



## Australia Post's Response to Issues Paper

18 September 2009

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# 1. Introduction

This document has been prepared by Australia Post in response to the Australian Competition and Consumer Commission's (ACCC)'s Issues Paper of 20 August 2009.

This document is provided for the benefit of the ACCC, in considering Australia Post's draft notification; it either reinforces or supplements information contained within Australia Post's draft notification.

Australia Post will review the public submissions that the ACCC receive and may provide a further document to the ACCC that addresses any specific issues that are raised.

## 2. Scope and duration of Australia Post's 2009 draft price notification

The ACCC seeks comments on the scope and duration of Australia Post's 2009 draft price notification.

- Does the information about Australia Post's intention to increase the prices of its reserved letter services in 2011/12 provide certainty to customers about future prices for reserved services?
- One option available to the ACCC is to consider the need for price notifications over the period 2010/11 to 2011/12 in its assessment of Australia Post's 2009 proposal.

In light of this option, what are your views on:

- the appropriate sharing of volume risk (i.e. the extent to which reserved letter volumes vary from those forecast in this notification) between Australia Post and its key customers;
- whether Australia Post should be rewarded for reducing its costs below the ACCC's forecasts in future price notifications;
- if the 2009 model is used to assess future price notifications, how should variances between actuals and forecasts be treated?
- what would constitute a 'significant' variance?

The draft notification proposes changes to domestic reserved letter prices in early 2010. In support of these proposed changes, we have provided modelling (consistent with the ACCC's request) that has identified that a further increase may be required in the third year (2011/12). However, as noted in the draft notification, we believe that we would need to undertake an appropriate assessment of the market environment before finalising any further proposals (ie changes beyond those proposed in early 2010).

As noted in the financial modelling contained within our draft notification, the proposed prices substantially under-recover the sum of the efficient costs of providing the domestic reserved letter service plus an appropriate rate of return. We consider that proposing prices at this level was reasonable in the current circumstances and reflective of the current global economic environment. Any variation in volume or cost forecasts is highly unlikely to substantially close the gap. However, as noted in Section 9, the under recovery does provide an incentive for us to continue to minimise costs by continuing our efforts to pursue efficiencies.

### 3. Australia Post's forecast reserved letter volumes

The ACCC seeks comments on Australia Post's forecasts of reserved mail volumes for the period 2009/10 to 2011/12.

- Do you think Australia Post should seek price increases in the context of declining volumes? What impact do you consider increases in the price of domestic reserved letter services will have on the demand for those services?
- Do you agree with Australia Post's volume forecasts by category of reserved letter service? Are these forecasts reflective of the long-term trend of demand for Australia Post's mail services and your expectations about future usage?
- What impact do you consider the decline in current economic activity will have on volumes of Australia Post's reserved services? If there is an impact, how long do you expect that this will persist?
- Do you think that the long-term trend toward consolidation, rationalisation, and substitution will be affected by the recent downturn in economic conditions?

Domestic reserved letter demand is covered in Section 7 and Appendix 9 of the draft notification.

At a high level, the forecasts reflect an average rate of decline of 2.3% per annum over the next three years which compares with an average growth of 0.3% since 2000 and a forecast decline of 3.8% in 2008/09. The volume forecasts are also consistent with what other postal administrations are expecting. We would also note that based on the conditions of the first two months of 2009/10 volumes are currently trading below the forecast level – closer to the declines experienced in the last six months of 2008/09.

The forecasts for the three key segments are consistent with recent trends;

- Transactional – forecast to decline by an average of 3.4% per annum over the next three years. While transactional mail is being impacted at the moment by the general business environment, the existing pressures from substitution and consolidation & rationalisation activities is expected to increase in the future. Within the OECD, countries typically have reported transactional mail has been declining, with pressure – in particular from substitution – expected to increase.
- Promotional – forecast to increase by an average of 2.1% per annum over the next three years. Advertising media spend generally is being impacted in the current business environment and promotional mail is no exception. However, Australia Post believes that promotional mail will experience a moderate level of growth.
- Social – forecast to decline by an average of 4.1% per annum over the next three years. The decline (slightly higher than recent years, which was around 3%) is consistent with the long term trend of lower usage of social mail.

We would also note that the proposed price increases are below that which the ACCC modelling would consider to be the maximum allowable. In the current environment we believe that the proposed prices are appropriate and that we are not seeking to offset the impact of any volume decline through price increases.

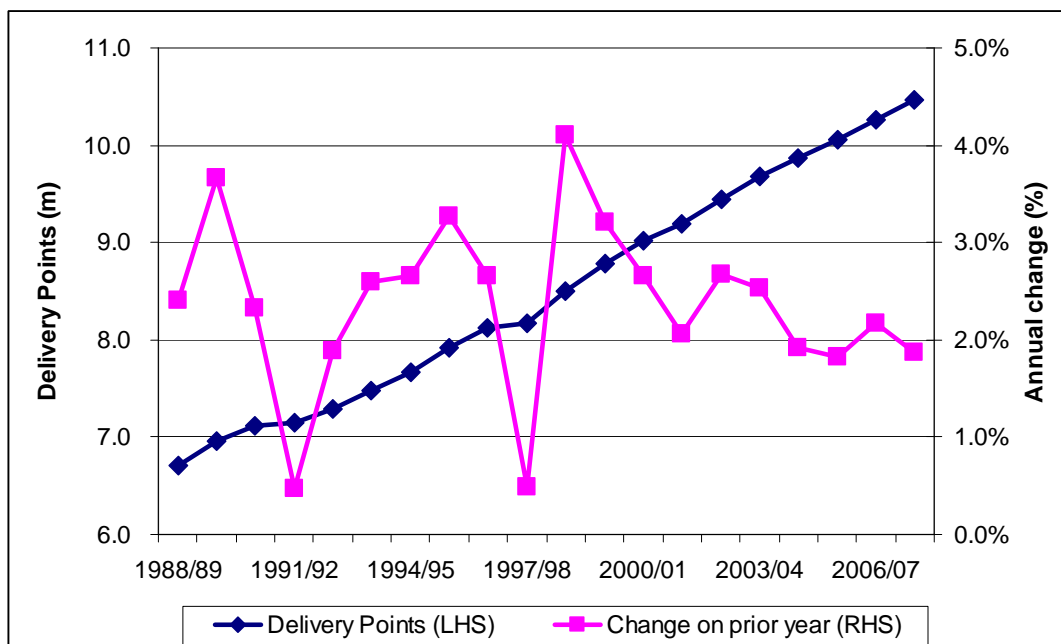
## 4. Community service obligations

The ACCC seeks comments on the impact of Australia Post's CSOs on the costs of providing its reserved letter services.

- What are the key growth areas in Australia Post's delivery network? Do you agree with Australia Post's forecast increase in delivery points?

Delivery point growth is based on an extrapolation of growth in delivery points over the last 20 years.

- At the end of 1987/88 there were 6.6m delivery points across Australia.
- At the end of 2007/08 there were 10.5m
  - o Average annual growth rate of 2.4% over the last 20 years;
  - o Average annual growth rate of 2.5% over the last 10 years
- We have used 2% as a more conservative number and closer to the average over the past five years



The ACCC seeks comments on the impact of Australia Post's CSOs on the costs of providing its reserved letter services.

- To what extent do you consider that the costs of providing Australia Post's letter services are predominantly fixed and invariant to volume declines?
  - o Does this vary with changes in volume depend on the particular network function, i.e. sales and acceptance, processing, transport and delivery? Are there elements of these functions where costs are more variant with changes in volumes?

In providing a letter service, Australia Post is required to meet a number of performance standards including some (that relate to the frequency, speed or accuracy of mail delivery and the availability and accessibility of mail lodgement points) which are prescribed pursuant to the Australian Postal Corporation Act, 1989 (APC Act).

Meeting these performance standards requires our network to operate at a dependable level regardless of daily, weekly or seasonal variations in volume.

Potential cost variability with changes in letter volume depends on the network function and the activities within it. Furthermore, any large scale changes need to be appropriately managed to ensure there is no degradation to the performance standards or other commitments, such as our EBA (which prescribes employment arrangements and conditions).

An overview of each function is as follows:

Sales and Acceptance – We are required to maintain a network of at least 4,000 outlets from which postal products or services may be purchased. The 4,000 outlets must include at least 2,500 in rural or remote locations and there are additional obligations involving proximity of residences to a retail outlet.

At 30 June 2008:

- There were 1,892 outlets in metropolitan areas and 2,561 in rural and remote locations.
- 831 outlets were Corporate and 3,622 were Licensed or Other (eg Community Postal Agents and Franchised Post Offices).

Total outlet numbers are slightly down on 2001/02 numbers (by less than one percent) which is attributable to a decrease in corporate outlets by almost 6%.

This trend of a decrease in corporate outlets and an increase in licensed outlets has led to a slightly more variable cost base in the Sales & Acceptance function (as the sale transaction costs of licensed outlets are generally based on commission).

Within corporate outlets there is limited cost variability with letter volumes. Most of the activity is related to the acceptance and processing of mail lodgements which are unlikely to vary in number with a decline in volume eg a lodgement may contain less letters but it is still one lodgement. Based on analysis of the retail network we expect that there will be further conversions to licensed or franchised outlets over the next three years.

Since the late 1990s there has been an increase in the use of part time staff to match staffing with peak activity times during the day. These peak windows (typically later in the day) are likely to remain substantially unchanged and, as mentioned above, it is likely lodgements will be smaller in size rather than fewer in number. Furthermore, the increased use of part time staff has meant that there is very little overtime in corporate outlets- which would generally be a source of cost variability.

In summary, the Sales & Acceptance function offers little scope for further cost variability following letter volume declines in the short to medium term.

Processing – Processing costs have elements of variability with volume, but within constraints that include:

- The level of variability at the individual product, facility and network path level – unless the volume decline is stable and predictable through time, the removal of resources puts service quality at significant risk.
- The scale of the volume decline – since volume reductions that lead to decrements of machine or labour time measured in minutes per day are extremely difficult to realise.

Typically, some labour intensive processing functions eg video coding and manual sorting (for non machineable or rejected letters) will be more variable to volume than other types of processing activities.

There are three main types of mail processing equipment that is used in mail centres; Culler Facer Cancellers (CFC), Multi Line Optical Character Readers (MLOCR), and Barcode Sorters (BCS). The impact of volume variability on the equipment is described below.

The number of CFC machines required to be active to cull and cancel SPB mail will depend on mail volumes and the time available within the processing window to complete the work. Stepped reductions in volume will allow some CFCs to be de-activated, but in the short term, labour costs will only be reduced by the extent of flexible hours (ie overtime and casual hours), and asset, maintenance, accommodation and other facility costs will be largely unchanged.

A similar principle applies to other processing equipment (eg MLOCRs), where the machines hours which drive the labour time of the machine crew, will reduce if the volume to be processed reduces. But the variation in crew labour time is not proportionate, since most processing equipment requires the crew to undertake a range of machine “set up” and “clear down” activities irrespective of the volumes processed.

Moreover, all BCS machines, which sort small letters to the final depth of sort, must operate to fulfil the national network sort plan irrespective of volume. In this case, reduced volumes will reduce the run time on certain machines, but provide very limited opportunity for labour saving unless sustained over an extended period.



Mail is moved within a mail centre using various devices such as trays and ULDs (palletised devices for moving letter trays) where resourcing is driven more by the number of ULDs / containers than letter volumes. Other facility functions – eg maintenance, supervisory & management, supervisory functions are also relatively invariant to volume

**Transport** - Generally, transport costs are driven by the requirement to transport mail between network nodes to meet the service standards, even if, for example, the vehicle is not 100% full. Vehicle and labour hours will be driven by distance travelled, frequency, and the number of network nodes; variation in load or weight creates a negligible cost difference in the short term.

Where contract transport is used (as in some road line haul routes with minimal back loads for Australia Post vehicles), costs for these services will be stepped in line with ULD numbers, the destination and distance travelled. In such cases, a 10% change in ULD weight for example, will have no impact on cost.

In the case of air transport, contracts are maintained with airlines for a minimum amount of space on certain routes. Freight costs are generally based on weight and distance, but air freight costs will not generally fall with volume until contracts are renegotiated.

**Delivery** – Considerations similar to those in the Processing function above apply also in Delivery.

- Indoor operations – indoor functions can be broken into two types of activities;
  - o Processing and sorting activities of individual mail items eg round (primary) sorting and street / sequence sorting (Vsort).
  - o Functional or administrative activities – which don't directly relate to the volume of mail – eg bike checks, weather protection / preparation, etc.

While the first type tends to be variable with volume, the challenge is to actually realise savings of a few minutes per person per day. Realising savings can be slow and requires a structured program – which is an element of the FDD program.

- Outdoor operations – offer little or no scope for volume-based cost variability. A fall in volume is likely to result in a lower average number of letters per delivery point which means the postie still needs to deliver to the whole delivery round but deliver fewer letters to each address.

As mentioned in the draft notification, savings from a reduction in the use of indoor labour can be realised through a variety of adjustments, that include;

- reduced overtime, part time additional hours or natural attrition;
- later shift commencement times;
- rebalancing full time delivery work, including having a postie prepare two or more rounds for delivery and/or extending PDO work to include some primary sorting; and
- employing part time delivery only resources.

## 5. Productivity

The ACCC seeks comments on Australia Post's forecasted productivity performance, its international benchmarking study and its views on the allocation of its past productivity gains between its stakeholders.

- To what extent should the ACCC have regard to Australia Post's past and forecast productivity performance in assessing the efficiency of the costs that it is seeking to recover from consumers through prices?
- Are the postal operators which Australia Post's productivity has been benchmarked against appropriate, or are there substantial differences in the nature of the selected postal operators operations? Should other international postal operators have been included in Australia Post's benchmarking study? If so, on what basis?
- Are the adjustments made to the international benchmarking study to account for mail density and customer density appropriate? Are there any other significant differences between the identified international postal operators that should be incorporated into the study?
- Australia Post's productivity dividend study indicates that the productivity gains that it has made over the period 1998 to 2009 have been captured by consumers and labour (contractors and staff). Do you think that this is appropriate?

In addition to our comments below, we have also asked Economic Insights (who we commissioned to prepare the three productivity reports) whether they had any comments – Economic Insights' comments are shown at Attachment 1.

As noted in Section 9 of the draft notification the circumstances relevant to Australia Post are that:

- volumes in the domestic reserved letter service declined last year (2008/09) and are expected to continue to decline, albeit at a lower rate, over the next three years;
- no organisation has a resource elasticity of 100%, ie can completely offset volume losses by equivalent cuts in resources. In Australia Post's case the trucks need to travel just as far just as frequently, and posties have to cover the same round distance and delivery points regardless of volume losses. In other words, a great deal of resource usage in any corporation can be fairly volume invariant. In our case, the community service obligations and the associated prescribed performance standards further fix the resource base; and
- in these circumstances, no matter how productivity is measured, eg on a total factor (TFP) basis, the measured productivity must arithmetically fall, even though the organisation has realised all of the cost savings available to it.

In our case, an additional non-volume factor in our TFP outlook is the fact that we must increase our capex programme to replace ageing IT infrastructure and implement efficiency and other required network initiatives such as FDD. This will add to the capital resource levels over time.

For these reasons, the draft notification examines the cost base for its potential to be managed downward. In the remainder of Section 9, the draft notification explains the various initiatives undertaken and their results. Key initiatives implemented to date include:

- sustained reductions in labour numbers against a no-change base, despite growth in non-reserved parts of the business, and despite the additional resource demands imposed by the continued increase in the number delivery points (around 200,000 per annum); and
- substantial outsourcing of Retail, Transport and Delivery operations to contract operations.

As noted in the draft notification, labour and contractor costs make up over 70% of Australia Post's cost base.

- Are the postal operators which Australia Post's productivity has been benchmarked against appropriate, or are there substantial differences in the nature of the selected postal operators operations? Should other international postal operators have been included in Australia Post's benchmarking study? If so, on what basis?

Benchmarking studies provide a valuable source of information in reviewing the relative performance of businesses within the same industry. It is our intent to update this study in the future, although we would note that benchmarking studies of this type – a broader user base across different countries – are generally difficult to undertake as each participant can report upon their business differently. This point is discussed in Economic Insight's comments at Attachment 1.

In undertaking this study we approached nine postal operators (all in developed countries) – seven accepted and two declined for confidentiality reasons; which is a factor that may prohibit other participants in the future. Notwithstanding this we believe that the operators that participated represented a broad cross section that was not unreasonable for comparative purposes; eg;

- o Canada, similar geographic challenge – large country with low population density;
- o New Zealand; close neighbour but with a higher population density;
- o United States; significant operator in the world postal business; and
- o European; typically smaller geographic countries with high population density.

The mix of participants represented a diverse enough picture of postal operators worldwide which provided us with a sense of our performance when compared with other advanced countries facing similar customer and market challenges.

## 6. Australia Post's financial model

The ACCC seeks comments on the efficiency of the operating costs outlined by Australia Post in its draft price notification.

- What are your views on the efficiency of Australia Post's operating costs (including labour costs, contractor costs, accommodation and depreciation)?
- What factors do you consider will affect Australia Post's cost structure over time?

The main assumptions, which are detailed in Section 9 of the draft notification, are:

- wage escalation in line with EBA7 and then assumed growth thereafter;
- rising superannuation expense from the very low levels of the past 2-3 years;
- further declines in labour resources (FTEs);
- continued growth in delivery points of around 200,000 per annum;
- rising depreciation expenses reflecting the resumption of significant capital investment in the next three years;
- general non-labour cost inflation of 3% in 2009/10 followed by two years of 2.5% (2010/11-2011/12);
- payments to licensees, franchisees and community postal agents in line with their payment packages; and
- miscellaneous costs to rise broadly in line with inflation, ie little or no volume growth.

## 7.Future Delivery Design program

The ACCC seeks comments on Australia Post's proposed FDD program.

Are the key elements of Australia Post's FDD program appropriate? Are there other projects that Australia Post could implement to reduce its costs and improve the efficiency by which it provides reserved letter services?

The delivery function is a major component of our network. It comprises over 7,600 delivery rounds (of which around 84% are motorcycle rounds); 265 delivery centres; over 12,000 FTEs; and services some 10.5m delivery points across Australia.

As noted in the draft notification, the major challenge in the delivery function is to ensure an ongoing delivery capability while containing costs and maintaining service performance standards (the frequency, speed and accuracy of delivery), in an environment of declining letter volumes, and where the delivery network continues to expand (by over 200,000 delivery points per annum).

The FDD key elements entail technology, process and workforce change to improve flexibility in the delivery network and create savings.

Key elements as set down in the draft notification include:

- improved address recognition software for our Multi Line Optical Character Reader (MLOCR) processing equipment to significantly (> 10%) raise the proportion of machineable small letter addresses that can be read and sorted to delivery round (or round sections);
- automated processing of small letters to street delivery sequence using the existing Barcode Sorter (BCS) machines as well as the acquisition of new equipment;
- reconfiguring indoor and outdoor delivery operations in order to achieve the savings from the reduction in manual sorting and sequencing in delivery centres due to the uptake of automated letter sequencing;
- the development of delivery rounds where the round commencement and cessation is remote from the DC, creating more opportunities for part time street delivery postie roles that are less dependent on motorcycles or new recruits with motorcycle licenses; and
- the deployment of new delivery modes (electric buggies, bikes and tricycles) to assist the outdoor postie roles, eliminate motorcycle accident risks, appeal to a wider job market for new recruits, and expand the postie's carrying capacity.

There is no 'one size fits all' approach in the implementation of FDD across the network. FDD provides an effective framework for extracting cost savings and efficiency gains across local delivery networks that have considerable variation in their geography, mail types, and staff mix, without threatening service quality.

This overall approach is similar to the approach adopted by overseas postal authorities in response to delivery cost pressures, declining mail volumes and fixed delivery commitments, and the design of FDD incorporates a number of features drawn from overseas experience. However FDD is also tailored to the strengths of our network, which since the FuturePOST investment in the late 1990s, has been reengineered to achieve an improved performance at low capital cost through a range of process innovations.

FDD is a significant program that we are pursuing that will contain cost, but there are a range of other initiatives that are being developed to drive efficiencies across the network including:

- conversion of retail outlets to licensee or franchise operations;
- resource and production management approaches to match resources to the work required in retail outlets and mail centres;
- reducing high cost air uplift and using lower cost road transport as far as service performance standards permit;
- other transport efficiency initiatives – route optimisation, fuel efficiency; and
- improved administration of contract mail services.

Australia Post has an established record of process efficiency and improved service performance, over the past 10 years. Our record of corporate profitability growth, customer price stability and robust service performance has only been sustainable due to our strong cost management culture.

[Do you consider the pace of Australia Post’s implementation of technological changes \(such as enhanced OCR software and small letters sequencing\) is consistent with other postal operators overseas?](#)

We have put forward a number of points in the draft notification:

1. Australia Post has a track record of maintaining the pace of successful technology change;
2. technology plays a role when undertaking end to end process improvement to lift business performance (technology alone will not improve business performance); and
3. technology change must be viewed in the context of the different business environments and challenges faced by postal operators – as the technology solutions will differ.

Each of these is discussed in turn:

**Australia Post has a track record of maintaining the pace of successful technology change; since the late 1990s we have fundamentally restructured the letters network with new technology, including;**

- 54 MLOCs and associated video coding systems including one remote video coding site, plus 57 BCS machines operating to a national sort plan, 2 major tray management systems at its automated facilities in Dandenong and Strathfield;
- rolled out 8 automated large letter processing machines with associated video coding systems; and
- a major upgrade of its small letters recognition software and OCR platform.

In addition to this we have also;

- restructured the national parcels network with major new Large parcels sortation equipment;
- rolled out hand held scanners for parcel delivery contractors; and
- undertaken a major upgrade of the postal systems in our international mail facilities in line with UPU protocols.

**Technology plays a role when undertaking end to end process improvement to lift business performance (technology alone will not improve business performance):**

- Australia Post has pursued technology as a tool and enabler to improve the performance of its end to end business processes, rather than pursuing new technology as an end in itself.
- The implementation of Vsort frames in Delivery Centres and motor cycles for outdoor delivery are examples of relatively simple technologies that nevertheless generated high benefits in the context of our business processes.
- Technology is not a sufficient condition for enhanced business performance – our approach also emphasises other complementary elements such as workforce engagement, organisation capability and change management.
- Major technology and network change in Australia Post has been undertaken with a high level of staff consultation and engagement, which resulted in the large scale change being executed with minimal industrial disruption, delay or reworking of the technology solutions.
- Technology changes not only benefit Australia Post but also customers eg lower prices for barcoded PreSort Letters and improved delivery performance. Therefore, technology changes must also be aligned to the needs of customers and their willingness to take up opportunities provided by such technology.

**Technology change must be viewed in the context of the different business environments and challenges faced by postal operators – as the technology solutions will differ.**

Comparison with other postal authorities is difficult because of the particular characteristics of the geographic and market environment in which each operates. For instance, compared to the United States:

- the average number of mail items per delivery point in Australia is less than 40% of that of the United States – 496 per annum compared to 1,360 per annum;
- the profile of mail items carried differs – in the US there is a significant quantity of ‘large’ sized items; and
- in Australia there are around 10.5 million delivery points compared to 150 million delivery points in the US.

Differences in scale, product mix, and business strategy inevitably drive differences in technology adoption. Australia Post does not have the economies of scale and density enjoyed by the USPS, nor does it have the leverage with equipment vendors to initiate major new technology design with overseas vendors. However it has a track record in adopting and tailoring overseas technology solutions to Australian conditions in a measured approach that has driven business benefit.

By way of conclusion, Australia Post's TFP is already the highest of the countries in the Economic Insights' study.

**Will the FDD be effective in constraining growth in Australia Post's operating expenditure over time?**

As detailed in Appendix 17 of the draft notification, our FDD Program represents the core focus of investment and process reengineering in the network over the next 5 years. The primary objective of the FDD Program is to ensure business continuity through an ongoing delivery capability. Our challenge is to provide this ongoing delivery capability while containing the growth in operating costs driven by the requirement to operate and maintain a network that increases by an additional 200,000 delivery points per annum.

Over the period of the draft notification, initiatives within the FDD Program will realise around 600 FTE savings (a figure that is offset by delivery point growth).



## 8. Capital expenditure

The ACCC would appreciate views on the level and composition of proposed capital expenditure for the domestic reserved letter service.

Is Australia Post's approach to funding its forecast capital expenditure appropriate?

The capex programme is discussed in Section 10 of the draft notification; with section 10.7 referring to capex within the domestic reserved letter service.

An important aspect of the way that capex is planned and managed within Australia Post is that there are not reserved and non-reserved components of the investment programme. Capex projects for some non-reserved products and services are clearly solely non-reserved in application, but all capex used by reserved services is also shared by non-reserved services and has to be allocated. Even the proposed future investment in sequencing machines (predominantly small letter sized items) will be shared between reserved and non-reserved letters.

Traditionally, we fund the total capex outlay from our cash flows without resorting to external funding, a practice that we understand would be the most common method of funding capex by corporations.

Companies planning for substantial acquisitions might resort to capital markets for these one-off outlays, but regular or even just medium-term capital market usage for capex purposes would be unusual.

In Australia Post's case, our annual ratings review with Standard & Poor's has just commenced and we would need to wait for the outcome of that review before considering any change to standard funding practices as ratings outcomes can have a significant impact on capital market funding costs.

Notwithstanding this, if there was a clear need to make unavoidable investments not currently included in the three-year capex programme, then we would examine all options to accommodate such investments.

## 9. Weighted average cost of capital

The ACCC seeks comments on Australia Post's return on capital.

- Are Australia Post's WACC parameters appropriate?
- A benchmarking approach is ordinarily taken in estimating the equity beta parameter. Which domestic and international firms are most comparable to Australia Post's operations and should be used in benchmarking this parameter?

Australia Post always seeks independent expert advice in setting its weighted average cost of capital.

The most recent advice was obtained in June 2009 from Value Adviser Associates and this independent advice was adopted in full in the draft notification (section 12 and Appendix 18). A copy of the full report has also been provided to the ACCC.

# 10. Structure of Australia Post's proposed price increases

The ACCC seeks comments on the structure of Australia Post's proposed price increases.

- Are the letter pricing principles that Australia Post has had regard to in proposing price increases appropriate?
- Are the margins proposed by Australia Post between its Pre Sort and other reserved letters sufficient?

The letter pricing principles provide a balanced approach to the determination of letter prices. They recognise our community service obligation, but also the need to ensure the pricing structure reflects commercial and market needs – which include the recognition that bulk interconnection prices, in addition to requirements of Australia Post's Act, reflect the level of work saved by Australia Post through work carried out by customers.

We believe that:

- price margins are appropriate; and
- PreSort prices;
  - o encourage the adoption of machine efficient formats and reflect the lower processing costs; and
    - The price differences are greater than the costs avoided, but are considered appropriate to ensure they encourage machine efficient formats and the adoption of quality tools (eg. database accuracy and maintenance)
  - o for the purposes of bulk interconnection, provide a price reduction for interstate movement that is greater than the avoidable cost.

## **Economic Insights' Response to ACCC Issues Paper Productivity Questions**

This note provides responses to the four questions in relation to productivity issues raised in the ACCC (2009) Issues Paper on Australia Post's draft price notification.

### **1. To what extent should the ACCC have regard to Australia Post's past and forecast productivity performance in assessing the efficiency of the costs that it is seeking to recover from consumers through prices?**

Productivity growth and productivity levels are both important determinants of the prices that a regulated business should be allowed to charge. We would normally expect output prices to increase by the rate of growth in input prices less the rate of productivity growth. That is, producers will pass on the rate of input price growth to consumers less the extent to which they have been able to offset this through productivity improvements (ie the extent to which they now require fewer units of input to produce a given quantity of output). In the case of price cap regulation of network industries, the change in output prices would be 'capped' as follows:

$$(1) \quad \Delta P = \Delta W - X$$

where  $\Delta$  represents the proportional change in a variable,  $P$  is the maximum allowed output price,  $W$  is a price index taken to approximate changes in the firm's input prices and  $X$  is the estimated TFP change. However, complete input price information is often not readily or objectively available. A commonly used alternative is to choose a generally available price index such as the consumer price index.

Based on the seminal contribution of Bernstein and Sappington (1999) and as outlined in Lawrence (2003), traditional productivity-based regulation has typically been implemented using CPI-X price caps where, as the result of choosing the CPI to index costs, the formula for the  $X$  factor takes on the following 'differential of a differential' form:

$$(2) \quad X \equiv [\Delta TFP - \Delta TFP_E] - [\Delta W - \Delta W_E] + \Delta \pi$$

where the  $E$  subscript refers to corresponding variables for the economy as a whole and  $\Delta \pi$  is a profit adjustment term to correct for excess or deficient profits. It is necessary to introduce the economy-wide terms in this case because the CPI is effectively an output price index for the economy (and not the input price index for the firm as required in equation (1)).

What this formula tells us is that the  $X$  factor can effectively be decomposed into three terms. The first differential term takes the difference between the firm's TFP growth and that for the economy as a whole while the second differential term takes the difference between the firm's input prices and those for the economy as whole. The third terms allows for price changes to restore either excess or low profitability to reasonable levels. Thus, if the regulated industry has the same TFP growth as the economy as a whole and the same rate of input price increase as the economy as a whole then the  $X$  factor in this case is zero (assuming there is no need to adjust for excess or deficient profits). If the regulated industry has a higher TFP growth than the economy then  $X$  is positive, all else equal, and the rate of allowed price increase for the

industry will be less than the CPI. Conversely, if the regulated industry has a higher rate of input price increase than the economy as a whole then X will be negative, all else equal, and the rate of allowed price increase will be higher than the CPI.

So, to the extent that the firm is facing productivity growth going forward which will be less than that for the economy as a whole then, all else equal, there will be a case for allowing a real price increase for the firm. Similarly, if the firm is facing input price growth which is higher than that for the economy as a whole then there will also be a case for a real price increase.

What Economic Insights (2009a) tells us in terms of Australia Post's reserved services productivity growth is that it has been higher than that for the economy over the period 1999 to 2008 but that reserved service productivity growth reversed markedly in 2009 and is forecast to continue to decline over the next three years. This is partly the result of the economic downturn but, importantly, also because of technological change which is reducing the demand for traditional postal services. All else equal, this would indicate there is likely to be a case for real price increases for the reserved services.

Economic Insights (2009) also indicates that Australia Post has faced sharp increases in the price of some of its key inputs such as mail delivery contractor services. If these price increases continue and Australia Post's reserved services overall input price growth is higher than that for the economy then there will also be a case for real price increases for the reserved services, all else equal.

The above analysis is based on two key assumptions. The first is that Australia Post was earning the opportunity cost on its reserved services capital at the start of the next regulatory period. If it is not then would be a case for real prices increases to restore its rate of return to a reasonable level (ie the profit adjustment term in equation (2) would be non-zero). The second is that Australia Post's reserved services are being operated at reasonable levels of efficiency given the operating environment it faces. If Australia Post's productivity levels were lower than those of comparable postal services then would be less of a case for real price increases (since Australia Post could then be expected to achieve higher productivity growth in future as it removed inefficiencies). This issue is addressed in the answer to the following question.

**2. Are the postal operators which Australia Post's productivity has been benchmarked against appropriate, or are there substantial differences in the nature of the selected postal operators operations? Should other international postal operators have been included in Australia Post's benchmarking study? If so, on what basis?**

To examine Australia Post's productivity levels relative to other postal services, Economic Insights (2009b) benchmarked Australia Post's postal service productivity levels against those of Canada, Denmark, Italy, Japan, New Zealand and the United States. The benchmarking study was undertaken using a detailed survey approach using data confidential to each firm rather than using publicly available 'off the shelf' data.

In undertaking benchmarking studies there is a trade-off between including a wide range of countries but with little scope to ensure similarity of data coverage versus going with a smaller group and being able to obtain better quality data. Including a wide range of countries

usually necessitates the use of ‘off the shelf’ data from international organisations such as the Universal Postal Union. These data are usually relatively limited in coverage and may not have been supplied using a common set of definitions and may cover different ranges of activities between countries. The ability of the analyst to ascertain the quality and consistency of the ‘off the shelf’ data is usually limited and so studies using this approach are often prone to the ‘garbage in, garbage out’ effect.

An examination of Universal Postal Union data confirmed that the level of detail provided was clearly inadequate for undertaking a robust productivity benchmarking study. Review of the annual reports of the postal service companies also confirmed that information in annual reports would not be sufficient to undertake such a study.

The alternative approach usually involves using a targeted survey to obtain detailed and consistent data from a smaller number of organisations. This provides greater scope for data quality control and ensuring consistency or ‘like-with-like’ coverage. Provided the smaller group contains businesses facing a representative range of conditions and includes some firms thought within the industry to be good performers then the smaller group approach will nearly always be preferable in terms of ensuring better data quality and hence more robust results.

Economic Insights (2009b) has adopted the targeted survey approach. It covers six overseas postal services and Australia Post which is a relatively ambitious undertaking for this type of study. The countries were chosen because they are all developed economies with well established national postal systems covering a range of small and large systems operating in a range of operating environments. Requests were also made to two other developed European postal systems but they were unwilling to participate because of concerns about data confidentiality.

Assuming that broadly similar business or engineering systems are being benchmarked, there are two further areas where comparability is an issue in undertaking benchmarking. The first relates to the comparability and quality of the data provided. The second relates to taking account of key operating environment differences.

In relation to the basic data, considerable effort was made to ensure that data were provided on a comparable basis. A structured, detailed questionnaire was sent to all postal companies with instructions in relation to definitions of specific variables. Follow up questions of clarification were sent following a comprehensive review of the data that were provided. Adjustments were made to the data to help ensure comparability. The adjustments in terms of specific variables largely related to adjustments to modify one-off unusual cost effects (eg to amortise pension cost adjustments, ensure all relevant costs were included, or to smooth accounting adjustments in relation to asset reclassifications or to remove the impact of investment properties). It would not have been possible to do these sorts of detailed adjustments with a larger sample based on publicly available data.

Postal companies can undertake a range of non-postal services such as payment processing, logistic services and banking. Two of the postal service companies had significant banking services but only one provided sufficient information to disaggregate the postal business. This meant that one postal company was considerably different to the others given the importance of banking in other business. However, other services (including banking for the one postal company where it could not be removed), were all defined under one output category with outputs being defined in constant price terms and this meant that it was still

valid to undertake comparative benchmarking for the sample of seven postal companies. However, the caveat is that one of seven postal companies had a greater reliance on non-postal business as an output but with the corresponding inputs to provide that service included in its cost structure. The results in terms of rankings of the businesses are still valid but recognising that one of the companies relies more than the others on non-postal business services.

Turning to business environment differences, as explained in the Economic Insights (2009b) benchmarking report, like other network industries, postal service productivity performance will be influenced by the operating environment conditions that each service faces, many of which will be beyond the control of management. To allow meaningful comparisons of performance, it is necessary to adjust for the most important operating environment conditions to put the services on a relatively even footing. Operating environment differences could include the extent to which the postal service is a statutory monopoly for parts of its business; whether and to what extent the postal service is restricted in the types and quality of services it is mandated to deliver, or the types and quantities of inputs it uses or from expanding into other business services, as well as the overall scale of operation, mandatory delivery standards and geographic features.

For postal services two of the most important operating environment differences are considered to be mail density (mail items per delivery point) and customer density (delivery points per kilometre of route length). Those services that have high mail density (ie a relatively large number of items delivered to each customer) and/or high customer density (ie a relatively large number of customers or delivery points per kilometre of route length) will have an advantage relative to those services with lower network densities. Mail and customer density variables are also likely to reflect the effect of other business environment variables such as whether the postal system has statutory monopoly rights as well as the impact of various scale, scope and geographic effects. Experience in benchmarking and analysing other network industries such as electricity and gas distribution systems and airlines has also confirmed the importance of adjusting for various density effects. Statistically-based adjustments were made for mail and customer density variables in the benchmarking study as summarized below in the response to question 3.

In some cases it is possible to adjust for business environment differences by adjusting the data directly, for example as was the case in removing banking services from one of the postal services. The other important data adjustment that was undertaken in the study was to remove unaddressed or saturation-advertising type mail from both the output side and the input side. As noted in the Economic Insights (2009b) report, in some countries unaddressed or saturation-advertising type mail was a major category while in others it was minimal. These differences mainly resulted from differences in institutional arrangements with this type of mail being delivered by competitor organisations in some countries but with competition for this type of mail being restricted to varying degrees in other countries. Given the broad range of treatment of this type of mail and its potential to distort output measures, in undertaking benchmarking across the postal services, an adjustment was made to outputs, revenues and costs to remove unaddressed or saturation-type mail to allow more like-with-like comparisons.

**3. Are the adjustments made to the international benchmarking study to account for mail density and customer density appropriate? Are there any other significant differences between the identified international postal operators that should be incorporated into the study?**

As explained in Economic Insights (2009b) mail density and customer density effects were adjusted for by using a technique known as two stage regression analysis. In the first stage productivity indexes are calculated. In the second stage of the analysis, these indexes are regressed against relevant variables that take account of key operating environment conditions – in this case mail density and customer density. The coefficients from the regression are then used to adjust for the differences in business environment variables and their impact on the productivity measure. This produces an adjusted TFP index that is based on all participants having the same mail density and customer density. The adjusted TFP index then allows a more like-with-like comparison of the businesses in order to provide a more reliable assessment of underlying efficiency.

Five services provided data that enabled adjustment for mail density only and four services provided data that enabled adjustment for both mail density and customer density. The density effects were found to be highly statistically significant and important in terms of their impacts on the relative rankings (for mail density in the sample of five postal systems and for customer density in the sample of four postal systems). These results provided support for the proposition that density effects are likely to be critical in explaining relative performance.

Although other business environment factors may be potentially important, data availability limited the scope to explore other factors. However, from an economic perspective the adjustments for unaddressed mail and mail and customer density are clearly important for ensuring like-with-like comparability. Furthermore it is considered that the density variables in particular are likely to capture many other legislated and underlying economic and physical factors that would affect productivity performance. From this perspective, it is considered that the main business environment differences have been sufficiently incorporated in the Economic Insights (2009b) report. Furthermore, it is unlikely to be practical to incorporate or adjust for some operating environment effects such as differences in delivery standards given the data it would be feasible to obtain.

In interpreting the results it is important to recognize that even when the unadjusted TFP results were used, Australia Post showed the most consistent improvement in TFP of the seven postal services reviewed and was ranked third overall with the unadjusted data. However, importantly, Australia Post improved its ranking when formal, statistically based adjustments were made for differences in mail and customer density. Australia Post improved its ranking from third out of five postal companies to second when adjustment was made for mail density alone, and from second out of four postal companies to first when adjustment was made for mail and customer density or customer density effects alone. It is considered that these conclusions are likely to be robust to taking account of other differences between the seven postal systems given the likely dominance of density effects.



**4. Australia Post's productivity dividend study indicates that the productivity gains that it has made over the period 1998 to 2009 have been captured by consumers and labour (contractors and staff). Do you think that this is appropriate?**

Economic Insights (2009c) shows that in 2002 Australia Post's reserved service real gross return to capital was \$303 million (expressed in 2009 prices). By 2009 the gross return to capital had fallen to \$107 million. The total productivity dividend in 2009 for productivity change since 2002 was \$65 million. The distribution of this cumulative productivity dividend was a benefit of \$118 million passed on to consumers, a benefit of around \$18 million passed on to Australia Post's reserved service labour and a benefit of around \$115 million passed on to reserved service contractors. Since these benefits far exceed the available productivity dividend, Australia Post's owners were worse off by \$186 million.

The ACCC price review in 2002 would have ensured that Australia Post was not earning excess returns on its reserved services at that time. But Australia Post's real returns are now much lower as there has not been a reasonable sharing of the benefits from productivity improvements over the last seven years.

Australia Post's nominal reserved service prices were effectively frozen from 2002 to 2008 which meant they fell substantially in real terms. This directly benefited consumers. While Australia Post's productivity improvement over this period would have offset part of the impact of real output price reductions, this was in turn more than offset by substantial increases in input prices over the period leading to ongoing falls in the real gross return to capital. In particular, the price of contractor services increased sharply. This reflected the fact that Australia Post was initially very successful in containing contractor prices but has subsequently had to increase them substantially to retain contractors' services. Anecdotal evidence indicates that contractors were at one stage earning less than Australia Post employees doing equivalent tasks despite contractors also being required to supply transport equipment. Combined with competition from other sectors of the economy during the economic expansion of the period up to 2009, this has meant relatively high growth in contractor prices and a corresponding growth in contractors' share of the available productivity dividend.

As noted in the answer to question (1), a reduced or negative rate of productivity growth going forward combined with ongoing input price growth requires corresponding increases in output prices if Australia Post's owner's position is to be maintained and higher price increases if profitability is to be restored. Higher increases again would be required if the deficiency in returns in recent years was also to be redressed. In this respect it is clear that the reduction in real output prices since 2002 has meant that the owner's position has continued to deteriorate. This uneven distribution of the productivity dividend reduces the incentive to invest further in the reserved services business and meet future needs given the impact on profitability. A more sustainable position be maintained going forward will only be achieved by ensuring there is a more even distribution of benefits among stakeholders and that profitability is restored to levels based on the opportunity cost of capital. This will most likely require an increase in the prices Australia Post is allowed to charge for its reserved services.

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