom Australia, Submission No. 960, p. 1.

\textsuperscript{14} ibid., p. 2.

Education assistance is provided through a number of programs. A Special Education Grant Scheme funds State Education Departments to provide aids and equipment required by children for use in their education. These schemes vary among States, and are supplemented by equipment provision schemes.

The Higher Education Equity Scheme provides funding for institutions to facilitate the education of people with disabilities. This can include modification to buildings and the purchase of equipment. People with disabilities attending education institutions receive assistance through AUSTUDY. Provision is made for those who take longer to complete their degree because of their disability.

**E2 State Government programs**

**Equipment provision**

Prior to 1981, aids and appliances were provided through either the public hospital system or the Social Welfare Division of the Commonwealth Department of Youth and Community Services. Individual States had responsibility for determining eligibility and provision of aids and appliances. The Program of Aids for Disabled Persons (PADP) was introduced in 1981, with the intention of providing a coordinated set of guidelines and to provide aids and appliances, free of means testing, to those who required them. In 1987, the Commonwealth Government provided funding of $10m, and returned responsibility for the provision of aids to the States.

Administrative arrangements differ among States. In New South Wales, the eleven health regions are responsible for administration. In Western Australia, PADP is administered through public hospitals, while the South Australian scheme is also

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16 W.A. Surgical Bootmakers was critical of aspects of the procedures involved in the supply of surgical shoes and orthotics under the PADP scheme in Western Australia. The company said that prescriptions for specialised manufacture of surgical footwear, written by private medical specialists for supply under the PADP scheme in the Perth metropolitan area, are vetted by the Royal Perth Rehabilitation Hospital and then only passed on to private bootmakers if the orthotics department of the hospital cannot supply. Further, the company claimed that when the prescription was given to a private supplier by the hospital it was not necessarily the supplier specified by the specialist. W.A. Surgical Bootmakers said that this procedure is considerably more expensive than the previous practice (which applied to the State Government assuming control of the PADP scheme) where prescriptions were passed directly from the specialist to the bootmaker and the hospital had no involvement in the procedure. The company also said that the
accessible through domiciliary care services. In Queensland, all administrative
duties are performed by the Queensland Department of Health, with assessment and
information provision occurring through the Community Health Centres.

Programs in most States are means tested, so that the person must possess a Health
Care Card, a Health Benefits Card, a Pensioner Health Benefits Card or be receiving
the Child Disability Allowance in order to be eligible. In some cases, those who
can ‘demonstrate proven financial need’ may receive aids. Sometimes, eligible
people are not able to obtain an aid because the administering authority has
insufficient funds.

Eligibility is also dependent on other schemes operating in the State. In Victoria
and New South Wales, surgical aids and appliances are available under PADP,
whereas in other States they are provided through the hospital or nursing homes. In
Victoria, people being discharged into the community from a public hospital are
ineligible for assistance under PADP as they are seen to be a responsibility of the
treating hospital.

Patient contribution applies in some States. For example, Tasmania has a $50
contribution on all items. Queensland and the Northern Territory have ceilings on a
number of items, after which the patient must meet all or part of the cost
themselves. Queensland does not supply non-repetitive aids which costs less than
$100.

Items available under PADP also vary among States. In South Australia, for
example, items such as communication aids, bath lifts and hoists, pressure care
equipment and incontinence pads are excluded from PADP.

supply of replacement footwear which did not need modification required unnecessary visits to
medical practioners and the Rehabilitation Hospital which added to costs. (Transcript, Perth, 15
May 1990, pp. 799-808.)
Hospitals

Under Medicare, the States and Territory Governments must ensure that care and treatment is available to all eligible persons within the hospital system. Thus public hospitals are required to provide pharmaceuticals, surgical supplies, prostheses, aids and appliances and home modifications to:

. registered inpatients,
. individuals on discharge, and
. registered outpatients (only when ‘chronic’ patients or pensioners).

Past reviews into State schemes providing aids and appliances have identified a number of problems in hospital provision of aids. The Health Department of Western Australia said ‘definitions of ‘outpatient’ of a public hospital varied considerably between hospitals and within hospitals and hence the interpretation of who was eligible’.17

The Review of the Provision of Aids and Appliances in Victoria said that individuals frequently encountered ‘technical’ ineligibility where, due to differences in definition, an individual ‘falls between’ the available programs. It also said that often the ‘duration of responsibility by public hospitals is unclear ... discharge from public hospitals has, in some instances, been delayed pending resolution of client need for aids and equipment and the funding source for these items (especially more expensive items such as wheelchairs and home modifications)’.18

Compensation

State operated compensation schemes, such as the Victorian Accident Rehabilitation Council and the Transport Accident Commission, provide rehabilitation and compensation for people injured in work or transport accidents. The schemes offer access to aids, equipment and home, vehicle or workplace modifications as part of a rehabilitation plan.

17 Health Department of Western Australia, Submission No. 184, p. 46.
18 Review Steering Committee, op. cit., p. 55.