Industry Commission Submission to the National Competition Council Review of the Australian Postal Corporation Act 1989

September 1997

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Abbreviations

ACCC Australia Competition and Consumer Commission

CPI Consumer price index

CSO Community service obligation

EBIT Earnings before income and tax

GBE Government business enterprise

NCC National Competition Council

NCP National competition policy

PS Act Prices Surveillance Act

PSA Prices Surveillance Authority

TFP Total factor productivity

TPA Trade Practices Act

Main findings

- The Australian Postal Corporation Act 1989requires Australia Post to provide a universal letter service that reasonably meets the social, industrial and commercial needs of the community.
- The universal service would be enhanced if its objectives were more clearly specified and if performance standards, such as delivery times and frequencies, were set for Australia Post.
- Estimates of the annual cost of the universal service would be improved if the technique used by Australia Post were open to scrutiny. It appears likely that the current technique prescribed by the Government overestimates the cost.
- The universal service is currently funded by a cross subsidy through the reserved service. The reserved service restricts competition for certain types of letters. This allows Australia Post to maintain artificially high prices to some users (largely to businesses but also to some households), resulting in efficiency losses.
- There is evidence that the uniform price of 45 cents for standard letters could be higher than needed to fund the universal service. Depending on how this is distributed there could be some further efficiency losses.
- The efficiency losses and the burden on business users and some households would be reduced if the universal service were instead directly funded by the Government from consolidated revenue. This would also increase the transparency of the cost of the universal service.
- Direct funding would also facilitate any future competitive tendering and contracting of the universal service by the Government to other providers, as well as Australia Post.
- The reserved service should be abolished. Direct funding would make it redundant and permit the benefits of competition to flow through to those users who are currently overcharged for letter services.
- The Act requires Australia Post to permit interconnection to its network. With the reserved service becoming redundant as a result of direct funding, the case for mandatory interconnection would become weaker.
- Australia Post is also subject to some price regulation. If the reserved service were removed, Australia Post should be subject to prices monitoring by the ACCC until effective competition emerges. A maximum price should be set for standard letters, initially at 45 cents, but consideration should also be given to reducing that price.
- The Commission suggests that these changes be adopted as soon as practicable, as
 Australia Post's financial status suggests that it is already well placed to meet the
 challenges of the above reforms.

1 Introduction

In May 1997, the Treasurer requested the National Competition Council (NCC) review the *Australian Postal Corporation Act 1989* as part of the Commonwealth's legislative review schedule under the National Competition Policy (NCP). The review's terms of reference generally require the NCC to consider whether the benefits to the community of the existing legislative restrictions to competition (such as the reserved service) outweigh the costs and whether the objectives of the current legislative arrangements can be met more efficiently through other (including non-legislative) means (NCC 1997).

Postal services in Australia are dominated by Australia Post — a government business enterprise (GBE) established under the *Australian Postal Corporation Act 1989* ('the Act'). The Act exclusively reserves the domestic carriage of standard letters to Australia Post (the reserved service). In return Australia Post must provide reasonable access to a letter service Australia-wide at a uniform price (a universal service). Australia Post also supplies parcel, courier, express mail and other related services in direct competition with other postal service providers.

Traditionally, most countries have granted their postal service providers some form of reserved service for the delivery of letters in return for the provision of a universal service. However, the link between the two is being increasingly questioned and a number of countries, including Argentina, Finland and Sweden, have recently abolished the reserved service while maintaining universal service objectives.

Australia Post's reserved and universal service has been reviewed on a number of occasions through specific postal reviews (see IC 1992 and Vaile Committee 1996) as well as part of broader studies of microeconomic reform (see IC 1995a and IC 1996a). Legislative reform of postal services last occurred in 1994.

1.1 Why is the Commission making a submission?

As the Commonwealth's major independent research and advisory body on industry assistance, regulation and microeconomic reform, the Commission is keen to advance the development of policy analysis for postal services. The Commission undertook the 1992 inquiry into *Mail, Courier and Parcel Services* (IC 1992) and both the Commission and the Bureau of Industry Economics contributed to the Vaile Committee (1996) review of rural and remote letter delivery services.

Over the last decade, Australian governments have implemented wide ranging reforms to their GBEs including commercialisation, corporatisation and the reduction in legislative restrictions from competition. Australia Post was corporatised in 1989 and some of its legislative protection reduced in 1994.

This submission addresses four areas of relevance to the current review of postal services by the NCC, namely:

- the characteristics of postal markets and Australia Post's performance in those markets;
- the efficiency implications of using the reserved service to fund the universal service;
- whether there are more efficient means of funding the universal service; and
- the need for further pro-competitive reforms in the areas of price regulation and third party access.

In examining these issues, this submission applies an economic framework to analyse the postal services industry. This submission does not seek to comment on all of the issues relevant to the NCC review, nor does it seek to quantify all of the effects of the current arrangements such as the contribution of the postal system to social cohesion and offsetting the disadvantages of remoteness.

A comprehensive analysis of the economic effects of the current arrangements requires detailed information from Australia Post. However, much of the information needed is not publicly available at present. The NCC is best placed to gather this information and undertake the relevant analysis.

1.2 Current postal regulations

The Australian Postal Corporation Act 1989 sets out provisions establishing Australia Post and its operation. These include requirements for Australia Post to provide a universal letter service, a bulk interconnection service and the exclusive right to provide the reserved letter service. It also requires Australia Post to act in a commercial manner.

Section 27 of the Act describes the universal service requirement. Australia Post is required to supply a letter service at a uniform rate of postage for carriage within Australia, by ordinary post, of letters that are standard postal articles (see box 1.1).

The universal service is required to be reasonably accessible to all people in Australia on an equitable basis wherever they reside or carry on business. It is also required to be of a standard that reasonably meets the social, industrial and

commercial needs of the Australian community. Further guidance as to what constitutes reasonable access may be provided by regulations under Section 28C of the Act. For example, they may prescribe frequency, speed or accuracy standards or the availability and accessibility of post boxes, post offices and other service outlets. Currently there are no such regulations, although the Board of Australia Post may include such matters in its Corporate Plan. The current Corporate Plan is not a public document but the Annual Report contains a short summary of the Corporate Plan for the previous year.

Box 1.1: Ordinary post, standard postal articles and letters

The terms ordinary post, standard postal articles and letters are defined in the Act.

An *article* is carried by ordinary post if it is carried by means of a letter service such that payment for extra services is not required. It generally excludes services such as registered mail or door-to-door courier delivery. However, it does not specify what constitutes an ordinary level of service.

A *standard postal article* is defined as not weighing more than 250 grams and not being more than 5mm thick. It must be rectangular, but no longer than 237mm or wider than 122mm and with a ratio of width to length of at least 1 to 1.414.

A *letter* is any form of written communication that is directed toward a particular person or address. It includes any standard postal article, envelope or package that contains such a communication or any unenclosed communication.

The reserved service, as defined in section 29 of the Act, provides Australia Post with the exclusive right to collect, carry and deliver letters within Australia, including letters sent from other countries. A list of exclusions to the reserved service in section 30 contains a different range of articles from those covered by the universal service (see box 1.2). For example, the reserved service includes large letters up to 250 grams as the dimensional limits for standard postal articles do not apply. The term *standard letters* tends to be used interchangeably in relation to postal items under both the reserved service and the universal service. However, it is not a term specifically defined in the Act.

The powers of the Board of Australia Post to set and vary postage rates are set out in sections 32 and 33 of the Act. Any variation in the rate for *standard postal articles* must be notified to the Minister for Communications who has the power to disapprove the variation. Australia Post's reserved service is also 'declared' under the *Prices Surveillance Act 1983*. As a result, price rises for any postal items under this service must be notified to the Australian Competition and Consumer Commission (ACCC). The declaration and surveillance processes are intended to restrain 'price rises in markets where competition is less effective' (ACCC 1995, p.13).

Section 32 of the Act requires Australia Post to supply a bulk interconnection service whereby senders can receive discounts to normal postage if they lodge bulk quantities of letters for delivery within Australia. The discounts available vary depending upon the form and place of lodgement. Regulations provide the ACCC with the power to settle disputes in relation to these arrangements.

Box 1.2: Exclusions to the reserved service

Exclusions to the reserved service under Section 30 of the Act include:

- letters weighing more than 250 grams;
- letters accompanying related goods;
- newspapers, books, magazines, catalogues and leaflets, whether or not directed to a particular person or address;
- letters carried for more than four times the rate for a standard postal article carried by ordinary post (currently 4 times 45 cents, or \$1.80);
- letters carried by an employee of the sender;
- letters carried between offices of the sender;
- writs, warrants and other court documents;
- letters carried by a document exchange;
- letters carried solely by electromagnetic means; and
- other services defined by regulation (of which currently none exist).

1.3 Structure of this submission

The remainder of this submission is structured as follows:

Chapter 2 highlights some of the key features of the postal services industry in Australia. It focuses on the key elements that are needed to assess costs and benefits of the current arrangements, including the supply and demand characteristics of the industry.

Chapter 3 discusses the benefits and costs of the current arrangements and outlines alternative approaches to achieving the Government's postal objectives.

Chapter 4 explores the scope for further enhancing the efficiency of postal services through pro-competitive regulation.

2 The postal services industry in Australia

Postal services differ from most other services in the communications industry as they involve the physical movement of messages and, in some cases, goods. Although the boundaries are not strictly defined, the physical aspect of postal services sets it apart from other forms of communication that permit point-to-point transfer of messages such as telephone and email.

2.1 Postal markets

Post's role in communications

Australia Post's share of the broader communications market has declined over the last few decades. Between 1960 and 1990, it declined from around 50 per cent to 20 per cent whilst the size of the total messages market increased from under 4 billion to nearly 18 billion (IC 1992). More recent estimates from Australia Post indicate that messages sent by post accounted for 19 per cent of the total 21 billion messages in 1996 (AP 1997).

In contrast, telecommunications service providers' share of the total communications market had expanded to over 60 per cent over the same period to 1996. Other service providers such as couriers and letterbox distributors have doubled their share of the market to 20 per cent over the same period.

Despite Australia Post's declining share of the burgeoning message market, mail volumes have continued to grow at around two per cent a year between 1960 and 1996. This continued growth is evidence that hard copy messaging still has an important place in a market otherwise dominated by near instantaneous electronic messaging.

The postal services market can be segmented a number of ways to account for the different characteristics of customers. One approach is to separate mail flows between businesses and households leading to a four segment market — business to business, business to household, household to household and household to business. Further segregation can occur geographically, such as between urban, suburban, rural and remote and between types of mail items such as letters, leaflets, parcels and others.

The continued expansion in mail volumes in absolute terms reflects the growth in particular market segments such as business to household mail, notably advertising material and bills. In Australia, mail originating from businesses has experienced the greatest volume growth in recent years. In 1988, 80 per cent of mail originated from the business sector (IC 1992). Australia Post reports that in the six years to 1996 the volume of business to household mail has grown by 40 per cent (Marshall 1996). Business to business mail volume trends are less clear. Growth in the courier business suggests that these volumes have increased, although this segment is likely to be under threat from electronic alternatives such as fax and email (Plum 1997).

Growth in mail from businesses to households has been partly offset by declining mail volumes originating from households (Streetfile 1997a). It is in this area that telecommunications have perhaps had the greatest impact, with declining long-distance telephone call costs (IC 1996a) and expanding automated bill payments such as direct debits and telephone payments.

It is estimated that the majority of letters in the reserved service are generated by business (Streetfile 1997a). This would mean that the restrictions in the Act limit competition in the segment of the postal market with the most growth potential, namely the business to household mail market. Mail in this market is likely to comprise a significant amount of billing and advertising. These are least likely to be affected by the encroachment of electronic technologies such as telephony, fax and email which are either unsuited at present or as yet insufficiently dispersed to be useful substitutes for bulk mailing of bills. Further, businesses may view advertising mail as a complement rather than a substitute to other advertising media such as television and radio.

Postal service providers in Australia

While Australia Post's share of the broader communications market has fallen over the last few decades, there has been considerable development in some sectors of the postal services industry. This reflects the growth in some areas of postal services, such as leaflets and catalogues, and the identification of opportunities in others, such as business to business couriers and document exchanges, which are not restricted by the Act.

Australia Post is the dominant provider of postal services in Australia. This is largely because its privileges and responsibilities under the Act both encourage and require it to maintain a broad network. In 1995-96 it handled over 4 billion mail items including letters and parcels but excluding unaddressed advertising (AP 1996). However, Australia Post's dominance has been affected by technological developments and legislative reforms which have created opportunities for private sector competitors in the areas of document exchanges, courier services and letterbox distribution.

Document exchanges operate as a form of a mail club whereby members send their mail to an exchange centre to be deposited either into a recipient's box or transferred to another exchange centre. Ausdoc is a significant document exchange operator in Australia with over 500 exchanges and 17 000 member organisations (Ausdoc 1995). It is a publicly listed company that began operating originally in Sydney as an exchange for legal firms in response to the lack of speed and reliability of the existing postal service for many of their documents (IC 1992). Ausdoc now operates in all capital cities and many regional centres (Ausdoc 1996).

Numerous courier companies operate in Australia. Couriers normally provide high-speed delivery of parcels and messages at a considerable premium to the standard 45 cent letter service. Some couriers specialise in close delivery, such as within a central business district of a city only. Others offer delivery anywhere in Australia or around the world.

Letterbox distributors deliver catalogues, leaflets, magazines and other related material to households (except material that they are not permitted to handle under the reserved service). In 1992, one such distributor — Progress Press — offered delivery of material within any 48 hour period and had coverage of over 82 per cent of Australian households (IC 1992). Another letterbox distributor, Streetfile (1997a) states that it can reach 96 per cent of Australians. However, some of this is facilitated by interconnection with Australia Post, particularly in rural areas where access to post office boxes can only occur through interconnection. As well as distribution, these firms can offer extra services such as those relating to mail-out targeting and customer database management.

Australia Post itself uses contractors to supply some of its services. Some of these arrangements are long standing, such as licensed post offices and delivery contractors in rural and remote areas. Australia Post also contracts some of its other activities such as long-distance transport of bulk mail.

2.2 The supply of postal services

Postal service providers operate networks whereby mail lodged in any one part of the network can be delivered to any other part of the network. The way a network is arranged depends upon the cost of operating different components of that network. Ideally it should capture various economies wherever possible whilst continuing to provide the type of service that customers value.

Australia Post's network is the largest network operated by a single postal provider in Australia. It maintains the network's size and breadth as a means of satisfying its universal service obligation. However, as noted above, some

letterbox distributors have indicated that they can reach almost as wide a customer base as Australia Post despite the restrictions on the type of material that they can deliver. Although letterbox distributors operate alongside the Australia Post network, they do not necessarily wish to exactly duplicate it because they offer a different type of service (for example delivery 7 days a week) and are unable to deliver reserved service material.

While each network is designed to serve certain purposes, they display some basic similarities. For ease of description, a typical postal network like that of Australia Post can be divided into three parts: collection, sorting and delivery.

The collection network is designed to gather mail and distribute it to sorting centres. This network comprises the familiar red postboxes and post office mailing slots but also includes collection by delivery contractors and postal delivery officers (AP 1996). Through interconnection, senders can also take mail directly to certain designated sorting centres.

Organising a collection system involves balancing the cost to customers of lodging letters with the cost to Australia Post of collecting them. For example, Australia Post could lower its costs by accepting mail only at post offices and sorting centres. However, this would increase the cost to consumers, thereby reducing their preference for post. It would also probably breach the intent of Australia Post's universal service requirement.

Sorting involves checking and cancelling postage and grouping mail for transportation to its delivery centre. Sorting is becoming increasingly automated. In 1995-96, 77 per cent of Australia Post's full rate letters were sorted electronically although a significant amount of mail is still sorted by hand. Electronic sorters handle around 30 000 items per hour compared with an estimated 1 500 per hour with manual sorting (AP 1996; IC 1992).

The higher throughput of electronic sorters is the reason for the increasing trend toward centralised sorting. However, the benefits of increased centralisation need to be weighed against the costs of transporting mail to central facilities. For this reason, the concentration of high speed sorters varies according to distance, mail volumes and the cost advantages of sorting machines.

Delivery remains a labour intensive activity. After sorting, mail is taken to a final delivery centre, such as a local post office or other facility, where postal delivery officers prepare mail for their routes. Over half a postal delivery officer's day can be spent sorting mail down to delivery rounds and then to street sequence (IC 1992). However, automated sorting technology using barcoding has been developed whereby mail can be sorted down to delivery rounds (and even to street sequence) in much quicker time.

Australia Post reports that labour accounts for 60 per cent of its costs and that nearly 60 per cent of its full time staff are engaged in sorting and delivery (AP 1996). This has prompted Australia Post to move towards adopting automated sorting technology, including the barcode technology mentioned above, in order to free resources currently being used in delivery (Marshall 1996).

Network issues

Postal networks tend to operate on hub and spoke principles. Mail is collected and funnelled into central sorting facilities (hubs) for distribution to delivery centres. As noted above, the degree of centralisation varies with mail density, transport costs and the economies of modern sorting equipment. Developments in technology may further increase the automated rate which may contribute to increasing centralisation of sorting over time. However, centralised sorting may also increase the risk of being unable to respond to rising transport costs and declining volumes. Australia Post has indicated that increasing its ability to vary costs (and hence its ability to respond) has been an objective for some time (AP 1997).

Networks pose some challenges to traditional thinking about costing operations. This is because the total value of the network is often higher than the individual value of each part. For example, customers often value the fact that mail lodged anywhere in the network can be delivered to any other part of the network. As a result, parts of the network that are considered marginal or even unprofitable, may still warrant retention because of their value to the overall network.

Valuing network activities is an important issue for estimating the costs associated with Australia Post's universal service obligation. It is of particular importance when assessing the extent to which the network might shrink in the absence of the requirement to provide a universal service. It is also relevant in determining whether the postal network, or any part of it, is a natural monopoly. This has implications for determining whether it may be more efficient to limit direct competition in circumstances surrounding the existence of a natural monopoly or whether access arrangements may be more appropriate to promote effective competition.

The cost of postal services

Estimating the effects of the restrictions in the Act requires cost information. Detailed information on the cost of operating the different elements of a postal network is not publicly available. Australia Post publishes mainly aggregate data in its annual reports including aggregate figures for its reserved service.

These data do not reveal the manner in which costs are allocated between reserved and other services, nor do they disaggregate reserved service costs.

Australia Post's revenue and expenditure figures for 1995-96 indicate that the reserved service operates at a profit (see table 2.1). According to Australia Post these figures are not adjusted to account for the cost of the universal service. This is estimated by avoidable cost, which is the net cost that Australia Post would avoid if the universal service were not provided. In its submission to the NCC, Australia Post estimated the universal service to cost \$67 million in 1995-96 (AP 1997).

Table 2.1: Australia Post's reserved service financial indicators, 1995-96

	Reserved services	Non-reserved services
Revenues (\$million)	1522.8	1393.4
Expenses (\$million)	1389.7	1182.0
Operating profit (\$million)	133.1	211.4
Assets employed (\$million)	1155.3	1074.0
Return on revenue (per cent)	8.7	15.2
Return on assets (per cent)	11.5	19.7

Source: AP (1996).

Estimates of the marginal costs of letter services can be used to estimate the economic costs and benefits of certain arrangements in the postal services industry. The lack of publicly available data for these services makes it difficult to assess the economic effects of the reserved and universal letter services.

In a recent Federal Court case, Australia Post argued that in most cases it expected the short-run marginal cost of handling an extra letter to be close to zero (*APC v Streetfile 1996*). As a result, there is likely to be little impact from adding one more item to the four billion mail items processed annually by Australia Post. In the longer run, all costs need to be covered including those which may be fixed in the short run. As a result, the long-run marginal cost of an extra letter would be expected to be greater than zero.

Estimating long-run marginal costs of letter services requires making decisions about the allocation of common costs between different postal services and about assumptions on the future direction of the network. Australia Post has indicated that it allocates common costs between postal item categories according to volume (*APC v Streetfile 1996*). Long-run marginal cost can be considered to be the cost of keeping the postal network 'alive and well' in the long run and is approximated by average total cost (IC 1997a).

By applying this methodology to postal services and assuming that each letter generates a revenue of 45 cents and the return on revenue is 8.7 per cent, the

long-run marginal cost would be around 41 cents per letter (see table 2.1). However, this method ignores the fact that a considerable proportion of letters, particularly business letters, are posted at some discount to 45 cents because they are lodged in bulk or are pre-sorted. Also, it does not account for the fact that the reserved service includes large letters up to 250 grams which cost more than 45 cents.

Letters posted to some areas must cost considerably less than 41 cents. This is because the reserved service enables Australia Post to 'overcharge' (relative to costs) some customers, and hence 'undercharge' others, in order to cross subsidise the universal service. Overcharged customers are predominantly business mailers. Undercharged customers are often characterised as rural and remote, although only around one-third of the reported cost of the universal service is directly related to rural services. The rest is attributable to other urban and suburban services and international mail (AP 1992).

The Victorian Government contracts its interdepartmental document service across the state. In 1992 the cost of this service was reported to be between nine and 19 cents per item (IC 1992). Although not the same as Australia Post's service, it does operate statewide. This suggests that the long-run marginal cost could be well below 45 cents. Further, Streetfile (1997b) claims that with competition, large volume business senders could pay up to 20 per cent less than current rates. This is in addition to the bulk and pre-sort discounts that can already drop postage rates closer to 35 cents. This would take some business postage rates to less than 30 cents.

In some rural towns, such as Ballarat, the costs could reasonably be expected to be similar to those in urban areas. However, costs in more remote areas could rise rapidly as volumes fall. In 1992, indicative delivery costs for some central Queensland runs ranged from 32 cents to \$1.45 (IC 1992). Australia Post (1996) indicated that cost of delivering a letter on the Wiluna–Eastwards mail run in Western Australia was more than \$8.

2.3 The demand for postal services

The nature of demand for mail can be captured by estimates of the elasticity of demand. Elasticities measure the responsiveness of mail senders to factors such as price of mail (own-price), price of alternatives such as telephone or courier (cross-price) and levels of incomes or economic activity.

A number of studies around the world have sought to estimate own-price elasticities of demand for mail (see table 2.2). There have also been studies estimating cross-price elasticities. These studies have sought to capture to some

extent the effect of the shift away from post that has occurred over time as a result of the increasing competitiveness of alternatives such as telephone, fax and email. Appendix A provides a summary of these studies.

Table 2.2: Price elasticity of demand for postal services

Authors	Country	Class of mail ^a	Elasticity (absolute value)
Albon (1989)	United Kingdom	first	0.86
		second	0.89
		all	0.64
Cuthbertson and Richards (1990)	United Kingdom	first	1.8
		second	0.8
Scott (1986)	United States	first	0.31
Adie (1990)	United States	first	0.23
Neary (1975)	Ireland	first	0.31
		second	very low
Ohya and Albon (1994)	Japan	first	0.25
Izutsu and Yamaura (1997)	Japan	all	0.2
		standard first	0.3
		second	0.12
Nikali (1997)	Finland	first class	0.52

a Mail classes have different meanings in different countries.

Most of the studies above report own-price elasticities of less than one. In its submission to the NCC Australia Post assumes an own-price elasticity of 0.5 (AP 1997). This implies that demand has a limited response to changes in price (that is, it is inelastic). An unconstrained monopolist would tend to take advantage of inelastic demand by raising prices and reaping the extra profits. However, as Adie (1990) notes, most governments place operational restrictions on their postal services (for example, universal service requirements and price caps) thereby limiting their ability to raise prices.

Business mail could be expected to have a lower elasticity of demand than other market segments due to the more limited availability of direct substitutes for business to household mail. Earlier it was noted that business to household mail was the growth segment in the overall postal market. The estimated price elasticities in table 2.2 do not segment the market according to sender type. However, a number of the studies reported in table 2.2 found that telephone costs do not have a significant impact on mail demand. This is not surprising given that the bulk of mail volumes are business generated and as noted earlier telephony may be a weak substitute for advertising and billing mail.

The postal services industry is likely to continue to develop unevenly across different market segments. Australia Post's response to market pressures would therefore be variable in those segments. Examination of Australia Post's performance in light of recent reforms, and comparisons with overseas postal service providers, may provide some further insight into its ability to adapt to continuing changes both in the broader communications market and in specific postal market segments.

3 Postal policy options

The current arrangements for the postal services industry restrict competition in the reserved services and provide subsidised letter services under the universal service. Examining the costs of these and alternative arrangements allows better ways of meeting the objectives of the universal service to be considered.

3.1 The benefits of the current arrangements

Section 27 of the Act emphasises the social importance of the universal service to Australia. It states that the quality of the service must reasonably meet the social, industrial and commercial needs of the Australian community. The exact nature of the social benefits of the universal service are not described in the Act. These appear to relate to the facilitation of personal and commercial written communication between Australians regardless of location and the contribution to national social and economic cohesion (IC 1992).

These objectives are similar to those for the policy of providing a universal basic telecommunications service. Indeed, post and telecommunications universal services are likely to play complementary roles in promoting social and economic cohesion and while the two may have been linked in the past, they now appear to be developing separately.

While it is possible to estimate some of the private benefits of access to postal communications by looking at patterns of expenditure for those services, estimating the social benefits of the universal service is more difficult. This is exacerbated by the fact that the Government has not specified the benefits it expects of the universal service. Despite this, the Government has indicated its desire to maintain the universal service and uniform pricing of standard letters in the terms of reference to the NCC (1997). Similarly the Vaile Committee (1996) affirmed its support for maintaining the universal service because of the benefits it confers on the Australian community.

3.2 The costs of the current arrangements

The universal service provides a subsidised letter service to some consumers. Australia Post estimates that the universal service cost around \$67 million in 1995-96 (AP 1997).

The universal service is currently funded by the reserved service. The reserved service restrictions allow Australia Post to maintain high prices to some customers by artificially restricting competition.

The universal service subsidises the use of the letter service by certain consumers and results in greater usage of the service than if those consumers had to face the full costs of the service. The reserved service stifles the demand of other consumers and results in less usage of the service by those consumers than if the price were allowed to fall closer to the cost of the service. These effects involve a welfare or efficiency loss, which depends in part on the response of consumers to changes in price.

There is some evidence to suggest that Australia Post may be overcompensated by the reserved service. Overcompensation would occur if the difference between the revenue raised at the current standard letter price of 45 cents and the actual cost of handling some letters were large enough that the surplus revenue was greater than Australia Post's estimated \$67 million cost of the universal service.

Overcompensating Australia Post could result in further efficiency losses over and above those that result from overcharging some of its customers. Thus an important issue for the NCC review is what happens to the surplus revenue that results from any overcompensation?

- The Government could appropriate surplus revenue resulting from any overcompensation in the form of higher dividends. This would imply that the Government is using the reserved service as an indirect form of taxation that falls particularly on businesses.
- Any surplus could also be absorbed through cost-padding of postal services, whereby Australia Post operates at a higher cost than an efficient provider would. Cost-padding would prevent the efficient use of resources and hinder the uptake of new technology and services in response to changing customer needs and productive opportunities over time.
- Australia Post could also use any surplus revenue to cross subsidise its activities in non-reserved areas such as parcel and courier services. In its submission to the NCC, Streetfile (1997a) contends that Australia Post engages in substantial cross subsidisation of this type. In this case other competitors would face potentially unfair competition as they do not have legislated access to a source of surplus revenue. This issue arose in the Commission's 1992 inquiry but the Commission found no evidence of cross subsidisation at the time (IC 1992).

In appendix B the Commission presents a basic framework that can be used to estimate the efficiency losses that arise from the reserved and universal

services. A lack of publicly available detailed data (for example on the quantity of letters in different market segments) has limited the Commission to presenting a few illustrative simulations of the effects of the current arrangements based on existing information. These simulations illustrate what may happen to demand and prices if competition were allowed in a two segment market, one segment representing subsidised letters, the other representing overcharged letters.

The estimates from the Commission's illustrative simulations suggest that the subsidised demand under the universal service gives rise to a small efficiency loss. This loss may be more than offset by the benefits of the universal service noted earlier. The more important efficiency losses associated with the current arrangements arise because of the high prices that result from restricted competition under the reserved service.

The Commission does not have all the relevant data and information required to enable it to fully analyse the potential efficiency losses it has identified. The framework in appendix B provides a basis for analysing some of these issues. Based on the information publicly available, it appears that the reserved service does impose significant efficiency costs. As the body conducting the review, the NCC should be in a position to seek the necessary data to use the framework presented in appendix B to develop more precise and detailed estimates of the effects of the current arrangements.

The Commission's analysis points to a major shortcoming with the reserved service approach to funding Australia Post's universal service requirement. Under that approach the actual level of compensation being generated is difficult to determine and is likely to vary significantly over time. In particular the level of compensation is not sensitive to changes in the cost of providing the service. As noted, overcompensation could give rise to substantially larger efficiency losses than the direct costs of the universal service.

3.3 The universal service

The universal service necessarily involves charging some consumers below cost. This subsidised demand generates some efficiency losses. While efficiency losses inevitably arise from a universal service, it does not preclude measures to ensure that the benefits of the universal service are achieved at least cost.

The universal service is commonly considered to be a CSO and therefore improvements in the efficiency and effectiveness of delivery could be made by

adopting good CSO policy practices. These include improving CSO specification, costing, funding and delivery.

Specifying the universal service

A poorly defined universal service can impose costs on the community as the Act requires Australia Post to provide a non-commercial function but without clear direction as to how. This could encourage Australia Post to limit the supply or quality of the universal service in order to limit its losses, thereby compromising the intention of the universal service. For this reason Australian governments are moving to improve the identification of their CSOs more generally (IC 1997b).

A CSO should display the following three characteristics (IC 1997b):

- a government directive to a GBE on a specific service or function;
- the service or function would not otherwise be supplied under the same conditions as a commercial decision of the enterprise; and
- the specified service provides an identifiable community or social benefit.

First, the universal service is clearly a directive from government. Second, Australia Post would probably not operate its network in entirely the same way if it were to provide postal services on purely commercial basis (though noting the difficulties in deciding what parts of a network would be avoided, as raised in chapter 2). Third, the Act prescribes that the universal service meet the social, industrial and commercial needs of the Australian community, although the Government does not appear to have specifically identified the exact nature of the benefits that the universal service should provide.

Although the universal service constitutes a CSO, the lack of clear definition of its objectives makes it difficult to assess whether they are being met. In addition, the universal service itself is loosely defined leaving it largely to Australia Post to decide what quality of service should be delivered. Better specification of the universal service would overcome these problems.

In 1994 the Government amended the Act to allow for regulations to specify the actual performance standards to be met by Australia Post. More recently, the Vaile Committee (1996) recommended that Australia Post and the Steering Committee on National Performance Monitoring of Government Trading Enterprises develop performance standards for inclusion in those regulations. As yet, no such regulations have been made. In contrast, since 1989 a Deed of Understanding between New Zealand Post and the New Zealand Government specifies the standard of service that New Zealand Post is required to meet as the universal service provider (Ministry of Commerce, New Zealand 1997).

Better specifying the universal service would also clarify the status of Australia Post's other perceived CSOs. For example, the Vaile Committee (1996) noted that much of the concern of rural and remote users related to parcel services as well as letter services. However, these do not form part of the current universal service. Similarly, Australia Post claims that it bears significant costs in relation to its many heritage buildings because of its status as a GBE (AP 1996), but these do not form part of the universal service (see IC 1992 for details).

Costing the universal service

Clear and accurate costing of the universal service would enable decision makers to see the real resource costs of the service. It would also help encourage Australia Post to provide the universal service efficiently.

It is not possible to verify Australia Post's estimated cost of the universal service. Australia Post states that it estimates the universal service using the 'avoidable cost' method, that is the net costs that would be avoided in the absence of the universal service requirement (AP 1996). In doing so, it considers the cost of letter paths, local overheads incurred on that path and an allocation of avoidable capital costs (AP 1992).

'Avoidable cost' is an appropriate methodology for estimating the cost of a CSO (IC 1997b). However, publicly available details of the method used by Australia Post suggest that its estimates are likely to overstate the avoidable costs. For example, it assumes that the only response to a path on which revenues do not cover costs is to close it (AP 1992). This does not allow for other potential commercial responses such as attempting to improve volumes, reducing costs or changing the letter path. Nor does it account for the likelihood that in the absence of the universal service, some loss making paths would still be retained to maximise the value of the network to customers.

Funding the universal service

The choice of funding mechanism can significantly affect the cost and quality of the universal service. The reserved service accounts for some of the efficiency losses of the current postal arrangements. This arises because a cross subsidy requires some users to pay more than the cost of providing the service in order to fund subsidies to other users. It is also possible that the reserved service could be overcompensating Australia Post. Much of the burden of the reserved service appears to fall on businesses.

A key issue for the review of the Act is assessing whether there are more efficient ways of funding the universal service. A range of options could be considered, including:

- direct funding;
- allowing a lower rate of return; and
- applying an industry levy on all postal service providers.

CSO delivery would be improved if CSOs were directly funded from consolidated revenue as it removes the distortions that result from cross subsidies (IC 1997b and IC 1992). Direct funding also encourages transparency as the actual outlays are publicly identified in the budget process. Further, it would encourage more rigorous specification of the universal service.

Directly funding the universal service would remove the efficiency losses associated with the reserved service. Although direct funding from consolidated revenue incurs the efficiency loss of raising the required tax revenue (which depends on the efficiency of the overall tax system), the cost of the universal service would be subject to greater public scrutiny through the budget process. It would also share the burden more equitably than the current arrangement which is mostly borne by business.

Direct funding also requires an implicit contract between the Government and Australia Post for the provision of the universal service. This would encourage improved specification and costing of the universal service.

The Vaile Committee (1996) recommended against direct funding because of its concern that scrutiny would put the universal service at risk in the budgetary process. It also argued that there is currently sufficient transparency through Australia Post's publication of its universal service cost estimates. However, as noted earlier, the opportunities for external scrutiny of Australia Post's estimates are limited at present.

The Vaile Committee's views were based on its preference for maintaining the reserved service. Clearly, for as long as Australia Post is afforded a reserved service, it will continue to have a capacity to fund the universal service by cross subsidy. If the reserved service is retained, it would be inappropriate to also directly fund (though not to better specify and cost) the universal service as this would amount to double funding. The level of the cross subsidy (via the appropriate price of a standard letter) should also be reviewed (see chapter 4).

An alternative funding mechanism would be to allow Australia Post to earn a lower rate of return. Australia Post is permitted to lower its target rate of return to account for the cost of the universal service under section 38 of the Act. However, given that the universal service is already funded by cross subsidy

from the reserved service, adjusting the rate of return amounts to double counting (BIE 1995).

Without the reserved service, accepting a lower rate of return would be similar to direct funding because the Government would have to increase taxes to offset lower dividends. However, there may be less scrutiny of the cost of the universal service than with direct funding (IC 1997b). Accepting a lower rate of return also has cash flow implications for the provider (SCNPMGTE 1994).

Another option would be to fund the universal service by way of an industry levy. This approach would require certain postal service providers, such as letterbox distributors and perhaps couriers, to contribute to the cost of the universal service even though they may not provide it themselves. This type of approach is used in Finland, where any postal service provider other than Finland Post must be licensed and pay a charge to guarantee Finland Post's remote services (Minister of Transport and Communications, Finland 1997).

A new industry levy is also being implemented to fund Australia's telecommunications universal service obligation. In this case all telecommunications carriers will have to pay an amount based on a measure of their market share. There is not sufficient experience with the new approach in telecommunications to comment fully on its applicability to post.

In principle, an industry levy should be a simple and efficient way of funding a universal service. However, implementation of an industry levy raises a number of practical questions, particularly regarding who should be levied, what activities should be levied and how the levy should be calculated. For example, would the levy apply to letterbox distributors, couriers, document exchanges? Would the levy apply to letter handling services only, or would it cover any type of mail handling? How would the levy be calculated, by revenues share, by profit, or by volume?

Delivering the universal service

Australia Post presently has sole responsibility for supplying the universal service. However, it is not the only postal service provider in Australia and in the longer run need not be the only provider of the universal service.

Competitive tendering and contracting of universal service provision by the Government could offer the benefits of reduced costs, while explicitly maintaining the service standards required by the Government (IC 1997b). For example, in Finland and Sweden, the Government is responsible for ensuring the delivery of a universal service, rather than the postal operator. This is done

by authorising at least one firm to provide a nationwide service. The licensee need not be the government owned provider (Leskinen and Palmgren 1997).

In the short run, and even in the event of the abolition of the reserved service, it seems likely that the bulk of the universal service will continue to be delivered by Australia Post. However, the existing reach of other postal service providers such as Streetfile (1997a) suggests that some of them may be well placed to compete to provide the universal service in certain areas in the future. Moving to a system of directly funding the universal service provider would facilitate future contracting of the universal service as the Government could directly fund anyone and would not be tied to Australia Post.

3.4 Uniform pricing

Australia Post is required to charge a uniform price for standard letters under the universal service. Maddock (1995) argues that there is a net benefit from uniform pricing as it avoids the costs (such as the time spent working out postage) that arise from having more than one price for standard letters. However, Australia Post currently offers pre-sort discounts, meaning that it operates a system of multiple prices with the uniform price operating, in effect, more as a maximum price.

Allowing different prices permits customers to benefit through discounts. The current discounts are largely for pre-sorted letters but discounting could extend to other circumstances such as bulk lodgement and seasonal lodgement. Mandatory uniform pricing would limit the scope for such discounts.

However, allowing different prices will not necessarily result in a complicated pricing structure. The type of costs associated with the time spent working out postage that Maddock (1995) canvassed mean that there are commercial incentives for maintaining a degree of pricing simplicity for some products. For example, Australia Post charges \$3 for small Express Post items of up to 500 grams for delivery anywhere in Australia even though it is not required to do so.

The Government has stated its desire to maintain uniform pricing (NCC 1997) even though the current system effectively operates as a maximum price. Maintaining mandatory uniform pricing would reduce the scope for customers to benefit from the discounting that differential pricing would allow.

3.5 The reserved service

As discussed earlier, the funding of the cross subsidy from the reserved service is likely to lead to efficiency losses. There is also the potential for Australia Post to operate inefficiently as the size of the cross subsidy is not directly linked to the cost of providing the universal service and could overcompensate Australia Post. This would lead to further efficiency losses as Australia Post may not operate as efficiently as it could.

If the universal service were to be directly funded, the reserved service would become redundant and could be abolished. However, if the reserved service were to be maintained as the mechanism for funding the universal service, the efficiency losses could be minimised by ensuring that the reserved service only generates sufficient revenue to cover the efficient cost of providing the universal service. This would still require better specification and costing of the universal service.

A further transitional reduction in the extent of the reserved service could facilitate Australia Post's adjustment to a new commercial environment by gradually opening postal markets to further competition. However, caution should be exercised to ensure that the chosen path not only facilitates adjustment, but also encourages it through greater exposure to competition. Of particular interest is the use of the price multiple and/or weight limits.

The use of the price multiple to introduce competition

In 1994 the Government reduced the extent of the reserved service by lowering the price threshold from ten times to four times. This permitted other postal service providers to carry reserved service letters as long as they charged at least \$1.80 rather than the previous threshold of \$4.50. In it submission to the NCC, Australia Post has suggested lowering the multiple to two and then one over a five year period (AP 1997).

The reduction from ten times to four times appears to have had little adverse effect on Australia Post's operations. As appendix C suggests, its rate of return has remained high, productivity improvements have continued and its capacity to provide the universal service does not appear to have been adversely affected. The reduction has probably benefited couriers, although as the Commission noted in 1992, it is very hard to police weight and price limits for couriers and they had already been competing under the \$4.50 price range (IC 1992).

Until the price multiple is sufficiently low, competitors offering a similar service cannot compete on the basis of price. The only way for a competitor to

attract customers would be to offer a significantly higher quality service (for example high speed couriers) or to offer bundled services, such as design, printing and publishing services on top of collection and delivery (such as the services provided by letterbox distributors). In its submission to the NCC, Australia Post expressed concern that bundling of services could lead to companies circumventing the reserved service (AP 1997). While this would be a matter for legal consideration, any bundling of services that leads to an implied price of collection, sorting and delivery below the price threshold may still be challengeable.

Lowering the price multiple is unlikely to open significant market segments to competition unless the multiple approaches one. New Zealand Post commented that the lowering of its multiple in 1991 to less than two did not significantly impair its ability to continue to fund the universal service (IC 1992).

For bulk business mail it would probably need to fall below one as even with a price multiple of one, Australia Post would be protected from firms able to undercut it. Notwithstanding any potential to bundle services, this would continue to limit those firms able to offer prices lower than 45 cents from doing so. This would continue to maintain the burden that the reserved service imposes, particularly on businesses.

It would even be possible to use a price multiple lower than one, until it reaches a market clearing level. This would permit the benefits of more competitive pricing to flow through to customers, rather than just the discounts they currently receive for carrying out some sorting themselves.

Weight limits in competitive reform

In 1994 the Government lowered the weight threshold for reserved services from 500 grams to 250 grams. As noted above these changes did not significantly impair Australia Post's ability to fund the universal service. In its submission to the NCC Australia Post has suggested further lowering the weight threshold to 125 grams (AP 1997).

Lowering the weight threshold could further assist in introducing competition to the reserved service. However, as with the price multiple this would only have a substantially beneficial impact if it exposed significant letter volumes to competition. For example, it has been estimated that the European Union's directive to member states to reduce the weight threshold for reserved services to 350 grams would only open to competition two per cent of postal operators' current letter volumes and three per cent of revenues (EC 1995).

Information on the proportion of mail in different weight categories in Australia is not publicly available. However, it takes around 25 pages of A4 photocopy paper to reach 125 grams. This amount of paper is unlikely to be carried in a standard sized envelope and therefore a threshold of 125 grams could still preclude competition for a significant proportion of letters.

3.6 Suggested reform package

The Commission suggests that the NCC consider recommending that the following reforms be adopted as soon as practicable.

1. Better specify the objectives and standards required of the universal service.

Clearer specification of the universal service would assist in assessing whether its objectives are being met. This would include specifying what standard of service is required to meet the objectives.

In addition, the review of telecommunications CSOs scheduled to commence in 1998 should have regard to the complementary role that post can play with telecommunications, especially in terms of access to communications in rural and remote areas.

2. Improve the accuracy of the technique used to cost the universal service.

It is likely that the current technique prescribed by the Government to be used by Australia Post overestimates the cost of the universal service. Any method of funding the universal service should only cover the efficient cost of its provision, meaning that accurate estimates are required. The technique should be open to independent external scrutiny to ensure that it accurately reflects only the real resource costs of the universal service.

3. Abolish the reserved service.

According to the Commission's illustrative analysis, the reserved service imposes an efficiency loss. This efficiency loss and burden of overcharging some consumers (largely businesses and some households) are unnecessary. They would be avoided if the reserved service were abolished.

4. Directly fund the universal service from consolidated revenue.

Direct funding would enhance the transparency of the cost of the universal service as it would be subject to budget scrutiny. Direct funding would also

enable future competitive tendering and contracting by the Government of the provision of the universal service.

5. Set a maximum price for standard letters (initially at 45 cents).

Setting a maximum price would allow competition up to (initially) 45 cents for all standard letters, while ensuring that nobody would be worse off compared to the current situation. Competition would result in access to some postal services (such as for bulk business letters) for less than 45 cents, facilitating personal and commercial written communications.

Any variation from 45 cents would be considered in terms of the objectives of the universal service. For example, lowering the maximum to 40 cents would further facilitate personal and commercial written communications, but would raise the cost of the universal service. However, with the abolition of the reserved service and the setting of a maximum price, competition would provide real lower prices, especially to the larger market segments such as business letters.

The alternative: a transitional path to reform

In its submission to the NCC, Australia Post has proposed a transitional path to reform involving the gradual lowering of the price multiple to one, a halving of the weight multiple and a further review in 2003 (AP 1997). The purpose of a transitional path is to allow Australia Post (and others) time to adjust to the new, more competitive environment.

However, Australia Post's high returns suggest that it may already have the capacity to respond to the challenges of reform (see appendix C). The lowering of the multiple from ten times to four times appeared to have little adverse effect on Australia Post's performance and as noted earlier there may not be any significant impact until the price multiple approaches one.

If a transitional path were to be adopted, a program of reducing the price multiple and/or the weight threshold would need to be designed to allow significant competition throughout the transition. For example, reducing the price multiple to two, as proposed by Australia Post, would still offer a substantial shield to Australia Post from competitive forces and is therefore less likely to actively encourage appropriate adjustment by Australia Post.

For as long as the reserved service remains throughout the transition, direct funding of the universal service is inappropriate as it could involve double funding. However, at some intermediate point the reduction in the extent of the reserved service could affect the ability of Australia Post to cross subsidise the universal service. At this point, direct funding should begin to cover the shortfall. This would require proper specification and costing of the universal service and measurement of the profitability provided by the reserved service.

If a transitional path is adopted, the Commission suggests that it follow a timeline to the abolition of the reserved service, rather than require any interim review. This will ensure a speedy and effective adjustment process and provide greater certainty for businesses planning to enter the letter market or expand their operations.

A suggested transitional path for reform of the reserved service (if a transition is deemed necessary):

1 July 1998:

- Lower the price multiple to two times the standard letter rate.
- Better specify the objectives and standards required of the universal service.
- Improve the accuracy of the method of costing the universal service.

1 July 1999:

- Lower the price multiple to one time the standard letter rate.
- Begin to directly fund the universal service as the reserved service becomes deficient.

1 July 2000:

- Abolish the reserved service.
- Directly fund the universal service from consolidated revenue.
- Set an appropriate maximum price for standard letters.

4 Pro-competitive regulation

This chapter examines the need for further pro-competitive reforms in postal services in the context of the reform options reviewed in the previous chapter. The focus is on price regulation and access to Australia Post's network.

4.1 Current prices surveillance and access arrangements

Prices surveillance

The Board of Directors of Australia Post is largely responsible for making decisions on postal pricing matters. However, the Government has imposed two types of price regulation on Australia Post through the *Australian Postal Corporation Act 1989* and the *Prices Surveillance Act 1983* (the PS Act).

The Government does not have a formal power enabling it to determine Australia Post's prices. Under the Act, decisions by Australia Post to fix or vary the rate of postage for standard postal articles may be disallowed by the Minister. In considering whether to disallow a proposal to alter the postage rate, the Act requires the Minister to take into account changes in the consumer price index (CPI) and any other matters deemed appropriate. The power to disallow price changes was inserted into the Act in 1994 but has not been invoked to date. While the Government does not possess a formal price setting power it may be able to exert an indirect influence over Australia Post's prices via other Ministerial powers. For example, the Government may be able to influence postal prices through its role in setting Australia Post's financial target and therefore its revenue raising requirements. Under the interconnection arrangements (set out in the Act and regulations), the Minister also has the power to disallow proposed discounts offered to customers where there is a dispute about the terms and conditions of interconnection that has been notified and reported on by the ACCC.

A number of Australia Post's services are also subject to prices surveillance by the ACCC. The PS Act gives the ACCC power to inquire into (but not disallow) proposed price rises of declared services, undertake public inquiries into pricing practices and related matters, and monitor the prices, costs and profits of an industry or business (ACCC 1995). Australia Post's reserved services are declared for prices surveillance. The interconnection and PreSort discounts are also subject to surveillance (see below). Australia Post's non-reserved services are not declared. Thus it is not required to notify the ACCC of

proposed changes in charges for certain services such as its courier and parcel services.

Third party access/interconnection

Australia Post is exempt from the national access arrangements contained in the *Trade Practices Act 1974* (the TPA). However, its operations are covered by voluntary and legislated third party access arrangements.

Prior to 1994, Australia Post operated a voluntary upstream access regime in the form of a bulk letter service. This service enabled customers to by-pass Australia Post's collection and mail centre sorting processes to lodge bulk presorted mail at designated mail centres. Cost savings resulting from bulk lodgement were then shared with customers through reduced prices (AP 1997).

In 1994 the Government legislated to require Australia Post to offer additional access in the form of a bulk interconnection service. The Act now requires Australia Post to allow bulk letters to be delivered to designated mail centres within Australia at reduced rates. The Act sets out conditions governing the operation of the interconnection arrangements and methods for calculating prices. Regulations made pursuant to the Act establish a mechanism for resolving interconnection disputes between the parties.

Two major types of discount are available under the PreSort and bulk interconnection arrangements (see box 4.1 for information on the use of these services):

- PreSort provides users with a variable discount for pre-sorting their own letters. The size of the discount is related to the degree of pre-sorting, the packaging of the letters (bags or trays versus bundles) and the size and weight of letters. Australia Post has reported that the average discount is 7.6 cents per item (AP 1997). Further discounts are offered for off-peak delivery (that is, adding three working days to Australia Post's normal delivery time).
- Under the interconnection scheme, customers can obtain a further discount (around one cent per article) for delivering their bulk letters to designated mail centres. However, this additional discount is only available for letters that are transported inter-state (and not for intra-state transport).

The PreSort and bulk interconnection services combined with the reserved service effectively restrict access to those pre-sorting their own letters (or contracting this task to others). Importantly, firms cannot collect letters and sort them on behalf of others. This is because the reserved service covers letter collection.

Box 4.1: Use of the interconnection regime

There is little up-to-date public information on the use of the PreSort and bulk interconnection services. The PSA (1994) reported that in 1993:

- Australia Post had around 13 000 bulk customers;
- bulk pre-sorted letters accounted for around 30 per cent of total letters posted (based on appendix B's estimates of letter volumes this would equate to around one billion letters); and
- around 90 per cent of bulk mail is the standard letter size (or approximately 900 million letters).

According to Australia Post (1997) bulk mail is the fastest growing area of mail in volume terms.

Source: PSA (1994).

The Act does not stipulate how the interconnection discount should be calculated. However, it does specify that the interconnection discount offered by Australia Post must include a component based on the estimated avoided average transport costs per letter.

The interconnection discounts were examined by the Prices Surveillance Authority (PSA) prior to implementation. Under the PS Act, services which are reserved to Australia Post are 'declared' for the purpose of prices surveillance. As noted above, the ACCC has responsibility for reviewing any proposed changes to PreSort and interconnection discounts and the Minister can direct Australia Post to implement the ACCC's recommendations relating to interconnection disputes.

4.2 Options for price regulation of postal services

The need to subject Australia Post to some form of price regulation will depend on the nature of any future regulation of postal services (allowing for any transitional arrangements). This section considers the need for and nature of price regulation arrangements under two alternative reform scenarios:

- removal of all legislative barriers to competition in postal services; and
- maintenance of the current restrictions on competition.

Open competition

In chapter 3, the Commission proposed that the reserved service be abolished as soon as practicable. If this occurred, the existing prices surveillance arrangements and the Ministerial pricing powers w need to be reviewed.

The Commission does not have access to the information required to assess whether continued prices surveillance would be warranted for the Australia Post's declared postal services. However, there are some principles that should guide any review of declared services. The Commission (IC 1994) has previously argued that prices surveillance should be limited to circumstances where a single firm has:

- a share of the relevant market which is greater than two-thirds; and
- no major rival; and
- faces sporadic or trivial imports; and
- is sheltered by substantial barriers to entry (and expansion by rivals).

In a deregulated environment, the case for declaring Australia Post's services will depend partly on its likely market share. Measures of market share are sensitive to the choice of market boundaries. As noted earlier, Australia Post's share of the messages market is well below the two-thirds threshold. But in the key market segment of business to household mail (where competition from electronic substitutes is likely to be weakest), Australia Post is currently the dominant provider. This market segment is also the major area where direct competition is likely to arise. Thus it is not clear that Australia Post will be able to retain its dominance in this market in the absence of the reserved service.

Even if Australia Post were able to retain a large share of the market for business mail, its ability to abuse its dominant position may be constrained by the threat of new entry or expansion by smaller providers. This threat is likely to be greatest where barriers to entry are low. In general, relevant barriers to entry in postal services may include sunk costs, product differentiation (brand loyalty) and the possibility of strategic behaviour (such as predatory pricing) (see box 4.2).

Much of the information required to assess the height of potential barriers to entry in postal services (such as detailed information on Australia Post's costs) is not publicly available. However, in examining the effect of removing reserved service protection, the Commission has previously argued that there are likely to be few significant barriers to the expansion of existing private service providers (such as letterbox distributors, document exchanges and couriers), particularly in niche markets (IC 1992).

Box 4.2: Assessing the barriers to entry in postal services

Non-legislative barriers to entry, such as sunk costs, product differentiation (brand loyalty) and the possibility of strategic behaviour, may impede the development of competition, particularly in concentrated markets (see IC 1996b for a general discussion).

The likelihood of significant entry occurring in postal services will depend upon the significance of sunk costs in total entry costs. While there is little information on the importance of sunk costs in the postal industry, many have argued that they are likely to be low (see for example Albon 1991, Panzar 1991 and Nicholson 1994).

Brand loyalty and product differentiation may be a barrier to entry in some markets. However, numerous firms already compete with Australia Post in some areas (such as document exchanges, and parcel and courier services). Also, the importance of reputation as a factor deterring entry may be transitory for services currently reserved to Australia Post.

Another possible concern is that Australia Post may seek to deter new entry or expansion by rivals by engaging in strategic behaviour. For example, Australia Post could maintain significant overcapacity in its network in order to be able to reduce prices in the event of new entry. However, if sunk costs are low, such strategies are costly to sustain and are likely to be ineffective in the longer term if potential entrants are more efficient. In Australia, such behaviour could also invoke action under the anti-competitive conduct provisions of the TPA.

An additional concern is that Australia Post may refuse to grant (or hinder) third party access where other postal providers are operating in market niches (such as intra-city advertising mail). However, this may not be a major impediment for firms that only deliver mail to intra-state or intra-urban areas. In part, this is because private providers could always lodge mail with Australia Post at the post office or in post boxes. While this may be more expensive and inconvenient compared to bulk lodgement, it may not significantly preclude the development of competitors to Australia Post.

Significant niche markets may arise in providing faster letter services, or meeting the specific needs of bulk mailers such as utilities, financial institutions and government agencies. The Commission previously argued that it would take some time for private postal networks to develop and to establish their reputations in terms of reliability, timeliness and security (IC 1992). Therefore, in the short term, Australia Post would be likely to maintain a significant share of postal markets.

Prices surveillance is not likely to be needed if the reserved service is abolished. However, a less intrusive form of prices oversight, such as prices monitoring, should be applied temporarily. Under prices monitoring, Australia Post would only be required to provide certain price and cost data at regular intervals to the ACCC. This requirement would only need to be imposed on services where there is particular doubt about the significance of barriers to entry or until such time as competition fully develops.

No change in the regulatory environment

In the absence of changes to the regulation of postal services, the current prices oversight arrangements applying to Australia Post should be reviewed.

The evidence cited in appendix C on Australia Post's rate of return suggests that its profitability exceeds the level required to fund the universal service. The illustrative estimates provided in appendix B suggest that Australia Post could be earning more from the reserved services than is required to fund the universal service. This suggests that the application of prices surveillance to Australia Post has been ineffective in constraining its market power and that the freeze on the standard letter price implemented in 1992 has done little to ameliorate this situation.

Consequently, if the reserved service is retained, consideration should be given to reducing the price of standard letters. As discussed earlier, the Government has direct and indirect pricing powers (concerning price disallowance and rate of return targets respectively) but these have not been invoked for the purpose of reducing Australia Post's prices.

In reviewing the adequacy of Australia Post's existing prices oversight arrangements, the NCC should consider a range of practical alternatives to prices surveillance, such as prices caps, rate of return and performance-based regulation (see IC 1997c for details).

4.3 Options for access regulation in postal services

The case for maintaining or enhancing the access arrangements in postal services will depend on the nature of any reforms to the current postal regulatory environment.

The benefits of access may include promoting the efficient provision of postal services through facilitating competition in activities such as mail collection, transportation, sorting and delivery. However, mandatory access imposes direct costs relating to administration and compliance. For example, Australia Post and access seekers may be required to collect and provide information to an access regulator relating to access disputes. The regulator may also be required

to independently verify this information. Further costs may be imposed if the access regime is administered poorly (IC 1995b, 1997d).

As the costs of regulating access may be quite large, it is important that mandatory access only be imposed if:

- postal networks (or particular elements such as delivery) possess strong natural monopoly characteristics; and
- access to the postal network (or certain elements) is essential in order to compete in a particular market; or
- there are strong transitional benefits from seeking to facilitate or safeguard the development of effective competition in deregulated industries.

Natural monopoly characteristics of mail networks

The notion underlying Australia's national access regime (embodied in Part IIIA of the TPA) is that access to certain facilities with natural mono poly characteristics, such as electricity grids or gas pipelines, is needed to encourage competition in related markets (IC 1995b). The case for establishing a right of access in postal services depends in part upon demonstrating that postal networks have natural monopoly characteristics.

An activity may have natural monopoly characteristics if, for example, the technology of production is such that it is most efficient to have one firm only producing all of the industry's output (see IC 1997d for a general discussion on natural monopoly). In practice, extensive information on production costs, demand (including market boundaries — see below) and technology is needed to identify natural monopolies and this information is unavailable for postal services. Consequently opinions on the importance of natural monopoly characteristics in postal services differ.

One way of considering whether postal networks possess natural monopoly characteristics is to examine the characteristics of the entire network. If looked at this way, the existence of alternative delivery networks for a range of services (newspapers, leaflets, parcels and magazines) could be taken as strong evidence that postal networks do not have natural monopoly characteristics.

It is therefore most useful to examine the characteristics of individual elements of postal networks (mail collection, sorting, transport and delivery). In discussions on the scope for applying access to the postal services industry, the focus has been on mail delivery (IC 1992). This is partly because fixed costs and scale economies in activities such as collection, sorting and transportation are generally considered to be low or, in the case of scale economies, exhausted at relatively low levels of output (see Albon 1991 and Nicholson 1994).

Views on whether natural monopoly conditions prevail in mail delivery are divided. The idea that natural monopoly is present in postal delivery has intuitive appeal — one postal delivery officer visiting an address could deliver two pieces of mail at a lower per unit cost than two officers each delivering one piece of mail. While numerous alternative delivery networks exist, such as those for non-reserved items (for example parcels, newspapers, magazines and leaflets), differences in service quality (covering aspects such as frequency, timeliness, reliability and security) may justify the existence of separate networks for distinct products. For example, people may prefer early morning newspaper deliveries whereas mail may be delivered at any time during the day. Also reliability and security requirements may differ between letters, newspapers and other items such as advertising leaflets.

In analysing the characteristics of postal delivery, it may be worthwhile distinguishing the economies arising from operating a large delivery network from those savings arising from the density of mail traffic on a particular part of the delivery network. Like some other network industries such as airlines, there may be economies of traffic density in mail delivery services. This means that the average cost of delivering mail falls as the amount of traffic on a particular delivery run increases. However, there may be no cost savings from operating a larger postal network (increasing the number of delivery paths).

A further possibility is that natural monopoly conditions may prevail in some parts of the delivery network but not in others. For instance, the Commission's 1992 review of postal services suggested that postal markets could support competition between firms in high-volume areas but that for some rural and remote areas it may be efficient to have only one firm providing letter and other delivery services (due to considerably lower volumes) (IC 1992).

Overall, there is some doubt as to whether the delivery function of postal networks possesses strong natural monopoly characteristics. However, even if mail delivery possesses natural monopoly characteristics, obtaining access to the network may not be essential in order to compete in some markets.

Is access to the postal network essential to promote competition?

Given doubts about the existence of natural monopoly in postal networks, the case for imposing a mandatory access requirement on Australia Post would appear to hinge on demonstrating that access to postal facilities is essential in order to promote competition and efficiency in postal markets.

The extent to which access to elements of the postal network may be considered 'essential' will depend upon:

- how markets for postal services are defined; and
- whether there are significant regulatory or other barriers to competition in postal markets.

Differences in market definition can lead to contrasting views about the need for mandatory access. For example, if the market is defined broadly as a communications market encompassing electronic and physical messages, obtaining access to postal networks may not be essential for competing in the communications market. However, if the market is defined too narrowly implementing a mandatory access regime for postal services may reduce efficiency (because any small gains from encouraging competition will be outweighed by the costs of access regulation).

The approach adopted in chapter 2 was to define markets on the basis of the originators and receivers of messages. Within the communications market, it is possible to identify separate market segments covering household to household, household to business, business to household and business to business communication. Chapter 2 argued that most of these market segments are already reasonably competitive due to the availability of electronic substitutes for mail. However, the business to household mail segment is likely to comprise a significant amount of mail (such as advertising, billing and customer mail) for which there are currently few strong substitutes.

Even where the availability of electronic substitutes is limited (implying a more narrow market definition) the potential for new entrants may effectively constrain Australia Post from restricting access to its delivery network. As noted earlier, in the absence of restrictions on competition, mail delivery is likely to be highly contestable due to low barriers to entry and set-up costs and this may be sufficient to discipline Australia Post's pricing behaviour.

If the reserved service is maintained, Australia Post is likely to continue to possess significant market power, particularly in the business to household mail segment. Consequently, the efficiency gains from mandatory access to Australia Post's network are more likely to outweigh the costs of access.

If the reserved service is abolished, the case for establishing a mandatory access regime becomes weaker. It will depend on the magnitude of the efficiency gains likely to arise from establishing a mandatory access regime compared with the potential costs of access. Assessing these gains will require difficult judgements to be made about the natural monopoly characteristics of postal networks, the boundaries of postal markets and the magnitude of potential barriers to entry to postal markets. That said, the efficiency gains attributable to a mandatory access regime for postal services are likely to be lower compared to the

situation where the reserved service is maintained. The costs of regulation would be similar under both scenarios.

Is access needed as a transitional or safeguard measure?

In recent years, governments have adopted transitional reform measures for certain industries, including in relation to access. For example, in telecommunications, the Commonwealth Government has established an industry-specific competition regime incorporating a telecommunications-specific access regime. The Government argued that this was necessary to safeguard the development of competition, even after removal of restrictions on competition because Telstra would continue to wield significant market power derived primarily from its historical monopoly position (House of Representatives 1996). By implication, the telecommunications-specific access arrangements could be removed once sufficient competition is deemed to have developed.

If the reserved service is abolished, it could be argued that existing or additional access arrangements would be needed to facilitate and safeguard the development of effective competitors to Australia Post. The postal industry-specific access arrangements could eventually be removed once reform objectives for postal services have been attained.

The case for establishing a temporary postal access regime depends on the nature of postal reforms (including any transitional arrangements) and the height of barriers to entry. Existing mandatory postal access arrangements should be retained if the reserved service protection were to be removed gradually. If the reserved service is removed completely, Australia Post would most likely continue to be the largest provider of postal services. However if, as is likely, barriers to entry into postal services are low, the competitive pressures on Australia Post's pricing and production performance are likely to develop rather quickly. In these circumstances the potential gains from extending or maintaining access arrangements temporarily will be lower.

4.4 Access pricing

If mandatory access arrangements were applied to postal services, a key challenge would be to determine the terms and conditions of access. In postal services, this involves determining an access price (for pre-sorted bulk mail and interconnection) that ensures that Australia Post is not commercially disadvantaged, efficient entry is promoted, and there is no monopoly exploitation. Access prices can be calculated in a variety of ways (see IC

1997c). One option involves calculating an access discount based on Australia Post's costs forgone (avoidable cost). An alternative is to set an access price based on the incremental costs of these services.

As noted earlier, under the current postal access pricing regime, users of the PreSort and bulk interconnection services may receive a discount reflecting Australia Post's costs forgone. Key determinants of the price paid by users are:

- the price of standard postal articles which is set by Australia Post but can be disallowed by the relevant Minister; and
- the cost reductions achieved by Australia Post as a result of customer presorting and/or transport.

The main outcomes of the current scheme include:

- bulk mail users who are able to pre-sort and transport mail more cheaply than the discount offered may reduce their mailing costs (leading to efficient entry); and
- it preserves Australia Post's ability to cross subsidise loss making services required as part of the universal service obligation.

The 'avoidable cost' approach to determining the interconnection discount relies heavily on efficient regulation of the standard letter price. King and Maddock (1996) argue that the access pricing regime established for Australia Post has the effect of promoting efficient entry while avoiding monopoly exploitation through surveillance of final prices (for standard letters). As discussed earlier, there is scope for improving the effectiveness of price regulation in postal services, especially if the reserved service is maintained.

In the absence of improvements to price regulation of postal services and abolition of the reserved service, the use of a cost-based approach to access pricing becomes a viable alternative. With cost-based access charges, users would pay for the costs incurred from the point of acceptance of the mail to its subsequent delivery. Compared to the current pricing system, adopting a cost-based approach to access pricing could improve efficiency by ensuring that access prices more closely reflect the true resource cost to Australia Post of providing bulk mail sorting and delivery services.

Applying cost-based access pricing to postal services will require addressing several practical implementation issues. In practice, some broad banding of access charges would be required to cope with the many different journeys that mail can take. Implementing this approach may also necessitate greater accounting separation of Australia Post's activities than currently occurs (for the purposes of price determination and verification). If the reserved service

were to be retained, the access charge may also need to include a fixed component reflecting Australia Post's universal service costs.

4.5 Summary

Australia Post is already subject to prices surveillance (for reserved services only) and a mandatory access regime. This chapter has examined whether these pricing and access arrangements should be reformed in the context of potential changes to the reserved service.

Implementing pro-competitive regulation is not a substitute for removing regulatory barriers to entry. If the reserved service is abolished, the need for costly price and access regulation may be avoided.

Since 1992 Australia Post has capped the price of standard letters at 45 cents and this will continue into 1998. However, the price freeze appears to have done little to restrain Australia Post's ability to maintain its dominant position in postal markets. Consideration should therefore be given to reducing the price of standard letters.

It is unlikely that the existing prices surveillance arrangements will be needed if the reserved service is abolished. However, a less intrusive form of prices oversight, such as prices monitoring could be applied temporarily, to lessen concerns about Australia Post's potential dominant position in postal markets.

The case for maintaining or enhancing postal access arrangements will depend on the nature of any reforms to the current postal regulatory environment.

If the reserved service were to be maintained, there may be gains from extending the interconnection arrangements applying to Australia Post. For example, consideration should be given to allowing private postal service providers to consolidate bulk pre-sorted mail from businesses and other bulk mailers and requiring Australia Post to provide access to its sorting and delivery network. The current arrangements for determining the interconnection and PreSort discounts should also be reviewed.

If the reserved service were abolished, the benefits of a mandatory postal access regime would be lessened. Abolishing the reserved service will enable private mail networks to develop in significant niche markets (such as intra-urban markets and servicing the needs of bulk customers such as utilities, financial institutions and government agencies). These networks would probably develop interconnection arrangements between each other voluntarily, thereby lessening their need for access to Australia Post's network.

Appendix A A summary of recent demand studies

Empirical studies on the demand for postal services are relatively scarce. A number of these are summarised in table A.1. The approach taken by many of these studies has been to consider postal demand as a function of postal prices, incomes and telephone charges (as a substitute). Most studies segment the market between first and second class mail, but the general paucity of postal data worldwide hinders any significant further market segmentation.

Table A.1 Recent studies of postal demand

Estimation technique	Dependent variables	Independent Variables	Key findings
maura (1997)			
Double log ordinary least squares.	Total regular delivery mail, standard sized first class mail, non-standard first class mail and second class mail.	Real prices, real incomes and facsimile numbers.	Own price elasticities: Total: -0.2 Standard first: -0.3 Non-standard first: -0.52 Second: -0.12 Facsimile appear to have complemented mail volumes.
Double log ordinary least squares.	First and second class mail volumes.	Real first and second class prices, real GDP, a business cycle variable (number of building permits), the number of facsimile machines and a dummy for changes in mail composition.	The own price elasticity of demand for first class mail was -0.52, with own price being first class price divided by second class price.
on (1994)			
Double log, maximum likelihood technique.	Normal sized first class mail under 50 grams, abnormal sized first class mail and first class over 50 grams and second	Real postal prices for each category, real per capita GDP, a time trend to represent communications advances and telephone prices.	All own price elasticities were highly inelastic. Normal first -0.25 Abnormal first -0.40 Second -0.08 Telephone prices were found to be insignificant.
	maura (1997) Double log ordinary least squares. Double log ordinary least squares. On (1994) Double log, maximum likelihood	maura (1997) Double log ordinary least squares. Double log of first class mail, non-standard first class mail and second class mail. Double log ordinary least class mail wolumes. Double log ordinary least squares. Normal sized first maximum class mail under likelihood technique. So grams, abnormal sized first class mail and second class mail under so grams, abnormal sized first class mail and	maura (1997) Double log ordinary least squares. Double log ordinary least squares. Double log ordinary least squares. Double log ordinary least class mail, non-standard first class mail and second class mail. Double log ordinary least squares. Double log ordinary least squares. Double log ordinary least class mail olass mail ordinary least squares. Double log ordinary least class mail olass mail ordinary least squares. Double log ordinary least class mail ordinary least squares. Double log ordinary least class mail ordinary least squares. Double log ordinary least class mail ordinary least squares. Normal sized first ordinary least squares. Real first and second class prices, real ordinary least squares of building permits), the number of facsimile machines and a dummy for changes in mail composition. On (1994) Double log, Normal sized first ordinary least squares ordinary least squares. Real prices, real incomes and facsimile numbers. Real first and second class prices, real ordinary least squares. Real prices, real incomes and facsimile numbers.

Table A.1 (continued) Recent studies of postal demand

Country and sample	Estimation technique	Dependent variables	Independent Variables	Key findings
Adie (1990)				
United States	Linear and	Seasonally	Real postal prices, real personal	The own price elasticity of demand was
1977-82	-82 double log adjusted monthly income, real long distance telephone ordinary least first class mail prices and US population.	income, real long distance telephone	-0.23	
	squares.	volumes.	prices and OS population.	The telephone price was only significant at the 90 per cent level.
Cuthhartean ai	nd Diaharda (100	201		
United Kingdom	nd Richards (199 Static double-log	First and second	First and second class mail prices,	Own price elasticities declined over the
	Static double-log demand function	First and second class mail	telephone prices, prices for other	sample period:
United Kingdom	Static double-log	First and second		-
United Kingdom	Static double-log demand function with error	First and second class mail	telephone prices, prices for other communications services, real	sample period: First class from -2.2 to -1.8
United Kingdom	Static double-log demand function with error correction. Assumed fixed communications budget and	First and second class mail	telephone prices, prices for other communications services, real expenditure and first and second class	sample period: First class from -2.2 to -1.8 Second class from -1.2 to -0.8
United Kingdom	Static double-log demand function with error correction. Assumed fixed communications	First and second class mail	telephone prices, prices for other communications services, real expenditure and first and second class	sample period: First class from -2.2 to -1.8 Second class from -1.2 to -0.8

Table A.1 (continued) Recent studies of postal demand

Country and sample	Estimation technique	Dependent variables	Independent Variables	Key findings
Albon (1989)				
United Kingdom 1970-86	Ordinary least squares.	A traffic index for total volume. Actual first and second class mail volumes.	Total volume: Real postal prices, real telephone usage prices, real GDP, first and second class delivery standards. First and second class: real own prices, real telephone prices, real GDP, household income, business income and delivery standards.	Own price elasticities: Total -0.638. First -0.86. Second -0.89 Telephone prices insignificant.
Scott (1986)				
United States 1971-79	Reports 1980 US Postal Rate Commission elasticities.	Presents estimates for first, second, third and fourth class mail types.	Based on US Postal Rate Commission deliberations.	Own price elasticities: First class: letters -0.31 cards -0.64 priority -0.31 Second class: regular -0.12
Neary (1975)				
Ireland 1949-69	Linear and log- linear ordinary least squares.	Total mail, first class and second class mail volumes per head per week.	Real postal prices, real consumer expenditure, real telephone prices, number of telephones, a time trend.	The own price elasticity for first class mail was about -0.3. Second class was less certain but appeared to be very low.
		per week.		The impact of telephones was unclear.

Appendix B Estimating the efficiency effects of the current arrangements

This appendix outlines a basic framework for analysing the efficiency costs of the current postal arrangements. Using this framework and publicly available information, the Commission has provided some illustrative simulations. The framework could be developed further, provided better data is available from Australia Post.

B.1 Current restrictions

In order to examine the effect of the reserved and universal services, it is necessary to separate these policies into their component rules. There are four readily identifiable rules, namely:

- the uniform price;
- the price cap;
- universal coverage; and
- the exclusive right to carry letters under the reserved service.

The uniform price requires Australia Post to charge a single price for a standard letter regardless of the location of the sender or the recipient, as long as both are within Australia. This applies only to standard letters.

Currently the price cap for a standard letter is 45 cents and has remained unchanged since January 1992. Australia Post may vary this subject to ministerial approval and ACCC review. Although the price cap and uniform price rules suggest that all standard letters should be charged at 45 cents, bulk interconnection and pre-sort discounts have been available to around 30 per cent of all letters (PSA 1994). These discounts are provided where the sender carries out specific activities, such as sorting bulk mail, themselves. Therefore they must still bear the cost of that activity, meaning that the real price reduction to senders is less than the discount from Australia Post.

Universal coverage requires Australia Post to meet all Australia-wide demand for standard letters (although service standards vary as noted in appendix C).

In the absence of other constraints, the exclusive right to carry letters under the reserved service would enable Australia Post to act as a monopolist for standard letters, at least up to a price of \$1.80 and for large letters up to 250 grams. Monopoly behaviour is often characterised by restricted supply and higher

prices and sometimes by excessive costs. However, Australia Post's behaviour is potentially constrained somewhat by the three other rules which restrict its ability to act as a pure monopolist. For example, the price cap limits Australia Post's ability to raise prices and the universal service requires it to meet all demand at 45 cents, limiting its ability to restrict supply.

In combination, these four rules produce an outcome that limits competition and generates sufficient extra revenues in the reserved service for Australia Post to cover at least the costs of the universal service. Determining whether these arrangements are efficient necessitates some estimation of the relative costs and benefits of the current restrictions.

B.2 Simulating the effects of the current restrictions

Analytical framework

The economic effects of the current restrictions can be estimated by using a simple model of the costs and benefits across the different sectors of the postal market. As noted in chapter 2, the postal market can be segmented in many ways. However, data limitations restrict the current model to a simple two sector market. For the purpose of this modelling exercise, these sectors are characterised as those letters that are 'overcharged' and those that are 'subsidised' (see box B.1).

'Overcharged' letters are those whose prices are maintained artificially high because of the reserved service restrictions on competition. As noted in chapter 2, most of the burden of these restrictions appears to be borne by businesses. However, not all business letters would fall within this category. There would also be a proportion of household letters that are overcharged.

'Subsidised' letters represent those letters that either break even or benefit from undercharging as a result of the universal service. This would include a significant proportion of household letters. As noted in chapter 2, undercharged letters are sometimes characterised as rural, although rural and remote letters account for only around one-third of the estimated cost of the universal service.

Box B.1: A framework for analysing the Australian letter market

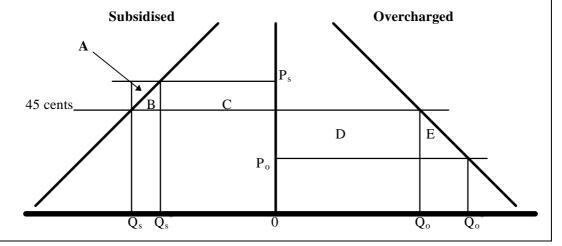
For simplicity, the letter market is segmented into overcharged and subsidised letters. Overcharged letters represent predominantly business letters whilst subsidised letters are predominantly household letters, though would include some business letters.

In the diagram below, the two markets are shown back to back. At the current price of 45 cents, the quantity of overcharged letters is Q_o and the quantity of subsidised letters is Q_s . These price and quantity combinations can be compared with those that would occur if competitive pressures were allowed such that prices moved to long-run marginal costs (represented by P_o for overcharged letters and P_s for subsidised letters). At these prices, new quantities are demanded reflecting a movement along the demand curve in each market. Under competitive conditions, the quantity of letters in the overcharged market is Q_o^* and in the subsidised market is Q_s^* .

At the current price, Australia Post has to bear a net cost equal to the sum of areas A, B and C to operate in the subsidised market as it charges only 45 cents for Q_s letters that cost P_s cents. However, in the overcharged market it charges 45 cents for Q_s letters that cost only P_s cents, thereby benefiting to the amount of area D. The net effect on Australia Post is the area D minus the areas A, B and C.

Subsidised letter senders gain from the current price of 45 cents, given that they would only demand Q_s^* letters if the price were at P_s . Their gain in consumer surplus is the sum of areas B and C. However, overcharged senders lose because charging at 45 cents instead of the lower P_o reduces their demand from the competitive amount, Q_o^* . Their loss in consumer surplus is the sum of areas D and E.

The net effect on economic efficiency is the sum of the above effects and equates to areas A and E. Areas B and C are the transfer from Australia Post to subsidised letters senders and area D is the transfer from overcharged letters senders to Australia Post.



Indicative estimates of the effects of the current restrictions are made by comparing the current restrictions (first simulation) with a competitive base case scenario. Two additional simulations are also undertaken to analyse the effect of alternate assumptions about the proportion of letters in each market. In the base case, prices in each market are set at long-run marginal costs. As a result, there is no loss in economic efficiency and no surplus (or deficiency) of revenue to Australia Post.

The basic framework used here gives an indication of the transfers between consumers and Australia Post in each market. It is based on an approach used by Albon (1991) to consider the implications of uniform postal pricing practices.

The first simulation

The model used to estimate the effects of the current restrictions (first simulation) is based on a number of assumptions. First, the letter market is divided into two markets only. Second, it does not allow for varying service standards for different senders. Third, the model does not attempt to capture the costs and benefits from linking all postal users through a network. Elaboration of the analysis to account for these matters requires better data than are presently available, such as letter quantities in various market segments.

For the purpose of this model the four rules described earlier are assumed to operate as follows:

- the uniform rate does not allow for discounts;
- the price cap sets price at 45 cents only higher prices for large letters are ignored;
- universal coverage requires Australia Post to meet all demand at 45 cents with no allowance for differences in quality of service; and
- the monopoly powers derived from the reserved service are constrained by the other three rules.

The impacts of these assumptions are presumed to offset each other to some degree. For example, ignoring large letters will tend to understate the average price paid for a letter whereas not allowing for discounts tends to overstate the price. Similarly, not allowing for differences in quality of service will tend to overstate the cost of handling letters whereas not allowing for large letters will tend to understate that cost.

It is also assumed that both the universal and reserved services cover the same items. This differs from the actual situation described in chapter 1 whereby the

universal service applies only to standard letters but the reserved service includes large letters up to 250 grams.

The demand in each market is assumed to be linear. The price elasticity of demand in both markets is assumed to be 0.5, following the estimate used by Australia Post (AP 1997).

The cost per letter of providing the letter service in each market is assumed to be constant across the range of outputs considered. Based on the discussion of long-run marginal costs in chapter 2, the cost of a standard letter in the overcharged market is set at 30 cents. The cost of a standard letter in the subsidised market is set at a level (49.95 cents for the first simulation) which imposes a cost on Australia Post of \$67 million, in line with its own estimated cost of providing the universal service (AP 1997).

As such, the model only accounts for a move from one price (45 cents) to two prices (30 cents and 49.95 cents). If prices were permitted to move freely, a broader number of prices might arise across a number of letter categories, particularly for business letters. As noted in chapter 3, the degree of price differentiation would be driven by commercial considerations. Further disaggregation along these lines requires better cost and volume data than is available to the Commission.

Finally, the current quantities of standard letters in each market are derived using the following information. In 1995-96 reserved service revenue was just under \$1 523 million. It is assumed that lower revenues from bulk interconnection and pre-sort discounts are offset by higher revenues from large letters. Assuming 45 cents per letter, this revenue figure corresponds to 3 384 million letters. As discussed in chapter 2, business accounts for the majority of letters (up to 80 per cent). Here it is conservatively assumed that 60 per cent of letters are in the overcharged market. Hence the volume in the overcharged market is set at 2 030 million letters and the subsidised market volume is 1 354 million letters.

Results of the first simulation

Estimates of the first simulation of the effects of the current postal arrangements are shown in box B.2. Included are partial estimates for each market, and these indicate that there are significant transfers involved in the cross subsidy.

Estimated efficiency costs are shown in table B.1. These indicate that the current regulatory restrictions impose an estimated annual net efficiency cost of \$27 million — \$25 million from overcharging under the reserved service and

\$2 million from subsidising the universal service. These are well above the estimate of just over \$800 000 in Australia Post's submission to the NCC (AP 1997). However, Australia Post only considered the cost of raising \$70 million less revenue in a single letter market, involving a price fall from 45 cents to near 43 cents. It has not attempted to segment the market and has not considered the possible effects of allowing competition in the reserved service. Therefore, Australia Post's analysis does not take into account the possibility of prices falling well below 45 cents as a result of the entry of competitors.

Table B.1: First simulation

Overcharged market	Estimated cost (\$million)	Subsidised market	Estimated cost (\$million)
Gain to Australia Post	305	Loss to Australia Post	-67
Loss to consumers	-330	Gain to consumers	65
Efficiency loss	-25	Efficiency loss	-2

Source: Industry Commission estimates.

Table B.1 also shows substantial estimated gains and losses to various consumers. Some consumers (largely businesses) are estimated to lose \$330 million a year in consumer surplus due to overcharging under the reserved service. Other consumers (largely households) are estimated to gain \$65 million a year from the subsidised universal service.

Australia Post is estimated to accrue a surplus considerably higher than that necessary to cover its reported cost of providing the universal service. The model is calibrated such that Australia Post spends \$67 million in providing the universal service but it is estimated to gain \$305 million by maintaining high prices to some consumers as a result of the reserved service. This estimated excess of \$238 million could account for Australia Post's high level of profitability, with return on assets for 1995-96 reported in appendix C at over 15 per cent.

Results of alternate simulations

Tables B.2 and B.3 present the results of alternate scenarios relating to the proportion of letters in the subsidised and overcharged markets.

For the second simulation (table B.2), the proportion of letters in each market is set to 50 per cent of total letters (1 692 million letters each). In this case, the price that would need to be charged in the subsidised market to cover a \$67 million loss is 48.96 cents.

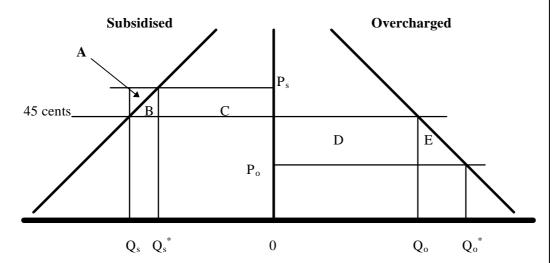
Box B.2: First simulation of the effects of the current postal arrangements

The effects of the current postal arrangements are estimated by setting the following parameter values.

 $Q_o = 2030$ million $Q_o^* = 2369$ million $P_o = 30$ cents

 $Q_s = 1354 \text{ million}$ $Q_s^* = 1279 \text{ million}$ $P_s = 49.95 \text{ cents}$

The choice of 49.95 cents for the subsidised market results in a deficit to Australia Post of \$67 million in that market (area A+B+C).



Area estimates:

A = \$2 million B + C = \$65 million

D = \$305 million E = \$25 million

For the third simulation (table B.3), the proportion of overcharged letters is set to 70 per cent of letters (2 369 million letters) and hence subsidised letters are 30 per cent (1 015 million letters). In this case, the price that would need to be charged in the subsidised market to cover a \$67 million loss is 51.6 cents.

In both cases, Australia Post is still estimated to be significantly overcompensated for its reported \$67 million loss from providing the universal service. The overcharging that results from the reserved service accounts for the bulk of the estimated efficiency costs.

Table B.2: Second simulation

Overcharged market	Estimated cost (\$million)	Subsidised market	Estimated cost (\$million)
Gain to Australia Post	254	Loss to Australia Post	-67
Loss to consumers	-275	Gain to consumers	66
Efficiency loss	-21	Efficiency loss	-1

Source: Industry Commission estimates.

Table B.3: Third simulation

Overcharged market	Estimated cost (\$million)	Subsidised market	Estimated cost (\$million)
Gain to Australia Post	355	Loss to Australia Post	-67
Loss to consumers	-385	Gain to consumers	65
Efficiency loss	-30	Efficiency loss	-2

Source: Industry Commission estimates.

Sensitivity analysis

The sensitivity of the estimates of the efficiency cost in the first simulation to changes in the values of key variables and parameters was tested by altering their values as shown in table B.4. The results show that the efficiency cost of the current arrangements is relatively robust around the baseline values of the key variables and parameters. Further precision could be achieved if better data were to become available, enabling more elaborate modelling of postal service markets, including further disaggregation of postal markets.

Table B.4: Sensitivity analysis

Variable/parameter	Baseline assumptions	Alternative assumptions	Estimated efficiency cost ^a (\$million)
Overcharged market cost	30 cents	25 cents	-47
		35 cents	-13
Overcharged letters	60 per cent	50 per cent	-23
		70 per cent	-32
Overcharged market elasticity of	- 0.5	-0.4	-22
demand		-0.6	-32
Subsidised market elasticity of	- 0.5	-0.4	-27
demand		-0.6	-28

a Rounded sum of efficiency costs in both markets. Based on varying one variable/parameter at a time only and setting subsidised market costs at a level that maintains the \$67 million cost to Australia Post

Source: Industry Commission estimates.

Appendix C Recent performance of Australia Post

This appendix provides an overview of Australia Post's recent performance, particularly in light of the Government's 1994 reform initiatives. It also compares Australia Post's performance with a number of overseas postal operators.

C.1 Performance of the postal services industry

In 1992, Australia Post argued that the Commission's proposed options for reform involving the removal or reduction in the extent of the reserved service would result in a substantial loss of profitability. It also stated that to restore its profitability it would have to retrench a significant number of staff (IC 1992). However, the Commission argued that Australia Post's claimed losses to profitability and staff lacked credibility. The information presented here on Australia Post's performance since the reduction in the extent of the reserved service suggests that it has maintained both profitability and employment.

Section 28C of the Act enables the Government to issue regulations prescribing performance standards for the frequency, speed or accuracy of mail delivery and accessibility of services. However, there are currently no regulations prescribing these performance standards despite the Vaile Committee's (1996) recommendations that they be developed. Australia Post publishes information in its annual report as to performance achieved in a number of areas. Apart from this information, there is little independent and publicly available analysis of its performance. The following sections present the main performance indicators used by Australia Post to evaluate its own performance.

Financial indicators

Australia Post has consistently returned a profit over the last ten years (see table C.1). In 1995-96, it recorded an operating profit of \$344 million before abnormal items and tax (AP 1996). Increasing mail volumes contributed to rising revenue of approximately 4.8 per cent in 1995-96.

Table C.1: Australia Post's key financial indicators, 1990-1996 a

Year ended June 30	1990	1991	1992	1993	1994	1995	1996
Profits ^b (\$million)	71	146	179	249	287	332	344
Revenue (\$million)	1980	2183	2310	2421	2568	2782	2916
Expenses (\$million)	1909	2037	2131	2171	2281	2450	2572
Dividends (\$million)	1	25	50	62	90	120	143
Taxes and charges (\$million)	123	187	242	273	227	254	306
Debt to equity ratio (per cent)	1.1	3.6	4.2	4.5	29.3	34.0	36.1

a Some discrepancy between figures reported in different annual reports.

b Profits before abnormal items and tax.

Source: AP (1996) and SCNPMGTE (1997).

Significant improvements in Australia Post's financial performance since 1988 can be largely attributed to its increased commercial focus. However, profits and revenue have continued to increase despite the reduction in the extent of the reserved letter service. Australia Post acknowledged to the Vaile Committee (1996) that the reduction from ten to four times the standard letter rate had 'not had an enormous impact'. However, the Department of Finance indicated that financial results for 1994-95 suggested that the reduction in the extent of the reserved service had little practical effect on Australia Post's financial capacity to maintain rural and remote services (Vaile Committee 1996).

Since 1993, Australia Post has published separate financial data in its annual report for reserved and non-reserved services. Despite an increase in mail volumes, the proportion of revenue derived from reserved services has declined from 62 per cent in 1992-93 to 52.2 per cent in 1995-96 (AP 1996). In 1995-96, the reserved service accounted for 38.6 per cent of Australia Post's operating profit.

Significant increases in the debt to equity ratio suggest that Australia Post has made more effective use of debt instruments to finance its investments. However, the extent to which it has done so is somewhat less than for some other Commonwealth government business enterprises (GBEs) (SCNPMGTE 1997).

Standard letter rate and mail volumes

The standard letter rate has been fixed at 45 cents since January 1992. During 1995-96, Australia Post announced that the postal rate would be maintained at this rate until June 1998. This represents a decrease in the standard letter rate of 11.3 per cent, or 5 cents, in real terms since January 1992. However, these estimates do not provide a clear indication of the extent to which service costs have declined, and hence, the scope for further reducing postal prices.

In its annual report, Australia Post defines total mail articles to include letters and parcels but exclude unaddressed advertising and articles which do not generate revenue. It is unclear exactly how many of these articles are standard letter items. Nevertheless, total mail articles have increased steadily over the last five years despite the reduction in the reserved letter service, increased competition from courier and parcel services and increased use of electronic communication. In 1995-96, Australia Post processed over 4 billion articles through its network compared with around 3.2 billion articles in 1991-92.

Rate of return

Rates of return provide an indication of how effectively an organisation's resources are used to generate revenue. Table C.2 highlights Australia Post's return on assets using two different methods of calculation. The first used by the Steering Committee on National Performance Monitoring of Government Trading Enterprises calculates the rate of return using operating profit before interest and tax but after abnormals. The second calculated by Australia Post uses operating profit before abnormals and tax. The difference in results highlights the susceptibility of accounting rates of return to the use of different accounting techniques.

Both calculations highlight the significant increase in returns to assets achieved in the last seven years. This has occurred despite significant variability in the value attributed to the CSO. It has largely resulted from higher growth in Australia Post's earnings relative to its average total assets (SCNPMGTE 1997). Since 1992-93, Australia Post's earnings before interest and tax (EBIT) has increased by 62 per cent compared with a 7 per cent increase in average total assets. The return on assets has not been significantly affected by the reduction in the extent of the reserved service.

Australia Post also calculates its rate of return on assets separately for reserved and non-reserved services. According to Australia Post, in 1995-96 it achieved a rate of return on assets of 11.5 per cent in the reserved service and 19.7 per cent in the non-reserved areas (AP 1996).

Table C.2: Australia Post's return on assets a, 1990-1996

Year ended June 30	1990	1991	1992	1993	1994	1995	1996
Assets (\$million)	2122	2123	2047	1950	2022	2216	2239
Return on assets ^b (per cent)	3.2	8.4	11.6	11.5	13.6	16.8	17.6
AP return on assets ^{cd} (per cent)	3.5	6.8	8.6	12.5	14.5	15.6	15.4
CSO (\$million)	96	60	52	46	62	65	72 ^e

a Dollar figures are rounded down to the nearest million dollars.

Source: AP (1996 and previous issues) and SCNPMGTE (1994, 1997).

The aggregate rate of return for all Commonwealth GBEs is dominated by the rates of return for both Australia Post and Telstra (see table C.3). It is interesting to note that both these high performing GBEs operate in the communications industry. The rate of return for Australia Post is also significantly higher than that for all GBEs nationwide.

Table C.3: Australia Post's return on assets ^a compared with other GBEs, 1992-1996

Year ended 30 June	1992	1993	1994	1995	1996
GBEs					
Commonwealth GBEs	8.3	12.0	13.4	12.1	15.4
— Australia Post	11.6	11.5	13.6	16.8	17.6
— Airservices Australia	6.6	9.9	13.2	-3.9	7.1
— ANL Limited	-2.0	4.0	-36.1	-8.9	0.6
 Federal Airports Corporation 	8.1	7.4	7.4	8.4	8.4
— Telstra Corporation	8.2	12.7	14.8	12.9	16.4
All GBEs	6.3	7.2	7.0	6.2	6.9

a Calculated as earnings before interest and tax (EBIT) but after abnormal items divided by average total assets.

Source: SCNPMGTE (1997).

The Treasury has previously argued that an appropriate target rate of return for a GBE is the government bond rate plus a loading to cover the market risks associated with its activities (Treasury 1990). The bond rate represents a minimum risk alternative for the money that is tied up in the assets of the

b Rate of return on assets reported in SCNPMGTE (1997). Calculated as earnings before interest and tax (EBIT) but after abnormals divided by average total assets.

Rate of return reported by Australia Post. Calculated as earnings before abnormals and tax divided by average total assets.

d Rate of return calculated without adjusting for the CSO.

e Australia Post (1997) has recently revised the cost of the CSO for the year ended 1996 to \$67 million. It is unclear what the reasoning is for this revision.

enterprise. The use of the long term bond rate is a reasonable benchmark for examining Australia Post's rate of return given the relatively long life of Australia Post's assets.

The current long term bond rate is less than 7 per cent. Given that Australia Post is likely to have a low risk premium because of its reserved service protection, the rate of return achieved by Australia Post is still significantly higher than what may be considered to be appropriate. This raises the issue of whether the reserved service protection allows Australia Post to achieve a rate of return on assets in excess of what is necessary to adequately provide the universal service.

Productivity

Australia Post is Australia's seventh largest employer and labour accounts for 60 per cent of total costs. In 1996, Australia Post employed 32 040 full-time staff and 5 689 part-time staff (AP 1996). Both the total number of employees and the number of full-time employees have remained remarkably steady over the last five years (AP 1996). This has occurred over a period when other GBEs have been shedding labour — since 1991-92 GBEs have on average reduced the number of employees by 7 per cent (SCNPMGTE 1997). It has also remained constant despite the reduction of Australia Post's reserved service.

Australia Post has made a number of significant achievements on the labour front (AP 1996). Since 1989-90, labour and related costs as a proportion of operating revenue have declined by 11 percentage points. Work hours lost per year due to industrial stoppages have fallen from almost 1.5 hours per employee in 1988-89 to less than three minutes per employee in 1995-96. The frequency of lost time injuries has also declined considerably over the same period. Fifteen different awards covering Australia Post staff were also replaced with four new consent awards (AP 1996).

Australia Post has achieved cumulative labour productivity gains of around 28 per cent since 1990-91 (see table C.4). Total factor productivity has also grown, although to a lesser extent than labour productivity. To some extent, this productivity growth has resulted from increased capital investments in technology and automation which are expected to continue over the coming years (AP 1996). For example, in 1995-96 Australia Post commenced a five year network renewal program aimed at increasing network capacity and efficiency.

Table C.4: Australia Post's labour and total factor productivity, 1991-96

Year ended 30 June	1991	1992	1993	1994	1995	1996
Labour productivity ^a	100.0	104.3	109.1	115.8	123.2	128.1
Total factor productivity	100.0	101.5	105.4	109.9	115.4	n.a.

a Labour productivity index measures revenue at constant prices per paid work year.

n.a. Not available.

Source: SCNPMGTE (1997).

This increased commitment to network renewal and automation reflects the fact that mail processing arrangements have remained largely unchanged for the last decade (AP 1996). In New South Wales and Victoria capacity constraints in mail processing have already emerged and hampered performance. Whilst capacity constraints have affected some areas of Australia Post's network, Australia Post has indicated that it generally operates its network at significant over capacity to accommodate substantial peaks in mail volumes (APC v Streetfile 1996).

Service quality

Service quality is an important indicator of Australia Post's performance. It is often measured in terms of accessibility, frequency, reliability and numbers of complaints.

Accessibility

Australia Post is required to provide a universal and uniform priced letter service which is reasonably accessible to all Australians. Australia Post reports two measures of accessibility: letter senders' access to the postal network and recipients' access to the postal network. Since 1991, there appear to have been considerable improvements in both of these elements.

Access to Australia Post's network is provided through corporate offices, licensed post offices and agencies, community mail agencies, street posting boxes and roadmail contractors. In 1996, Australia Post operated over 20 000 posting facilities (including retail outlets, street posting boxes and roadmail contractors) which included over 16 000 postal outlets (including corporate offices, licensed post offices and agencies and community mail agencies) throughout Australia (AP 1996).

The measure of postal outlets to Australian residents indicates that access to postal outlets in metropolitan areas is better than for rural and remote areas (see

table C.5). This largely reflects the concentration of Australia's population in city and metropolitan areas. Access to postal outlets and posting facilities in 1996 has declined slightly from the previous year (AP 1995a, 1996).

Table C.5: Letter senders' access to postal network, 1996

	Metro areas	Rural zones	Remote zones	Australia
Comparative access measures				
Outlets per 10 000 residents ^a	6.3	14.8	18.1	8.9
Posting facilities per 10 000 residents ^b	9.2	15.0	19.0	11.0
Distance from postal outlets				
Average per household (km)	1.9	3.3	12.4	2.6
Dispersion: 90 per cent of households	0-2.5	0-7.5	0-30.0	0-2.5
Dispersion: 75 per cent of households	0-2.5	0-2.5	0-10.0	0-2.5

a Outlets includes postpoints, licensed stamp vendors, off-site vending machines etc.

Source: AP (1996).

Australia Post's network in relation to mail delivery consists of street delivery, roadside delivery, private boxes and bags, counter delivery and community bags to both households and businesses. In 1996, the total number of postal delivery points amounted to over 7.9 million. Households accounted for more than 7.1 million of these delivery points. In comparison, there were a total of 6.9 million delivery points to both households and businesses in 1991.

Frequency of delivery

There are no explicit requirements for Australia Post to ensure a particular frequency of delivery. However, Australia Post generally delivers mail to households and businesses in metropolitan areas every weekday, and to rural and remote areas less frequently.

Australia Post's annual reports do not provide information in relation to frequency of delivery prior to 1995. In its 1995-96 annual report, Australia Post indicated that it aimed to provide five mail deliveries a week to 98 per cent of all delivery points. It achieved this overall target, although only 94 per cent of households in rural and remote areas received five mail deliveries — the remainder received between one and four.

Concerns have often been expressed about the frequency of deliveries, particularly to rural and remote areas. In 1992, the Commission made a number of recommendations to ensure reasonable access on an equitable basis for people in rural and remote areas (IC 1992). The Vaile Committee (1996) also expressed concern that some 80 000 households did not receive even a once a

Does not include access to posting provided through postal delivery officers.

week service. It argued that 'it is unacceptable that a segment of Australia's population has no access to a delivery service' (p.41).

Reliability of on-time delivery

Australia Post advertises standard delivery times for the delivery of mail: one day within metropolitan areas of capital cities and within the same city or town and environs; two days between metropolitan areas of capital cities and country locations, between country locations, between metropolitan areas of capital cities; three days between metropolitan areas of capital cities and country locations; and four days between country locations (AP 1996).

KPMG independently audits Australia Post's domestic letter service performance against these advertised standards, although the audit excludes letters posted under bulk pre-sorted conditions. Table C.6 indicates that Australia Post's reliability in delivering mail on time has declined slightly in recent years. This has been attributed largely to saturation of processing capacity in New South Wales and Victoria and congestion at the Sydney's Kingsford Smith Airport (AP 1996). Australia Post has since invested in new sorting equipment to alleviate the constraints on processing capacity.

Table C.6: Australia Post's reliability of delivery, 1991-1996

Year ended 30 June	1991	1992	1993	1994	1995	1996
Mail volume (million articles)	3 215	3 265	3 416	3 611	3 828	4 047
Delivery within advertised time (per cent)	94	96	92	93	94	93
Delivery within advertised time or one day later (per cent)	99	100	98	98	99	99

Source: SGNPMGTE (1997).

C.2 Comparison with overseas postal providers

Comparison of Australia Post's performance with other postal service providers can provide some insight into the scope for further improvement. This may enable a better assessment of the extent to which further efficiency gains exist for Australia's postal system.

It is important to recognise a number of issues in making international comparisons. First, significant differences in regulatory and institutional arrangements for post amongst countries make comparisons somewhat difficult. Second, the international comparisons tend to be based on publicly available

indicators which have in some cases not been consistently developed and applied to each postal system. Third, the results of this exercise generally do not provide an explanation of the underlying reasons for good or poor performance.

Australia Post has argued that its performance is world best. It has made this assessment on the basis of comparisons of its own performance with a limited number of countries and a limited number of performance indicators (AP 1997).

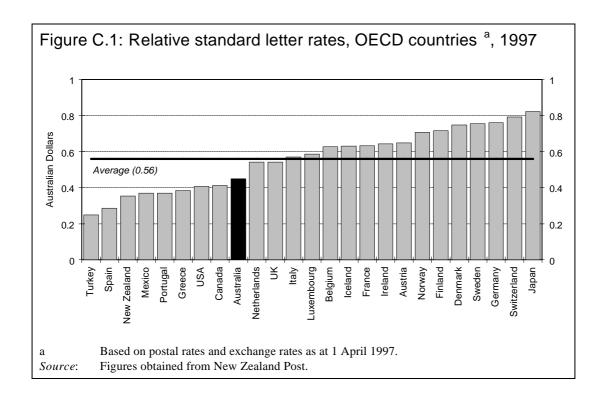
In 1995-96, Australia Post participated in international benchmarking studies with postal operators in Denmark, Finland, France, the Netherlands, Sweden and the United Kingdom (AP 1996). The studies compared the unit cost of processes in the domestic letter service, administrative overhead costs and processes used to assess customer satisfaction. Australia Post (AP 1996) indicated that the unpublished results from these studies confirm its high standing in the international postal industry.

The remainder of this section compares the performance of Australia Post against some overseas postal service providers using a number of different performance measures.

Standard letter rates

Comparison of standard letter rates between countries is complicated by the varying definitions applied to a standard letter. Figure C.1 indicates that the Australian standard letter rate of 45 cents is less than the average when compared with a range of OECD countries.

In Australia, competitors must charge at least four times the standard letter rate. Some of the countries with lower standard letter rates than Australia also have lower competition thresholds, based either on a multiple of the standard letter rate or a specific price. For example, in New Zealand the price threshold is currently NZ\$0.80 (equivalent to less than two times the standard letter rate) whereas in Canada it is three times the standard letter rate. The United Kingdom applies a £1 threshold which is currently equivalent to four times the first class letter rate. However, in Germany and the Netherlands the threshold is currently equivalent to at least ten times the standard letter rate.



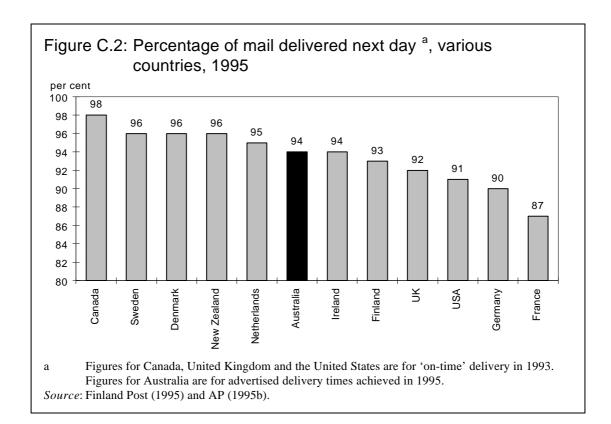
Frequency of delivery

Australia Post generally provides between one and five or more deliveries per week to all delivery points in Australia. Over 98 per cent of all delivery points receive five or more deliveries (although Australia Post does not identify the percentage of delivery points receiving more than five deliveries) (AP 1996).

Some other countries are required to provide a six day delivery. For example, New Zealand Post has agreed with the New Zealand Government to provide a six day delivery to more than 95 per cent of delivery points, and 99.88 per cent of delivery points receive more than five or six day deliveries. Similarly, postal operators in Denmark, Finland, France, Germany, and the United States are required to provide deliveries six days a week. Royal Mail delivers mail six days a week in the United Kingdom and twice a day in some parts.

Speed of first class letter delivery

Australia Post's standard delivery times are longer than those in many other countries which offer next day delivery. However, longer delivery times for postal services can be expected where the size of the network is larger including remote and rural areas with low population densities and where the number of mail items being processed by the postal service providers is greater.



Despite allowing for longer delivery times, Australia Post still only delivers 93 per cent of its mail as per its internally set advertised standards. International comparisons show that countries with similar mail volumes such as Denmark, Ireland, the Netherlands and Sweden, although smaller in geography, all achieve greater rates of next day delivery (see figure C.2).

Table C.7: Postal mail volume and population density, various countries

Country	Mail volume (billion articles)	Mail items (per person per year)	Population density (persons per square mile)
Australia	3.8	213	6
Canada	11.5	414	7
Finland	1.9	380	38
France	24.4	424	274
Germany	19.5	242	585
New Zealand	0.8	235	33
Sweden	4.6	529	50
The Netherlands	6.1	396	962
United Kingdom	18.0	311	623
United States	177.1	686	71

Source: Sutton and Ofei-Mensah (1996).

Whilst Australia Post operates a geographically large postal network with low population densities, the mail volume is significantly less than that of some countries operating a next day delivery service (see table C.7).

Access to postal outlets and delivery points

In recent years, many countries have reduced the number of post offices and official postal agencies in favour of alternative means of providing services such as private stamp vendors and vending machines. This has prompted some governments to limit the number of post office closures to ensure that access to services is not compromised. For example, in Canada the high rate of post office density is likely to reflect the Government's moratorium on post office closures.

In 1995, Australia Post operated approximately 2.2 post offices and agencies per 10 000 residents. This is comparable with a number of other countries (see figure C.3). This level of post office density in Australia is largely due to fewer post offices and agencies including community mail agencies in rural and remote areas.

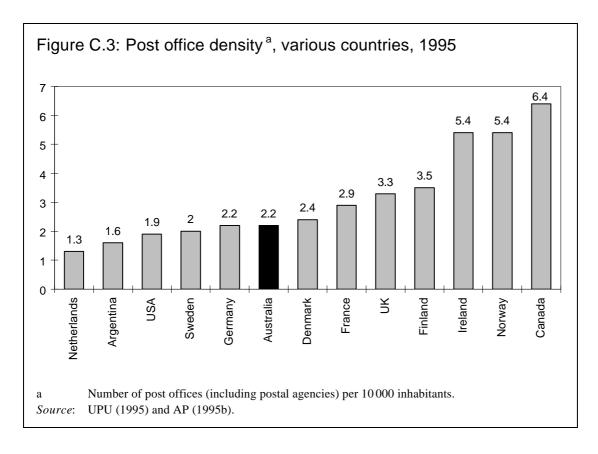


Table C.8 indicates that Australia's access to delivery points per person is comparable with a number of other countries, although it is rather low when compared to delivery points per square kilometre. This may be largely attributable to Australia's large geographic area and the tendency for the population to be predominantly located around cities and urban areas. However, the United States appears to have a very high delivery point density per head of population (AP 1995b). In 1995-96, Australia Post's number of delivery points had increased to 7.9 million (AP 1996).

Table C.8: Access to delivery points, various countries, 1993

Country	Delivery points (millions)	Delivery points/ square km	Delivery points/ 10 000 people
Australia	7.3	0.9	412
Canada	12.0	1.2	424
New Zealand	1.4	5.2	399
United Kingdom	24.5	100.0	421
United States	120.0	12.8	468

Source: AP (1995b).

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