Study for the Australian Competition and Consumer Commission

Review of Australia Post Cost Allocation Methodology

Authors:
Christian M. Bender
Alex Kalevi Dieke
Karl-Heinz Neumann
Antonia Niederprüm

WIK-Consult GmbH
Rhöndorfer Str. 68
53604 Bad Honnef
Germany

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wik CONSULT

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List of Abbreviations

ABC	Activity Based Costing
ACCC	Australian Competition and Consumer Commission
AP	Australia Post
CAM	Cost Allocation Model
CFC	Culling Facing Cancelling
EPM	Enterprise Profit Model
EPMU	Equi-proportionate mark-up
FY	Financial Year
GL	General Ledger
LPO	Licenced Post Office
MODAPTS	Modular Arrangement of Predetermined Time Standards
PDO	Postal Delivery Officer
PRODCOST	Product Costing Code
RAPM	Regulatory Account Procedure Manual
RKR	Record Keeping Rules
RoLS	Reform our Letter Service
SAE	Standard Article Equivalent
SBU	Strategic Business Unit
WIK	WIK-Consult

Executive Summary

Objective of the study

This report was prepared in August and September 2015 for the Australian Competition and Consumer Commission (ACCC). The ACCC has commissioned WIK-Consult (WIK) to review and assess the Cost Allocation Model (CAM) used by Australia Post.

The ACCC is seeking advice on the extent to which Australia Post's CAM adequately reflects the cost of providing reserved letter services. For this purpose, the authors

- assessed the reasonableness of the allocation of Australia Post's direct and shared costs between reserved and non-reserved services and the range of reserved letter services including 'regular' and 'priority' letter services, and
- reviewed the appropriateness of the CAM given relevant accounting standards and practice, the trend of declining letter volumes and increasing parcel volumes delivered by Australia Post, and current and future cost differences in the delivery of 'regular' and 'priority' letter services.

The study also is intended to provide the ACCC information on costing in the context of its upcoming price notification decision on intended price changes of Australia Post regarding the ordinary letter service. The ACCC is also seeking advice on potential improvements that could be made to the CAM. This report provides advice on

- the extent to which the CAM provides a reasonable model to derive efficient costs and prices for 'regular' and 'priority' letter services, and
- potential improvements that could be made to the CAM.

Methodology and building blocks of the CAM

Australia Post’s cost allocation aims to ensure that all products and services are charged appropriately with the costs of the enterprise. Australia Post’s Cost Allocation Model, since August 2013 the Enterprise Profit Model (EPM), is a fully absorbed cost model which utilises Activity Based Costing (ABC) as cost allocation methodology. Resources, i.e. cost inputs, are consumed by activities and activities are consumed by products and services. This approach is reasonable to systematically break-down recorded postal expenditures into established product and services cost categories.

According to the Report Keeping Rules (RKR), issued by the ACCC, the EPM reports cost in one of three defined cost categories (account items) which use different cost allocation methods:

- Direct Cost: A direct account item is one solely associated with a particular service. For example cost of goods sold can directly be attributed to products sold in Australia Post’s retail stores. As far as possible, an account item must be reported

as a direct account item but the direct allocation of activity cost is rarely possible for letter mail and parcel services.

- Attributable Cost: An attributable account item is part of a pool of common account items that are identifiable to a particular service by a separable cause and effect relationship. Due to the shared nature of postal operations, the majority of account items are classified as attributable. The RKR require that attributable account items are assigned on a causation basis as far as possible. The EPM uses a volume driven allocation of attributable cost. Australia Post allocates attributable cost to activities and then uses a series of weighting factors to allocate activity cost to products. Volume is a key driver in this context which shifts costs between products if and when volumes and the product mix changes. There are three key categories of factors for the allocation from activities to services / products:
    - Relative Use: product volume, e.g. number of articles posted.
    - Probability Factors: represent the 'probability' of the service undergoing an activity, e.g. ≻% of Ordinary Small Letters are sold through the LPO network.
    - Relative Effort Factors: reflect relevant differences in handling products at an article level within the same activity, e.g. transaction size or time.
- Unattributable Cost: An unattributable account item is part of a pool of common account items but is not identifiable related in whole or in part to any particular service by separable cause and effect relationship. For example, costs associated with central support functions such as finance and corporate affairs are classified as unattributable items. Unattributable account items should be allocated using allocating factors which are the closest available to ones with a causal relationship.

Strength and weaknesses of the CAM

In the context of price notification decisions and the extent of which the EPM provides a reasonable model, we identified the following strength and weaknesses:

- Consistency with RKR:
  The overall structure in which the EPM is generated and presented guarantees regulatory involvement and consistency over time. EPM-based cost information is provided in a framework which is defined in principle by the ACCC and where the ACCC has control over the implementation principles although there remains a relevant degree of discretion for Australia Post to design the cost model and to set and change the relevant parameters.
- Consistency with financial accounts:
  The cost inputs for the EPM are derived from Australia Post's General Ledger (GL) which guarantees consistency with its financial accounts. This consistency also allows the generation of balance sheets segmented at a product, service group and

segment/portfolio level. A further advantage of this structure for the ACCC is that the data in the CAM is externally audited.

- Fully allocated costing ensures all costs are allocated to services:
  The EPM allocates all costs identified in the GL to services. That means all services which use the shared infrastructure contribute to covering total costs based on their consumption of these resources in the network. Non-reserved services like parcel services contribute scale benefits to the use of the network and absorb (at least partially) the loss of economies of scale due to declining volumes of reserved letter services. Hence, reserved services benefit from growth of non-reserved services compared to a stand-alone costing approach.
- Use as an internal management tool:
  The EPM is also being used for internal management reporting of Australia Post, in addition to being used to support price notifications to the ACCC. Using the same tool for internal reporting which supports commercial pricing decisions and for external regulatory reporting gives much more comfort to the ACCC that the model outcomes are accurate, consistent and properly reflect Australia Post's business reality.
- Based on actual cost:
  A major weakness of the EPM is the top-down cost modelling approach which is based on actual cost, i.e. the costs generated by the model do not represent efficient cost in the economic sense. They include resources which may not be used in the production process such as overcapacity of assets and labour resources.
- Ex post cost allocation:
  The EPM does not represent forward-looking costs as it informs about cost as they have occurred in the past. Assets are valued at historic cost and not at their forward-looking current cost. The production process is represented as it has been structured and managed at a certain point in time in the past and not as it might be structured in a forward-looking efficient sense. Resources are treated as cost as they are actually occurring and not as they should be in an efficient production process.
- No integrated model which allows simulation or forecasts:
  The EPM, as provided to the ACCC, only provides raw data which informs on the allocation cost path from activities to weighting factors and to products. The data sheets are not integrated and therefore do not allow simulating the effects of parameter changes to verify / test forecast scenarios. Moreover, this does not allow performing sensitivity analysis or in-depth analysis of the underlying calculation with regard to inconsistencies or errors in the application of the methodology.

Review and assessment of Australia Post's CAM applied in FY 2013/14

Our study focusses on a selection of activities related to core postal functions (acceptance, processing, transport and delivery of mail items). The selection of activities was based on the identification of the most relevant activities in terms of total cost allocated and with respect to the allocation of cost between non-reserved, reserved and notified services, letter, parcel and express services, and regular and priority services.

Generally, Australia Post's Regulatory Procedure Manual (RAPM) and the supporting documentations do not include a detailed model specification but only high-level explanations on the EPM. The raw data set lacks documentation with respect to abbreviations and explanations for attributes of the data set. For most activities, the documentation on the exact elements included in the activities, on the considerations underlying the factors used for cost allocation and on the derivation of the factor values is extremely short and does not appear sufficiently informative.

Some activities are highly aggregated with respect to the included elements/sub-activities and – as a consequence – in terms of cost allocated to these activities. For some activities a more granular approach including some sub-activities may be useful and recommendable. This also would allow for a better incorporation of changes in the production processes due to technological progress (for example the degree of automation in processing) or changes in delivery processes related to the changing compositions of mail volumes (for example decreasing letter mail volumes, increasing parcel volumes).

Australia Post's approach of combining volumes with factors that account for the relative effort in processing different postal articles for the allocation of attributable cost is appropriate. However, a limited number of concerns about the applied factors and factor values emerge from our review/assessment.

- For some activities, our assessment raises concerns about the use of the appropriate factors for the cost allocation and the extent to which the allocation of these activity costs to products are based on the principle of cost causality.
- Factor values of major factors (in terms of cost allocated through these) are not changed since our review in 2008 although we would expect changes to be necessary due to changes in the composition of mail volumes (e.g. letter mail decline, increasing parcel volumes) and due to changes in the processes (e.g. automated sequencing, joint delivery of letters and parcels).
- The assigned factor values for unaddressed mail items are rather high compared to other (addressed) mail items, in particular in the relative effort factors assigned in processing activities.

- Some factor values for parcels seem to be rather low compared to some letter mail products (non-reserved large letters >250g). The factor value for large letters seems appropriate compared to reserved letters below 250g. The low values for parcels could have a material impact on Australia Post's cost allocation, as these particular factor values allocate a significant proportion of Australia Post's costs. The low factor values for parcels may indicate a cost shift towards reserved (and notified) services although the factor values relate to non-reserved services: increasing values for non-reserved products would mean that ordinary letters are allocated a smaller portion of an activity's cost. However, we could not identify significant systematic cost shifting from non-reserved to reserved or notified services.

During 2013-14 Australia Post provided a choice of two speeds for its business mail services only. In our review and assessment, we only identified differences between the costs allocated to priority and regular services in the allocation of transport activity cost. It seems reasonable that activities related to other functions (delivery, processing) do not incorporate any differentiation between the handling of regular and priority mail in FY2013/2014. Both types of mail are still handled as part of the same unadjusted processes. This is intended to change in the future.

Another criticism stemming from our review of the CAM is that the Regulatory Account Procedure Manual (RAPM) and supporting documents do not provide an explanation of the allocation of the unattributable cost. Based on our review we identified no indication that unattributable cost is allocated via an equi-proportionate mark-up (EPMU) rule to products. We would recommend to generally using the EPMU rule as the allocation principle for unattributable costs.

Potential improvements to the CAM

The regulatory functions of the ACCC would be much better supported by an EPM which is capable of conducting simulations. In this case the ACCC could use the EPM to perform parameter changes and calculate the impact from a coherent and consistent model instead of having to analyse such changes on the basis of (ad hoc) top-down approaches.

We regard it as important that the EPM integrates a forecast module. Today at least the ACCC has to rely on modelling tools other than the EPM to derive forward-looking information on costs and revenue requirements of a notified service. This is unsatisfactory, in particular as missing links between the EPM and other tools may generate inconsistencies and shortcomings.

Some (delivery and processing) activities in Australia Post's CAM are highly aggregated with respect to the included elements/sub-activities and a more granular approach including some sub-activities may be useful and is recommended. This also would allow for a better incorporation of changes in the production processes due to technological

progress (e.g. degree of automation) or due to changing mail volume structure (e.g. decreasing letter mail volume and increasing parcel volumes).

Outlook on changes of cost structure due to reform

Central to Australia Post's reform program (RoLS) is the introduction of two-speed letter services which will give customers a choice between a 'Priority' letter service and a 'Regular' letter service that will be delivered to a slower timetable.

Australia Post's reform program and its central element – the introduction of a 'Priority' and a 'Regular' service for ordinary letters – yield significant changes in Australia Post's postal supply chain, particularly with respect to processing and delivery activities. On the one hand, Australia Post's investment program will significantly increase the level of automation of mail processing and reduce the amount of manual work in the sorting and indoor delivery processes. On the other hand, the utilization of capacities will be increased, for example by shifting processing activities to daytime and lowering the required peak capacities during the night. As a consequence, Australia Post's CAM has to be adjusted to the changes in the postal supply chain due to the RoLS program and the introduction of Priority and Regular letter services. For example:

- Australia Post has to amend its product portfolio used in the CAM to include Regular and Priority letter services.
- Australia Post has to amend and decompose the activities in the CAM to reflect the changes in the postal supply chain. For example, the CAM may implement a more granular modelling of processing activities to accurately allocate cost between manual and automated sorting or between sorting during the day and sorting at night.
- Australia Post has to amend the factor values applied in the CAM to allocate activity costs to products according to changes in the postal supply chain. Additionally, the introduction of new factors may be necessary to reflect cost differences between Priority and Regular letter services, for example a factor which accounts for different handling requirements in delivery and processing activities.

Recommendations

From our review and assessment of the Cost Allocation Model (CAM) used by Australia Post in FY 2013/2014, we could not indicate any systematical bias or distortion in the cost allocation to products. However, we deduce the following recommendations. In order to maintain a reliable CAM which operates most efficiently, Australia Post should ensure that:

- there is improved transparency in model documentation (more detailed model specification, detailed explanation of elements included in activities, derivation of factor values);

- there is more detailed tracing and reasoning of factor value changes;
- activities, factors and factor values reflect the actual processes in the core postal functions;
- the CAM will be further developed to an integrated model which enables
    - consistency checks and the identification of potential calculation faults, and
    - simulations and sensitivity analysis (which could also be a deducted version of the CAM);
- the CAM gets an integrated forecast module to conduct consistent calculations for price changes in the future;
- certain activities better reflect the actual processes with respect to products;
- relative effort factor values, in particular for parcels, reflect the actual processes, state of technology and volume structure;
- certain activities are refined to better reflect differences between products and sub-activities;
- unattributable cost are allocated to products according to an EPMU rule;
- certain activities are separated into sub-activities so that they sufficiently reflect cost differences related to the introduction of ordinary stamp priority and regular mail services.

1 Introduction

1.1 Tasks of the study

This report was prepared in August and September 2015 for the Australian Competition and Consumer Commission (ACCC). The ACCC has commissioned WIK-Consult (WIK) to review and assess the Cost Allocation Model (CAM) used by Australia Post.

The authors of this report have studied the documentation available from Australia Post and the ACCC, and have assessed the approach used by Australia Post to allocate direct and shared costs for its 'reserved' monopoly letter services (services including 'regular' and 'priority' letter services) and its non-reserved services (e.g. parcel services, 'Express Post' and retail services) that are subject to competition from other businesses.

The ACCC is seeking advice on the extent to which Australia Post's CAM adequately reflects the cost of providing reserved letter services. For this purpose, the authors

- assessed the reasonableness of the allocation of Australia Post's direct and shared costs between reserved and non-reserved services and the range of reserved letter services including 'regular' and 'priority' letter services, and
- reviewed the appropriateness of the CAM given relevant accounting standards and practice, the trend of declining letter volumes and increasing parcel volumes delivered by Australia Post, and current and future cost differences in the delivery of 'regular' and 'priority' letter services.

The study also is intended to provide the ACCC information on costing in the context of its upcoming price notification decision on intended price changes of Australia Post regarding the ordinary letter service. The ACCC is also seeking advice on potential improvements that could be made to the CAM. This report provides advice on

- the extent to which the CAM provides a reasonable model, to derive efficient costs and prices for 'regular' and 'priority' letter services, and
- potential improvements that could be made to the CAM.

This report summarizes the results of our investigation into Australia Post's approach to cost allocation, and our assessment of the approach. This report also reflects similar work which we conducted on Australia Post's cost allocation model for the ACCC in 2008.

Section 2 of the report describes methodology and the building blocks of the CAM. The strengths and weaknesses of the CAM will be identified, described and assessed in Section 3. These aspects of the CAM will be mirrored according to the (potential) use of the CAM by the ACCC as a tool to support certain regulatory purposes and decisions.

Section 4 then provides our detailed analysis of the cost allocation model for 2013/14.

Section 5 recommends potential improvements of the CAM to improve its use as a tool to support regulatory decisions.

In Section 6 we will address changes due to the upcoming reform process of Australia Post and the changes that will follow for the services' cost structure. These cost structure changes will be adapted in a preliminary approach to the upcoming distinction between different letter speed classes.

WIK gratefully acknowledges the constructive assistance provided by the ACCC and Australia Post. Both institutions generously contributed their time and expertise in responding to our questions and follow up inquiries. While gladly acknowledging the assistance of all, the authors are, of course, solely responsible for the final report, including any errors it may contain.

1.2 Study methodology

In order to assess Australia Post's cost allocation practice, we have reviewed the following documents:

- Australia Post's Regulatory Accounting Procedure Manual, Version 1.0 dated November 2014 (cited as RAPM) and supporting documents (for example a detailed factor description, an activity factor mapping and an EPM activity dictionary).
- Regulatory accounts reported by Australia Post for the financial year 2013/2014.
- Presentation "Enterprise Profitability Model (EPM)" held by Australia Post on 25 August 2015.
- Various public available information including annual reports, price lists, and product brochures of Australia Post.
- Various previous decisions and regulatory documents published by ACCC including cross-subsidy reports, price notifications, and the Report Keeping Rules.

We have conducted two meetings with Australia Post: on 25 August 2015 and on 26 August 2015 where Australia Post explained their Cost Allocation Model and responded to detailed questions about cost allocation, and the determination of factors used for cost allocation. A second subject of these meetings has been the Reform our Letter Service (RoLS) program Australia Post is intending to introduce. Where results of these meetings are referred to in the text, this information relates to our minutes of the meeting.

Subsequent to the meetings with Australia Post, ACCC and WIK-Consult have addressed several follow-up questions to Australia Post, and this report takes account of the additional information provided by Australia Post in response of the information requests.

2 Methodology and building blocks of the CAM

Australia Post's cost allocation aims to ensure that all products and services are charged appropriately with the costs of the enterprise. For this purpose, production costs are allocated to products via the following main principles:[1]

- Direct attribution of costs to products is conducted, wherever possible;
- Sound allocation rules based on the best available data is employed where direct attribution is not possible;
- One product using another product being charged appropriately for that use; and
- Miscellaneous revenues, unrelated to a product or service, are treated as miscellaneous, with any associated costs allocated.

The ACCC has issued the Record Keeping Rules (RKR) which provide Australia Post with detailed instructions for the establishment of regulatory accounts. Section 13 of the RKR set out definitions for three different cost categories (account items). According to the RKR, each account item must be reported as either:[2]

- a direct account item – that is one solely associated with a particular service;
- an attributable account item – that is part of a pool of common account items that are identifiable to a particular service by a separable cause and effect relationship;
- an unattributable account item – that is part of a pool of common account items but is not identifiable related in whole or in part to any particular service by separable cause and effect relationship.

The RKR set out that, where possible, an account item must be reported as a direct account item. Due to the shared nature of postal operations, the majority of account items are classified as attributable. The RKR require that attributable account items are assigned on a causation basis as far as possible by identifying relationships such as:[3]

- a directly traceable cause and effect relationship with the provision of the product or service; or
- a verifiable relationship between the item and the output of the individual product or service; or
- a relevant, reliable and verifiable factor such as relative use.

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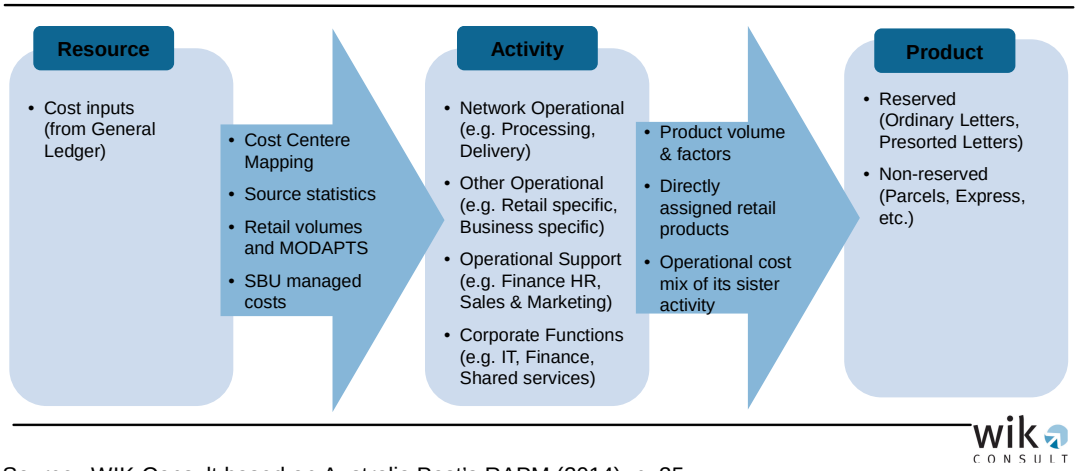
1 Australia Post (2014), Regulatory Accounting Procedure Manual, November 2014, p. 24.
2 ACCC (2005), Record Keeping Rules - Establishing a Regulatory Accounting Framework for Australia Post, 30 March 2005, Section 13 (2), p. 9.
3 ACCC (2005), Record Keeping Rules - Establishing a Regulatory Accounting Framework for Australia Post, 30 March 2005, Section 13 (4), p. 10.

The remaining unattributable account items should be allocated using allocating factors which are the closest available to ones with a causal relationship.

2.1 Building blocks of Australia Post's CAM

Australia Post's Cost Allocation Model, since August 2013 the Enterprise Profit Model (EPM), is a fully absorbed cost model which utilises Activity Based Costing (ABC) as cost allocation methodology. Resources, i.e. cost inputs, are consumed by activities and activities are consumed by products and services. The approach aims to systematically break-down the recorded postal expenditures until product and services costs are established. Figure 2-1 provides a stylized illustration of this cost allocation approach.

Figure 2-1: Stylized illustration of Australia Post's Cost Allocation Model



Source: WIK-Consult based on Australia Post's RAPM (2014), p. 35.

Note: Modular Arrangement of Predetermined Time Standards (MODAPTS) are time and motion studies used for direct labour cost estimations, quality control, safety analysis and establishing productivity standards for work stations and manufacturing processes, ergonomics and work study management.

The three major building blocks of Australia Post's CAM are briefly descripted below. To allocate the costs to specific products, costs are processed in two steps: Resource to Activity, then Activity to Products/Services. Once resource values are allocated to product/services the cost items are exported from the EPM and are then mapped to reserved and non-reserved services.

Resource: Resources (cost inputs) are sourced from Australia Post's General Ledger (GL). There are two key dimensions to identify resources from the GL: Every expense is held against (1) a cost centre and (2) a GL account. All cost centres are linked to the organisational structure of the organisational hierarchy (cost centre groups) which materially follows AP's management structure. Every cost centre code has a Product

Costing Code (PRODCOST) attached as additional information.[4] The cost inputs are created by extracting the costs from the General Ledger using GL accounts. GL accounts are then combined with cost centres, Cost Centre Group and GL account/group for a PRODCOST. Each resource is allocated to an activity using resource drivers. The resource drivers can either be directly assigned or assigned based on business information or surveys.[5]

Activity: Australia Post has four core activities that relate to expenditure allocation (with sub-activities): (1) Direct Operational, (2) Operational Support, (3) Other Operational, and (4) Corporate Activities. Each group contains a range of activities / processes and sub-activities / sub-processes. For example, Direct Operational consists of processes related to the postal value chain (Sales and Acceptance, Processing, Transport, Delivery) and each process consists of several sub-processes, which consists of further sub-processes.[6] For example, the activity Delivery distinguishes between "Contract Delivery" and "Corporate Delivery". The sub-activity "Corporate Delivery" is divided into four activities "Delivery Centre", "Outdoor Delivery", "Parcel Delivery Centre", and "Retail Delivery", whereas "Retail Delivery" includes further sub-activities / processes.[7]

Once expenses are allocated to an activity, expenses are allocated to products via one of three allocation methods:

- Direct: Costs are allocated directly to a product.
- Factor assignment: The allocation of costs is performed using a series of weight factors. The weight factors aim at reflecting the degree of cost variability with respect to services "consuming" a specific activity by analysing the extent to which a service requires a particular activity to be performed. Using this analysis, the services which utilize the same activities are identified and a group of variables, which indicate the "consumption rate" of the activity by each service, is determined. The factors used more commonly, either individually or in some combination, in distributing activity costs to mail services include volume, average and total mass, average bag content, average tray content, average distance conveyed, average processing/handling time, and payment/conveyance rate.
- Other drivers: For all other expenses the EPM assigns the costs using other drivers. These drivers include revenue, volume, costs, and business sources, such as transaction volumes, time and motion studies standard, cost per minute, call centre statistics marketing surveys etc.

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4 Australia Post attaches 82 PRODCOST in eight PRODCOST groups, such as Operations – Retail & Delivery, Mail Centres, Operations – Delivery, Transport Depot, Parcel Centre, etc.; See Australia Post (2014), Regulatory Accounting Procedure Manual, November 2014, Section 13.

5 Australia Post (2014), Regulatory Accounting Procedure Manual, November 2014, p. 30 and p. 35.

6 Australia Post (2014), Regulatory Accounting Procedure Manual, November 2014, p. 16 subsq. and p. 26.

7 Australia Post (2015), Enterprise Profitability Model (EPM), ACCC and WIK Presentation, 25 August 2015.

Product: Product and services are aligned to the four major operating segments, i.e Mail, Retail, Parcel & StarTrack, and other services not allocated to the core operating segments. Mail products and services are separated whether they are considered "reserved" or "non-reserved" services, according to the definitions of the Australian Postal Corporation Act.[8] Australia Post distinguished between 15 service groups, 4 reserved and 11 non-reserved, which are modelled in the EPM and Product Balance Sheets.[9]

2.2 Activity based costing

Postal services are produced in a production process which is characterised by a high degree of shared or joint cost. Individual mail and/or parcel services use the same resources and processes within the production value chain. The intensity of use may be different from service to service.

Some observers misunderstand these characteristics of the postal production process such that they regard these shared or joint costs as fixed cost. From an economic perspective this only holds in a (very) short-term perspective. The efficiency driven economic perspective is, however, a long-term perspective.

In a long-term perspective the production process and the resources needed are designed according to the volumes of outputs and the relative use of resources by the different outputs the firm is producing. Under such a perspective the joint and shared costs of the postal production process become attributable to services and to service volumes as variable cost.

The state-of-the-art tool which makes joint and shared cost attributable is Activity-Based Costing (ABC). ABC systems are quite commonly used costing systems by postal operators around the world at various degrees of sophistication. The primary goal of such costing systems is to inform management decisions on product profitability, process design, productivity improvement and many more. ABC also is an appropriate tool to inform regulators on their typical information needs, if appropriately applied.[10]

The basic concept of ABC is to assign the cost of activity resources to those products and services which use these activities. This assignment is conducted so that the allocation of costs of an activity to services occurs according to the actual consumption by each service. Resource costs are assigned to products and services through these activities. Usage and relative consumption is the major allocation driver.

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8 Australia Post (2014), Regulatory Accounting Procedure Manual, November 2014, p. 11.
9 Australia Post (2014), Regulatory Accounting Procedure Manual, November 2014, p. 15.
10 See for example Royal Mail, ABC Costing Manual. Each year (or in case of updates, several times per year) Royal Mail has to provide the ABC Costing Manual (a more than 100-page document) to Ofcom as part of the regulatory cost accounting.

In Australia Post's ABC system product volume becomes the dominant cost driver in the core postal functions (acceptance, processing, transport and delivery). Product volume is measured in each activity (either delivered volume or posted volume) and normalised to a common unit ("standard article equivalent") on the basis of weighting factors. Products do not get allocated activity cost if there is no volume of product in that particular activity. This approach implies that the relative allocation of fixed costs becomes smaller for services for which volumes are declining and it becomes larger for services with growing volumes. Product volumes are updated in the model monthly and activity throughput annually.

As we derive in detail in Section 4.2 the share of joint and shared (or attributable) cost in the case of Australia Post amounts to 66% for all services and 96% for reserved services.

Error! Reference source not found. shows the high level cost structure of Australia Post according to operational and corporate functions (for the financial year 2014/15). Delivery represents the by far dominating function which represents ≻≪% of total costs and ≻≪% of all operating costs. ≻≪% of the delivery cost is allocated to reserved services.

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Error! Reference source not found. shows that delivery is an even more important cost function for reserved letters than for the corporation as a whole. ≻ of the cost of reserved services is dedicated to the delivery function.

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2.3 Cost categories

The RKR require Australia Post to categorise costs according to the following major cost categories:

- Direct costs,
- Attributable costs,
- Unattributable costs.

Direct cost are directly allocated to a particular service. To qualify as direct a cost must be traceable from a source, e.g. a specific General Ledger Account item to a service (or service group)[11]. Examples of direct costs are:

- Cost of Goods Sold,
- LPO Commissions, for example payments which LPOs receive for a specific transaction.

11 See Australia Post, RAPM, p. 38f.

The major part of costs is classified as attributable. They represent the shared network nature of the postal production process and are allocated to multiple service groups. Examples of attributable cost include

- Operational labour costs,
- Accommodation.

Delivery centres for example support letter and parcel services.

Unattributable cost represent high level management and central support functions like corporate public affairs[12].

2.4 Allocation of costs to activities (cost centres)

Australia Post's cost to activity allocation uses structured GL accounts and product costing functions. Each expense is held against a cost centre code and a GL account. The cost centres are linked to the organisational hierarchy (cost centre groups) which materially follow Australia Post's management structure. Each expense is allocated to an activity using resource drivers. The resource drivers are derived from four approaches:[13]

- Cost Centre Mapping (Functional Mapping): cost is allocated to the assigned cost centre(s) and activities causing the expense according to the underlying product costing function. On lower levels the allocation is informed by surveys or cost transparency models.
- Retail Product standard: cost is allocated using either functional mapping or transaction counts and time and motion studies (for example Modular Arrangement of Predetermined Time Standards, MODAPTS).
- GLA-centric: cost allocation to activities is based on highly structured chart of accounts which allows a direct mapping of cost to activities (for example direct allocation of GLA account for contracted work or domestic air transport).
- "Cost Transparency" models: cost is allocated by using separate models which apply, for example, site costs and rents, IT applications & services used by pre-defined "Activity Groups" or call centre statistics at product group.

2.5 Service categories

The ACCC distinguishes 15 service groups for Australia Post's products which include 171 products. Services are further categorised in 'Reserved services' and 'Non-reserved services'. Reserved services include all letter mail products up to 250 g and

12 Please note that this department no longer exists.
13 Australia Post, Enterprise Profitability Model (EPM), Presentation 25 August 2015, p. 48 subseq. Australia Post (2014), Regulatory Accounting Procedure Manual, November 2014, p. 30.

only Australia Post is permitted to provide these services.[14] Reserved services comprise 21 products in 4 service groups. Two of these reserved services, Small Letter Ordinary Stamp and Large Letter Ordinary Stamp, are 'Notified' services, i.e. Australia Post is required to notify the ACCC if it proposes to:[15]

- increase the price of a declared (and therefore notified) service, or
- introduce a new service that would fall within the definition of declared (notified) services, or
- provide an existing declared (notified) service under terms and conditions that are not the same or substantially similar to the existing terms and conditions of that service.

Table 2-1 below provides an overview of the products and service categories. The EPM is built to represent all of these 15 product service categories (and six additional non-product related service categories related to non-product related or internal transfer related account items).

Table 2-1: Service groups and products

ACCC Service Group		Products	
Reserved services	Small Letters Ordinary	1020	Pol Sl Ordinary Stamped
		1021	Pol Sl Metered Imprint Charge Regular
		1022	Pol Sl Clean Regular
		1024	Pol Sl Concession Stamps
		1025	Pol Sl Reply Paid
		1040	Pol Sl Local Rate Regular
	Small Letters Presort	1050	Pol Sl Pre Sort Priority
		1060	Pol Sl Charity Mail Priority
		1070	Pol Sl Pre Sort Regular
		1080	Pol Sl Charity Mail Regular
	Large Letters Ordinary	1110	Pol Ll Ordinary Stamped 0 250g
		1111	Pol Ll Metered Imprint Charge 0 250g Regular
		1112	Pol Ll Clean Sml Plus Regular
		1115	Pol Ll Reply Paid
		1130	Pol Ll Local Rate Regular
	Large Letters Presort	1140	Pol Ll Pre Sort Sml Plus Priority
		1150	Pol Ll Pre Sort Sml Plus Regular
		1160	Pol Ll Pre Sort Medium Priority
		1170	Pol Ll Pre Sort Medium Regular
		1180	Pol Ll Pre Sort Large 0 250g Priority
		1190	Pol Ll Pre Sort Large 0 250g Regular
Non-reserved	Large Letters Ordinary	1113	Pol Ll Ordinary Stamped 250 500g
		1114	Pol Ll Metered Imprint Charge 250 500g Regular
	Large Letters Presort	1185	Pol Ll Pre Sort Large 250 500g Priority
		1195	Pol Ll Pre Sort Large 250 500g Regular

14 Australian Postal Corporation Act 1989, Act No. 64 of 1989 as amended up to Act No. 156 of 2007, Sections 29 and 30.

15 Australian Postal Corporation Act 1989, Act No. 64 of 1989 as amended up to Act No. 156 of 2007, Sections 29 and 30, Division 2 of Part 3.

ACCC Service Group	Products	
Interl Out Letters	3010	Pol Smlletters Out Airmail
	3020	Pol Smlletters Out Aerograms
	3050	Pol Lge Letters Out Airmail
	3085	Pol Business Mail Out
	3245	Pol Express Post International
	3250	Pol Mbags Out
	3260	Pol International Bulk Mail
	3265	Pol Direct Access Outwards
Internl In Letters	3310	Pol Smlletters In Airmail
	3315	Pol Direct Access Inwards
	3330	Pol Smlletters In Sea
	3340	Pol Smlletters In Economy
	3350	Pol Lge Letters In Airmail
	3360	Pol Lge Letters In Sea
	3380	Pol Lge Letters In Economy
	3510	Pol Registered In Letters
	3550	Pol Mbags In
	3630	Pol Int'lletters Fx Journalised
Other Letters	1410	Pol Unaddressed Interstate Std Size
	1420	Pol Unaddressed Interstate Lge Size
	1450	Pol Unaddressed Intrastate Std Size
	1460	Pol Unaddressed Intrastate Lge Size
	1510	Pol Print Post Standard Regular
	1520	Pol Print Post <500g Regular
	1530	Pol Print Post >500g Regular
	1550	Pol Contract Publications
	1560	Pol Registered Post
	6050	Pol Address Matching Approval
	6055	Pol Address Post
	9140	Pol Forces Mail
Other Letters Associated	5025	Els Easy Mail Service
	6040	Els Eletter Solutions Formerly Edipost Mail
	6043	Posted Red Box
	6044	Change Of Address Notification
	6045	Els Digital Services
	9107	Els First Direct Solutions Formerly Geospend
	9120	Pol Redirection Fees
	9125	Pol Mail Holding
	9126	Els Information Request
	9213	Els Decipha
	9250	Els Letters Elimination
	9251	Els Letters Elimination Expense
Parcels	1210	Pol Express Post Envelope C5
	1215	Pol Express Post Envelope B4
	2010	Pop Pcls <500g Fr Stamp Label
	2011	Pop Pcls <500g Fr Other Bulk Meter
	2015	Pop Pcls <500g Express Satchel
	2017	Pop Pcls <500g Express Platinum
	2018	P_PCLS_<500G_PLATINUM_PARCELS_
	2020	Pop Pcls <500g Express Fr Stamp Labels
	2021	Pop Pcls <500g Express Reduced Rate
	2023	Pop Pcls <500g Express Fr Other Bulk Meter
	2030	Pop Pcls <500g Parcel Post Satchel

ACCC Service Group	Products	
	2040	Pop Pcls <500g Local Rate
	2065	Pop Pcls <500g Contract
	2110	Pop Pcls >500g Fr Stamp Label
	2115	Pop Pcls >500g Fr Other Bulk Meter
	2120	Pop Pcls >500g Express Satchel
	2122	Pop Pcls >500g Express Platinum
	2123	Pop Pcls >500g Express Satchel 3kg Large
	2124	Pop Pcls >500g Express Satchel 5kg
	2125	Pop Pcls >500g Express Stamp Labels
	2126	Pop Pcls >500g Express Reduced Rate
	2128	P_PCLS_>500G_PLATINUM_PARCELS
	2129	Pop Pcls >500g Express Other Bulk Meter
	2130	Pop Pcls >500g Parcel Post Satchel
	2140	Pop Pcls >500g Local Rate
	2150	Pop Pcls 5kg - Parcel Post Satchel
	2165	Pop Pcls >500g Contract
	2166	P_PCLS_>500G_CONTRACT_PL
	2174	P_PCLS_>500G_EPARCELS_ORDINARY_PL
	2175	Pop Pcls >500g Eparcels Ordinary
	2178	Pop Pcls >500g Point To Point Ulds
	2180	Pop Pcls >500g Eparcels B2b
	2200	Pop Cash On Delivery
	2205	Pop Retail Parcel Tracking
	2225	Pop Other Parcel Fees
	J213	Sai Cheng Expense
Interl Out Parcels	3090	Pop Packets Out Airmail
	3100	Pop Packets Out Sea
	3120	Pop Business Packets
	3125	Pop Trackable <2kg Labels
	3130	Pop Parcels Out Airmail
	3140	Pop Parcels Out Sea
	3210	Pol Registered Post Out Air
	3215	Pop Registered Parcels < 2kg Labels
	3220	Pop Business Parcels
	3226	Pop Outward Da Parcels
Courier Services	3230	Pop Eci Prepaid
	3235	Pop Eci Charge Account
	3240	Pop Eci Labels
	3280	Pop Epi Prepaid
	3285	Pop Epi Charge Ac Non Prepaid
	3290	Pop Epi Cash Non Prepaid
	4010	Eds Messenger Post
	4011	Courier Post
	9300	Els Star Track Express
Internl In Parcels	3390	Pop Packets In Airmail
	3395	Pop Epackets In Tracked Airmail
	3400	Pop Packets In Sea
	3410	Pop Packets In Economy
	3430	Pop Parcels In Airmail
	3440	Pop Parcels In Sea
	3445	Pop Inward Da Parcels
	3460	Pop Parcels In Economy

ACCC Service Group	Products	
	3520	Pop Registered In Packets
	3525	Pop Insured Articles In
	3530	Pop Ems Ap In
	3660	Pop Int'l Parcels Fx Journalised
StarTrack International	9101	Lge Letters - In - Commercial
	9102	Packets - In - Commercial
	9103	Parcels - In - Commercial - Untracked
	9104	Parcels - In - Commercial - Tracked
	9106	Eds Logistics
	9216	Eds Pl Hongkong
Retail	5020	Ret Private Boxes&bags
	6010	Els Fax Post
	7010	Ret Philatelic
	7020	Ret Postpak
	7023	Ret Retail Services
	7026	Ret General Merchandise
	7027	Ret Stationery
	7028	Ret Greeting Cards
	7029	Ret Telephony
	9255	Securepay
Financial Services	2210	Pop Optional Insurance
	3270	Pop International Insurance Fees
	7030	Ret Money Orders
	7031	Ret International Money Services
	7032	Ret Travel Money Services
	7033	Ret Payment Processing Other
	8010	Ret Telstra
	8511	Ret Cba Personal Banking
	8512	Ret Cba Business Banking
	8516	Ret Bank@post Personal Banking
	8517	Ret Bank@post Business Banking
	8520	Ret Aust Tax Office
	8570	Ret Aae Agency
	8580	Els Telephone Billpay
	8585	Ret Passport
	8586	Ret Image Capture
	8587	Ret Applications&forms
	8588	Ret 100 Point Id Check
	8589	Ret Other In Persons Proofing
	8590	Ret Other Agency
	8591	Tobenamed

Source: WIK-Consult, based on data from Australia Post.

Note: The notified services (1020 - Pol Sl Ordinary Stamped and.1110 - Pol Ll Ordinary Stamped 0 250g) are highlighted.

2.6 Allocation factors

Allocation factors are important intermediate parameters which are used to allocate costs to services. Attributable costs are allocated using product volumes and factors. One or more factors combined with the product volume are activity cost drivers. Factors can be based on postal industry standards, can be calculated or can be based on operational information or a survey conducted for that purpose. Accordingly, there is a variety of sources for generating the relevant factors. There is also a need to update factors to ensure that they reflect the current cost of the production process. Furthermore, updates are needed when the product portfolio changes, in particular when new products are introduced and when the production process changes. Table 2-2 shows some characteristics of the allocation factors. Besides annual updates, factor changes are event driven.

Table 2-2: Characteristics of allocation factors

Classification	Description	Sources	Updates
1. Postal Industry Standards	Differences in product characteristics between small letters, large letters, parcels etc. broadly conform to a standard 1/2/10 matrix. Example: 'GENWGT1' – General weighting for delivery.	Corporate records, correspondence between postal organisations and operational knowledge.	Updated when products or processes change materially.
2. Calculated	Product characteristics that can be calculated from available data. Example: 'LPO%' - The percentage of a product revenue obtained via the Licenced Post Office network.	Australia Post financial and operational systems.	Updated depending on the factors and the availability of the information. As an example, with the annual update of retail sales channel probability factors, a review of lodgement data for product 2175 eParcel was undertaken that led to the average mass and transport factors being updated.
3. Operational Information/ Surveys	Operational information and surveys, sampling. Example: 'AIRISP': Proportion of posted product volume bound interstate by air transport.	Operational data, surveys and sampling.	As survey / sample data can be expensive to obtain, the decision to undertake a survey / sample to update factors is governed by balancing information about the likely materiality of business and / or network / product changes with the cost of performing the survey / sample.

Source: Australia Post

According to Australia Post each factor is reviewed on a three year rolling cyclical basis (as a minimum).[16] The potentially more volatile factors are reviewed more frequently. Australia Post intends to reflect significant changes within the network as soon as sufficient data is available. "*These are then monitored on at least a quarterly basis, to ensure the use of the most accurate data and to reflect the impact of the bedding down of the new process.*"[17]

When we compared some of the factors which we analysed more deeply in our 2008 study we found that many of them did not change compared to the 2013/14 EPM. This holds although we expected some adoption due to changes in the production process. One important change in the production process was, for example, the introduction of sequence sorters for small letters which should have an impact on the handling factors in mail preparation taking place in the delivery offices.

From the documentation of the EPM it is unclear when changes have been made to a particular factor. Based on the information provided by Australia Post it looks like that many factors have been updated in the last 12 months, but it remains unclear when the last changes occurred for each particular factor. This makes it difficult for us (and the ACCC) to identify how representative certain factors still are for the current production process. This is important insofar as (necessary) factor changes usually lead to a change in allocation of costs to individual services. Australia Post demonstrates that with a recent example: In 2014/15 the relevant factor values for parcel services were adjusted to reflect the use of scanning devices instead of a paper based system for recording signatures. The updates to these factors relate to a pool of activities with a total expense of over $✂ and resulted in around $✂ of expenses shifted away from parcel to letter products. We will provide further examples when we describe the recent NCAU in Section 2.8.

We conclude that the ACCC needs improved transparency about the history of evolution of allocation factors. This includes information on when factors were last updated.

2.7 Allocation of cost to services

Costs are allocated to services via activities. Volume is a key driver in this context which is used for most network activities. Volume drivers shift costs between products if and when volumes and the product mix changes. Three driver components are related to volume:[18]

- Product volume, e.g. number of articles;

16 See Australia Post, RAPM, p. 46.
17 Australia Post RAPM, p. 46.
18 See Australia Post, 25.8.15, p. 53.

- The 'probability' of the product undergoing the activity (e.g. ≻≺% of Ordinary Small Letters are sold through the LPO network);
- Relative use-'handling factor': reflect the relevant differentiation between products at an article level, e.g. transaction size or time.

2.8 System changes due to the NCAU

Australia Post has recently updated its cost model over a six month period ending in June 2015. The project is called Network Cost Allocation Update (NCAU). NCAU is not generating a new cost model. NCAU also does not change the main principles and building blocks of the EPM. NCAU is mainly focused on improving the data base for the allocation rules of the attributable costs. NCAU also addresses major changes in processing activities and their impact on operational data. The major changes are related to the following areas:[19]

1. Review of all network cost centres and amending the functions to more accurately represent the cost purpose.
2. Sourced operational data where possible, to provide business related activity cost drivers.
3. Rationalisation of the activity hierarchy (in particular consideration of "priority" processing costs).
4. Changes in relation to the Trusted Services product suite (with no impact on reserved services)

One highlight of the changes has been the split of van operations from transport.[20] This was a response to the creation of the new Business Hub structure. The new Prodcost Van Operations was created to delineate this function from other Transport which represents around $≻≺ of cost. The new allocation factor led to a reduction of around $≻≺ in letter transport allocation.

A second highlight was an update of the retail activity resource to activity drivers. This change resulted in a rebalancing of Sales & Acceptance to the Delivery activity cost.

A third highlight was the more transparent and detailed representation of priority processing costs in the EPM. This is a response to the introduction of a two speed letter service for business mail, called "regular" and "priority".[21] NCAU has created one priority processing activity for metro and regional respectively. One concrete example of the new allocation was that ≻≺% of the penalty rate labour cost will be allocated to the priority letter processing activities. Costs for these activities will be allocated to the priority and express products only. The remaining ≻≺% of penalty rate labour costs will be allocated to each of the MDCS derived activities on the basis of the proportion of the hours as reported for each facility.

19 See Australia Post, Product Profitability, Walk Through with the ACCC, 9 April 2015, p. 6.
20 See Australia Post, Enterprise Profitability Model (EPM), Presentation 25 August 2015, p. 68.
21 See Australia Post, Product Profitability – Walt through with the ACCC, 9 April 2015, p. 21.

The most important and major changes generated by NCAU are not yet represented in the 2013/14 CAM. They will be for the first time represented in the 2014/15 CAM. In any case the NCAU has a significant impact on the costs allocated to individual services. Australia Post has calculated pre NCAU and post NCAU values for the 2014/15 CAM.

The model changes due to the NCAU project are all relevant reactions to changes in the production process. However, we are surprised that Australia Post did not perform any changes in the delivery activity which has the highest cost share and is still treated as a uniform activity when it should be disaggregated into different sub-activities.

Table 2-3 shows the impacts of NCAU on Australia Post's letter services. The implementation of NCAU has reduced the costs of reserved letter services and therefore their negative financial contribution. The losses of reserved letter services reduced from $184m to $142m, a 22.8% reduction.

Table 2-4 shows an even greater reduction in losses for the notified ordinary letter services as result of NCAU. Losses reduced from $127m to $77m, which constituted a 39.4% reduction. The size of the loss incurred by notified services in 2013/14 ($141m) was nearly double the loss post-NCAU in 2014/15 ($77m).

Table 2-3: Impact of NCAU on letter service results

	Actual	Forecast	
	2013/14	2014/15 (pre NCAU)	2014/15 (post NCAU)
Domestic reserved Ordinary/Other letter service			
Volume (m)	1,296	1,155	1,155
Revenue ($m)	816	792	792
Cost ($m)	984	976	934
Profit ($m)	(169)	(184)	(142)
Domestic reserved small Ordinary/Other letter service			
Volume (m)	✂	✂	✂
Revenue ($m)	✂	✂	✂
Cost ($m)	✂	✂	✂
Profit ($m)	✂	✂	✂
Domestic reserved large Ordinary/Other letter service			
Volume (m)	✂	✂	✂
Revenue ($m)	✂	✂	✂
Cost ($m)	✂	✂	✂
Profit ($m)	✂	✂	✂

Source: Australia Post, Draft Price Notification, August 2015, p. 49

Table 2-4: Impact of NCAU on notified services

	Ordinary (Stamped)
2013/14	
Volume	475
Revenue ($m)	280
Total costs ($m)	421
Contribution ($m)	(141)
ROR %	(50.3%)
2014/15 (pre NCAU)	
Volume	411
Revenue ($m)	282
Total costs ($m)	409
Contribution ($m)	(127)
ROR %	(45.1%)
2014/15 (post NCAU)	
Volume	411
Revenue ($m)	282
Total costs ($m)	359
Contribution ($m)	(77)

Source: Australia Post

These changes indicate that the new CAM data for the financial year 2014/15 will not only reflect changes of the business volumes but will also reflect the implementation of NCAU. The costs allocated to services will also be significantly changed due to (necessary and convincing) changes in the cost allocation system.

≻

Error! Reference source not found. shows that the model changes conducted as part of the NCAU process changes the cost allocated to reserved letter services by function significantly. While the allocated cost for acceptance decreases by ≻%, the cost for delivery increases by ≻%. In total the costs of the domestic letter service are reduced by ≻%.

2.9 System changes due to reform

Under its RoLS program Australia Post will be introducing major business restructuring reforms to cope with the decline of letter volumes and generally to improve business

and operational productivity. The following key aspects of the reforms require changes to the EPM to reflect the costings of these reforms on business processes:[22]

(1) Introduction of two service speeds;

- Requires the introduction and costing of new products.
- Change of supply chains based on pre-existing off-peak products.
- Change of transport mix (air vs. road mix)

(2) Decreasing the the volume of letters processed during the evening and at night and increasing the volumes processed during day;

- ≻
- Better use of economies of scale and automation of processing activities by migration of volumes from priority to regular services allowing increased daytime processing.
- Moderate differentiation between products in processing.

(3) National delivery model.

- ≻

Because regular mail will mostly be processed during the daytime it will no longer attract penalty labour payments. Compared to the current production process regular mail will ceteris paribus attract less processing cost than ordinary mail today.

≻. The allocation of outdoor delivery cost on a per unit basis should be significantly lower for the (future) regular letter than for the current ordinary letter.

From December 2015 Australia Post will redesign data flows in the EPM. From February 2016 Australia Post will rebuild the EPM to a new platform.[23]

22 See Australia Post, Enterprise Profitability Model (EPM), Presentation 25 August 2015, p. 73ff.
23 See Australia Post, Enterprise Profitability Model (EPM), Presentation 25 August 2015, p. 9.

3 Strengths and weaknesses of the CAM

3.1 Strengths

3.1.1 Consistency with RKR

The RKR are the instrument by which the ACCC defines the reporting requirements for Australia Post to ACCC which the ACCC needs to meet its regulatory tasks. These include:

- Monitoring cross-subsidy between Australia Post's reserved and non-reserved services;
- Assessing proposed price increases to Australia Post to the subset of the reserved services which have to be notified;
- Inquiring into certain disputes regarding the terms and conditions on which Australia Post supplies its bulk mail services.

The RKR set the principles and the structure of the regulatory reporting. The RKR provide and define a set of requirements on Australia Post in its regulatory reporting system:[24]

- Details of the information and financial reports to be provided for each Service Group;
- Principles to be applied by Australia Post in developing detailed allocation methodologies in compliance with the Rules;
- Details of specific reports on activity level;
- Rules that Australia Post must follow in developing a Manual which records the procedure to be followed in preparing the Reports;
- The audit and compliance framework for ensuring the integrity of the information provided to the ACCC.

There is a certain time path under which Australia Post has to meet its reporting requirements under the RKR. For each financial year ending 30 June Australia Post has to provide the draft RAPM by 15 April. The EPM results for the last financial year and other reports have to be provided by 15 November. The RAPM details the high level reporting requirements under the RKR and has to be approved by the ACCC.

This overall structure guarantees that the EPM is not structured and changed ad hoc by Australia Post. The EPM-based cost information is provided in a framework which is defined in principle by the ACCC and where the ACCC has control over the

24 See Australia Post (2014), RAPM, November 2014, p. 9.

implementation principles. There remains a relevant degree of discretion for Australia Post to design the cost model and to set and change the relevant parameters. It is, however, up to the ACCC to define the level of granularity of its own involvement.

This overall structure in which the EPM is generated and provided guarantees regulatory involvement and consistency over time. This is a clear strength of the EPM.

Different to the findings in our 2008 study for the ACCC[25] on Australia Post's cost allocation we can state now that the RAPM and the EPM use and have implemented the same costing terminology, costing concepts and cost categories as the RKR defined by the ACCC. We regard that as a major improvement which has happened over the last few years. Complicated transition calculations (which we had to conduct previously) have become obsolete. This may otherwise have become a transparency concern or have led to a misinterpretation of costing outcomes.

3.1.2 Consistency with financial accounts

The cost inputs for the EPM are derived from the General Ledger (GL). Together with its nature of a fully allocated cost model this guarantees consistency with the financial accounts of the corporation. This consistency also allows the generation of balance sheets segmented at a product, service group and segment/portfolio level. A further advantage of this structure for the ACCC is that the data in the CAM is externally audited.

On the other hand, this feature makes the EPM an ex post allocation tool; by definition and by its relation to the financial accounts it is not a forward-looking analytical costing instrument.

However, Australia Post still lags behind compared to international peers when it comes to segment reporting in the financial accounts presented in their annual report.[26] Although Australia Post differentiates between Mail, Retail and Parcel Services it only reports on inter-segment revenues for Retail coming from the segments Mail and Parcel Services. Inter-segment revenues are based on an internal transfer price that has been established between the Retail, Mail and Parcel & Express segments in respect of Australia Post's own retail stores, equivalent to the market price paid to licenced postal offices. We understand a Postal Delivery Officer (PDO) delivers letters and (small) parcels together. Therefore the segment Mail Services should also report inter-segment revenues (and costs) coming from Parcel Services. This would provide a more transparent and accurate picture on the segment results. However, Australia Post's transparency in segment reporting in its Annual Reports is less a regulatory than an owners' task.

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25 See WIK-Consult (2008).
26 See Australia Post, Annual Report 2014, p. 100 sseq.

3.1.3 Fully allocated costing ensures full cost recovery for Australia Post

The EPM allocates all costs identified in the GL to services. This includes unattributable costs which occur at the corporation level as overhead costs. That means all products and services which use the shared infrastructure contribute to covering total costs based on their consumption of resources in the network.

The inclusion of non-reserved services like express post and parcel services into the production chain have contributed scale benefits to the use of the network and absorbed (at least partially) the loss of economies of scale due to declining volumes of reserved letter services because those services were growing in volumes. Due to the mechanics of the EPM the reserved services have benefitted from the growth of (some) non-reserved services compared to a hypothetical stand-alone provision of the reserved services. **Error! Reference source not found.** shows how the share of total costs borne by reserved letters drops from 42% in FY 11 to 26% in FY 16.

✂

3.1.4 Use as an internal management tool

Although originally designed as a tool to provide regulatory reporting, the EPM is also being used for internal management reporting of Australia Post. The EPM generates as an output product profitability, service group and strategic business unit (SBU) profitability. So it is used to support price notifications to the ACCC and commercial pricing decisions. To ensure the relevance for supporting management information the EPM provides information on a monthly base. The EPM is also used to provide segment notes of the audited annual report and to provide information for the quarterly shareholder reports.

This is not common practice in regulated industries. Many regulated companies use different tools for internal reporting and for supporting management decisions than they use for providing the relevant report to the regulator. It is a great benefit for the ACCC that Australia Post behaves differently. Using the same tool for internal and for external regulatory reporting gives much more comfort to the ACCC that the model outcomes are accurate, consistent and properly reflect Australia Post's business reality. The ACCC does not have to compare systems to identify potential errors and deviations to the real business costs.

3.2 Weaknesses

3.2.1 Based on actual costs

The EPM is a top-down cost modelling approach which is based on actual cost. Costs are generated from the GL of the corporation. This makes the cost model consistent with the financial accounting of the firm. At the same time the costs generated by the model do not represent efficient cost in the economic sense. They include resources which may not be used in the production process. Overcapacity of assets and labour resources are part of the actual costs although they do not represent (efficient) costs. Actual costs (at best) are calculated on the basis of the production processes which currently prevail (or in the lag structure the cost model uses to change the relevant operational parameters). Therefore actual costs are not forward-looking. This holds in particular if the corporation is going to change its production process in the (near) future to make it more efficient and adaptive to volume changes.

Capital expenditure is valued at historic cost. Historic cost valuation does not take care of price changes of the assets. Therefore it entails the risk that assets may not be reproduced at current prices. Asset valuation at historic cost also does not reflect technological change as represented by a current cost valuation of the modern equivalent asset which the corporation would purchase today if it were to substitute an asset today.

3.2.2 Ex post cost allocation

The EPM informs about cost as they have occurred in the past. It generates information ex post. By the high degree of granularity of the cost allocation process this information can be provided at a product level, at the level of a strategic business unit or at the level of a certain service group.

Costs as shown in the EPM do not represent forward-looking costs. Assets are valued at historic cost and not at their forward-looking current cost. The production process is represented as it has been structured and managed at a certain point in time in the past and not as it might be structured in a forward-looking sense. Resources are treated as cost as they are actually occurring and not as they should be in an efficient production process.

3.2.3 No parameter simulation

The raw data – as we have received it – is a 2013/14 snapshot of data which informs on the allocation cost path from cost centres (activities) to weighting factors and to products. The data sheets are not integrated and therefore do neither allow simulating

the effects of parameter changes nor in-depth analysis of the underlying calculation with regard to inconsistencies or errors in the application of the methodology.

3.2.4 No integration of a forecast model

Due to its nature as an ex post cost allocation model, the EPM is not coupled with a forecast model. When Australia Post provides regulatory information on future years and the impact of price changes to the profit or loss of a particular service, this is based on the corporate plan. The corporate plan is based on a financial model which is not directly coupled with the EPM. The EPM (the CAM as part of the EPM) itself is not used as a forecasting tool. It is rather used to allocate Australia Post's cost forecast, undertaken for each business unit in fully separated models, to products and services.[27] Furthermore, the financial forecast is presented in a much more aggregated structure. Results are presented at the level of service groups and not individual products. This is a potential source of a mismatch between historic, actual and forecast data.

3.3 Relevance to ACCC regulatory decisions as a tool

3.3.1 Cross-subsidy test

One of the major outputs of the EPM is whether a particular service or a group of services is covering their fully allocated cost. The more traditional view of a cross-subsidy is that a service is receiving a subsidy if its revenues are not covering its fully allocated costs. Vice versa users of a service which generate revenues above the level of their fully allocated cost provide a cross-subsidy to users of a service which do not generate enough revenues to cover their fully allocated cost.

If the cross-subsidy test is conducted on the above mentioned definitional basis, the EPM delivers the output which the ACCC can directly use to make its cross-subsidy test and can directly identify whether there is a case where the profit from providing one service is used to cover the loss in providing another service. This test can be conducted for a (potential) cross-subsidy from the group of the monopoly reserved services to the competitive non-reserved services. The EPM also allows to conduct this test on a more granular service basis.

The direct suitability of the EPM results for such a cross-subsidy test needs two qualifications. One qualification is that the cross-subsidy test should be based on efficient cost. We have shown in Section 3.3.2 that the EPM is not necessarily based on efficient cost. The second qualification is related to the proper allocation of costs to services. The cross-subsidy test and its results would be distorted if the allocation of costs to services were not appropriate. Although the analysis conducted in Section 4 of

27 Australia Post, Repsonse to Information Request, 6 October 2015.

this study did not reveal any systematic underallocation of costs to reserved services we have identified some elements of the system of allocation factors which may distort the results of the EPM in detail.

In conducting its cross-subsidy test the ACCC, however, is not following the traditional definition of a cross-subsidy but is applying the more modern economic concept of a cross-subsidy.[28] According to this definition the regulator seeks to identify whether the revenue from any non-reserved service group is less than the incremental cost of providing that service group and whether the revenue generated by reserved services is greater than the stand-alone cost of providing the reserved services.

This economic concept of a cross-subsidy is quite demanding for generating the (theoretically) appropriate data to make the test and the assessment. The EPM does neither provide the incremental nor the stand-alone cost of providing a service or a service group. Applying these economic cost concepts in practice is a quite demanding exercise. The EPM model would need quite a different structure to support those economic cost concepts. The model would need the flexibility to model the provision of services in different combinations and scenarios. Usually it would require a sophisticated engineering bottom-up cost model to generate the costing outcomes needed for the economic cross-subsidy test.

Given the lack of the theoretically needed costing input to conduct the cross-subsidy test the ACCC is following a pragmatic approach which uses the basic output of the EPM to approximate incremental and stand-alone costs.[29] The ACCC uses the service's fully allocated cost as generated by the EPM as the lower bound of the stand-alone cost test. If a service's revenue exceeds its fully distributed cost, it may be a source of subsidy. The upper bound of the stand-alone cost is assumed to be the service's direct and attributable costs plus the total of all of Australia Post's unattributable costs. Where the revenues of a particular service are above this upper bound it is definitively a source of subsidy.

Under its pragmatic approach the ACCC is considering the direct cost allocated to a service as the lower bound of its incremental cost. Where revenue of a service is sufficient to cover its direct costs but less than the sum of its direct and attributable costs, the service is assumed to be a possible recipient of a subsidy. This is regarded as the upper bound of the incremental cost of a service.

The cost proxies the ACCC uses for its cross-subsidy test are not the directly appropriate incremental and stand-alone cost for conducting the economic test. Nevertheless, the proxy approach of the ACCC using the EPM data makes a lot of sense to us in generating a robust result. Although one can construct theoretical examples which might show that the test does not generate the "correct" results, in

28 See ACCC, Assessing cross-subsidy in Australia Post, April 2015.
29 See ACCC, Assessing cross-subsidy in Australia Post, April 2015, p. 7f.

most of the relevant cases it will. This holds in particular when the proxy numbers generate a result which is unequivocal. The proxy approach becomes more critical if the result is tight. Then it might need additional tests and checking to test the robustness of the result.

3.3.2 Identification of efficient cost

The EPM informs the ACCC on the actual cost incurred by Australia Post in its monopoly letter business and costs associated with the services it provides in competition with other businesses. The ABC system allocates those costs in a conceptually appropriate form to products and services enabling the ACCC to identify per unit cost.

One prerequisite for the CAM to generate efficient cost would be that the production processes which inform the allocation of costs of activities to services themselves are efficient. The RoLS program which Australia Post currently is starting indicates that the current mail operation processes need restructuring before they can be regarded as efficient. The full potential of the productivity improvement program will be materialised not earlier than in financial year 2017/18. This holds although the RoLS program entails more elements than making the current processes more efficient. Further cost savings will be materialised by extending the timetables of mail delivery for customers. ✂

Achieving efficient cost can have a time dimension. If the current processes are not efficient and need to be restructured to achieve an efficient cost structure and cost level, that restructuring process needs time to be introduced such that the targeted cost level will be achieved. The same holds if restructuring is accompanied with investments in a new machinery infrastructure.

This can be demonstrated with reference to Australia Post's RoLS program. The program starts in 2014/15 and will - according to Australia Post - generate yearly increasing cost benefits which achieve their maximum in 2017/18 (see Table 3-1). From an economic perspective efficient cost are achieved at the end but not at the beginning or in the middle of a restructuring process. If the regulator insists and is driven by efficient cost pricing it has to determine prices according to the cost at the end of a restructuring process. This could imply that on the basis of actually incurred costs the company may not recover costs at any moment in time.

Restructuring cost is often caused by redundancy payments to reduce overcapacities, for example due to decreasing demand for services or due to an increased productivity, or related to capital expenditures, for example investment in new equipment or write-down of replaced machines. From an economic perspective, restructuring cost is a nonrecurring and non-operating expense. Non-operating expenses are expenses that are not caused by the normal course of producing output. As such, restructuring cost is included in the net income of a business and has to be borne by its shareholders.

Shareholders may, however, request the coverage of restructuring costs by the firm's current operations, i.e. to allocate them to services and products. In the context of a fully allocated cost approach, many regulators allow for consideration of restructuring cost in services' prices given a reasonable allocation of restructuring cost to (regulated and unregulated) services, for example by using an equi-proportionate mark-up rule to allocate such cost.

Table 3-1: Achieving cost savings over time in the RoLS program

Project	2014/15	2015/16	2016/17	2017/18
Daytime Processing	✂	✂	✂	✂
Automation	✂	✂	✂	✂
Alternative Delivery Model	✂	✂	✂	✂
DC Consolidation	✂	✂	✂	✂

The CAM treats all labour related and non-labour related resources which are used in the production process as relevant costs. This also holds for overcapacity and redundant assets as long as they are not disposed. Efficient costs are defined as representing the cost of those resources which are needed to produce current demand (including efficiently incurred planning reserves). Cost of overcapacity and redundant labour or other redundant resources are not part of efficient cost.

3.3.3 Assessing the cost of new services

It is the function of the EPM to allocate actual costs to the current service portfolio. Furthermore, activities and allocation factors are defined for the existing service portfolio. Therefore, by definition the EPM cannot derive the cost of a newly introduced service. The EPM needs to be restructured if a new service occurs before the system can generate the costs of a new service. The data generation process in particular on the probability factors of the use of an activity by a certain service, needs a certain time before stable operational information on changed processes are available. This defines a trade-off of the timing of changing the EPM. Because a new service changes the relative use of activities for the "old" services, this has impacts on the cost allocation for each particular service which uses these activities. This asks for an immediate change

of the EPM if a new service is introduced. On the other hand, reliable information on the process change and the necessary change of allocation factors needs time.

From a regulatory perspective it follows that the annual EPM cannot show the impacts and the cost of a new service which is introduced in the following financial year. Only next year's EPM results are able to show the cost of a new service if the EPM is adapted in due time.

The ACCC and/or Australia Post have to use other costing tools to calculate the cost of a new service than the EPM. The EPM can, however, deliver inputs for a top-down analysis of the costs of a new service. On the basis of process information for the new service the processing costs of the relevant activities of the EPM can support such a top-down analysis. This holds in particular if the new service only uses the processes of the "old" services. The exercise becomes more complex if the new service requires a redefinition of activities or the introduction of new activities.

3.3.4 Review of price notifications

From our assessment of the strengths and weaknesses of the Australia Post's CAM (in Sections 3.1 and 3.2) it should become obvious that the outcome of the EPM only provides a limited contribution to the information needs of the ACCC to assess a price notification. These requirements can be summarized as follows:

(1) The ACCC needs forward-looking cost and not actual cost of the recent past to assess a price proposal for prices which would be valid for the next few years.

(2) Economic regulation of prices is based on efficient cost. The price regulated should earn enough revenues to get coverage of efficiently occurred costs and not (necessarily) actual costs. Efficiency adjustments to actual costs may be needed to identify efficient cost.

Besides these general limitations of the EPM to inform about the relevant cost to assess a price proposal there is a more specific issue if a new product is introduced and needs to be priced. The costs of a new product usually cannot be identified in the EPM at all. This follows from the building principles of the EPM.

The EPM might provide an indication to the ACCC about the revenue requirements of a notified service. That, however, only can be an indication. In any case, the ACCC has to develop a forecast on the relevant revenue requirements for the upcoming regulatory period. The same holds for the unit cost of a service. The EPM generated unit costs need to get top down adjustments to identify the relevant cost for the price decision.

In Section 7 of this study we will describe in detail how the results of the EPM can be an input to the specific price notification decision of the ACCC and which further considerations and calculations may be needed to generate the appropriate data for an appropriate price notification decision.

3.3.5 Assess effects of declining/increasing volumes

To identify the effects of declining or increasing volumes of a service on the cost of that service (and simultaneously the cost of services which use the same activities), the EPM needs to be capable of conducting such simulations. The "model" provided to ACCC is not capable for such simulations.[30] In principle we believe that the EPM should be capable or could be made capable of conducting such simulations.

Nevertheless, the short-term effects may be overstated because the EPM does not distinguish between fixed and variable costs. Short-term changing volumes only have an effect on variable but not on fixed costs.

In a longer-term perspective the EPM also has a major issue to identify the effects of changing volumes on costs. In a longer-term perspective a business responds to volume changes of a service by examining its production process. It would seek to further optimise and adapt its production process such that it optimally fits with the new volumes and the anticipated change of volumes in the planning horizon. The EPM reacts on volume changes, but it reacts in the structure of the prevailing production process. The EPM only shows such longer-term effects if the processes are newly defined and the allocation factors are adapted to the change in the production process.

3.3.6 Assess the cost of regular and priority letter services

The 2013/14 EPM already shows different costs between Regular and Priority mail services ✂. In 2013/14 Australia Post provided six main types of letter services (Small Letter Pre Sort, Small Letter Charity Mail, Large Letter Pre Sort Small Plus, Large Letter Pre Sort Medium, Large Letter Pre Sort (0 to 250g), and Large Letter Pre Sort (250-500g)). The differences in costs between Regular and Priority mail services are mainly driven by different volumes and a higher share of transport cost, in particular related to air transport, to Priority mail services.

It is not surprising that the 2013/14 EPM only shows small cost differences because Regular and Priority mail as they are currently produced only face a minor different treatment in the production process. This is going to change significantly with the introduction of the Regular and Priority differential for ordinary letters. This will go hand in hand with major changes in the production process in processing as well as in delivery. ✂

The EPM as a system can only show the "real" cost differences between Regular and Priority mail once the new production processes are in place. Only the new processes deliver the operational data which are needed to feed the relevant factors to properly allocate costs to the differently defined activities. For example, the new sorting

30 See Section 3.2.3 of this report.

machines Australia Post plans to implement will allow for more granular sub-activities in sorting separately for small and large letters. Current activities have to be redefined and new adapted factor values have to be derived. That is also the reason why Australia Post currently can only develop a top-down approach to the EPM to estimate the operational cost differences between Regular and Priority mail.

4 Review of Australia Post's cost allocation model for 2013/14

4.1 Approach and focus of the analysis

In order to assess Australia Post's cost allocation practice, we have reviewed the following documents:

- Australia Post's Regulatory Accounting Procedure Manual, Version 1.0 dated November 2014 (cited as RAPM) and supporting documents (for example a detailed factor description, an activity factor mapping and an EPM activity dictionary).
- Regulatory accounts reported by Australia Post for the financial year 2013/2014.
- Presentation "Enterprise Profitability Model (EPM)" held by Australia Post on 25 August 2015.
- Various public available information including annual reports, price lists, and product brochures of Australia Post.
- Various previous decisions and regulatory documents published by ACCC including cross-subsidy reports, price notifications, and the Record Keeping Rules.

It was not possible (nor intended) to review the cost allocation practices for all activities in equal detail. Therefore, we focus on a selection of activities for which we have assessed the cost allocation methods and factors in more detail (see Section 4.4.2). The review and approach focus on activities related to core postal functions, i.e. acceptance, processing, transport and delivery of mail items. The selection of activities was based on the identification of the most relevant activities in terms of total attributable cost allocated and with respect to the allocation of cost between

- non-reserved, reserved and notified services,
- letter, parcel and express services, and
- regular and priority services.

The authors have not scrutinised the methods employed by Australia Post to report costs per activity (i.e. collect costs for each expenditure item, allocate to resources, then map to activities). The reason for concentrating the analysis on the allocation of costs from activities to products was an initial assessment that this is the most complex, and most critical stage of cost allocation from a regulatory perspective.

In order to assess Australia Post's approach to cost allocation, we have formed a judgement on the quality of the information and of evidence provided by Australia Post to support factor values with special emphasis on the "Relative Effort Factors". In

particular, our assessments relate to our view of how well Australia Post's approach reflects the principle of cost causality.[31]

4.2 Overall distribution of costs

Australia Post's Cost Allocation Model is a fully absorbed cost model which utilises Activity Based Costing (ABC) as cost allocation methodology. The approach aims to systematically break-down the recorded postal expenditures until product and services costs are established. To allocate the costs to specific products, costs are processed through two steps: Resource i.e. cost inputs, to Activity then Activity to Product / Services.

The ACCC has issued the Record Keeping Rules (RKR) which provide Australia Post with detailed instructions for the establishment of regulatory accounts. Section 13 of the RKR set out definitions for three different cost categories (account items). According to the RKR, each account item must be reported as either:[32]

- a direct account item – that is, one solely associated with a particular service.
- an attributable account item – that is, part of a pool of common account items that are identifiable to a particular service by a separable cause and effect relationship.
- an unattributable account item – that is, part of a pool of common account items but is not identifiable related in whole or in part to any particular service by separable cause and effect relationship.

To support ACCC requirements with the regards to allocation of account items, Australia Post categorizes all allocations into one of three categories:[33]

- Direct Cost: Costs are allocated directly to a product.
- Attributable Cost: The allocation of costs is performed using a series of weight factors. The weight factors aim at reflecting the degree of cost variability with respect to services "consuming" a specific activity by analysing the extent to which a service requires a particular activity to be performed. Using this analysis, the services which utilize the same activities are identified and a group of variables, which indicate the "consumption rate" of the activity by each service, is determined. The factors used more commonly, either individually or in some combination, in distributing activity costs to mail services include volume,

31 Activity based costing seeks to identify cause and effect of all cost objects. This (objective) information is then used to assign costs and replaces broader, often arbitrary, percentages used in traditional accounting practice. The orientation towards causal relationships between cost objects and products is a key element of activity based costing. We refer to this as the 'principle of cost causality'.

32 ACCC (2005), Record Keeping Rules - Establishing a Regulatory Accounting Framework for Australia Post, 30 March 2005, Section 13 (2), p. 9.

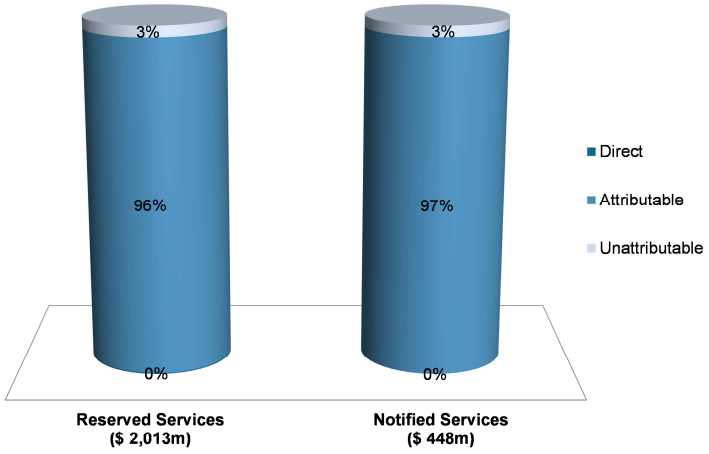
33 Australia Post, RAPM, p.35 subsq.

average and total mass, average bag content, average tray content, average distance conveyed, average processing / handling time, and payment / conveyance rate.

- Unattributable Cost: For all other expenses, Australia Post's CAM assigns the costs using other drivers. These drivers include revenue, volume, costs, and business sources, such as transaction volumes, time and motion studies standard, cost per minute, call centre statistics marketing surveys etc.

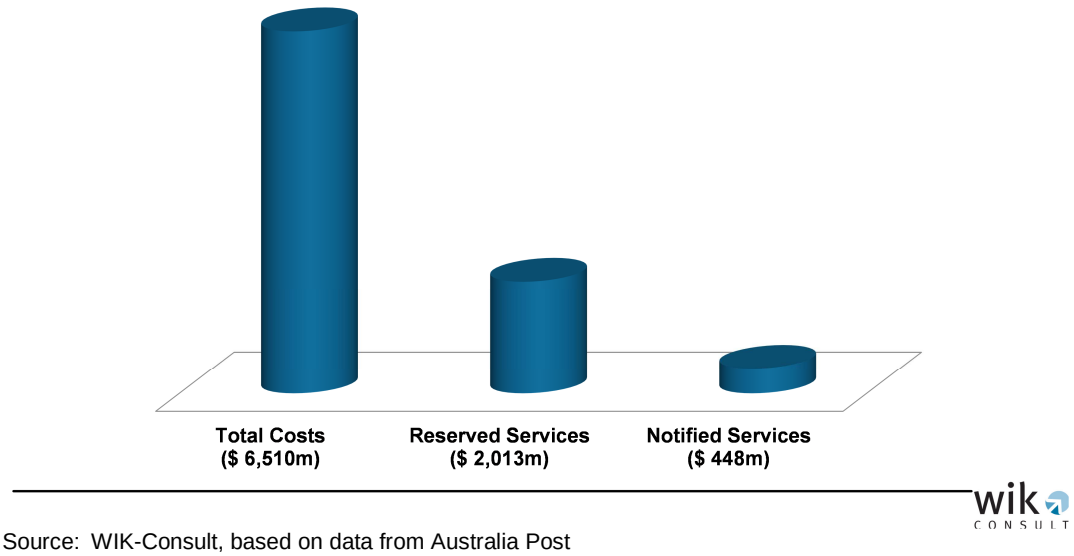
Figure 4-1 illustrates the relative importance of the three cost categories (direct, attributable and unattributable). Attributable cost is the by far most relevant cost category which is responsible for around 96% (97%) of all costs allocated to reserved (notified) services. In comparison, unattributable cost only plays a minor role with a share of 4% of the costs allocated to reserved and notified services. Direct cost accounts are negligible in the context of these services.

Figure 4-1: Cost allocation methodology - Share of Direct Cost, Attributable Cost and Unattributable Cost on reserved and notified services



Source: WIK-Consult, based on data from Australia Post

Figure 4-2: Cost allocation to reserved, non-reserved and notified services



Source: WIK-Consult, based on data from Australia Post

Figure 4-2 illustrates Australia Post's cost allocation to reserved, non-reserved and notified services. Reserved services include letter mail products up to 250g[34] (21 products in FY 2013/2014) and account for $2,013m, i.e. around 31% of Australia Post's total costs. Notified services include two products, Small Letters Ordinary Stamped and Large Letters ordinary Stamped, and account for $448m, i.e. around 7% of Australia Post's total cost or 22% of cost allocated to reserved services.

[redacted]

Error! Reference source not found. illustrates the composition of costs allocated to reserved, non-reserved and notified services according to operational functions. The postal core functions, i.e. acceptance, processing, transport and delivery, account for more than [redacted]% of the costs allocated to reserved and notified services. For the two notified services, the costs for the acceptance of letters represent around [redacted]% of the allocated cost.

[redacted]

Error! Reference source not found. illustrates Australia Post's cost allocation to different service groups[35]. A major part of cost is allocated to the small letter products,

34 Australian Postal Corporation Act 1989, Act No. 64 of 1989 as amended up to Act No. 156 of 2007, Sections 29 and 30.

35 The assignment to service groups is taken from Australia Post's data and based on ACCC's definitions.

which account for around ≻or around ≻ of cost allocated to reserved services. In total, costs allocated to letter mail products, including international inbound and outbound letters and other letter associated services, account for approximately ≻. Parcel and courier services, including international inbound and outbound parcels and StarTrack International, account for approximately ≻. The service groups Courier Services and Parcelsrepresent the major categories, with allocated cost of more than ≻each.

≻

illustrates the cost allocation according to functions for reserved letter services (letters below 250g), non-reserved letter services (including large letters above 250g, international letter mail services and other letter associated services) and parcel services (including express products). There are only minor differences in the relative share of cost related between the three service groups beside the relative cost shares of transport and for delivery. Transport costs are more important for parcel services than for letter mail services and represent around twice the relative cost share (≻vs. ≻ and ≻). Letter mail services show a higher relative cost share in relation to delivery, which account for around ≻ for reserved letter services and ≻ for non-reserved letter services in comparison to ≻ for parcel services.

4.3 Direct costs

Direct Costs account for $1,928m (around 30% of total cost). The majority, around 99%, are allocated to non-reserved services and only a small share is allocated to reserved services (approximately $6m, i.e. below 1% of total cost allocated to reserved services).

Table 4-1: Major Direct Cost account items (in terms of allocated cost)

Activity Code	Description	Function	% of direct cost
STARTRKEXP	Star Track Express	Other	≻
TP_CIRETM_LPOINMAIL	Inter Sbu Cost In Retail Mails Lpo Inward Mail	Other	≻
TP_CIMAIL_LPOINMAIL	Inter Sbu Cost In Mails Lpo Inward Mail	Other	≻
MPOST	Messenger Post	Business Specific	≻
TP_CI_FRMAIL	Inter Sbu Transfer Cost In From Mails	Other	≻
TP_CIMAIL_LPOBULKSBB	Inter Sbu Cost In Mails Lpo Bulk Sorting To Boxes	Other	≻
TP_CI_FRPAR	Inter Sbu Transfer Cost In From Parcels	Other	≻
CRENOTALLOC	Real Estate for Investment & Non Let Space	Corporate Real Estate	≻
TP_CIRETM_SALEASTA	Inter Sbu Cost In Retail Mails Sales & Accept Of S	Other	≻

Activity Code	Description	Function	% of direct cost
COGSSTAT	Cogs Stationery	Cost of Goods Sold	≻≺

Source: WIK-Consult, based on data from Australia Post

Table 4-1 provides an overview of major Direct Cost account items in Australia Post's CAM. The major account item, StarTrack Express, allocates Direct Cost of around ≻≺and accounts for around ≻≺ of total direct costs allocated in the CAM.

Account items are categorized as direct cost if costs are traceable from the source, e.g. a specific General Ledger account, during the allocation process to service groups. Total cost of an activity is assigned directly to a product and mainly used for non-mail products, subsidiaries etc.[36] The majority of direct cost account items are related to non-operational functions, in particular to internal transfer pricing, cost related to goods sold for retail products, LPO commissions (for example payments to LPOs for accepting Financial Service transactions), and specialist business units (for example Messenger Post).[37]

4.4 Attributable cost

The majority of postal activities are shared by a set of products and related costs and are allocated to multiple product groups. Consequently, the direct allocation of activity cost is rarely possible and most activity cost / account items are considered attributable.[38] Attributable Cost account items include cost of $4,323m (around 66% of total cost) and represent 96% of costs allocated to reserved services.

4.4.1 Distribution of costs according to activities

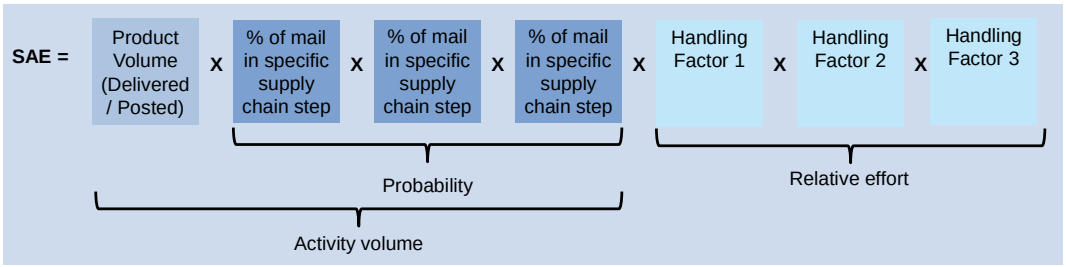
Australia Post uses a volume driven method to allocate cost reflecting causality and/or output which aims "to present the most reliable "cause and effect" relationship between the relative consumption of resources by each Service Group or products therein"[39]. The objective of the "Standard Article Equivalent" Conversion approach is a volume driven allocation of the cost of shared activities to the products. For this purpose, Australia Post first allocates attributable cost to activities and uses a series of weighting factors to allocate activity cost to products. The factor values are derived "from an analysis of the extent to which a Service requires a particular Direct Activity to be performed and what causes a Service to use more or less of that Direct Activity"[40].

36 Australia Post, Enterprise Profitability Model (EPM). Presentation 25 August 2015, p. 55.
37 Australia Post, RAPM, p. 38.
38 Australia Post, RAPM, p. 29.
39 Australia Post, Factor Description, p. 6.
40 Australia Post, RAPM, p. 36.

There are three key categories of factors for the allocation from activities to services / products:[41]

1. **Relative Use**: product volume, i.e. number of articles posted and/or delivered.
2. **Probability Factors**: represent the 'probability' of the Service Group or product undergoing an activity and model the probability / share that a product will pass through a particular supply chain path (the activity).
3. **Relative Effort Factors**: reflect relevant differences in handling products at an article level within the same activity (relative duration or difficulty of handling) and aim to achieve a reasonable cost allocation.

Figure 4-3: Cost allocation – Calculation of Standard Article Equivalent (SAE)



Source: WIK-Consult, based on Australia Post, "Enterprise Profitability Model" (EPM), Presentation, 25 August 2015

The factors are used to calculate "Standard Article Equivalents" (SAE) for each product as illustrated in Figure 4-3. For example, the SAE of a small letter ordinary stamped for the activity "outdoor delivery by contractors" is calculated by multiplying the total volume of small letters ordinary stamped delivered with

- the proportion of mail that is processed through Corporate Offices (Probability Factor 1),
- a factor that represents the probability that a mail item is delivered to a street delivery point (Probability Factor 2),
- the proportion of mail that is delivered outdoor by contractors (Probability Factor 3), and with
- the relative handling factor for small letters ordinary stamped (Relative effort Factor).

Australia Post points out that it is important to ensure that total activity cost allocated to products equals the total activity cost prior to appointment.[42] For this reason, a second

41 Australia Post, Enterprise Profitability Model (EPM) Presentation, 25 August 2015, p. 53.
42 Australia Post, RAPM, p.36.

calculation step is performed that ensures that the share of the activity costs allocated to an individual service is the product of the SAE for that service divided by the sum over all services of the product of the SAE, i.e.:

$$Share\ of\ cost\ allocated\ to\ product\ 1 = \frac{SAE_{product\ 1}}{\sum_i SAE_{product\ i}}$$

Finally, attributable cost of an activity is allocated to an individual product by multiplying the share of cost allocation of this product with the activity cost.

The operational data that informs the derivation of the product volumes and the probability factors can generally be measured more accurately and more reliably. For example, it can be determined relatively easily how much items of a specific mail product use specific transport facilities or how much working time a postal delivery officer spends sorting and sequencing the mail indoors, or delivering it outdoors. By contrast, it is much more difficult to measure how much of the delivery time outdoors relates, for example, to large letters or unaddressed items. For this reason, we focus our review and assessment of Australia Post's approach to allocate attributable cost on the quality of the descriptions and of evidence provided by Australia Post to support factor values with special emphasis on the "Relative Effort Factors".

4.4.2 Review of cost allocation for selected activities

For this project, a more detailed review was carried out, for selected activities, for the allocation of attributable cost from activity to products.

Table 4-2: Major activities (in terms of share of attributed costs)

Activity Code	Description	Function	% of attrib. costs
OUTDRDELSTF	Outdoor Delivery Staff	Delivery	✂
SETUPSEQSTF	Set Up & Sequencing Staff	Delivery	✂
CONPARCELDEL	Contract Parcel Delivery	Delivery	✂
FINCORP	Finance Activity Corporate	Finance	✂
METROLET	Metro Letters Centre	Processing	✂
INTEROFROADTRA	Intrastate Road Transport	Transport	✂
ROADSIDEDEL	Roadside Delivery - Contractor	Delivery	✂
PRIMSORTSTF	Primary Sort Staff	Delivery	✂
SUPERACT	[Superannuation actual]	-	✂
INWARDMAIL	Inward Mail LPO	Delivery	✂
METROPAR	Metro Parcels Centre	Processing	✂
STREETDEL	Street Delivery - Contractor	Delivery	✂

Activity Code	Description	Function	% of attrib. costs
HRCORP	Hr Activity Corporate	Human Resources	✂
POSTAGESALE	Postage Sales LPO	Acceptance	✂
INTERPRO	International Processing	Processing	✂
CONLHAULINTER	Interstate Linehaul - Contractor	Transport	✂
SALEACCSTAMPRP	Sale & Acceptance of Stamps	Acceptance	✂
PARPRO	Parcel Processing Operational Support	Support to Operations	✂
LCAOTERMDUE	Tds Lc Ao Terminal Dues	Delivery	✂
SORTBBRET	Delivery Centre - Sorting To Boxes & Bags – Staff	Delivery	✂
TECHMETROLET	Metro Letters Centre - Technicians	Processing	✂
DOMAIRTINTER	Air Transport - Interstate	Transport	✂
DELOPPON	Delivery Operational Support - PON	Support to Operations	✂
CLEARLETT	Clearance of SPBs	Acceptance	✂
RETOP	Retail Operational Support	Support to Operations	✂
NMECHCOUNTRY	Non-Mechanised Country Centre	Processing	✂
ITCORPADM	Corporate Administration	Information Technology	✂
CONLHAULINTRA	Intrastate Linehaul - Contractor	Transport	✂

Source: WIK-Consult, based on data from Australia Post

Table 4-2 above lists all activities with a share of more than one per cent in Australia Post's attributable costs. The remainder of this section concentrates on reviewing and assessing eight activities which are highlighted in the table.

As activities related to delivery represent the major costs allocated to reserved and notified services, with a cost share of ✂ and ✂, we selected the most important delivery activities for letter mail products, i.e. Outdoor Delivery Staff (OUTDRDELYSTF), Set Up & Sequencing Staff (SETUPSTQSTF), Primary Sort Staff (PRIMSORTSTF), Inward Mail LPO (INWARDMAIL), Roadside Delivery – Contractor (ROADSIDEDEL), and Street Delivery – Contractor (STREETDEL). The cost allocated to processing activities represents the second major function in the postal supply chain and represent ✂ of cost allocated to reserved services and ✂ of cost allocated to notified services. We select the activity Metro Letters Centre (METROLET) for our detailed assessment as it represents the major letter mail processing activity in terms of attributable cost allocated. Further, we selected the activity Air Transport – Interstate (DOMAIRINTER) as this activity provides insights regarding the cost allocation between regular and priority services.

4.4.2.1 Activity Outdoor Delivery Staff (OUTDRDELSTF)

The activity Outdoor Delivery Staff (OUTDRDELSTF) is allocated to the function "Delivery" and accounts for [redacted] (around [redacted]) of all attributable costs of which $[redacted] are allocated to reserved services (around [redacted] of all the costs of reserved services).

4.4.2.1.1 Description

The RAPM does not include a detailed description of the activity. In Australia Post's EPM Activity Dictionary, the activity is defined as "The outdoor delivery of mail by Postal Delivery Officers (PDOs)", i.e. it does not include cost for delivery performed by contracted delivery staff or cost related to set-up, sequencing and loading the carriers' bags (which are reported in a separate activity).

Table 4-3: Factors used to allocate cost of activity OUTDRDELSTF to products

Factor	Factor Description	Explanation
DELVVOL	Mail volume delivered	This factor represents the total mail volume delivered by product e.g. the number of SL Ordinary Stamped delivered in Victoria. This volume is obtained via the Revenue Based Volumes process.
DELOP	%AGE PRODUCT DELV OPO'S	Represents the proportion of mail that is processed through Corporate Offices - Corporate offices include delivery centres, retail shops, post offices but exclude processing facilities (mail centres and parcels centres)
OUTDEL	% OUTDOOR DELIVERY	This is an analysis of how much of a mail item is delivered to a street delivery point as opposed to Boxes/Bags/Counter.
OUTSTF	%AGE PRODUCT DELV OPO'S Staffed	This factor represents the proportion of mail that is processed through Corporate Offices - Corporate offices include delivery centres, retail shops, post offices but exclude processing facilities (mail centres and parcels centres)
GENWGT1	GENERAL WEIGHTING - GENERAL	Represents the relative handling factor between products.

Source: Australia Post, Factor Description

Table 4-3 above lists the factors used by Australia Post to allocate the cost of this activity to products. The factor DELVVOP, which represents the total mail volume delivered, combined with the three probability factors (DELOP, OUTDEL, and OUTSTF) measure the volumes of mail actually delivered outdoors by AP's delivery staff. The factor GENGWT1 incorporates the relative effort related to the outdoor delivery of different services and products.

The cost allocation through the four volume related factors, i.e. according to mail volume shares, seems less crucial than the allocation according to the relative effort assigned to different products. Against this background, the subsequent assessment of

activity OUTDRDELSTF focusses on the factor GENGWT1 and its factor values for the different products and services.

4.4.2.1.2 Assessment

A first observation is that the documentation on the exact activities included in "outdoor delivery", as well as the considerations underlying the factors used for cost allocation in the RAPM, is extremely short and does not appear sufficiently informative.

Table 4-4: Attributable cost of all activities affected by the factor GENWGT1

Activity Code	Description	Attributable cost per activity (m$)
STREETDEL	Street Delivery	✂
SORTBBRET	Delivery Centre - Sorting To Boxes & Bags – Staff	✂
SORTBBDEL	Delivery Centre - Sorting To Boxes & Bags – Staff	✂
SORTBBBC	Business Centre - Sorting To Boxes & Bags – Staff	✂
PARPICKUP	Parcel Pickup	✂
OUTDRDELSTF	Outdoor Delivery Staff	✂
INWARDMAIL	Inward Mail LPO	✂
COUNTERPRET	Retail - Counter Point Delivery – Staff	✂
COUNTERPBC	Business Centre - Counter Point Delivery – Staff	✂

Source: WIK-Consult, based on data from Australia Post

Within Australia Post's cost allocation model, the allocation of the costs of activity "Outdoor Delivery Staff" relies heavily on the relative effort factor GENWGT1. This factor is used for several sorting and delivery activities (see Table 4-4 above). The total attributable costs of activities allocated using GENWGT1 account for more than ✂, i.e. more than ✂ of the attributable cost.

GENWGT1 represents the relative handling factor between products. Australia Post's Factor Description explains that the values for each product "were developed from a base of 1, 2, 10, where 1 is for small letters, 2 is for non-standard articles (Large Letters and small Parcels) and 10 is for parcels/Specials."[43]

According to Australia Post, higher values for large formats were due to issues such as the difficulties in inserting larger items into a household's post box, more space needed for the item in the delivery bag, and heavier weight carried by the PDO. While these examples stated for the relative values of factor GENWGT1 are certainly convincing, no clear evidence was provided by Australia Post as regards the exact values of the factors. Again, such detail appears appropriate given the significance of this cost centre.

43 Australia Post, Factor Description, p. 16.

Table 4-5: GENWGT1 – Factor values per product

ACCC SERVICE GROUP		Product Description	GENWGT1
Reserved services	Small Letters Ordinary	1020 - Pol Sl Ordinary Stamped	✂
		1021 - Pol Sl Metered Imprint Charge Regular	✂
		1022 - Pol Sl Clean Regular	✂
		1025 - Pol Sl Reply Paid	✂
		1040 - Pol Sl Local Rate Regular	✂
	Small Letters Presort	1050 - Pol Sl Pre Sort Priority	✂
		1060 - Pol Sl Charity Mail Priority	✂
		1070 - Pol Sl Pre Sort Regular	✂
		1080 - Pol Sl Charity Mail Regular	✂
	Large Letters Ordinary	1110 - Pol Ll Ordinary Stamped 0 250g	✂
		1111 - Pol Ll Metered Imprint Charge 0 250g Regular	✂
		1112 - Pol Ll Clean Sml Plus Regular	✂
		1115 - Pol Ll Reply Paid	✂
		1130 - Pol Ll Local Rate Regular	✂
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂
		1160 - Pol Ll Pre Sort Medium Priority	✂
		1170 - Pol Ll Pre Sort Medium Regular	✂
		1180 - Pol Ll Pre Sort Large 0 250g Priority	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂
Non-reserved services	Large Letters Ordinary	1113 - Pol Ll Ordinary Stamped 250 500g	✂
		1114 - Pol Ll Metered Imprint Charge 250 500g Regular	✂
	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority	✂
		1195 - Pol Ll Pre Sort Large 250 500g Regular	✂
	Interl Out Letters	3010 - Pol Smlletters Out Airmail	✂
		3020 - Pol Smlletters Out Aerograms	✂
		3050 - Pol Lge Letters Out Airmail	✂
		3085 - Pol Business Mail Out	✂
		3245 - Pol Express Post International	✂
		3250 - Pol Mbags Out	✂
		3260 - Pol International Bulk Mail	✂
		3265 - Pol Direct Access Outwards	✂
	Internl In Letters	3310 - Pol Smlletters In Airmail	✂
		3315 - Pol Direct Access Inwards	✂
		3330 - Pol Smlletters In Sea	✂

ACCC SERVICE GROUP		Product Description	GENWGT1
		3340 - Pol Smlletters In Economy	✂
		3350 - Pol Lge Letters In Airmail	✂
		3360 - Pol Lge Letters In Sea	✂
		3380 - Pol Lge Letters In Economy	✂
		3510 - Pol Registered In Letters	✂
		3550 - Pol Mbags In	✂
	Other Letters	1410 - Pol Unaddressed Interstate Std Size	✂
		1420 - Pol Unaddressed Interstate Lge Size	✂
		1450 - Pol Unaddressed Intrastate Std Size	✂
		1460 - Pol Unaddressed Intrastate Lge Size	✂
		1510 - Pol Print Post Standard Regular	✂
		1520 - Pol Print Post <500g Regular	✂
		1530 - Pol Print Post >500g Regular	✂
		1550 - Pol Contract Publications	✂
		1560 - Pol Registered Post	✂
	Parcels	1210 - Pol Express Post Envelope C5	✂
		1215 - Pol Express Post Envelope B4	✂
		2010 - Pop Pcls <500g Fr Stamp Label	✂
		2011 - Pop Pcls <500g Fr Other Bulk Meter	✂
		2015 - Pop Pcls <500g Express Satchel	✂
		2017 - Pop Pcls <500g Express Platinum	✂
		2018_POP_PCLS_<500G_PLATINUM_PARCELS_	✂
		2020 - Pop Pcls <500g Express Fr Stamp Labels	✂
		2021 - Pop Pcls <500g Express Reduced Rate	✂
		2023 - Pop Pcls <500g Express Fr Other Bulk Meter	✂
		2030 - Pop Pcls <500g Parcel Post Satchel	✂
		2040 - Pop Pcls <500g Local Rate	✂
		2065 - Pop Pcls <500g Contract	✂
		2110 - Pop Pcls >500g Fr Stamp Label	✂
		2115 - Pop Pcls >500g Fr Other Bulk Meter	✂
		2120 - Pop Pcls >500g Express Satchel	✂
		2122 - Pop Pcls >500g Express Platinum	✂
		2123 - Pop Pcls >500g Express Satchel 3kg Large	✂
		2124 - Pop Pcls >500g Express Satchel 5kg	✂
		2125 - Pop Pcls >500g Express Stamp Labels	✂
		2126 - Pop Pcls >500g Express Reduced Rate	✂
		2128_POP_PCLS_>500G_PLATINUM_PARCELS	✂

ACCC SERVICE GROUP		Product Description	GENWGT1
		2129 - Pop Pcls >500g Express Other Bulk Meter	✂
		2130 - Pop Pcls >500g Parcel Post Satchel	✂
		2140 - Pop Pcls >500g Local Rate	✂
		2165 - Pop Pcls >500g Contract	✂
		2175 - Pop Pcls >500g Eparcels Ordinary	✂
		2180 - Pop Pcls >500g Eparcels B2b	✂
	Interl Out Parcels	3090 - Pop Packets Out Airmail	✂
		3100 - Pop Packets Out Sea	✂
		3120 - Pop Business Packets	✂
		3125 - Pop Trackable <2kg Labels	✂
		3130 - Pop Parcels Out Airmail	✂
		3140 - Pop Parcels Out Sea	✂
		3210 - Pol Registered Post Out Air	✂
		3215 - Pop Registered Parcels < 2kg Labels	✂
		3220 - Pop Business Parcels	✂
		3226 - Pop Outward Da Parcels	✂
	Courier Services	3230 - Pop Eci Prepaid	✂
		3235 - Pop Eci Charge Account	✂
		3240 - Pop Eci Labels	✂
		3280 - Pop Epi Prepaid	✂
		3285 - Pop Epi Charge Ac Non Prepaid	✂
		3290 - Pop Epi Cash Non Prepaid	✂
	Internl In Parcels	3390 - Pop Packets In Airmail	✂
		3395 - Pop Epackets In Tracked Airmail	✂
		3400 - Pop Packets In Sea	✂
		3410 - Pop Packets In Economy	✂
		3430 - Pop Parcels In Airmail	✂
		3440 - Pop Parcels In Sea	✂
		3445 - Pop Inward Da Parcels	✂
		3460 - Pop Parcels In Economy	✂
		3520 - Pop Registered In Packets	✂
		3525 - Pop Insured Articles In	✂
		3530 - Pop Ems Ap In	✂
	StarTrack International	9101 - Lge Letters - In – Commercial	✂
		9102 - Packets - In – Commercial	✂
		9103 - Parcels - In - Commercial – Untracked	✂
		9104 - Parcels - In - Commercial – Tracked	✂

Source: WIK-Consult, based on data from Australia Post

Table 4-5 above lists all 109 values of factor GENWGT1 for the affected services. A first observation is that there are no values changed compared to 2008 (except for new values added for new products). Given the technological progress in postal operations, e.g. the introduction of hand scanners for the delivery of items which require signature, we would expect changes in the relative effort needed for different mail services. Generally, the relative values of the factor GENWGT1 for most products appear appropriate: For example, small letters are less costly than large letters, and these are again less costly than parcels. However, the RAPM does not provide any information to justify why, for example, a large letter below 250 grams takes ≻more time to deliver while a C5 express takes only ≻more time.

In the following we list our observations with regard to the factor values for GENWGT1:

- **Small and large letters:** Values for ordinary and presort small letters are identical (value 1 by definition) whereas the values differ between ordinary and presort large letter below 250g ≻. While it is straightforward that the relative handling for large letters below 250g is more costly than for small letters, it is not clear why there is a distinction between the relative handling factor of ordinary large letters (product code 1110 and 1111) and presort large letters (1180 and 1190) whereas this distinction is not made for other letter products.
- **Large letters (>250g):** ≻.
- **Unaddressed items**: ≻
- **Parcels:** ≻
- **Express Post Platinum and registered post:** ≻
- **Express Post Letters (C5 and B4 envelopes):** ≻
- **Priority vs. regular services:** It seems reasonable that the Factor GENWGT1 does not incorporate any differentiation between the handling of regular or priority mail.

Overall, Australia Post's approach of combining volumes with a factor to measure the relative effort of delivering a postal article appears appropriate for this activity. However, given the volume of cost allocated to the activity "Outdoor Delivery Staff" a more granular approach including some sub-activities may be useful and recommendable (see Section 5.3.1 for an extended analysis).

Even though the criticized factor values for products relate to non-reserved services, the factor values are also relevant for the cost of reserved and notified services: Lower values for non-reserved products would mean that ordinary letters (factor values normalised to one) are allocated a larger portion of the activity's cost.

4.4.2.2 Activity Set Up & Sequencing Staff (SETUPSEQSTF)

The activity Set Up & Sequencing Staff (SETUPSEQSTF) is allocated to the function "Delivery" and accounts for ≻ (around ≻) of all attributable costs of which ≻are allocated to reserved services (around ≻ of all the costs of reserved services).

4.4.2.2.1 Description

The RAPM does not include a detailed description of the activity. In Australia Post's EPM Activity Dictionary, the activity is defined as "The sorting and sequencing activities performed by outdoor delivery staff prior to delivery", i.e. this activity relates to the preparation of outdoor delivery (to walk sequence) by delivery staff in delivery centres.

Table 4-6: Factors used to allocate cost of activity SETUPSEQSTF to products

Factor	Factor Description	Explanation
DELVVOL	Mail volume delivered	This factor represents the total mail volume delivered by product and the volume is obtained via the Revenue Based Volumes process.
DELOP	%AGE PRODUCT DELV OPO'S	Represents the proportion of mail that is processed through Corporate Offices - Corporate offices include delivery centres, retail shops, post offices but exclude processing facilities (mail centres and parcels centres)
OUTDEL	% OUTDOOR DELIVERY	This is an analysis of how much of a mail item is delivered to a street delivery point as opposed to Boxes/Bags/Counter.
SETSART	Set Up & Sequencing Staff	This factor represents the relative time taken by each product in setting up/sequencing for outdoor delivery.

Source: Australia Post, Factor Description

Table 4-6 above lists the factors used by Australia Post to allocate the cost of this activity to products. The factor DELVVOP, which represents the total mail volume delivered, combined with the two probability factors (DELOP and OUTDEL) measure the volumes of mail actually delivered outdoors via delivery centres. The factor SETSART incorporates the relative effort related to the preparation of outdoor delivery of different services and products.

The cost allocation through the three volume related factors, i.e. according to mail volume shares, seems less crucial than the allocation according to the relative effort assigned to different products. Against this background, the subsequent assessment of activity SETUPSEQSTF focusses on the factor SETSART and its factor values for the different products and services.

4.4.2.2.2 Assessment

A first observation is that the documentation on the exact activities included in “outdoor delivery”, as well as the considerations underlying the factors used for cost allocation in the RAPM, is extremely short and does not appear sufficiently informative.

Table 4-7: Attributable cost of all activities affected by the factor SETSART

Activity Code	Description	Attributable cost per activity (m$)
SETSART	SET-UP & SEQUENCING – STAFFED	✂

Source: WIK-Consult, based on data from Australia Post

In contrast to other factors, which are used for the allocation of a set of activity cost to products, SETSART is used only for the allocation of the set-up and sequencing – staffed, as outlined in Table 4-7 above. However, this factor is responsible for the allocation of ✂of attributable cost, i.e. around ✂ of attributable cost.

SETSART represents the relative time taken by each product in setting up / sequencing the product for outdoor delivery.

Table 4-8: SETSART – Factor values per product

ACCC SERVICE GROUP		Product Description	Factor value (SETSART)
Reserved services	Small Letters Ordinary	1020 - Pol Sl Ordinary Stamped	✂
		1021 - Pol Sl Metered Imprint Charge Regular	✂
		1022 - Pol Sl Clean Regular	✂
		1025 - Pol Sl Reply Paid	✂
		1040 - Pol Sl Local Rate Regular	✂
	Small Letters Presort	1050 - Pol Sl Pre Sort Priority	✂
		1060 - Pol Sl Charity Mail Priority	✂
		1070 - Pol Sl Pre Sort Regular	✂
		1080 - Pol Sl Charity Mail Regular	✂
	Large Letters Ordinary	1110 - Pol Ll Ordinary Stamped 0 250g	✂
		1111 - Pol Ll Metered Imprint Charge 0 250g Regular	✂
		1112 - Pol Ll Clean Sml Plus Regular	✂
		1115 - Pol Ll Reply Paid	✂
		1130 - Pol Ll Local Rate Regular	✂
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂
		1160 - Pol Ll Pre Sort Medium Priority	✂
		1170 - Pol Ll Pre Sort Medium Regular	✂
		1180 - Pol Ll Pre Sort Large 0 250g Priority	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂
Non-	Large Letters Ordinary	1113 - Pol Ll Ordinary Stamped 250 500g	✂

ACCC SERVICE GROUP		Product Description	Factor value (SETSART)
reserved services		1114 - Pol Ll Metered Imprint Charge 250 500g Regular	✂
	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority	✂
		1195 - Pol Ll Pre Sort Large 250 500g Regular	✂
	Internl In Letters	3310 - Pol Smlletters In Airmail	✂
		3315 - Pol Direct Access Inwards	✂
		3330 - Pol Smlletters In Sea	✂
		3340 - Pol Smlletters In Economy	✂
		3350 - Pol Lge Letters In Airmail	✂
		3360 - Pol Lge Letters In Sea	✂
		3380 - Pol Lge Letters In Economy	✂
	Other Letters	1410 - Pol Unaddressed Interstate Std Size	✂
		1420 - Pol Unaddressed Interstate Lge Size	✂
		1450 - Pol Unaddressed Intrastate Std Size	✂
		1460 - Pol Unaddressed Intrastate Lge Size	✂
		1510 - Pol Print Post Standard Regular	✂
		1520 - Pol Print Post <500g Regular	✂
		1530 - Pol Print Post >500g Regular	✂
		1550 - Pol Contract Publications	✂
	Parcels	1210 - Pol Express Post Envelope C5	✂
		1215 - Pol Express Post Envelope B4	✂
		2010 - Pop Pcls <500g Fr Stamp Label	✂
		2011 - Pop Pcls <500g Fr Other Bulk Meter	✂
		2015 - Pop Pcls <500g Express Satchel	✂
		2017 - Pop Pcls <500g Express Platinum	✂
		2018_POP_PCLS_<500G_PLATINUM_PARCELS_	✂
		2020 - Pop Pcls <500g Express Fr Stamp Labels	✂
		2021 - Pop Pcls <500g Express Reduced Rate	✂
		2023 - Pop Pcls <500g Express Fr Other Bulk Meter	✂
		2030 - Pop Pcls <500g Parcel Post Satchel	✂
		2040 - Pop Pcls <500g Local Rate	✂
		2065 - Pop Pcls <500g Contract	✂
	Internl In Parcels	3390 - Pop Packets In Airmail	✂
		3395 - Pop Epackets In Tracked Airmail	✂
		3400 - Pop Packets In Sea	✂
		3410 - Pop Packets In Economy	✂
		3445 - Pop Inward Da Parcels	✂
	StarTrack International	9101 - Lge Letters - In – Commercial	✂
		9102 - Packets - In – Commercial	✂

Source: WIK-Consult, based on data from Australia Post

Table 4-5 above lists all 59 values of factor SETSART for the affected services. A first observation is that there are no value changes compared to 2008. For example, we

expected changes at least for small letters as the share of automatically sequenced letters increased significantly since 2011

The relative values of the factor SETSART for different products appear intuitive: For example, unaddressed items need not be sorted, and thus incur very little cost in this process. Larger items have slightly higher values than small letter as they are marginally more difficult to sort. However, the RAPM does not provide any information to justify the exact values of the factors.

In the following we list our observations with regard to the factor values for SETSART:

- **Unaddressed items**: ≻
- **Reply Paid Mail:** The factor values assigned to reply paid mail items seem rather low compared to other products. Australia Post explains the reasons for the very low value for reply paid mail as follows: "The process required for reply paid is not as intensive on a per item basis in the Set Up & Sequence stage. The majority of reply items are barcode sorted to round. […] This process provides the letters 'bundled' by addressee with the only requirement to place the bundle (not each item) into the round."[44] In combination with the high value of the factor SORTART (see Section4.4.2.7.2) the total cost allocation seems appropriate.
- **Light parcels and large letters (>250g):** ≻
- **Express items:** ≻

Overall, Australia Post's approach of combining volumes with a factor to measure the relative effort of delivering a postal article appears appropriate for this activity. A crucial aspect is that this activity (the factor SETSART) does not differentiate between automated and manually sequenced small letters. In contrast, the factor SORTART (activity PRIMSORTSTF, see Section 4.4.2.7) explicitly "takes into account proportion of articles already sorted to round"[45]. Australia Post introduced / expanded automated sequence sorting after 2008, particularly for small letters[46], and we would expect that this has an impact on the relative effort factor values related to the activity of set-up and sequencing performed by outdoor delivery staff prior to delivery.

4.4.2.3 Activity Metro Letters Centre (METROLET)

The activity Metro Letters Centre (METROLET) is allocated to the function "Processing" and accounts for ≻ (around ≻) of all attributable costs of which ≻are allocated to reserved services (around ≻ of all the costs of reserved services).

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44 See WIK (2008), Assessing Australia Post's allocation of costs between (and within) reserved and non-reserved services, p. 23.
45 Australia Post, Factor Description, p. 13.
46 See for example Australia Post (2010), Supporting Information to Australia Post's Notification of Domestic Reserved Letter Service Price Changes, April 2010, p. 26 subsq.

4.4.2.3.1 Description

In Australia Post's EPM Activity Dictionary, the activity is defined as "Metro processing activities at dedicated letters facilities […].This includes major processing sortation which includes both machine and manual, as well as video coding and other operational support processes".

Table 4-9: Factors used to allocate cost of activity METROLET to products

Factor	Factor Description	Explanation
DELVVOL	Mail volume delivered	This factor represents the total mail volume delivered by product e.g. the number of SL Ordinary Stamped delivered in Victoria. This volume is obtained via the Revenue Based Volumes process.
PSTDVOL	Mail volume posted	This factor represents the total mail volume posted by product e.g. the number of SL Ordinary Stamped posted in Victoria. This volume is obtained via the Revenue Based Volumes process.
MLCTV	METRO LETTERS CENTRE TERM AT VOL	The prefix MLC represents the particular mail centre, in this case Metro Letters. TV represents the proportion of a state's delivered volume being delivered from a particular mail centre by product.
MLCPV	METRO PARCELS CENTRE-POSTED-VOL	The prefix MLC represents the particular mail centre, in this case Metro Letters. PV represents the proportion of a state's posted volume lodged at a particular mail centre by product.
MLCFV	METRO LETTERS CENTRE-FROM PO- VOL	The prefix MLC represents the particular mail centre, in this case Metro Letters. FV represents the proportion of a state's posted volume being delivered from a mail centre by product.
GENMCEX	GENERAL MC WE'TING - TERM AT	General Mail Centre Weighting for mail posted from a mail centre (XP).
GENMCAT	GENERAL MC WE'TING – POSTED	General Mail Centre Weighting factor for mail lodged at a mail centre (ATM).
GENMCXP	GENERAL MC WE'TING - FROM PO	General Mail Centre Weighting for mail arriving from another mail centre (EX).
MLCTH	METRO LETTERS CENTRE-TERM AT – HAN	The prefix MLC represents the particular mail centre, in this case Metro Letters. TH is the relative handling rate for TV.
MLCPH	METRO LETTERS CENTRE POSTED HAN	The prefix MLC represents the particular mail centre, in this case Metro Letters. PH is the relative handling rate for PV.
MLCFH	METRO LETTERS CENTRE FROM PO – HAN	The prefix MLC represents the particular mail centre, in this case Metro Letters. FH is the relative handling rate for FV.

Source: Australia Post, Factor Description

The base activity METROLET incorporates six sub-activities with three different factor combinations to allocate cost to products. This approach takes into account volume variations between volumes posted to a mail centre, lodged in the mail centre and delivered from the mail centre. Table 4-9 above lists the eleven factors used.

Table 4-10: Factor combinations used to allocate cost of activity METROLET to products

Relative Use	Probability Factor 1	Relative Factor 1	Effort	Relative Factor 2	Effort	Function (WIK interpretation)
PSTDVOL	MLCFV	GENMCXP		MLCFH		Outbound processing
PSTDVOL	MLCPV	GENMCAT		MLCPH		Outbound & inbound processing

DELVVOL	MLCTV	GENMCEX	MLCTH	Inbound Processing

Source: WIK-Consult, based on data from Australia Post

Table 4-10 above shows the three series of factor combinations. Our understanding of the application of these three factor combinations is to differentiate between inbound, outbound and combined inbound and outbound processing activities performed in the mail centres. The factors DELVVOL and PSTDVOL represent the product volumes, i.e. the number of articles delivered and posted. At a national level, both numbers are equal but at state level, delivered and posted volumes may differ due to movement between the states. Australia Post states, for example, that "presort is primarily lodged in NSW and VIC who export volume to QLD, WA and SA who become importers. Therefore NSW and VIC delivered will be less than posted"[47]. Combined with the probability factors MLCTV, MLCPV, MLCFV, the factors measure the volume of mails actually posted, lodged and delivered from a mail centre.

The factors GENMCXP, GENMCAT, GENMCEX, MLCFH, MLCPH, and MLCTH represent the relative effort dedicated.

The cost allocation through the volume related factors seems less crucial than the allocation according to the relative effort assigned to different products. Against this background, the subsequent assessment of activity METROLET focusses on the six relative effort factors and their factor values for the different products and services.

4.4.2.3.2 Assessment

A first observation is that derivation of the used factor values is not documented in detail. Australia Post only states that the values for the factors

- GENMCXP, GENMCAT and GENMCEX "are based on historical data".[48]
- MLCTH, MLCPH, and MLCFH "are based on an industrial engineering exercise, which uses process mapping to determine the relative handling rates of each product. The rates as relative to small letters, which are assigned a handling rate of 1. For example, a parcel may take ≍ the level of handling and be given a relative handling rate of ≍."[49]

The documentation on the exact activities as well as the considerations underlying the factors used for cost allocation in the RAPM, is extremely short and does not appear sufficiently informative. Furthermore the RAPM does not provide a reason why Australia Post applies two separate handling factors for the cost allocation in activity METROLET.

47 Australia Post, Factor Description, p. 14.
48 Australia Post, Factor Description, p. 16.
49 Australia Post, Factor Description, p. 18.

Table 4-11: Attributable cost of all activities affected by the factors GENMCXP, GENMCAT and GENMCEX

Activity Code	Description	Attributable cost per activity (m$)
HYBRID	Hybrid Centre (mail & parcel)	✂
MECHCOUNTRY	Mechanised Country Centre	✂
METROEXP	Metro Express Processing	✂
METROLET	Metro Letters Centre	✂
METROPAR	Metro Parcels Centre	✂
NMECHCOUNTRY	Non-Mechanised Country Centre	✂

Source: WIK-Consult, based on data from Australia Post

Note: The three factors GENMCEX, GENMCAT, and GENMCXP are used for the allocation in all activities listed above except MECHCOUNTRY for which GENMCXP is not applied.

Within Australia Post's cost allocation model, the factors GENMCAT, and GENMCEX are used for the allocation of activity cost for six and the factor GENMCXP for five processing activities. The total attributable costs of activities allocated using the factors account for around ✂ (around ✂ of attributable cost).

The factors GENMCXP, GENMCAT, and GENMCEX are used to reflect known differences in the relative handling rates between products within a broad group.[50]

Table 4-12: GENMCXP, GENMCAT, GENMCEX – Factor values per product

ACCC SERVICE GROUP		Product Description	Factor value (GENMCXP)	Factor value (GENMCAT)	Factor value (GENMCEX)
Reserved services	Small Letters Ordinary	1020 - Pol Sl Ordinary Stamped	✂	✂	✂
		1021 - Pol Sl Metered Imprint Charge Regular	✂	✂	✂
		1022 - Pol Sl Clean Regular	✂	✂	✂
		1025 - Pol Sl Reply Paid	✂	✂	✂
	Small Letters Presort	1050 - Pol Sl Pre Sort Priority	✂	✂	✂
		1060 - Pol Sl Charity Mail Priority	✂	✂	✂
		1070 - Pol Sl Pre Sort Regular	✂	✂	✂
		1080 - Pol Sl Charity Mail Regular	✂	✂	✂
	Large Letters Ordinary	1110 - Pol Ll Ordinary Stamped 0 250g	✂	✂	✂
		1111 - Pol Ll Metered Imprint Charge 0 250g Regular	✂	✂	✂
		1112 - Pol Ll Clean Sml Plus Regular	✂	✂	✂
		1115 - Pol Ll Reply Paid	✂	✂	✂
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority	✂	✂	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂	✂	✂
		1160 - Pol Ll Pre Sort Medium Priority	✂	✂	✂

50 Australia Post, Factor Description, p. 16.

ACCC SERVICE GROUP		Product Description	Factor value (GENMCXP)	Factor value (GENMCAT)	Factor value (GENMCEX)
		1170 - Pol Ll Pre Sort Medium Regular	✂	✂	✂
		1180 - Pol Ll Pre Sort Large 0 250g Priority	✂	✂	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂	✂	✂
Non-reserved services	Large Letters Ordinary	1113 - Pol Ll Ordinary Stamped 250 500g	✂	✂	✂
		1114 - Pol Ll Metered Imprint Charge 250 500g Regular	✂	✂	✂
	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority	✂	✂	✂
		1195 - Pol Ll Pre Sort Large 250 500g Regular	✂	✂	✂
	Interl Out Letters	3010 - Pol Smlletters Out Airmail	✂	✂	✂
		3020 - Pol Smlletters Out Aerograms	✂	✂	✂
		3050 - Pol Lge Letters Out Airmail	✂	✂	✂
		3085 - Pol Business Mail Out	✂	✂	✂
		3245 - Pol Express Post International	✂	✂	✂
		3250 - Pol Mbags Out	✂	✂	✂
		3260 - Pol International Bulk Mail	✂	✂	✂
		3265 - Pol Direct Access Outwards	✂	✂	✂
	Internl In Letters	3310 - Pol Smlletters In Airmail	✂	✂	✂
		3315 - Pol Direct Access Inwards	✂	✂	✂
		3330 - Pol Smlletters In Sea	✂	✂	✂
		3340 - Pol Smlletters In Economy	✂	✂	✂
		3350 - Pol Lge Letters In Airmail	✂	✂	✂
		3360 - Pol Lge Letters In Sea	✂	✂	✂
		3380 - Pol Lge Letters In Economy	✂	✂	✂
		3510 - Pol Registered In Letters	✂	✂	✂
		3550 - Pol Mbags In	✂	✂	✂
	Other Letters	1410 - Pol Unaddressed Interstate Std Size	✂	✂	✂
		1420 - Pol Unaddressed Interstate Lge Size	✂	✂	✂
		1450 - Pol Unaddressed Intrastate Std Size	✂	✂	✂
		1460 - Pol Unaddressed Intrastate Lge Size	✂	✂	✂
		1510 - Pol Print Post Standard Regular	✂	✂	✂
		1520 - Pol Print Post <500g Regular	✂	✂	✂
		1530 - Pol Print Post >500g Regular	✂	✂	✂
		1550 - Pol Contract Publications	✂	✂	✂
	Parcels	1210 - Pol Express Post Envelope C5	✂	✂	✂
		1215 - Pol Express Post Envelope B4	✂	✂	✂
		2010 - Pop Pcls <500g Fr Stamp Label	✂	✂	✂
		2011 - Pop Pcls <500g Fr Other Bulk Meter	✂	✂	✂
		2015 - Pop Pcls <500g Express Satchel	✂	✂	✂
		2017 - Pop Pcls <500g Express Platinum	✂	✂	✂
		2018_POP_PCLS_<500G_PLATINUM_PARCELS_	✂	✂	✂
		2020 - Pop Pcls <500g Express Fr Stamp Labels	✂	✂	✂
		2021 - Pop Pcls <500g Express Reduced Rate	✂	✂	✂
		2023 - Pop Pcls <500g Express Fr Other Bulk Meter	✂	✂	✂
		2030 - Pop Pcls <500g Parcel Post Satchel	✂	✂	✂

ACCC SERVICE GROUP	Product Description	Factor value (GENMCXP)	Factor value (GENMCAT)	Factor value (GENMCEX)
	2065 - Pop Pcls <500g Contract	✂	✂	✂
	2110 - Pop Pcls >500g Fr Stamp Label	✂	✂	✂
	2115 - Pop Pcls >500g Fr Other Bulk Meter	✂	✂	✂
	2120 - Pop Pcls >500g Express Satchel	✂	✂	✂
	2122 - Pop Pcls >500g Express Platinum	✂	✂	✂
	2123 - Pop Pcls >500g Express Satchel 3kg Large	✂	✂	✂
	2124 - Pop Pcls >500g Express Satchel 5kg	✂	✂	✂
	2125 - Pop Pcls >500g Express Stamp Labels	✂	✂	✂
	2126 - Pop Pcls >500g Express Reduced Rate	✂	✂	✂
	2128_POP_PCLS_>500G_PLATINUM_PARCELS	✂	✂	✂
	2129 - Pop Pcls >500g Express Other Bulk Meter	✂	✂	✂
	2130 - Pop Pcls >500g Parcel Post Satchel	✂	✂	✂
	2165 - Pop Pcls >500g Contract	✂	✂	✂
	2175 - Pop Pcls >500g Eparcels Ordinary	✂	✂	✂
	2178 - Pop Pcls >500g Point To Point Ulds	✂	✂	✂
	2180 - Pop Pcls >500g Eparcels B2b	✂	✂	✂
Interl Out Parcels	3090 - Pop Packets Out Airmail	✂	✂	✂
	3100 - Pop Packets Out Sea	✂	✂	✂
	3120 - Pop Business Packets	✂	✂	✂
	3125 - Pop Trackable <2kg Labels	✂	✂	✂
	3130 - Pop Parcels Out Airmail	✂	✂	✂
	3140 - Pop Parcels Out Sea	✂	✂	✂
	3210 - Pol Registered Post Out Air	✂	✂	✂
	3215 - Pop Registered Parcels < 2kg Labels	✂	✂	✂
	3220 - Pop Business Parcels	✂	✂	✂
	3226 - Pop Outward Da Parcels	✂	✂	✂
Courier Services	3230 - Pop Eci Prepaid	✂	✂	✂
	3235 - Pop Eci Charge Account	✂	✂	✂
	3240 - Pop Eci Labels	✂	✂	✂
	3280 - Pop Epi Prepaid	✂	✂	✂
	3285 - Pop Epi Charge Ac Non Prepaid	✂	✂	✂
	3290 - Pop Epi Cash Non Prepaid	✂	✂	✂
Internl In Parcels	3390 - Pop Packets In Airmail	✂	✂	✂
	3395 - Pop Epackets In Tracked Airmail	✂	✂	✂
	3400 - Pop Packets In Sea	✂	✂	✂
	3410 - Pop Packets In Economy	✂	✂	✂
	3430 - Pop Parcels In Airmail	✂	✂	✂
	3440 - Pop Parcels In Sea	✂	✂	✂
	3445 - Pop Inward Da Parcels	✂	✂	✂
	3460 - Pop Parcels In Economy	✂	✂	✂
	3520 - Pop Registered In Packets	✂	✂	✂
	3525 - Pop Insured Articles In	✂	✂	✂
	3530 - Pop Ems Ap In	✂	✂	✂
StarTrack	9101 - Lge Letters - In - Commercial	✂	✂	✂

ACCC SERVICE GROUP	Product Description	Factor value (GENMCXP)	Factor value (GENMCAT)	Factor value (GENMCEX)
Intern.	9102 - Packets - In - Commercial	✂	✂	✂
	9103 - Parcels - In - Commercial - Untracked	✂	✂	✂
	9104 - Parcels - In - Commercial - Tracked	✂	✂	✂

Source: WIK-Consult, based on data from Australia Post

Table 4-12 above lists all values of the factors GENMCXP, GENMCAT and GENMCEX for the affected services. Generally, the factor values seem reasonable. In the following we list our observations with regard to the three factors:

- **Presort and ordinary letters:** Lower values for presorted letter items compared with ordinary letter items seems reasonable.
- **Unaddressed items:** ✂
- **Parcel vs. large letters (>250g):** ✂
- **Notified services:** The higher factor values for notified services (Products 1020 and 1110) in comparison with other (reserved) letter services seem reasonable as single piece items require a higher effort in the sorting process.
- **Priority vs. regular services:** There is no differentiation in the relative effort factors aligned to regular and priority services (product codes 1050&1070, 1060&1080, 1140&1150, 1160&1170, 1180&1190, 1185&1195). Given the processing processes in FY 2013/2014 this seems reasonable.

Table 4-13: Attributable cost of all activities affected by the factors MLCFH, MLCPH and MLCTH

Activity Code	Description	Attributable cost per activity (m$)
TECHMETROLET	Metro Letters Centre – Technicians	✂
METROLET	Metro Letters Centre	✂

Source: WIK-Consult, based on data from Australia Post

Table 4-13 illustrates that the factors MLCFH, MLCPH and MLCTH are used for the allocation of activity cost of two activities relating to the processing of mail items. The total attributable costs of activities allocated using the factors account for around ✂ (around ✂ of attributable cost).

The factors MLCFH, MLCPH and MLCTH represent the relative handling rate for each product in relation to small letters, which are assigned a handling rate of 1.[51]

51 Australia Post, Factor Description, p. 18.

Table 4-14: MLCFH, MLCPH and MLCTH – Factor values per product

ACCC SERVICE GROUP			Factor value (MLCFH)	Factor value (MLCPH)	Factor value (MLCTH)
Reserved services	Small Letters Ordinary	1020 - Pol Sl Ordinary Stamped	✂	✂	✂
		1021 - Pol Sl Metered Imprint Charge Regular	✂	✂	✂
		1022 - Pol Sl Clean Regular	✂	✂	✂
		1025 - Pol Sl Reply Paid	✂	✂	✂
	Small Letters Presort	1050 - Pol Sl Pre Sort Priority	✂	✂	✂
		1060 - Pol Sl Charity Mail Priority	✂	✂	✂
		1070 - Pol Sl Pre Sort Regular	✂	✂	✂
		1080 - Pol Sl Charity Mail Regular	✂	✂	✂
	Large Letters Ordinary	1110 - Pol Ll Ordinary Stamped 0 250g	✂	✂	✂
			✂	✂	✂
		1111 - Pol Ll Metered Imprint Charge 0 250g Regular	✂	✂	✂
			✂	✂	✂
		1112 - Pol Ll Clean Sml Plus Regular	✂	✂	✂
			✂	✂	✂
		1115 - Pol Ll Reply Paid	✂	✂	✂
			✂	✂	✂
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority	✂	✂	✂
			✂	✂	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂	✂	✂
			✂	✂	✂
		1160 - Pol Ll Pre Sort Medium Priority	✂	✂	✂
			✂	✂	✂
		1170 - Pol Ll Pre Sort Medium Regular	✂	✂	✂
			✂	✂	✂
		1180 - Pol Ll Pre Sort Large 0 250g Priority	✂	✂	✂
			✂	✂	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂	✂	✂
			✂	✂	✂
Non-reserved services	Large Letters Ordinary	1113 - Pol Ll Ordinary Stamped 250 500g	✂	✂	✂
			✂	✂	✂
		1114 - Pol Ll Metered Imprint Charge 250 500g Regular	✂	✂	✂
			✂	✂	✂
	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority	✂	✂	✂
			✂	✂	✂
		1195 - Pol Ll Pre Sort Large 250 500g Regular	✂	✂	✂
			✂	✂	✂
	Interl Out Letters	3010 - Pol Smlletters Out Airmail	✂	✂	✂
		3020 - Pol Smlletters Out Aerograms	✂	✂	✂
		3050 - Pol Lge Letters Out Airmail	✂	✂	✂
		3085 - Pol Business Mail Out	✂	✂	✂
		3245 - Pol Express Post International	✂	✂	✂
			✂	✂	✂

ACCC SERVICE GROUP		Factor value (MLCFH)	Factor value (MLCPH)	Factor value (MLCTH)
		[redacted]	[redacted]	[redacted]
	3250 - Pol Mbags Out	[redacted]	[redacted]	[redacted]
Internl In Letters	3310 - Pol Smlletters In Airmail	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	3315 - Pol Direct Access Inwards	[redacted]	[redacted]	[redacted]
	3330 - Pol Smlletters In Sea	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	3340 - Pol Smlletters In Economy	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	3350 - Pol Lge Letters In Airmail	[redacted]	[redacted]	[redacted]
	3360 - Pol Lge Letters In Sea	[redacted]	[redacted]	[redacted]
	3380 - Pol Lge Letters In Economy	[redacted]	[redacted]	[redacted]
	3510 - Pol Registered In Letters	[redacted]	[redacted]	[redacted]
	3550 - Pol Mbags In	[redacted]	[redacted]	[redacted]
Other Letters	1410 - Pol Unaddressed Interstate Std Size	[redacted]	[redacted]	[redacted]
	1420 - Pol Unaddressed Interstate Lge Size	[redacted]	[redacted]	[redacted]
	1450 - Pol Unaddressed Intrastate Std Size	[redacted]	[redacted]	[redacted]
	1460 - Pol Unaddressed Intrastate Lge Size	[redacted]	[redacted]	[redacted]
	1510 - Pol Print Post Standard Regular	[redacted]	[redacted]	[redacted]
	1520 - Pol Print Post <500g Regular	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	1530 - Pol Print Post >500g Regular	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	1550 - Pol Contract Publications	[redacted]	[redacted]	[redacted]
Parcels	2010 - Pop Pcls <500g Fr Stamp Label	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	2011 - Pop Pcls <500g Fr Other Bulk Meter	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	2030 - Pop Pcls <500g Parcel Post Satchel	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	2065 - Pop Pcls <500g Contract	[redacted]	[redacted]	[redacted]
	2110 - Pop Pcls >500g Fr Stamp Label	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	2115 - Pop Pcls >500g Fr Other Bulk Meter	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	2130 - Pop Pcls >500g Parcel Post Satchel	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	2165 - Pop Pcls >500g Contract	[redacted]	[redacted]	[redacted]
	2175 - Pop Pcls >500g Eparcels Ordinary	[redacted]	[redacted]	[redacted]
	2178 - Pop Pcls >500g Point To Point Ulds	[redacted]	[redacted]	[redacted]
	2180 - Pop Pcls >500g Eparcels B2b	[redacted]	[redacted]	[redacted]
Interl Out Parcels	3090 - Pop Packets Out Airmail	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]

ACCC SERVICE GROUP		Factor value (MLCFH)	Factor value (MLCPH)	Factor value (MLCTH)
	3100 - Pop Packets Out Sea	✂	✂	✂
		✂	✂	✂
	3120 - Pop Business Packets	✂	✂	✂
		✂	✂	✂
	3125 - Pop Trackable <2kg Labels	✂	✂	✂
		✂	✂	✂
	3130 - Pop Parcels Out Airmail	✂	✂	✂
	3140 - Pop Parcels Out Sea	✂	✂	✂
	3210 - Pol Registered Post Out Air	✂	✂	✂
		✂	✂	✂
	3215 - Pop Registered Parcels < 2kg Labels	✂	✂	✂
		✂	✂	✂
	3220 - Pop Business Parcels	✂	✂	✂
	3226 - Pop Outward Da Parcels	✂	✂	✂
		✂	✂	✂
		✂	✂	✂
Courier Services	3230 - Pop Eci Prepaid	✂	✂	✂
		✂	✂	✂
		✂	✂	✂
	3235 - Pop Eci Charge Account	✂	✂	✂
		✂	✂	✂
		✂	✂	✂
	3240 - Pop Eci Labels	✂	✂	✂
		✂	✂	✂
		✂	✂	✂
	3280 - Pop Epi Prepaid	✂	✂	✂
		✂	✂	✂
		✂	✂	✂
	3285 - Pop Epi Charge Ac Non Prepaid	✂	✂	✂
		✂	✂	✂
		✂	✂	✂
	3290 - Pop Epi Cash Non Prepaid	✂	✂	✂
		✂	✂	✂
		✂	✂	✂
Internl In Parcels	3390 - Pop Packets In Airmail	✂	✂	✂
	3395 - Pop Epackets In Tracked Airmail	✂	✂	✂
	3400 - Pop Packets In Sea	✂	✂	✂
	3410 - Pop Packets In Economy	✂	✂	✂
	3430 - Pop Parcels In Airmail	✂	✂	✂
	3440 - Pop Parcels In Sea	✂	✂	✂
	3445 - Pop Inward Da Parcels	✂	✂	✂
		✂	✂	✂
		✂	✂	✂
	3460 - Pop Parcels In Economy	✂	✂	✂

ACCC SERVICE GROUP		Factor value (MLCFH)	Factor value (MLCPH)	Factor value (MLCTH)
	3520 - Pop Registered In Packets	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	3525 - Pop Insured Articles In	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
StarTrack Intern.	9101 - Lge Letters - In - Commercial	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	9102 - Packets - In - Commercial	[redacted]	[redacted]	[redacted]
	9103 - Parcels - In - Commercial - Untracked	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]
	9104 - Parcels - In - Commercial - Tracked	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]

Source: WIK-Consult, based on data from Australia Post
Note: Multiple factor values for the same product are based on a factor differentiation on state level.

Table 4-14 above lists all values of the factors MLCFH, MLCPH and MLCTH for the affected services. Generally, the factor values seem reasonable and we did not identify factor relations which need to be discussed further. In particular, the relation between large letters and parcels seem appropriate (in contrast to the factor values for these products used for the effort factors GENMCXP, GENMCAT and GENMCEX).

The relation of the factor values for the different sorting types (outbound, inbound, outbound&inbound) is less convincing. It is reasonable that inbound sorting is less costly than outbound sorting and that the combination, i.e. inbound and outbound at the same letter centre, is most costly. However, the factor values related to inbound sorting (MLCTH) seems rather high in comparison with the factor values for outbound sorting (MLCFH).

To summarize our findings for the relative effort factors (GENMCXP, GENMCAT and GENMCEX; MLCFH, MLCPH and MLCTH) used for the cost allocation of activity METROLET:

- The RAPM does not provide a reason why Australia Post applies two separate handling factor types (GENMC* and MLC*) for the cost allocation in activity METROLET and the description of both factor types is nearly similar. According to Australia Post's definition GENMCXP, GENMCAT, and GENMCEX "reflect known differences in the relative rates between products within a broad group" and the factors MLCFH, MLCPH and MLCTH "represent the relative handling rate […] as relative to small letters"[52]. From our perspective it is questionable why this approach is used instead of applying one factor for the allocation.
- The factor values for parcel items used for the allocation via the factors GENMCXP, GENMCAT and GENMCEX seem to be rather low. As explained

52 Australia Post, Factor Description, p. 11 and p.18.

above, if the handling of parcels in the activity METROLET is the manual removal of parcels from the letter mail stream and redirect them to parcel sorting activities, the factor value of 1 may be appropriate. Otherwise, if parcels are actually handled in the letter mail centres, the low value assigned to parcel items (i.e. non-reserved products) would mean that ordinary letters are allocated a too high portion of the activity's cost.

- In FY2013/2014, Australia Post did not apply any differentiation between priority and regular services in the sorting activities as the factor values for the relevant products are identical / show no systematic difference in cost allocation. Given the processing processes in FY 2013/2014 this seems reasonable.

4.4.2.4 Activity Roadside Delivery Contract (ROADSIDEDEL)

The activity Roadside Delivery Contract (ROADSIDEDEL) is allocated to the function "Delivery" and accounts for ≻ (around ≻) of all attributable costs of which ≻are allocated to reserved services (around ≻ of all the costs of reserved services).

4.4.2.4.1 Description

Australia Post's EPM Activity Dictionary defines the activity as "The delivery of mail to roadside delivery points using contractors, mostly in rural and remote areas". The activity includes only cost for delivery performed by contracted delivery staff (in contrast to delivery performed by Australia Post's staff).

Table 4-15: Factors used to allocate cost of activity ROADSIDEDEL to products

Factor	Factor Description	Explanation
DELVVOL	Mail volume delivered	This factor represents the total mail volume delivered by product e.g. the number of SL Ordinary Stamped delivered in Victoria. This volume is obtained via the Revenue Based Volumes process.
DELOP	%AGE PRODUCT DELV OPO'S	Represents the proportion of mail that is processed through Corporate Offices - Corporate offices include delivery centres, retail shops, post offices but exclude processing facilities (mail centres and parcels centres)
RDDEL%	% ROADSIDE DELIVERY	The factor represents the relative proportion of a mail product that is delivered through Roadside delivery.
RDDELY	% ROAD DELY	This factor represents the relative product unit cost.

Source: Australia Post, Factor Description

Table 4-15 above lists the factors used by Australia Post to allocate the cost of this activity to products. The factor DELVVOP, which represents the total mail volume delivered, combined with the probability factors (DELOP and RDDEL%) measure the volumes of mail actually delivered to roadside points by contractors. The factor

RDDELY incorporates the relative product unit cost related to the delivery of different services and products.

The cost allocation through the three volume related factors, i.e. according to mail volume shares, seems less crucial. The subsequent assessment of activity ROADSIDEDEL focusses on the relative effort factor RDDELY and its factor values for the different products and services.

4.4.2.4.2 Assessment

A first observation is that, in contrast to other factors, Australia Post provides a detailed documentation of the factor RDDELY and the applied factor values.

Table 4-16: Attributable cost of all activities affected by the factor RDDELY

Activity Code	Description	Attributable cost per activity (m$)
ROADSIDEDEL	Road Side Delivery Contract	✂

Source: WIK-Consult, based on data from Australia Post

The factor RDDELY is only used for the allocation of the cost of activity ROADSIDEDEL, as outlined in Table 4-8 above, which account for ✂.

Table 4-17: RDDELY – Factor values per product

ACCC SERVICE GROUP		Product Description	State	Factor value (RDDELY)
		All other products (incl. small and large letters, parcels, express items, etc.)	✂	✂
Non-reserved services	Other Letters	1410 - Pol Unaddressed Interstate Std Size	2	✂
			3	✂
			4	✂
			5	✂
			6	✂
		1420 - Pol Unaddressed Interstate Lge Size	2	✂
			3	✂
			4	✂
			5	✂
			6	✂
		1450 - Pol Unaddressed Intrastate Std Size	2	✂
			3	✂
			4	✂
			5	✂
			6	✂
		1460 - Pol Unaddressed Intrastate Lge Size	2	✂
			3	✂
			4	✂
			5	✂
			6	✂

Source: WIK-Consult, based on data from Australia Post

The relative unit costs, represented by RDDELY, are all set to one, except for unaddressed mail service products. Australia Post justifies the factor values as follows:

- The factor values are set to one because "[r]oadside costs can generally be said to be independent of mail volume and mix, except in the absurd cases of no volumes or only one type of product being delivered."[53]
- The factor values for unaddressed mail service (UMS) products are set below one because "for operational purposes, ✂, the vast majority of which run 3 to 5 days a week to meet performance standards, which also supports a much lower

53 Australia Post, Factor Description, p. 13.

unit cost allocation for UMS items based on the reduced frequency of delivery required."[54]

Our observations and assessments on the factor used to allocate the cost of contracted roadside delivery are as follows:

- The costs of this activity can largely be considered as fixed costs: The compensation requested from contractors that deliver mail in rural Australia will mostly depend on the distance to be travelled on each round and the required frequency of delivery. By contrast, stopping at roadside mail boxes and inserting or handing over the mail will account for only a small portion of working time – and contractors' compensation.
- For fixed cost, there is no causal relationship between volume and activity cost. Australia Post's approach to charge each product the same per-unit cost, a simple and objective rule, appears appropriate. Different objective rules, e.g. based on the cost assigned to a product in other delivery activities, would seem appropriate, too.
- With regard to unaddressed items, it appears that Australia Post's objective was to avoid overcharging this product. However, it is unclear how the factor values used to allocate costs of this activity reflect cost causation. Unaddressed items are allocated less than ≻the cost (per unit): between ≻ and ≻ of the per-unit cost of other products for standard sized unaddressed items and between ≻ and ≻ of the per-unit cost of other products for large unaddressed items.
- Australia Post changed the factor values in comparison to 2008. First, Australia Post introduced a differentiation of factor values at state level. Secondly, factor values were lowered in comparison with 2008. We agree with Australia Post's approach to assign lower factor values to unaddressed mail items to consider that these are delivered on fewer days but we find no indication or explanation for the decrease of factor values in comparison to 2008. As a consequence of the decrease of factor values, cost allocated to unaddressed mail declined and a higher share of the activity's cost is allocated to all other products.

4.4.2.5 Activity Street Delivery Contracted (STREETDEL)

The activity Street Delivery Contract (STREETDEL) is allocated to the function "Delivery" and accounts for ≻ (around ≻) of all attributable costs of which ≻are allocated to reserved services (around ≻ of all the costs of reserved services).

4.4.2.5.1 Description

The RAPM does not include a detailed description of the activity. In Australia Post's EPM Activity Dictionary, the activity is defined as "Street mail delivery by contractors"

54 Australia Post, Factor Description, p. 13.

and complements the activity Outdoor Delivery Staff (OUTDRDELSTF) as according to Australia Post, this "activity is similar to a typical Postal Delivery Officer (PDO) round but relates to non-metro / metro fringe areas".[55]

Table 4-18: Factors used to allocate cost of activity STREETDEL to products

Factor	Factor Description	Explanation
DELVVOL	Mail volume delivered	This factor represents the total mail volume delivered by product e.g. the number of SL Ordinary Stamped delivered in Victoria. This volume is obtained via the Revenue Based Volumes process.
DELOP	%AGE PRODUCT DELV OPO'S	Represents the proportion of mail that is processed through Corporate Offices - Corporate offices include delivery centres, retail shops, post offices but exclude processing facilities (mail centres and parcels centres)
OUTDEL	% OUTDOOR DELIVERY	This is an analysis of how much of a mail item is delivered to a street delivery point as opposed to Boxes/Bags/Counter.
OUTCON	%AGE PRODUCT DELV OPO'S Contract	Represents the proportion of mail that is delivered outdoor by contractors
GENWGT1	GENERAL WEIGHTING - GENERAL	Represents the relative handling factor between products.

Source: Australia Post, Factor Description

Table 4-18 above lists the factors used by Australia Post to allocate the cost of this activity to products. The factor DELVVOP, which represents the total mail volume delivered, combined with the three probability factors (DELOP, OUTDEL, and OUTCON) measure the volumes of mail actually delivered outdoors by AP's delivery staff. The factor GENGWT1 incorporates the relative effort related to the outdoor delivery of different services and products.

The selection of factors responsible for the cost allocation highlights the complementary nature of this activity to activity Outdoor Delivery Staff (OUTDRDELSTF) as only one factor differs. The factor OUTCON is used which represents the proportion of mail that is delivered by contractors instead of the factor OUTSTF which represents the proportion of mail that is processed through Corporate Offices.

4.4.2.5.2 Assessment

Due to the complementary nature of the activities OUTDRDELSTF and STREETDEL using the same relative effort factor, GENWGT1, is appropriate. The assessment of activity STREETDEL does not differ from the assessment of the activity OUTDRDELSTF and our general findings and critics on factor values from Section 4.4.2.1.2 apply.

55 Australia Post, EPM Activity Dictionary.

4.4.2.6 Activity Domestic Air Transport Interstate (DOMAIRTINTER)

The activity Domestic Air Transport Interstate (DOMAIRTINTER) is allocated to the function “Transport” and accounts for ≻ (around ≻) of all attributable costs of which ≻are allocated to reserved services (less than ≻ of all the costs of reserved services). Although DOMAIRTINTER is not the most relevant transport activity (in terms of activity cost), a detailed review and assessment provide insights with respect to the cost allocation between regular and priority services.

4.4.2.6.1 Description

Australia Post’s EPM Activity Dictionary defines the activity as “The interstate movement of mail products via air.” The activity affects primarily letters and express post which must be transported by air to meet service standards.

Table 4-19: Factors used to allocate cost of activity DOMAIRTINTER to products

Factor	Factor Description	Explanation
DELVVOL	Mail volume delivered	This factor represents the total mail volume delivered by product e.g. the number of SL Ordinary Stamped delivered in Victoria. This volume is obtained via the Revenue Based Volumes process.
PSTDVOL	Mail volume posted	This factor represents the total mail volume posted by product e.g. the number of SL Ordinary Stamped posted in Victoria. This volume is obtained via the Revenue Based Volumes process.
AIRISD	DOM AIR PROB INTER DEL	This factor analyses the probability of inter air mail delivery in Australia by air for delivered mail.
AIRISP	DOM AIR PROB INTER POSTED	This factor analyses the probability of inter air mail posted in Australia. i.e. There is a high probability of air delivery interstate.
AIRPR4	AIR FACTORS - DOM MAIL	This factor considers the likelihood of mail being delivered using air transportation. For example, a parcel being sent from Melbourne to Broome will have a high probability of air transport. Whereas, a parcel being sent from Melbourne to Seymour is unlikely to be subject to air travel.
AIRBYAIR	DOM AIR PROB INTER by Air	This factor analyses the probability of inter air mail delivery in Australia by air for delivered mail.
AVERMAS	AVERAGE MASS FOR MAIL PRODUCTS	This is the total mass for a product divided by the number of product units
AIRPR3	ADD'L W'TING - EXPOST	This factor represents the additional weighting for Express Post mail to reflect higher costs per Kg for the product due to the use of more expensive freighters

Source: Australia Post, Factor Description

The base activity DOMAIRTINTER incorporates four sub-activities with two different factor combinations to allocate cost to products. Table 4-19 above lists the eight factors

used for the allocation and Table 4-20 below shows the two series of factor combinations.

Table 4-20: Factor combinations used to allocate cost of activity DOMAIRTINTER to products

Relative Use	Probability Factor 1	Probability Factor 2	Probability Factor 2	Relative Effort Factor 1	Relative Effort Factor 2
DELVVOL	AIRISD	AIRPR4	AIRBYAIR	AVERMAS	
PSTDVOL	AIRISP	AIRPR4	AIRBYAIR	AIRPR3	AVERMAS

Source: WIK-Consult, based on data from Australia Post

Australia Post does not provide any documentation for the differentiation of four sub-activities. The application of two different series of factor combinations seems to consider differences in posted and delivered mail volumes between states. The factor DELVVOP and PSTDVOL, which represents the total mail volume delivered and posted, combined with the three probability factors (AIRISD, AIRISP, and AIRBYAIR) measure the volumes of interstate mail actually transported by airplane. The factors AVERMAS and AIRPR3 incorporate the relative effort related to interstate air transport of different services and products.

The subsequent assessment sets emphasis on the allocation of cost between priority and regular services. For this purpose, we also include the probability factors in our assessment.

4.4.2.6.2 Assessment

A first observation is that the documentation on the exact activities included in “DOMAIRTINTER” and the accompanying sub-activities, as well as the considerations underlying the factors used for cost allocation in the RAPM, is extremely short and does not appear sufficiently informative.

Table 4-21: Attributable cost of all activities affected by the factors AVERMAS

Activity Code	Description	Attributable cost per activity (m$)
AIRTRAOS	Transport - Air Transport - Overseas	✂
APLETBYROAD	Transport - Letters By Road - Interstate	✂
CHKINBAGSTF	Delivery - Check In & Bag Opening - Staff	✂
CONLHAULINTER	Transport - Interstate Linehaul - Contractor	✂
CONLHAULINTRA	Transport - Intrastate Linehaul - Contractor	✂

Activity Code	Description	Attributable cost per activity (m$)
DEPOTBAG	Delivery - Depot Bag Delivery - Contractor	✂
DOMAIRTINTER	Transport - Domestic Air Transport Interstate	✂
DOMAIRTINTRA	Transport Domestic Air Transport Intrastate	✂
INTERSTLHAUL	Transport - Interstate Linehaul	✂
INTRASTLHAUL	Transport - Intrastate Linehaul	✂
LCAOTERMDUE	Delivery - Tds Lc Ao Terminal Dues	✂
PARPOSTEXP	Delivery - Tds Parcel Post Expense	✂
PREPDELDEPBAGSTF	Delivery - Prepare & Deliver Depot Bags - Staff	✂
RAILSEA	Transport - Rail & Ferry Transport	✂
SEATRAOS	Transport - Sea Transport - Overseas	✂

Source: WIK-Consult, based on data from Australia Post

Within Australia Post's cost allocation model, the factor AVERMAS is used for the allocation of activity cost for 15 delivery and transport activities. Table 4-21 illustrates that the total attributable costs of activities allocated using AVERMAS account for more than ✂ (around ✂ of attributable cost).

AVERMAS represents the total mass (weight) for a product divided by the number of product units.[56] The RAPM does not provide any further description of the methodology the values are derived.

Table 4-22: AVERMAS – Factor values per product

ACCC SERVICE GROUP		Product Description	Factor value (AVERMAS)
Reserved services	Small Letters Ordinary	1020 - Pol Sl Ordinary Stamped	✂
		1021 - Pol Sl Metered Imprint Charge Regular	✂
		1022 - Pol Sl Clean Regular	✂
		1025 - Pol Sl Reply Paid	✂
	Small Letters Presort	1050 - Pol Sl Pre Sort Priority	✂
		1060 - Pol Sl Charity Mail Priority	✂
		1070 - Pol Sl Pre Sort Regular	✂
		1080 - Pol Sl Charity Mail Regular	✂
	Large Letters Ordinary	1110 - Pol Ll Ordinary Stamped 0 250g	✂
		1111 - Pol Ll Metered Imprint Charge 0 250g Regular	✂
		1112 - Pol Ll Clean Sml Plus Regular	✂
		1115 - Pol Ll Reply Paid	✂

56 Australia Post, Factor Description, p. 15

ACCC SERVICE GROUP		Product Description	Factor value (AVERMAS)
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂
		1160 - Pol Ll Pre Sort Medium Priority	✂
		1170 - Pol Ll Pre Sort Medium Regular	✂
		1180 - Pol Ll Pre Sort Large 0 250g Priority	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂
Non-reserved services	Large Letters Ordinary	1113 - Pol Ll Ordinary Stamped 250 500g	✂
		1114 - Pol Ll Metered Imprint Charge 250 500g Regular	✂
	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority	✂
		1195 - Pol Ll Pre Sort Large 250 500g Regular	✂
	Interl Out Letters	3010 - Pol Smlletters Out Airmail	✂
		3020 - Pol Smlletters Out Aerograms	✂
		3050 - Pol Lge Letters Out Airmail	✂
		3085 - Pol Business Mail Out	✂
		3245 - Pol Express Post International	✂
		3250 - Pol Mbags Out	✂
		3260 - Pol International Bulk Mail	✂
		3265 - Pol Direct Access Outwards	✂
	Internl In Letters	3310 - Pol Smlletters In Airmail	✂
		3315 - Pol Direct Access Inwards	✂
		3330 - Pol Smlletters In Sea	✂
		3340 - Pol Smlletters In Economy	✂
		3350 - Pol Lge Letters In Airmail	✂
		3360 - Pol Lge Letters In Sea	✂
		3380 - Pol Lge Letters In Economy	✂
		3510 - Pol Registered In Letters	✂
		3550 - Pol Mbags In	✂
	Other Letters	1410 - Pol Unaddressed Interstate Std Size	✂
		1420 - Pol Unaddressed Interstate Lge Size	✂
		1450 - Pol Unaddressed Intrastate Std Size	✂
		1460 - Pol Unaddressed Intrastate Lge Size	✂
		1510 - Pol Print Post Standard Regular	✂
		1520 - Pol Print Post <500g Regular	✂
		1530 - Pol Print Post >500g Regular	✂
		1550 - Pol Contract Publications	✂
	Parcels	1210 - Pol Express Post Envelope C5	✂
		1215 - Pol Express Post Envelope B4	✂

ACCC SERVICE GROUP		Product Description	Factor value (AVERMAS)
		2010 - Pop Pcls <500g Fr Stamp Label	✂
		2011 - Pop Pcls <500g Fr Other Bulk Meter	✂
		2015 - Pop Pcls <500g Express Satchel	✂
		2017 - Pop Pcls <500g Express Platinum	✂
		2020 - Pop Pcls <500g Express Fr Stamp Labels	✂
		2021 - Pop Pcls <500g Express Reduced Rate	✂
		2023 - Pop Pcls <500g Express Fr Other Bulk Meter	✂
		2030 - Pop Pcls <500g Parcel Post Satchel	✂
		2040 - Pop Pcls <500g Local Rate	✂
		2065 - Pop Pcls <500g Contract	✂
		2110 - Pop Pcls >500g Fr Stamp Label	✂
		2115 - Pop Pcls >500g Fr Other Bulk Meter	✂
		2120 - Pop Pcls >500g Express Satchel	✂
		2122 - Pop Pcls >500g Express Platinum	✂
		2123 - Pop Pcls >500g Express Satchel 3kg Large	✂
		2124 - Pop Pcls >500g Express Satchel 5kg	✂
		2125 - Pop Pcls >500g Express Stamp Labels	✂
		2126 - Pop Pcls >500g Express Reduced Rate	✂
		2128_POP_PCLS_>500G_PLATINUM_PARCELS	✂
		2129 - Pop Pcls >500g Express Other Bulk Meter	✂
		2130 - Pop Pcls >500g Parcel Post Satchel	✂
		2165 - Pop Pcls >500g Contract	✂
		2175 - Pop Pcls >500g Eparcels Ordinary	✂
		2178 - Pop Pcls >500g Point To Point Ulds	✂
		2180 - Pop Pcls >500g Eparcels B2b	✂
	Interl Out Parcels	3090 - Pop Packets Out Airmail	✂
		3100 - Pop Packets Out Sea	✂
		3120 - Pop Business Packets	✂
		3125 - Pop Trackable <2kg Labels	✂
		3130 - Pop Parcels Out Airmail	✂
		3140 - Pop Parcels Out Sea	✂
		3210 - Pol Registered Post Out Air	✂
		3215 - Pop Registered Parcels < 2kg Labels	✂
		3220 - Pop Business Parcels	✂
		3226 - Pop Outward Da Parcels	✂
	Courier Services	3230 - Pop Eci Prepaid	✂
		3235 - Pop Eci Charge Account	✂

ACCC SERVICE GROUP		Product Description	Factor value (AVERMAS)
		3240 - Pop Eci Labels	✂
		3280 - Pop Epi Prepaid	✂
		3285 - Pop Epi Charge Ac Non Prepaid	✂
		3290 - Pop Epi Cash Non Prepaid	✂
	Internl In Parcels	3390 - Pop Packets In Airmail	✂
		3395 - Pop Epackets In Tracked Airmail	✂
		3400 - Pop Packets In Sea	✂
		3410 - Pop Packets In Economy	✂
		3430 - Pop Parcels In Airmail	✂
		3440 - Pop Parcels In Sea	✂
		3445 - Pop Inward Da Parcels	✂
		3460 - Pop Parcels In Economy	✂
		3520 - Pop Registered In Packets	✂
		3525 - Pop Insured Articles In	✂
		3530 - Pop Ems Ap In (unweighted average; factor value NSW: 2.81; Vic.: 2.7; Qld.: 2.89; W.A.:2.8)	✂
	StarTrack International	9101 - Lge Letters - In - Commercial	✂
		9102 - Packets - In - Commercial	✂
		9103 - Parcels - In - Commercial - Untracked	✂
		9104 - Parcels - In - Commercial - Tracked	✂

Source: WIK-Consult, based on data from Australia Post
Note: NSW: New South Wales; Vic: Victoria; Qld: Queensland; W.A.: Western Australia

Table 4-22 above lists all 108 values of factor AVERMAS for the affected services. Generally, the approach of deriving the factor values seems reasonable and the factor values appropriate.

Table 4-23: Attributable cost of all activities affected by the factors AIRPR3

Activity Code	Description	Attributable cost per activity (m$)
APLETBYROAD	Transport - Letters By Road - Interstate	✂
DOMAIRTINTER	Transport - Domestic Air Transport Interstate	✂

Source: WIK-Consult, based on data from Australia Post

The factor AIRPR3 is less important in Australia Post's cost allocation model. Table 4-23 above illustrates that the factor is only used in two transport activities, which account for around ✂ (around ✂) of attributable cost.

AIRPR3 represents the additional weighting for Express Post mail to reflect higher costs per Kg for the product due to the use of more expensive freighters.[57] The RAPM does not provide any further description of the factor or the methodology the values are derived.

57 Australia Post, Factor Description, p. 15.

Table 4-24: AIRPR3 – Factor values per product

ACCC SERVICE GROUP		Product Description	State	Factor value (AIRPR3)
		All other products (incl. small and large letters, parcels, express items, etc.)	all	✂
Non-reserved services	Parcels (Express mail services)	1210 - Pol Express Post Envelope C5 1215 - Pol Express Post Envelope B4 2015 - Pop Pcls <500g Express Satchel 2017 - Pop Pcls <500g Express Platinum 2018_POP_PCLS_<500G_PLATINUM_PARCELS_ 2020 - Pop Pcls <500g Express Fr Stamp Labels 2021 - Pop Pcls <500g Express Reduced Rate 2023 - Pop Pcls <500g Express Fr Other Bulk Meter 2120 - Pop Pcls >500g Express Satchel 2122 - Pop Pcls >500g Express Platinum 2123 - Pop Pcls >500g Express Satchel 3kg Large 2124 - Pop Pcls >500g Express Satchel 5kg 2125 - Pop Pcls >500g Express Stamp Labels 2126 - Pop Pcls >500g Express Reduced Rate 2128_POP_PCLS_>500G_PLATINUM_PARCELS 2129 - Pop Pcls >500g Express Other Bulk Meter	NSW Vic. Qld S.A. W.A.	✂ ✂ ✂ ✂ ✂

Source: WIK-Consult, based on data from Australia Post
Note: NSW: New South Wales; Vic: Victoria; Qld: Queensland; S.A.: South Australia; W.A.: Western Australia

Table 4-24 above lists the factor values of AIRPR3. The value for all products is normalized to 1 except for 16 express mail products. For these products different factor values are assigned on state level. The RAPM does not provide further information on the derivation of the factor values.

To summarize, the values for both relative effort factors, AVERMAS and AIRPR3, seem to be derived from statistical data. However, the RAPM does not provide any further description of the factor or any information to justify the factor values. Furthermore, the factor values do not consider any systematic differentiation between regular and priority mail items. Given that there are no differences regarding the effort for transporting priority and regular services, the approach seems appropriate. In order to gain further insights on the cost allocation between these two service types, we assessed the probability factors applied in the cost allocation of activity DOMAIRTINTER with focus on the six services listed in Table 4-25 below.

Table 4-25: Overview - priority and regular services

ACCC SERVICE GROUP		Product Description
Reserved services	Small Letters Presort	1050 - Pol Sl Pre Sort Priority
		1060 - Pol Sl Charity Mail Priority
		1070 - Pol Sl Pre Sort Regular
		1080 - Pol Sl Charity Mail Regular
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority
		1150 - Pol Ll Pre Sort Sml Plus Regular
		1160 - Pol Ll Pre Sort Medium Priority
		1170 - Pol Ll Pre Sort Medium Regular
		1180 - Pol Ll Pre Sort Large 0 250g Priority
		1190 - Pol Ll Pre Sort Large 0 250g Regular
Non-reserved services	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority
		1195 - Pol Ll Pre Sort Large 250 500g Regular

Source: WIK-Consult, based on data from Australia Post

These six products were provided as regular and priority services in FY 2013/2014. In the following we list our observations with regard to the four probability factors used for the allocation of cost of activity DOMAIRTINTER:

- **AIRBYAIR** analyses the probability of interstate mail delivery in Australia by air. The factor was just introduced in FY13/14 and factor values are set to ≻for all 81 products affected by this factor (including the regular and priority services listed above).
- **AIRISD** analyses the probability of interstate air mail delivery in Australia by air for delivered mail. The factor has no values assigned to the products listed above.
- **AIRISP** analyses the probability of interstate air mail posted in Australia. There are differences between the factor values between the relevant products but we cannot observe any systematically differentiation between regular and priority services.
- **AIRPR4** considers the likelihood of mail being delivered using air transportation. Australia Post assigns four different values to products ≻. The normalization of the factor value to 1 and the approach to assign lower values to some products seems reasonable but the RAPM does not provide any documentation on the derivation of the factor values. With respect to the relevant services listed in Table 4-25 above, the factor AIRPR4 systematically differentiates between regular and priority services by assigning the values 1 to priority products and the factor value ≻ to regular services (see Table 4-26 below).

Table 4-26: AIRPR4 – Factor values per product

ACCC SERVICE GROUP		Product Description	Factor value (AIRPR4)
Reserved services	Small Letters Ordinary	1020 - Pol Sl Ordinary Stamped	✂
		1021 - Pol Sl Metered Imprint Charge Regular	✂
		1022 - Pol Sl Clean Regular	✂
		1025 - Pol Sl Reply Paid	✂
	Small Letters Presort	1050 - Pol Sl Pre Sort Priority	✂
		1060 - Pol Sl Charity Mail Priority	✂
		1070 - Pol Sl Pre Sort Regular	✂
		1080 - Pol Sl Charity Mail Regular	✂
	Large Letters Ordinary	1110 - Pol Ll Ordinary Stamped 0 250g	✂
		1111 - Pol Ll Metered Imprint Charge 0 250g Regular	✂
		1114 - Pol Ll Metered Imprint Charge 250 500g Regular	✂
		1115 - Pol Ll Reply Paid	✂
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂
		1160 - Pol Ll Pre Sort Medium Priority	✂
		1170 - Pol Ll Pre Sort Medium Regular	✂
		1180 - Pol Ll Pre Sort Large 0 250g Priority	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂
Non-reserved services	Large Letters Ordinary	1140 - Pol Ll Pre Sort Sml Plus Priority	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂
	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority	✂
		1195 - Pol Ll Pre Sort Large 250 500g Regular	✂
	Interl Out Letters	1180 - Pol Ll Pre Sort Large 0 250g Priority	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂
		3050 - Pol Lge Letters Out Airmail	✂
		3085 - Pol Business Mail Out	✂
		3245 - Pol Express Post International	✂
	Internl In Letters	3310 - Pol Smlletters In Airmail	✂
		3315 - Pol Direct Access Inwards	✂
		3330 - Pol Smlletters In Sea	✂
		3340 - Pol Smlletters In Economy	✂
		3350 - Pol Lge Letters In Airmail	✂
		3360 - Pol Lge Letters In Sea	✂
		3380 - Pol Lge Letters In Economy	✂
		3510 - Pol Registered In Letters	✂

ACCC SERVICE GROUP	Product Description	Factor value (AIRPR4)
Other Letters	1510 - Pol Print Post Standard Regular	✂
	1520 - Pol Print Post <500g Regular	✂
Parcels	1210 - Pol Express Post Envelope C5	✂
	1215 - Pol Express Post Envelope B4	✂
	2010 - Pop Pcls <500g Fr Stamp Label	✂
	2011 - Pop Pcls <500g Fr Other Bulk Meter	✂
	2015 - Pop Pcls <500g Express Satchel	✂
	2017 - Pop Pcls <500g Express Platinum	✂
	2020 - Pop Pcls <500g Express Fr Stamp Labels	✂
	2021 - Pop Pcls <500g Express Reduced Rate	✂
	2023 - Pop Pcls <500g Express Fr Other Bulk Meter	✂
	2030 - Pop Pcls <500g Parcel Post Satchel	✂
	2065 - Pop Pcls <500g Contract	✂
	2120 - Pop Pcls >500g Express Satchel	✂
	2122 - Pop Pcls >500g Express Platinum	✂
	2123 - Pop Pcls >500g Express Satchel 3kg Large	✂
	2124 - Pop Pcls >500g Express Satchel 5kg	✂
	2125 - Pop Pcls >500g Express Stamp Labels	✂
	2126 - Pop Pcls >500g Express Reduced Rate	✂
	2128_POP_PCLS_>500G_PLATINUM_PARCELS	✂
	2129 - Pop Pcls >500g Express Other Bulk Meter	✂
Interl Out Parcels	3090 - Pop Packets Out Airmail	✂
	3100 - Pop Packets Out Sea	✂
	3120 - Pop Business Packets	✂
	3125 - Pop Trackable <2kg Labels	✂
	3130 - Pop Parcels Out Airmail	✂
	3210 - Pol Registered Post Out Air	✂
	3215 - Pop Registered Parcels < 2kg Labels	✂
	3220 - Pop Business Parcels	✂
Courier Services	3230 - Pop Eci Prepaid	✂
	3235 - Pop Eci Charge Account	✂
	3240 - Pop Eci Labels	✂
	3280 - Pop Epi Prepaid	✂
	3285 - Pop Epi Charge Ac Non Prepaid	✂
	3290 - Pop Epi Cash Non Prepaid	✂
Internl In Parcels	3390 - Pop Packets In Airmail	✂
	3395 - Pop Epackets In Tracked Airmail	✂

ACCC SERVICE GROUP	Product Description	Factor value (AIRPR4)
	3400 - Pop Packets In Sea	✂
	3410 - Pop Packets In Economy	✂
	3430 - Pop Parcels In Airmail	✂
	3445 - Pop Inward Da Parcels	✂
	3520 - Pop Registered In Packets	✂
	3525 - Pop Insured Articles In	✂
StarTrack Intern.	9101 - Lge Letters - In - Commercial	✂

Source: WIK-Consult, based on data from Australia Post

4.4.2.7 Activity Primary Sort Staff (PRIMSORTSTF)

The activity Primary Sort Staff (PRIMSORTSTF) is allocated to the function "Delivery" and accounts for ✂ (around ✂) of all attributable costs of which ✂are allocated to reserved services (around ✂ of all the costs of reserved services).

4.4.2.7.1 Description

The RAPM does not include a detailed description of the activity. In Australia Post's EPM Activity Dictionary, the activity is defined as "Primary Sort Staff" and includes "[a]ctivities performed by Delivery Centre staff which occur between the point of check-in at a Delivery Centre up until the point at which mail products are sorted and sequenced prior to delivery".[58]

Table 4-27: Factors used to allocate cost of activity PRIMSORTSTF to products

Factor	Factor Description	Explanation
DELVVOL	Mail volume delivered	This factor represents the total mail volume delivered by product e.g. the number of SL Ordinary Stamped delivered in Victoria. This volume is obtained via the Revenue Based Volumes process.
PRIMSORT	PRIMARY SORT OF MAIL ARTICLES	The factor represents the relative rate of primary sorting of articles and takes into account proportion of articles already sorted to round.
SORTART	PRIMARY SORT OF MAIL ARTICLES	The factor represents the relative rate of primary sorting of articles and takes into account proportion of articles already sorted to round.

Source: Australia Post, Factor Description

Table 4-27 above lists the factors used by Australia Post to allocate the cost of this activity to products. The factor DELVVOL, which represents the total mail volume

58 Australia Post, EPM Activity Dictionary.

delivered, combined with the probability factor PRIMSORT measure the volumes of mail actually prepared, i.e. manually sorted to rounds, for the delivery by AP's delivery staff. The factor SORTART incorporates the relative effort related to the primary sorting of different services and products. Note that Australia Post uses the same explanation for both propability factors PRIMSORT and SORTART.[59]

The cost allocation through the volume related factors, i.e. according to mail volume shares, seems less crucial than the allocation according to the relative effort assigned to different products. Against this background, the subsequent assessment of activity PRIMSORTSTF focusses on the factor SORTART and its factor values for the different products and services.

4.4.2.7.2 Assessment

A first observation is that the documentation on the exact activities included in "Primary Sort Staff", as well as the considerations underlying the factors used for cost allocation in the RAPM, is extremely short and does not appear sufficiently informative.

Table 4-28: Attributable cost of all activities affected by the factor SORTART

Activity Code	Description	Attributable cost per activity (m$)
PRIMSORTSTF	Primary Sort Staff	✂

Source: WIK-Consult, based on data from Australia Post

In contrast to other factors, which are used for the allocation of a set of activity costs to products, SORTART is used only for the allocation of the cost related to the activity primary sort staff, as outlined in Table 4-28 above.

SORTART represents the relative rate of primary sorting of articles and takes into account the proportion of articles already sorted to round. Australia Post suggests that factor values assigned to the factor SORTART are lower for small presort letters "due to a higher proportion being sorted to rounds by the barcode sorters".[60]

59 Australia Post, Factor Discription, p. 13.
60 Australia Post, Factor Description, p. 13.

Table 4-29: SORTART – Factor values per product

	ACCC SERVICE GROUP	Product Description	Factor value (SORTART)
Reserved services	Small Letters Ordinary	1020 - Pol Sl Ordinary Stamped	✂
		1021 - Pol Sl Metered Imprint Charge Regular	✂
		1022 - Pol Sl Clean Regular	✂
		1025 - Pol Sl Reply Paid	✂
		1040 - Pol Sl Local Rate Regular	✂
	Small Letters Presort	1050 - Pol Sl Pre Sort Priority	✂
		1060 - Pol Sl Charity Mail Priority	✂
		1070 - Pol Sl Pre Sort Regular	✂
		1080 - Pol Sl Charity Mail Regular	✂
	Large Letters Ordinary	1110 - Pol Ll Ordinary Stamped 0 250g	✂
		1111 - Pol Ll Metered Imprint Charge 0 250g Regular	✂
		1112 - Pol Ll Clean Sml Plus Regular	✂
		1115 - Pol Ll Reply Paid	✂
		1130 - Pol Ll Local Rate Regular	✂
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂
		1160 - Pol Ll Pre Sort Medium Priority	✂
		1170 - Pol Ll Pre Sort Medium Regular	✂
		1180 - Pol Ll Pre Sort Large 0 250g Priority	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂
Non-reserved services	Large Letters Ordinary	1113 - Pol Ll Ordinary Stamped 250 500g	✂
		1114 - Pol Ll Metered Imprint Charge 250 500g Regular	✂
	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority	✂
		1195 - Pol Ll Pre Sort Large 250 500g Regular	✂
	Internl In Letters	3310 - Pol Smlletters In Airmail	✂
		3315 - Pol Direct Access Inwards	✂
		3330 - Pol Smlletters In Sea	✂
		3340 - Pol Smlletters In Economy	✂
		3350 - Pol Lge Letters In Airmail	✂
		3360 - Pol Lge Letters In Sea	✂
		3380 - Pol Lge Letters In Economy	✂
		3510 - Pol Registered In Letters	✂
		3550 - Pol Mbags In	✂
	Other Letters	1510 - Pol Print Post Standard Regular	✂
		1520 - Pol Print Post <500g Regular	✂
		1530 - Pol Print Post >500g Regular	✂
		1550 - Pol Contract Publications	✂
		1560 - Pol Registered Post	✂
	Parcels	1210 - Pol Express Post Envelope C5	✂
		1215 - Pol Express Post Envelope B4	✂
		2010 - Pop Pcls <500g Fr Stamp Label	✂
		2011 - Pop Pcls <500g Fr Other Bulk Meter	✂

ACCC SERVICE GROUP	Product Description	Factor value (SORTART)
	2015 - Pop Pcls <500g Express Satchel	✂
	2017 - Pop Pcls <500g Express Platinum	✂
	2018_POP_PCLS_<500G_PLATINUM_PARCELS_	✂
	2020 - Pop Pcls <500g Express Fr Stamp Labels	✂
	2021 - Pop Pcls <500g Express Reduced Rate	✂
	2023 - Pop Pcls <500g Express Fr Other Bulk Meter	✂
	2030 - Pop Pcls <500g Parcel Post Satchel	✂
	2040 - Pop Pcls <500g Local Rate	✂
	2065 - Pop Pcls <500g Contract	✂
	2110 - Pop Pcls >500g Fr Stamp Label	✂
	2115 - Pop Pcls >500g Fr Other Bulk Meter	✂
	2120 - Pop Pcls >500g Express Satchel	✂
	2122 - Pop Pcls >500g Express Platinum	✂
	2123 - Pop Pcls >500g Express Satchel 3kg Large	✂
	2124 - Pop Pcls >500g Express Satchel 5kg	✂
	2125 - Pop Pcls >500g Express Stamp Labels	✂
	2126 - Pop Pcls >500g Express Reduced Rate	✂
	2128_POP_PCLS_>500G_PLATINUM_PARCELS	✂
	2129 - Pop Pcls >500g Express Other Bulk Meter	✂
	2130 - Pop Pcls >500g Parcel Post Satchel	✂
	2140 - Pop Pcls >500g Local Rate	✂
	2165 - Pop Pcls >500g Contract	✂
	2175 - Pop Pcls >500g Eparcels Ordinary	✂
	2180 - Pop Pcls >500g Eparcels B2b	✂
	2200 - Pop Cash On Delivery	✂
	2205 - Pop Retail Parcel Tracking	✂
Internl In Parcels	3390 - Pop Packets In Airmail	✂
	3395 - Pop Epackets In Tracked Airmail	✂
	3400 - Pop Packets In Sea	✂
	3410 - Pop Packets In Economy	✂
	3430 - Pop Parcels In Airmail	✂
	3440 - Pop Parcels In Sea	✂
	3445 - Pop Inward Da Parcels	✂
	3460 - Pop Parcels In Economy	✂
	3520 - Pop Registered In Packets	✂
	3525 - Pop Insured Articles In	✂
	3530 - Pop Ems Ap In	✂
StarTrack International	9101 - Lge Letters - In - Commercial	✂
	9102 - Packets - In - Commercial	✂
	9103 - Parcels - In - Commercial - Untracked	✂
	9104 - Parcels - In - Commercial - Tracked	✂

Source: WIK-Consult, based on data from Australia Post

Table 4-29 above lists the 83 factor values of factor SORTART for the affected services. Generally, the relative values of the factor SORTART for most products appear appropriate. For example, small pre-sorted letters are more often automatically sorted to rounds and therefore need less primary sorting than other letter mail products which are not already sorted to rounds. Moreover, the relative effort for manually sorting larger items to rounds is higher than for smaller items. However, the RAPM does not provide any information to justify the assigned factor values.

In the following we list our observations with regard to the factor values for SORTART:

- **Small and large letters:** The relative values for small and large letters seem appropriate as the relative handling for large letters below 250g is more intensive than for small letters.
- **Reply Mail:** As discussed in Section 4.4.2.2, there is a close relation to the activity SETUPSTQSTF and its relative effort factor SETSART, which assign significantly lower factor values for reply mail items to the factor SORTART. Australia Post explains that reply mail has a very low factor value because "[t]he process required for reply paid is not as intensive on a per item basis in the Set Up & Sequence stage. The majority of reply items are barcode sorted to round."[61] The assignment of higher factor values for reply mail in the factor SORTART seems consistent with the lower values assigned via the factor SETSART.
- **Parcels:** ≻
- **Express:** ≻
- **Priority vs. regular services:** It seems reasonable that the Factor SORTART does not incorporate any differentiation between the handling of regular and priority mail.

Overall, Australia Post's approach of combining volumes with a factor to measure the relative share of products already pre-sorted to rounds and the relative hardship of primary sorting appears appropriate for this activity. Generally, the assigned factor values and the relation between products seem reasonable and consistent, particularly when considered in light of the activity SETUPSQSTF and its relative effort factor SETSART

4.4.2.8 Activity Inward Mail Lpo (INWARDMAIL)

The activity Inward Mail Lpo (INWARDMAIL) is allocated to the function "Delivery" and accounts for ≻ (around ≻) of all attributable costs of which ≻ are allocated to reserved services (around ≻of all the costs of reserved services).

61 See WIK (2008), Assessing Australia Post's allocation of costs between (and within) reserved and non-reserved services, p. 23.

4.4.2.8.1 Description

The RAPM does not include a detailed description of the activity. In Australia Post's EPM Activity Dictionary, the activity is defined as "Inward Mail LPO" and includes box sorting, minor outdoor delivery, mail contractor management and primary sorting performed by LPOs.[62]

Table 4-30: Factors used to allocate cost of activity INWARDMAIL to products

Factor	Factor Description	Explanation
DELVVOL	Mail volume delivered	This factor represents the total mail volume delivered by product e.g. the number of SL Ordinary Stamped delivered in Victoria. This volume is obtained via the Revenue Based Volumes process.
DELLP	%AGE PRODUCT DELV LPO'S	This factor considers that percentage of products delivered that is processed at licensed post offices.
GENWGT1	GENERAL WEIGHTING - GENERAL	Represents the relative handling factor between products.

Source: Australia Post, Factor Description

Table 4-30 above lists the factors used by Australia Post to allocate the cost of this activity to products. The factor DELVVOL, which represents the total mail volume delivered, combined with probability factor DELLP measure the volumes of mail actually prepared and delivered by LPOs. The factor GENWGT1 incorporates the relative effort related to the handling of different services and products.

The cost allocation through the volume related factors, i.e. according to mail volume shares, seems less crucial than the allocation according to the relative effort assigned to different products. Against this background, the subsequent assessment of activity INWARDMAIL focusses on application of the factor GENWGT1.

4.4.2.8.2 Assessment

The activity INWARDMAIL uses the same relative effort factor (GENWGT1) as the core delivery activities OUTDRDELSTF and STREETDEL. Our general findings and criticisms on factor values assigned by GENWGT1 from Section 4.4.2.1.2 apply.

The activity INWARDMAIL represents, in contrast to the activities OUTDRDELSTF and STREETDEL, only "minor outdoor delivery activities". A major part of this activity includes other elements, particularly related to mail preparation processes (e.g. primary sorting) performed by LPOs.[63]

62 Australia Post, EPM Activity Dictionary.
63 Australia Post, EPM Activity Dictionary.

Table 4-31 provides a comparison of the factor values assigned to factors GENWGT1, SETSART and SORTART for different products.

Table 4-31: GENWGT1 - Comparison with factor values SETSART, SORTART

ACCC SERVICE GROUP		Product Description	Factor value (GENWGT1)	Factor value (SETSART)	Factor value (SORTART)
Reserved services	Small Letters Ordinary	1020 - Pol Sl Ordinary Stamped	✂	✂	✂
		1021 - Pol Sl Metered Imprint Charge Regular	✂	✂	✂
		1022 - Pol Sl Clean Regular	✂	✂	✂
		1025 - Pol Sl Reply Paid	✂	✂	✂
		1040 - Pol Sl Local Rate Regular	✂	✂	✂
	Small Letters Presort	1050 - Pol Sl Pre Sort Priority	✂	✂	✂
		1060 - Pol Sl Charity Mail Priority	✂	✂	✂
		1070 - Pol Sl Pre Sort Regular	✂	✂	✂
		1080 - Pol Sl Charity Mail Regular	✂	✂	✂
	Large Letters Ordinary	1110 - Pol Ll Ordinary Stamped 0 250g	✂	✂	✂
		1111 - Pol Ll Metered Imprint Charge 0 250g Regular	✂	✂	✂
		1112 - Pol Ll Clean Sml Plus Regular	✂	✂	✂
		1115 - Pol Ll Reply Paid	✂	✂	✂
		1130 - Pol Ll Local Rate Regular	✂	✂	✂
	Large Letters Presort	1140 - Pol Ll Pre Sort Sml Plus Priority	✂	✂	✂
		1150 - Pol Ll Pre Sort Sml Plus Regular	✂	✂	✂
		1160 - Pol Ll Pre Sort Medium Priority	✂	✂	✂
		1170 - Pol Ll Pre Sort Medium Regular	✂	✂	✂
		1180 - Pol Ll Pre Sort Large 0 250g Priority	✂	✂	✂
		1190 - Pol Ll Pre Sort Large 0 250g Regular	✂	✂	✂
Non-reserved services	Large Letters Ordinary	1113 - Pol Ll Ordinary Stamped 250 500g	✂	✂	✂
		1114 - Pol Ll Metered Imprint Charge 250 500g Regular	✂	✂	✂
	Large Letters Presort	1185 - Pol Ll Pre Sort Large 250 500g Priority	✂	✂	✂
		1195 - Pol Ll Pre Sort Large 250 500g Regular	✂	✂	✂
	Interl Out Letters	3010 - Pol Smlletters Out Airmail	✂	✂	✂
		3020 - Pol Smlletters Out Aerograms	✂	✂	✂
		3050 - Pol Lge Letters Out Airmail	✂	✂	✂
		3085 - Pol Business Mail Out	✂	✂	✂
		3245 - Pol Express Post International	✂	✂	✂
		3250 - Pol Mbags Out	✂	✂	✂
		3260 - Pol International Bulk Mail	✂	✂	✂
		3265 - Pol Direct Access Outwards	✂	✂	✂
	Internl In Letters	3310 - Pol Smlletters In Airmail	✂	✂	✂
		3315 - Pol Direct Access Inwards	✂	✂	✂
		3330 - Pol Smlletters In Sea	✂	✂	✂
		3340 - Pol Smlletters In Economy	✂	✂	✂

ACCC SERVICE GROUP	Product Description	Factor value (GENWGT1)	Factor value (SETSART)	Factor value (SORTART)
	3350 - Pol Lge Letters In Airmail	✂	✂	✂
	3360 - Pol Lge Letters In Sea	✂	✂	✂
	3380 - Pol Lge Letters In Economy	✂	✂	✂
	3510 - Pol Registered In Letters	✂	✂	✂
	3550 - Pol Mbags In	✂	✂	✂
Other Letters	1410 - Pol Unaddressed Interstate Std Size	✂	✂	✂
	1420 - Pol Unaddressed Interstate Lge Size	✂	✂	✂
	1450 - Pol Unaddressed Intrastate Std Size	✂	✂	✂
	1460 - Pol Unaddressed Intrastate Lge Size	✂	✂	✂
	1510 - Pol Print Post Standard Regular	✂	✂	✂
	1520 - Pol Print Post <500g Regular	✂	✂	✂
	1530 - Pol Print Post >500g Regular	✂	✂	✂
	1550 - Pol Contract Publications	✂	✂	✂
	1560 - Pol Registered Post	✂	✂	✂
Parcels	1210 - Pol Express Post Envelope C5	✂	✂	✂
	1215 - Pol Express Post Envelope B4	✂	✂	✂
	2010 - Pop Pcls <500g Fr Stamp Label	✂	✂	✂
	2011 - Pop Pcls <500g Fr Other Bulk Meter	✂	✂	✂
	2015 - Pop Pcls <500g Express Satchel	✂	✂	✂
	2017 - Pop Pcls <500g Express Platinum	✂	✂	✂
	2018_POP_PCLS_<500G_PLATINUM_PARCELS_	✂	✂	✂
	2020 - Pop Pcls <500g Express Fr Stamp Labels	✂	✂	✂
	2021 - Pop Pcls <500g Express Reduced Rate	✂	✂	✂
	2023 - Pop Pcls <500g Express Fr Other Bulk Meter	✂	✂	✂
	2030 - Pop Pcls <500g Parcel Post Satchel	✂	✂	✂
	2040 - Pop Pcls <500g Local Rate	✂	✂	✂
	2065 - Pop Pcls <500g Contract	✂	✂	✂
	2110 - Pop Pcls >500g Fr Stamp Label	✂	✂	✂
	2115 - Pop Pcls >500g Fr Other Bulk Meter	✂	✂	✂
	2120 - Pop Pcls >500g Express Satchel	✂	✂	✂
	2122 - Pop Pcls >500g Express Platinum	✂	✂	✂
	2123 - Pop Pcls >500g Express Satchel 3kg Large	✂	✂	✂
	2124 - Pop Pcls >500g Express Satchel 5kg	✂	✂	✂
	2125 - Pop Pcls >500g Express Stamp Labels	✂	✂	✂
	2126 - Pop Pcls >500g Express Reduced Rate	✂	✂	✂
	2128_POP_PCLS_>500G_PLATINUM_PARCELS	✂	✂	✂
	2129 - Pop Pcls >500g Express Other Bulk Meter	✂	✂	✂
	2130 - Pop Pcls >500g Parcel Post Satchel	✂	✂	✂
	2140 - Pop Pcls >500g Local Rate	✂	✂	✂
	2165 - Pop Pcls >500g Contract	✂	✂	✂
	2175 - Pop Pcls >500g Eparcels Ordinary	✂	✂	✂
	2180 - Pop Pcls >500g Eparcels B2b	✂	✂	✂
Interl Out	3090 - Pop Packets Out Airmail	✂	✂	✂

ACCC SERVICE GROUP	Product Description	Factor value (GENWGT1)	Factor value (SETSART)	Factor value (SORTART)
Parcels	3100 - Pop Packets Out Sea	✂	✂	✂
	3120 - Pop Business Packets	✂	✂	✂
	3125 - Pop Trackable <2kg Labels	✂	✂	✂
	3130 - Pop Parcels Out Airmail	✂	✂	✂
	3140 - Pop Parcels Out Sea	✂	✂	✂
	3210 - Pol Registered Post Out Air	✂	✂	✂
	3215 - Pop Registered Parcels < 2kg Labels	✂	✂	✂
	3220 - Pop Business Parcels	✂	✂	✂
	3226 - Pop Outward Da Parcels	✂	✂	✂
Courier Services	3230 - Pop Eci Prepaid	✂	✂	✂
	3235 - Pop Eci Charge Account	✂	✂	✂
	3240 - Pop Eci Labels	✂	✂	✂
	3280 - Pop Epi Prepaid	✂	✂	✂
	3285 - Pop Epi Charge Ac Non Prepaid	✂	✂	✂
	3290 - Pop Epi Cash Non Prepaid	✂	✂	✂
Internl In Parcels	3390 - Pop Packets In Airmail	✂	✂	✂
	3395 - Pop Epackets In Tracked Airmail	✂	✂	✂
	3400 - Pop Packets In Sea	✂	✂	✂
	3410 - Pop Packets In Economy	✂	✂	✂
	3430 - Pop Parcels In Airmail	✂	✂	✂
	3440 - Pop Parcels In Sea	✂	✂	✂
	3445 - Pop Inward Da Parcels	✂	✂	✂
	3460 - Pop Parcels In Economy	✂	✂	✂
	3520 - Pop Registered In Packets	✂	✂	✂
	3525 - Pop Insured Articles In	✂	✂	✂
	3530 - Pop Ems Ap In	✂	✂	✂
StarTrack Intern.	9101 - Lge Letters - In - Commercial	✂	✂	✂
	9102 - Packets - In - Commercial	✂	✂	✂
	9103 - Parcels - In - Commercial - Untracked	✂	✂	✂
	9104 - Parcels - In - Commercial - Tracked	✂	✂	✂

Source: WIK-Consult, based on data from Australia Post

Although the same relative effort factor is used to allocate costs to products for activities OUTDRDELSTF / STREETDEL and INWARDMAIL, the activities – and the products undergoing these activities – are quite different: INWARDMAIL only includes minor outdoor delivery activities and takes account for a range of mail preparation activities (box sorting, primary sorting). [64] It appears questionable whether the same factor (here: GENWGT1) can be appropriate to reflect differences in handling time in delivery and sorting processes.

64 Australia Post, EPM Activity Dictionary.

As shown in Table 4-31 above, factor values of GENWGT1 can be compared with the factors SETSART (that is exclusively applied in the activity SETUPSQSTF) and SORTART (that is exclusively applied in the activity PRIMSORTSTF). These two factors reflect differences in handling time for mail preparation in delivery offices (with own personnel) rather than in licensed post offices. However, we assume that the sorting activities in delivery offices are likely very similar to those in LPOs (activity INWARDMAIL).

Australia Post's approach of using the same factor (GENWGT1) to allocate the cost of delivery activities and handling inward mail appears inconsistent. It appears that factor values for GENWGT1 are determined primarily with regard to delivery activities, and there are serious concerns about whether these factors can appropriately reflect the costs of handling inward mail by LPOs. Consequently, this raises important concerns about the extent to which the allocation of these activity costs to products are based on the principle of cost causality. The definition of a separate relative effort factor or the application of (a combination) of factors related to mail preparation activities may be a more appropriate approach.

In the following we list our observations with regard to the comparison of factor values for GENWGT1 (used for activity INWARDMAIL in licensed post offices) with the factor values of SETSART (used for activity SETUPSQSTF in delivery offices) and SORTART (used for activity PRIMSORTSTF in delivery offices) to give reasons for our assessment:

- **Large letters:** Values for SETSART and SORTART are significantly lower than for GENWGT1 for large letters (see last two columns in Table 4-31). This implies that Australia Post rates the effort for mail preparation processes performed in LPOs higher than for mail preparation processes in delivery offices.

- **Unaddressed items:** ✂

- **Parcels:** ✂

Unattributable cost

Unattributable cost accounts to ≻ (around ≻) of total cost≻are allocated to reserved services (around ≻ of all cost allocated to reserved services) and $14m to notified services.

Table 4-32: Major unattributable cost account items (in terms of allocated cost)

Activity Code	Description	Function	% of unattrib. cost
CORPITEMEXPYE	Corporate Item Expense Year End		≻
CREMSDEL	Real Estate for Ms Delivery	Corporate Real Estate	≻
CRERETSA	Real Estate for Retail S&a	Corporate Real Estate	≻
RENONACCOM	Real Estate Non Accomodation		≻
MKTG_ESMMKTRET	Mktg Esm Marketing Activity Retail		≻
CREMSPROC	Real Estate for Ms Processing	Corporate Real Estate	≻
CORPITEM	Corporate Activity		≻
REDIRECT	Redirection		≻
CRERETSAPES	Real Estate for Ret Sa Pes	Corporate Real Estate	≻
CRERETSACMS	Real Estate for Ret Sa Cms	Corporate Real Estate	≻

Source: WIK-Consult, based on data from Australia Post

Table 4-32 provides an overview of the ten major Unattributable Cost account items in Australia Post's CAM. In comparison with attributable and direct cost, there is no major account item which represents a high share of unattributable cost.

According to Australia Post's RAPM, account items will be classified as unattributable if they are unable to be classified as direct or attributable. The RAPM does not include documentation on how unattributable cost are allocated to products.

Table 4-33: Allocation of unattributable cost to service groups

	ACCC Service Group	Sum of attributable and direct cost (m$)	% of attrib. and direct cost	Allocated unattrib. cost (m$)	Share of allocated unattrib. cost on service group cost
Reserved services	Small Letters Ordinary	✂	✂	✂	✂
	Small Letters Presort	✂	✂	✂	✂
	Large Letters Ordinary	✂	✂	✂	✂
	Large Letters Presort	✂	✂	✂	✂
Non-reserved services	Large Letters Ordinary	✂	✂	✂	✂
	Large Letters Presort	✂	✂	✂	✂
	Other Letters	✂	✂	✂	✂
	Other Letters Associated	✂	✂	✂	✂
	Courier Services	✂	✂	✂	✂
	Parcels	✂	✂	✂	✂
	StarTrack International	✂	✂	✂	✂
	Retail	✂	✂	✂	✂
	Transfer Retail	✂	✂	✂	✂
	Financial Services	✂	✂	✂	✂
	Internl In Letters	✂	✂	✂	✂
	Interl Out Letters	✂	✂	✂	✂
	Internl In Parcels	✂	✂	✂	✂
	Interl Out Parcels	✂	✂	✂	✂
	Other (share < 1%)	✂	✂	✂	✂

Source: WIK-Consult, based on data from Australia Post

Table 4-33 illustrates our assessment of the allocation methodology. The first row represents the sum of attributable and direct cost allocated to the service groups. The second row represents the share of attributable and direct cost of each service group on total attributable and direct cost. The third and fourth rows represent the unattributable cost allocated to each service group and the share on total unattributable cost.

The numbers in Table 4-33 do not support an allocation of unattributable cost according to the EPMU-rule (equi-proportionate mark-up), i.e. that unattributable cost is allocated to products according to the allocated direct and attributable cost. With an EPMU approach, the cost shares of each product and service group must be equal, i.e. the share on total direct and attributable cost equals the share on unattributable cost.

More generally, Australia Post's approach allocates some account items, which would typically be categorized as unattributable cost (e.g. related to IT- or HR-services), via factors and categorize these account items as attributable cost. This also explains the

low share of unattributable cost on total cost and on the cost allocated to reserved services.

4.5 Further critical observations

4.5.1 Documentation of the CAM

The documentation of the Australia Post's CAM improved since our review in 2008. However, the documentation for most activities and underlying factors used for cost allocation is extremely short and does not appear sufficiently informative. In particular the RAPM and the supporting documents are lacking a description of the exact elements and sub-activities included in the activities, a reasoning for the selected factors, an explanation and the documentation on the derivation of the factor values.

The RAPM and the supporting documents provide rather a high-level explanation of the CAM/EPM and on the general building blocks. A detailed model specification manual is missing, i.e. supporting documents that provide – at least – information on the abbreviations and explanations for the attributes included in the raw data set which informs on the allocation cost path from cost centres (activities) to weight factors and to products.

4.5.2 Treatment of restructuring costs

Restructuring cost accounted for [redacted] in FY2013/2014. This cost is related to two restructuring initiatives:

- Project [redacted], a restructuring program focussed on Australia Post's corporate and administrative workforce at head office, state and regional centres; and
- Project [redacted], the divestment of the Fulfilment business.

[redacted] of this restructuring cost was allocated as unattributable cost to products. This treatment of restructuring cost is appropriate if the regulator accepts that reserved services have to contribute to cover restructuring cost.

We find, however, no indication that restructuring cost is allocated to all products / service groups via EPMU. Only the restructuring cost allocated to reserved services is allocated to the products in the four service groups (Small Lettters Ordinary, Small Letters Presort, Large Letters Ordinary, Large Letter Presort) via EPMU. Generally the approach to allocate the restructuring cost for reserved services as unattributable cost and to allocate it via EPMU seems appropriate to us. The allocation of restructuring cost between non-reserved and reserved services clearly deviates from an EPMU approach as around [redacted] of the restructuring cost is allocated to reserved services although reserved services account for only [redacted] of the total attributable and direct cost.

4.5.3 Cost of overcapacity and redundant resources not identified by the CAM

Australia Post's CAM is a top-down cost modelling approach which is based on actual and not on efficient cost. The raw data used in the CAM are calculated on the basis of the production processes which currently prevail, i.e. they include resources which may not be used in the production process. We identified no resource / account item which includes potential cost related to overcapacities or resources not used.

Redundant resources (assets and/or labour work force) are an expense to the business but they do not generate cost in the economic sense. They are definitely not part of efficient cost. The same holds for overcapacities.

4.5.4 No separation of fixed and variable cost

Australia Post's CAM does not distinguish between fixed and variable costs. Nevertheless, major cost allocation factors are driven by volume. Volumes themselves also drive cost allocation directly. In a high level view one can even say that the CAM treats all costs as variable costs. Even unattributable costs are allocated to services according to drivers which are related to direct and attributable costs.

In a long-term perspective the capacity of the whole postal operations network is designed and planned to optimally and efficiently meet the relevant demand. In that sense, in the long-term view all cost including the costs of the network capacity are variable and should be treated in a cost model as such.

In a short term view, capacity is fixed and the elasticity to react on demand changes is limited to the variable part of the cost. Therefore a distinction between fixed and variable cost makes sense as an additional level of cost description if there is a regulatory interest in the short-term effects of changes in demand, volumes and costs.

4.6 Summary of findings

This section summarizes the findings of our review and assessment of Australia Post's CAM applied in FY 2013/2014. Generally, the EPM/CAM only provides a snapshot of raw data/spreadsheet data but no integrated model to assess the cost allocation, for example by performing sensitivity analysis or in-depth analysis of the underlying calculation with regard to inconsistencies or errors in the application of the methodology.

The documentation provided by Australia Post does not include a detailed model specification but only high-level explanations on the CAM/EPM. In particular, the raw data set provided lacks documentation with respect to abbreviations and explanations for attributes of the data set. For most activities, the documentation on the exact

elements included in the activities, on the considerations underlying the factors used for cost allocation in the RAPM and on the derivation of the factor values is extremely short and does not appear sufficiently informative.

Our review and assessment highlight that some activities are highly aggregated with respect to the included elements/sub-activities and – as a consequence – in terms of cost allocated to these activities. For some activities a more granular approach including some sub-activities may be useful and recommendable. This also would allow for a better incorporation of changes in the production processes. For example, this may take into account changes due to technological progress, e.g. different effort factor values related to the degree of automation in inbound and outbound sorting processes or changes in delivery processes related to the introduction/expansion of joint delivery of letter mail items and parcels.

Generally, Australia Post's approach of combining volumes with factors that account for the relative effort in processing different postal articles for the allocation of attributable cost is appropriate. However, a limited number of concerns about the applied factors and factor values emerge from our review/assessment. For some activities, our assessment raises concerns about the usage of the appropriate factors for the cost allocation, particularly of using the same factor for very different activities (like processing and delivery), and the extent to which the allocation of these activity costs to products are based on the principle of cost causality. Moreover, our assessment shows that factor values of major factors are not changed since our review in 2008 although we would expect changes to be necessary due to changes in the composition of letter mail volumes (e.g. letter mail decline, increasing parcel volumes) and due to changes in the processes (e.g. automated sequencing, joint delivery of letters and parcels).

Table 4-34: Major relative effort factors (in terms of costs allocated)

Factor Code	Factor Description	Attributable Cost allocated through Factor (m$)
GENWGT1	GENERAL WEIGHTING – GENERAL	✂
GENMCAT	GENERAL MC WE'TING – POSTED	✂
GENMCEX	GENERAL MC WE'TING - TERM AT	✂
AVERMAS	AVERAGE MASS FOR MAIL PRODUCTS	✂
GENMCXP	GENERAL MC WE'TING - FROM PO	✂
SETSART	SETTING-UP FOR OUTDOOR DELIVERY	✂
GENWGTS	GENERA WEIGHTING FOR SIGNED ITEMS	✂
ALLMAIL	PART. FA-ALL MAIL P & D	✂
RDDELY	% ROAD DELY	✂
SORTART	PRIMARY SORT OF MAIL ARTICLES	✂

Source: WIK-Consult, based on data from Australia Post / Australia Post Factor Description
Note: The cost figures only illustrate the relative importance of the factors. The absolute cost figures include double counting as some activity cost are allocated by more than one relative effort factor.

Table 4-34 represents the ten most important relative effort factors in terms of attributable cost allocated through the factors to products. The eight relative effort factors highlighted in the table above are covered by our selection and are reviewed and assessed in more detail in this study. Particularly the factor GENWGT1 appears as a major instrument in the cost allocation process, i.e. the factor has major influence on cost allocation because it underpins a number of activities and as it is responsible for the allocation of a major share of total attributable cost. Additionally, the factors applied for processing activities (GENMCXP, GENMCAT, GENMCEX) have a major influence on cost allocation. We assessed the assigned factor values for the highlighted relative effort factors and have the following observations:

- The assigned factor values for parcels in these factors seem to be rather low compared to letter mail products (large letters >250g).
- Values for unaddressed mail items are rather high compared to other (addressed) mail items, in particular in the relative effort factors assigned to processing.

The low factor values for parcels may indicate a cost shift towards reserved (and notified) services although the factor values relate to non-reserved services: increasing values for non-reserved products would mean that ordinary letters (factor values normalised to one) are allocated a smaller portion of an activity's cost. However, we could not identify indications for a significant systematic cost shifting from non-reserved to reserved or notified services.

In our review and assessment, we only identified differences between the costs allocated to priority and regular services in the allocation of transport activity cost. It seems reasonable that activities related to other functions (delivery, processing) do not incorporate any differentiation between the handling of regular and priority mail in FY2013/2014. Both types of mail are still handled as part of the same unadjusted processes.

Another criticism stemming from our review of the CAM is that the RAPM and supporting documents do not provide an explanation of the allocation of the unattributable cost. Based on our review we identified no indication that unattributable cost is allocated via an EPMU rule to products / to ACCC service groups. We would recommend to generally use the EPMU rule as the allocation principle for unattributable costs.

5 Potential improvements to the CAM

5.1 Make the model capable for simulation

We have stated in Section 3.2.4 that the EPM (at least as we know it) is not suited for simulation purposes. The impact of parameter changes (e.g. weighting factors, probabilities) cannot be tested or made use of for certain regulatory purposes.

From our understanding, the EPM as a whole is unable to perform simulations and Australia Post applies the EPM in its separately modelled forecasts only to allocate simulated figures to products. This may be due to its integration into the GL. New interfaces may be needed to decouple the EPM from the financial accounting system, at least for this purpose.

In any case it would be of high value if the ACCC could use the EPM to perform parameter changes and obtain the resulting impact calculated from a coherent and consistent model instead of having to analyse such changes on the basis of (ad hoc) top-down approaches. Such top-down approaches usually are incomplete, leave out certain impact chains and can lead to non-coherent results. The regulatory functions of the ACCC would be much better supported by an EPM which is capable of conducting simulations.

5.2 Link ex-post CAM with forecast model

We regard it as important that the EPM integrates a forecast module. Today at least the ACCC has to rely on modelling tools other than the EPM to derive forward-looking information on costs and revenue requirements of a notified service. This is unsatisfactory. Missing links between the EPM and other tools may generate inconsistencies and shortcomings.

An integrated forecast module does not necessarily have to have the same granularity as the EPM both in terms of services and costs. Costs and services in the forecast module can be presented in a more aggregated way than in the EPM. What is, however, required is that the modules and the service and cost categories have to be internally consistent.

5.3 Refine activities to better reflect differences between products

Some activities in Australia Post's CAM are highly aggregated with respect to the included elements/sub-activities and a more granular approach including some sub-activities may be useful and recommendable. This also would allow for a better incorporation of changes in the production processes due to technological progress

(e.g. degree of automation) or due to changing mail volume structure (e.g. decreasing letter mail volume and increasing parcel volumes).

5.3.1 Refine activity “Outdoor Delivery”

The activity Outdoor Delivery Staff (OUTDRDELSTF) accounts for ≻ and the activity Street Delivery Contracted (STREETDEL) for ≻. Combining both activities account for around ≻ of total delivery cost and for around ≻ of delivery cost allocated to reserved services. The key elements within the activity Outdoor Delivery Staff (as well as for the complementary activity Street Delivery Contracted) include:

- the physical delivery to residential and business addresses by various modes of transport (including motorcycles, bicycles, van, or walking), and
- obtaining signatures from addresses for signature items.

All elements of outdoor delivery by Australia Post are summarized in two activities which only differentiate between own staff and contractors. From our perspective a more granular approach including sub-activities may be useful and recommendable:

- The handling of different mail items differs significantly according to the transport mode, for example with regards to repacking bags at various points of the round and the mail volume structure of delivery modes (e.g. the composition of total mail volume). For this reason, a differentiation of outdoor delivery for different modes of transport seems reasonable.
- There is no explicit consideration of the additional effort / time related to mail items delivered on signature. This seems particularly relevant for the delivery of parcels using the optional extra “Signature on Delivery” service offered by Australia Post.

The application of a more granular approach for outdoor delivery would increase cost transparency, for example with respect to delivery cost in urban and rural areas, and allow for a more accurate cost allocation to products, particularly between letter mail and parcel services.

5.3.2 Refine activity “Metro Letters Centre”

The activity Metro Letters Centre (METROLET) accounts for ≻, i.e. around ≻ of total processing cost, of which ≻ are allocated to reserved services, i.e. around ≻ of processing cost allocated to reserved services. The activity includes major processing sortation, both by machine and manual, as well as video coding and other operational support processes.

The activity implicitly distinguishes between inbound, outbound, and combined inbound and outbound processing activities performed in the metro letter centres by applying

three different factor combinations. It is recommendable to decompose the activity explicitly with respect to these three processing steps which seems easily implementable in the current CAM.

More importantly, letter processing consists of very different steps which depend on the collection method (street collection boxes, outlets), the payment method (stamped or metered), and the letter format (some letters may not be able to be processed by specialized sorting machines).

A more granular approach for the activity Metro Letters Centre seems reasonable and recommendable in particular in relation to differences between the sorting steps for different letter formats. For example, sub-activities may differentiate between the following sorting steps and elements for outbound sorting:

- CFC sorter + manual cancelling of stamped large letters,
- Barcoding and pre-sorting to destination facilities on different machines for small letters,
- Barcoding and pre-sorting to destination facilities on different machines for large letters,
- Manual sorting of non-machinable letters to destination sorting facilities.

For inbound sorting, sub-activities may be defined to differentiate between the following sorting steps and elements:

- Sorting of small letters to rounds on barcode sorters,
- Sorting of large letters to delivery offices on flat sorters,
- Sorting of small letters into delivery order by machine, and
- Manual sorting of non-machinable small and large letters to delivery offices.

The application of such a more granular approach for the activity Metro Letters Centre would increase cost transparency and allow for a more accurate cost allocation to products given technological progress and different productivities of specialised sorting machines for different letter formats.

6 Outlook on changes of cost structure due to reform (RoLS)

Central to Australia Post's reform program is the introduction of two-speed letter services which will give customers a choice between a 'Priority' letter service and a 'Regular' letter service that will be delivered to a slower timetable. The Priority letter service will be delivered according to the existing timetable of the ordinary letter service. For the Regular letter service delivery time will be extended. The proposed changes in the delivery timetables from 1998 levels are summarised in Table 6-1 below.

Table 6-1: Statutory performance standard and Australia Post's delivery timetables

		"Old" regular	"New" Priority	"New" Regular
Intrastate	Metro to Metro	D+1	D+1	D+3
	Metro to Country	D+2	D+2	D+3
	Country to Country	D+2	D+2	D+4
Interstate	Metro to Metro	D+2	D+2	D+5 (D+4*)
	Metro to Country	D+3	D+3	D+6 (D+5*)
	Country to Country	D+4	D+4	D+7 (D+6*)

Source: Based on Australian Postal Corporation (Performance Standards) Regulations 1998 and proposed Australian Postal Corporation (Performance Standards) Amendment (Speed of Mail Delivery) Regulation 2015

Note: * The statutory performance standard actually differs from Australia Post's intended time table which foresees D+4 (Metro to Metro), D+5 (Metro to Country), and D+6 (Country to Country) for "New" Regular interstate delivery.

Mail will continue to be delivered five days a week for 98% of delivery points. However, as shown in Table 6-1 above, Australia Post will not be required by the Regulations to deliver Regular letters as quickly as Priority letters. ≻Australia Post attributes a ≻ cost saving to the implementation of the National Delivery Model which is mostly related to improvements in labour efficiency. These efficiency improvements are related to a variety of aspects:

- Generally an increase in efficiency of delivery by making better use of economies of scale and density, because the number of items delivered per stop will increase ≻.
- ≻

Australia Post has already some experience with two-speed letter services. In June 2014, Australia Post began offering an extended two-speed letter service for business customers. Prior to that the PreSort letter service was the only letter service that offered a choice of delivery speed.

Two aspects of the RoLS program and its two-speed product offer lead to cost reductions in the mail processing function:

(1) Longer processing window

Increasing the delivery time of Regular mail enables Australia Post to significantly increase the volume of letters processed during the day and no longer in the evening and at night. Australia Post intends to reduce the work effort for overnight processing from 95% to 20% by 2016/17.[65] All regular letters will be processed during the day in an extended processing window. At the same time the volume of letters sequenced at mail centres will be increased. This will reduce the level of processing required at the delivery centre (i.e. the primary sort step). Overall this shift and the change of activities between processing and delivery centres will increase productivity and reduce cost for the following two reasons:

- The extended processing window will enable an increase in the volume of sequenced letters leading to workforce reductions in delivery.
- Daytime processing does not attract labour penalty rates, which increase labour cost up to 30%. Night processing will now mainly be needed for the Priority mail.

✂

(2) Increased level of automation

Australia Post's investment program will significantly increase the level of automation of mail processing and reduce the amount of manual work in the sorting process. The introduction of the new Regular service allows Australia Post to use machines 24 hours a day. For this reason the total number of machines needed is lower compared to a 12 hour sorting window. The automation program will not only increase the processing productivity (and reducing manual sorting at processing centres) it will also increase efficiency in the indoor delivery activity if Australia Post is able to minimise the primary sort step in delivery offices e.g. by sorting large letters to delivery rounds by machine in the mail centre.

Under its investment program Australia Post will replace aged processing equipment with faster and more capable equipment in the major mail centres. Australia Post plans to implement state-of-the-art sorting machines for small and large letters, notably the flat sorter of Siemens which is able to sort large letters to delivery order and the combined CFC and small letter sorters from Toshiba. The new machines will be rolled-out from 2016. All new machines will be operational one to two years later.

The increased level of automation will increase productivity and reduce cost for the following reasons:

65 See Australia Post, Draft Price Notification, p. 39.

- This equipment will allow for the reduction of the size of the labour force in manual sorting at the processing centres as well as in the delivery offices.
- Switching to new equipment will also reduce maintenance costs related to the old machines.

✂

Although indirect business functions for operational support and corporate functions are not directly affected by the RoLS program, Australia Post intends to keep the cost share of these functions and also intends to realise certain savings there.

The RoLS program, in particular the introduction of Priority and Regular letter services, has several impacts on Australia Post's CAM:

- Services: It is straightforward that Australia Post has to amend its product portfolio in the CAM to include Regular and Priority letter services and to update the products to which costs are allocated.
- Activities: The activities in the CAM have to be amended and decomposed to take account for changes in the postal supply chain sub-activities. For example, the CAM may implement a more granular modelling of processing activities to accurately allocate cost between manual and automated sorting or between sorting during the day and sorting at night.
- Factors / factor values: The factor values applied in the CAM have to be amended and/or new factors have to be introduced according to changes in the postal supply chain. For example, an adjustment factor which accounts for cost differences between Priority and Regular small letters in delivery and processing activities may be applied, similar to the factor currently applied for priority and regular services in interstate air transport (see Section 4.4.2.6).

7 Some thoughts on the cost differences between ordinary letters and regular letters and the upcoming price notification

7.1 The rationale for regular and priority letter service differentiation

The ACCC will have to decide soon on an Australia Post price notification regarding the ordinary letter service. Australia Post intends to introduce a two-speed letter service for ordinary letters which will give customers a choice between a Priority letter service which will be delivered according to the existing timetable and a Regular letter service✂.[66]

Australia Post is required to notify the ACCC of proposed changes to its notified services. The notified service is the reserved ordinary letter service comprised of three price points:

- The uniform rate for an ordinary small letter (the basic postage rate),
- The price for large letters of up to 125g,
- The price for large letters of over 125g up to 250g.

Australia Post must notify the ACCC if it proposes to increase the price of an ordinary letter service or if it intends to introduce a new service that would fall within the definition of an ordinary letter service or if it intends to change terms and conditions of the ordinary letter service substantially.

According to a recent decision of the Australian Government, it will only be the Regular letter service which will be treated as a notified service.[67] The Priority letter service will be regarded as a commercial service which will not need to be notified to the ACCC. This holds as long as it is less than 50% more expensive than the price for the Regular letter service. If the price of the Priority letter exceeds the price of Regular by more than 50%, it becomes again a notified service.

Ordinary letters only represent a small proportion (16%) of Australia Post's domestic reserved letter service.[68] Ordinary letters are predominantly paid for using postage stamps.

Despite the small share of volume, the ordinary letter service plays a prominent role for Australia Post's business. In addition to fulfilling the key requirement of providing a basic letter service to all Australians at a uniform rate, the ordinary letter service acts as an anchor service and price for the larger part of the letter services.

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66 See Australia Post, Draft Price Notification, 14.8.15.

67 The current Australia Post price notification declaration is available on the ACCC website at https://www.accc.gov.au/system/files/Price%20Notification%20Declaration%20%28Australia%20Post%20Letter%20Services%29%20%28No%202%29%202015.pdf

68 See Australia Post, Draft Price Notification, p. 20.

Australia Post has proposed to increase the current price of the ordinary small letter from $0.70 to $1.00, which means by 42.86%. Also the prices for ordinary large letters will increase by 42.86%.

The use of two-speed ordinary letter services has a long tradition among postal operators. For example, the French La Poste, Swiss Post and Royal Mail offer D+1 and D+3 services to consumers. This service and price differentiation is usually called first and second class mail. In other jurisdictions the introduction of first and second class mail has been less driven as part of a strategy to cope with declining letter volumes. French La Poste has introduced a D+2 service ("letter verte") for consumers some years ago. However, we expect that this D+2 product will substitute the D+1 service so that La Poste can stop delivering letters the next working day after collection. La Poste has successively increased the price differential between the D+1 and the D+2 service to promote the substitution process and to better utilize capacities. We would not exclude that La Poste's overall objective is to establish a D+2 standard service and, by this way, to prepare the field for reducing the number of delivery days from six to five per week.

The pricing policy is less driven by cost considerations but more by strategic considerations. Demand studies show that demand for first class/priority mail is less price elastic than demand for second class/regular mail. This enables postal operators to achieve higher price/cost margins for first class/priority mail than for second class/regular mail.

A profit maximising firm would therefore be interested to differentiate prices in that way. This price differentiation is not only supported from a profit point of view. It is also supported from a welfare perspective. A revenue constrained welfare maximising operator would also choose a price differentiation approach if price elasticities differ in the way described above. In that sense a regular/priority price differentiation is just a form of Ramsey/Boiteux pricing with positive welfare implications.

Although prices in a Ramsey/Boiteux environment are informed to a certain degree by cost differentials between the relevant services, prices are actually not set in proportion to attributable costs. If the firm faces a cost covering or a certain profit constraint it would set prices on the basis of their incremental cost and a mark-up which is inversely related to the price elasticity of demand of that service (and further considering cross-elasticities of demand). The lower the price elasticity of a particular service, the higher the mark-up on attributable cost to cover common costs and/or to earn profits.

We are convinced that Australia Post is also driven by such considerations although that is not expressly stated, simply because that is rational business behaviour. This, however, means that the ACCC cannot use the intended price differential between regular and priority mail as an indicator of the cost differences between both types of

mail. It can also not inform the ACCC on the appropriate price discount between a uniform ordinary letter price and a regular letter price.

There is a second reason why the price differential between the Priority and the Regular letter services is not simply equal to the cost differential. The price acts as a tool to encourage migration to the Regular delivery timetable. This view is clearly confirmed by Australia Post. In its draft price notification Australia Post describes its intention to price the Regular letter service to recover the efficient cost of providing the service.[69] On the other hand: "*The Priority letter service is a commercial product but is priced to incentivise migration to the Regular service.*"[70]

Australia Post organises its future processes such that a certain volume of Priority and Regular mail can efficiently be handled. Australia Post intends to achieve relatively low volumes of Priority mail. The target share of Priority mail in 2017/18 is 20% of letter volumes.[71] Australia Post expects a gradual migration of volumes from Priority to Regular mail. The implementation of the NDM and related cost savings are only achievable if letter volumes actually shift to the slower speed. Also for this purpose costs are not the only driver for determining the price of Priority mail and the price differential towards Regular mail. Above cost pricing supports this migration function of the price. Therefore also for this reason the planned price differential between Regular and Priority letters should not be interpreted as Australia Post's calculation of the (real) cost differential between both services.

7.2 The relevant 'regulatory till' for price notification assessments

The introduction of Regular and Priority services reduces the scope of notified services: only Regular letter service will be treated directly as a notified service whereas Priority letter service will not be subject to price notifications as long as the price difference to Regular letter service is below 50%.

Given the reduction of the scope of notified services, one might ask for the relevant scope of services to be considered by the ACCC for the price notification assessment (the relevant 'regulatory till'). In airport regulation, the relevant scope is typically determined by either of two major approaches:[72]

- Single regulatory till approach includes the overall level of cost required to provide all services, i.e. regulated and unregulated services.
- Dual regulatory till approach typically only includes the cost associated to regulated services and assigns all other costs to a separate till.

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69 See Australia Post Price Notification, p. 21.
70 See Australia Post Price Notification, p. 21.
71 See Australia Post.
72 See for example: Civil Aviation Authority (CAA) "The 'Single-till' and the 'Dual-till' Approach to the Price Regulation of Airports -Consultation Paper", December 2000.

The majority of postal activities are shared by a set of products and related costs and are allocated to multiple product groups. For this reason, the whole range of products sharing activities with notified services seems to be the optimal regulatory till with respect to letter service price notification assessments. In the context of the CAM, this includes all reserved and non-reserved services which share activities in the cost allocation.

Another reason for not restricting the regulatory till, i.e. for assessing all services which share cost centres / activities, is the amount of cost allocated to notified services. Australia Post's CAM allocates only a minor share of total cost (less than 7%) to notified services. The setup of the CAM implies that a minor change in the cost allocation methodology, for example the change of factor values assigned to a non-reserved service in a shared activity, may have a major impact on the cost allocated to notified services. Hence, a reduction of the regulatory till, for example to notified or reserved services, may result in cost shifting from services outside the regulatory till which use shared infrastructure with the services inside the regulatory till. If the regulator only concerns itself with the cost of the 'notified' service, it has no opportunity to identify distortions of cost allocation and can, in the end, not properly identify and assess the relevant cost of the notified services.

Consequently, it seems neither reasonable nor recommendable to assess cost on a more granular level by reducing the scope of services considered in the price notification assessment to notified or even reserved services. For price notification assessments, it is recommendable to consider all services sharing infrastructure and processes in the postal supply chain with the notified services. The regulatory concern hereby is limited to the cost allocation. The regulator does not have to have a concern on the (degree of) profitability of non-reserved services.

7.3 A proposal for regulatory control

We have shown in Section 3.3 that the EPM does not (at least not directly) generate the information the ACCC would need to assess a price notification. To summarise,

- the EPM does not provide the forward-looking cost for the upcoming regulatory period;
- the EPM does not inform on efficient costs but only on actual costs;
- the EPM does not show the cost of a new service;
- the EPM does not provide the appropriate information on the cost structure if the production process changes.

All aspects are relevant for the upcoming price notification case. Given these limitations of the EPM we recommend to the ACCC an approach with the following steps:

(1) Start from the results for the notified services as presented in the 2014/15 EPM.

(2) Make adjustments to the costs allocated to the notified services according to the recommendations in this report insofar they have major impacts on the loss attributed to these services and insofar that it is practicable in the available time frame.

(3) Calculate a cost covering price for the notified services without changing the service/price structure

- take a two year regulatory perspective (or a three year perspective if the data quality allows),
- take account of the trend of declining demand for ordinary letters,
- take account of the reaction of demand to price change (price elasticity of demand).

(4) Deduct cost savings from extending the delivery time from the ordinary to the regular letter service and the implementation of the RoLS program.

These steps will be described and rationalised in more detail in the following:

(1) EPM 2014/15 as a starting point

Currently the ACCC only has the results of the 2013/14 EPM at its disposal. This version of the model also is subject to the critical review of Australia Post's cost allocation in this study. Generally only the most recent version of the EPM provides relevant information for a regulatory decision on pricing.

The EPM as a system will only be able to provide the "exact" cost information on the regular letter service after the full implementation of the process changes due to regular/priority mail in the financial year 2017/18. This may even be a year later if the implementation process faces delays.

Although one may assume that cost structures do not change significantly from one year to the next, this does not hold for the EPM. This follows from the lag structure on which the EPM reacts to changes in the production process and the actual changes in that process Australia Post has implemented in the last few years. Our analysis of the most recent update of the EPM (called NCAU) shows how important such changes might be and how significant changes in the allocated costs may be.[73] The costs allocated to notified services significantly reduced due to NCAU. Therefore calculating cost covering prices for notified services on the basis of the EPM 2013/14 would overestimate the revenue requirements and the need for increasing the prices for notified services. Therefore the post NCAU EPM 2014/15 should be the cost data platform for the ACCC to assess the pricing reform as a starting point.

73 See Section 2.8 of this study.

(2) Adjustments to cost allocation

In Section 4.4 of this study we have identified a few cost allocation areas where we are not convinced of the allocation factors being used in the EPM. Some of our criticisms indicate that reserved services and notified services get too much cost allocated. Some of our criticisms may be quantified. Others only qualitatively describe potential cost distortions. In a third category of findings we were (only) able to express our doubts about the appropriateness of allocations. Those need further analysis which we were unable to conduct in the timeframes of this study. The most important finding in this regard is that the factor values assigned for parcel products appear rather low in comparison with large letter mail items. As the factor values assigned to large non-reserved items seem appropriate in comparison to other reserved letter mail items, this may indicate a cost shift towards reserved (and notified) services although the factor values relate to non-reserved services. Increasing values for non-reserved products would mean that a smaller portion of an activity's cost are allocated to reserved services.

We recommend that the ACCC takes care that Australia Post implements these findings to correct the result of the notified services to have a more important starting point to calculate the revenue requirements for a cost covering price for the notified services. We are aware that it may not be viable to introduce those adjustments into the system of the CAM in the available time frame. In that case, the ACCC should in our view consider the current allocation of cost to the notified services as a conservative value or an upper bound of the appropriate allocation.

(3) Calculate a cost covering price for the notified services

Step 2 identifies the adjusted result of the notified services for 2014/15. Under certain assumptions the ACCC can calculate the revenue requirements of a cost covering notified service. The ACCC would have to set a time horizon for its calculation which is an implicit regulatory period. From previous decisions we know that the ACCC usually takes a two year period of consideration. We regard that as the appropriate time horizon. If the data quality of the forecast information is good enough, the ACCC should consider a three year time horizon because this better fits with the implementation of the RoLS program.

If the ACCC relies on the (adjusted) EPM to forecast the result of a service for future years, it implicitly assumes an unchanged product and production structure. That is what the EPM is able to do, not more and not less. Thus, the financial analysis based on the EPM calculates the cost covering price of the ordinary letter service without price and service differentiation. This assumption will be changed in step 4.

In conducting the forecast the ACCC has to consider the decline in demand of the notified services without price change. Australia Post has provided just

recently a study which estimates future demand developments.[74] This study – if it is methodologically valid and its results are acceptable which we did not check - together with the ACCC's own work in this area should generate appropriate demand forecasts.

In a second step the ACCC has to take into consideration the effects of the price change on demand and on the revenue requirements and the resulting cost covering price. The above mentioned study provides relevant inputs for this analysis. It only becomes important to distinguish between the short and the long-term price elasticity values and effects.

We recognise that the ACCC in its price notification decisions used a post-tax revenue model (PTRM) to identify and forecast the maximum allowable revenue.[75] We do not know the structure and functioning of that model. If it is able to work with the building blocks mentioned above it might be a suitable tool to conduct the analysis to identify the cost covering price for the notified services.

(4) Deduct cost savings

Step (3) of the analysis generates a cost covering price for a uniform price structure of the ordinary letter service. ≻ These cost savings will be accompanied with other productivity improvements in the production process which are indirectly related to this change and should also be taken into consideration.

In the remaining part of this section we will try to identify these cost savings according to the process functions where they will actually occur. Where possible we will provide Australia Post's estimate of the magnitudes of those savings.

(1) Delivery

≻Savings will occur in the delivery function. ≻There will be different effects in the outdoor and the indoor delivery function.

(1.1) Outdoor delivery

Under the National Delivery Model ≻the probability factor in the EPM will have to be adjusted for changes. ≻

(1.2) Indoor delivery

Due to a higher share of sequenced mail due to more processing automation, the degree and extent of sorting within the indoor delivery function will be reduced and cost will be saved.

74 See Diversified Specifics: Australia Post, Domestic Letter Volume Demand Update, August 2015.
75 See ACCC Decision, Australia Post price notification for its 'ordinary' letter service, February 2014.

(2) Processing

The cost savings in processing due to the regular service are mainly driven by shifting processing activities performed at night to daytime which does not attract penalty rates and therefore lowers labour cost. There are no further direct cost savings in processing due to the regular service but cost savings due to more productive machines and less manual sorting are expected. ✂

(3) Transport

Extending the delivery time for regular mail will also have an impact on the transport mix. Reducing delivery speed for regular mail will enable Australia Post to shift volumes from air transport to road transport for interstate mail. Currently Australia Post takes into account the lower probability for regular services by assigning a lower probability factor for domestic interstate air transport. The existing factor might be adjusted such that it incorporates the changing transport mix. We would assume that regular mail no longer needs air transport to meet its quality standard.

(4) Acceptance

We cannot identify that regular mail can materialise cost savings compared to ordinary mail in the acceptance function.

(5) Other operational function

We do not see relevant savings for regular mail related to these operational functions.

(6) Operational support

We do not see relevant savings for regular mail related to these operational functions.

(7) Corporate functions

By definition the cost for corporate functions are not driven by service characteristics of different services. Therefore there is no differential impact between regular and ordinary mail. If the EPMU allocation is applied to unattributable cost (which also represent corporate functions), then regular mail will get less unattributable cost allocated than ordinary mail.

8 Recommendations

From our review and assessment of the Cost Allocation Model (CAM) used by Australia Post in FY 2013/2014, we could not indicate any systematical bias or distortion in the cost allocation to products. However, we deduce the following recommendations for Australia Post to maintain a reliable CAM which operates efficiently and which facilitates ACCC's regulatory tasks. Australia Post should:

- ensure more transparency in model documentation: more detailed model specification, detailed explanation of elements included in activities, derivation of factor values;
- ensure more detailed tracing and reasoning of factor value changes;
- ensure that activities, factors and factor values reflect the actual processes in the core postal functions;
- further develop the CAM to include an integrated model which enables
    - assessment of right application / consistency checks;
    - simulations and sensitivity analysis.
- ensure that the CAM gets an integrated forecast module to conduct consistent calculations for price changes in the future;
- ensure that certain activities better reflect the actual processes with respect to products;
- ensure that relative effort factor values, in particular for parcels, reflect the actual processes, state of technology and volume structure;
- ensure that certain activities are refined to better reflect differences between products and sub-activities;
- ensure that unattributable cost are allocated to products according to an EPMU rule;
- ensure that certain activities are separated into sub-activities so that they sufficiently reflect cost differences related to the introduction of ordinary stamp priority and regular mail services.

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WIK-Consult GmbH
Rhöndorfer Str. 68
53604 Bad Honnef
Germany
Phone: +49 2224 9225-0
Fax: +49 2224 9225-63
eMail: info(at)wik-consult.com
www.wik-consult.com

Person authorised to sign on behalf of the organisation

General Manager and Director	Dr. Iris Henseler-Unger
Director Head of Department Postal Services, Logistics, and Transport	Alex Kalevi Dieke
Authorized Signatory Head of Department Cost Modelling and Internet Economics	Dr. Thomas Plückebaum
Director Head of Department Regulation and Competition	Dr. Ulrich Stumpf
Authorized Signatory Head of Administration	Karl-Hubert Strüver
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