

Assessment of Australia Post's cost allocation methodology and operations' efficiency

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Executive Summary

1. We have developed a top-down view on Australia Post's cost on the basis of functions or activities over time. The following figure shows the structure of Australia Post's costs by major functions between 2014 and 2019. While the delivery function makes up by far the highest cost share for reserved services, the cost category 'other' (including for example Australia Post's subsidiary StarTrack, retail services and overhead) represents the highest cost share for all services. The increase of the relative cost share of delivery from 45 per cent to 49 per cent for reserved services becomes plausible before the background of declining letter volumes. Given this sharp decline, the relative increase of delivery from 45 per cent to 49 per cent is in our assessment low, indicating efficiency gains which Australia Post has achieved in this activity over the last years.

Cost allocation by function: Cost share of activities FY2014 and FY2019 (forecast)

[C-i-C]

Source: WIK-Consult based on WIK-Consult (2015) and Australia Post, 'EPM Activity Hierarchy Cost Breakdown_FY19.xlsx' (confidential).

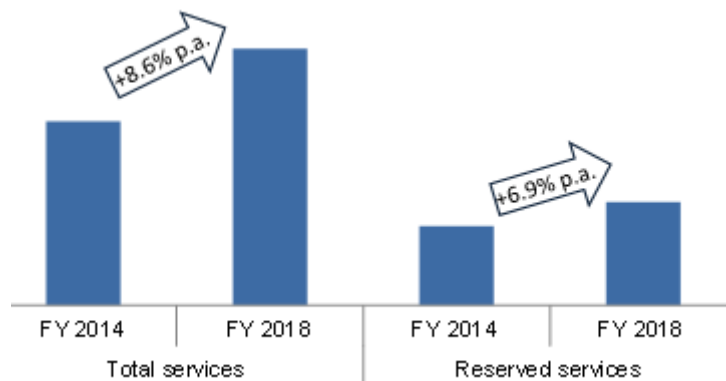
Note: No data for FY2018 (actual) available.

2. To further understand Australia Post's cost developments we calculated unit cost at an aggregated level being aware of the implied aggregation of services with different product characteristics. While total volumes (including reserved and non-reserved letters, unaddressed mail, parcels and international inbound mails) decreased by 6 per cent p.a. on average (CAGR) from 2014 to 2018, volumes of reserved letters declined stronger by 8.1 per cent over the same period. Despite the stronger volume decline for reserved services, unit cost increased more for non-reserved services (8.6 per cent p.a.) than for reserved services (6.9 per cent).¹ This again indicates that Australia Post realised relatively more

¹ All costs and revenues are in nominal terms in Australia Post's notification and in this document.

efficiency gains in activities primarily used for reserved services, because scale disadvantages should be higher for reserved services and resource cost changes should be mostly similar for reserved and non-reserved services. Nevertheless, we have to admit that total services include quite different products so that the informative value of their unit costs is limited.

Developments in unit costs: Total and reserved services (FY2014 and FY2018)



Source: Volume data FY2014 - Australia Post Submission Volumes FY13 to FY18.pdf
 Cost data FY2014: WIK-Consult (2015)
 Volume and cost data FY2018: Australia Post, PTRM July 19 Draft Notification (confidential)

Note: Total volume includes non-reserved letters, unaddressed mail, parcels and international inbound mail. As of 1st January 2017, PrintPost (<250g) became a reserved service. To ensure comparability between 2014 and 2018, the cost and volume of reserved services in FY2018 is reduced by PrintPost (<250g) cost and volume.

3. We also developed a top-down view on Australia Post's cost and profit forecast at the service level and we have identified some findings and implausible outcomes. One example is the quite different development of the reserved domestic services and the non-reserved (addressed) domestic letter services. While the non-reserved letters are forecasted to remain profitable despite an even sharper volume decline, reserved letters are forecasted to become unprofitable from 2020 onwards at an increasing rate. This would be implausible from a cost perspective because both service groups use more or less the same activities in the production process. However, Australia Post assumes that prices of non-reserved services increase more than prices of reserved services.
4. In our 2015 review and assessment of the EPM/CAM we identified some critical findings and made recommendations for improving the system. In this review we

Note that averages also reflect changes in product mix.

could identify major improvements made by better documenting the model, a faster update of relevant factors and a greater level of disaggregation of certain activities so that they better reflect the actual production process. In particular the Delivery Cost Review mainly restructured and improved the model for major activities. Furthermore, the delivery activities now incorporate the use of time standards where appropriate.

5. Following the recommendations we made in 2015, Australia Post conducted a major rebuild of the delivery model within the EPM. Australia Post followed a much more differentiated and granular approach with a high number of activities depending on the mode of delivery (including corporate, street contractors and roadside contractors). The more granular and more differentiated separation of sub-activities in the Delivery function generates a significantly more precise and accurate allocation methodology. The redesign of the delivery processes in the CAM provides an impressive detailed and granular representation of the production process. The resulting allocation of cost at layer 4 was mostly plausible with regard to the cost shares allocated to reserved services. Compared to the previous CAM which we analysed and assessed in 2015 the resulting allocations are more robust and reliable. We recognise that several critical remarks and recommendations for change which we highlighted in 2015 are fully reflected in the Delivery Cost Review and the corresponding changes of the CAM by Australia Post.
6. The Delivery Cost Review and the change of the business generated a significant shift of costs allocated to reserved services. While total cost allocated to major activities, particularly last mile delivery via Roadside Delivery, Street Delivery Contractor and Corporate Delivery, increased, the share of costs allocated to reserved services decreased compared to 2015 by 13 per cent. The major relative shifts in favour of reserved services occurred in the 'Delivery Centre' and the 'Roadside Delivery Contractor' activities.

Change of allocation to Delivery activities

Activity		Allocated Cost						% of costs allocated to reserved services		
		total			reserved services			2015	2019	Δ
2015	2019	2015	2019	Δ%	2015	2019	Δ%	2015	2019	Δ
PRIMSORTSTF SETUPSEQSTF	Delivery centre	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]
Outdoor Delivery Staff (OUTDRDELSTF)	Corporate Outdoor Delivery	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]
Street Delivery by contractors (STREETDEL)	Street Delivery Contractor	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]
Roadside Delivery Contract (ROADSIDEDEL)	Roadside Delivery Contractor	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]
Total		[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]	[C-i-C]

Source: WIK based on Australia Post (2019), 'EPM Activity Hierarchy Cost Breakdown_FY19.xlsx' and WIK (2015).

7. From a conceptual point of view, Australia Post's EPM/CAM applies a much more granular approach to allocate costs to services taking for example differences in the mode of transport and the necessary number of delivery days per week into account. Therefore, the EPM/CAM is able to more accurately allocate costs to products taking differences in the delivery timetable (priority and regular) into account compared to 2015.
8. Despite these major improvements of the EPM/CAM which we could identify and recognise, the main weaknesses of the model remain, because they are inherent in the conceptual methodology of the model. Among those are the following ones:
 - The model is based on actual and not (necessarily) efficient costs.
 - The model presents an ex post cost allocation to products and services which are incurred at the corporation level.
 - The model is not an integrated tool which would allow for calculating the impact of parameter changes and scenario calculations.
 - The model does not generate forward looking cost forecasts and is not integrated into a forecast model.
 - The model does not provide the short-run or long-run incremental cost of a service.

9. The EPM/CAM is also characterised by a number of strengths. Among them are the following ones:
- The model is consistent with the Record Keeping Rules. That makes it stable and coherent over time. Furthermore, the ACCC can formulate its interest in details and output of the model.
 - The model is consistent with Australia Post's financial accounts because its basic input data are derived from the General Ledger of the company.
 - The model fully absorbs all costs and guarantees a full cost coverage of Australia Post.
 - The model is not only or not even primarily used as a regulatory tool. It is mostly used as a management tool. This should give the ACCC confidence in the appropriate modelling and data input approach.
10. The strength and weaknesses of the model have implications where and how the model can support regulatory decisions of the ACCC. The model allows for directly identifying the profitability of services which supports a traditional cross-subsidy test. The model does neither generate forward looking nor efficient costs. It provides actual cost based on historic data, although it can be used to allocate forecast costs. That gives some limitations in applying the strict economic efficiency view of costs. The mostly missing element is a coherent and consistent forecasting tool to properly assess forward looking costs which should be the basis for regulatory price decisions.
11. On the basis of our assessment of the model and in light of regulatory requirements to better support ACCC's decisions we have made a set of recommendations in this report to improve the model including:
- Identify unattributable cost, treat restructuring costs as unattributable costs, allocate them at a high level based on the Equi-Proportionate Mark Up (EPMU) rule proportionally to attributable costs to all services.
 - Make the model capable for calculating the impact of parameter changes and for scenario calculations.
 - Generate short-run and long-run incremental cost for loss making reserved services.
 - Require a decomposition of cost changes in the future into major drivers at a service group level.

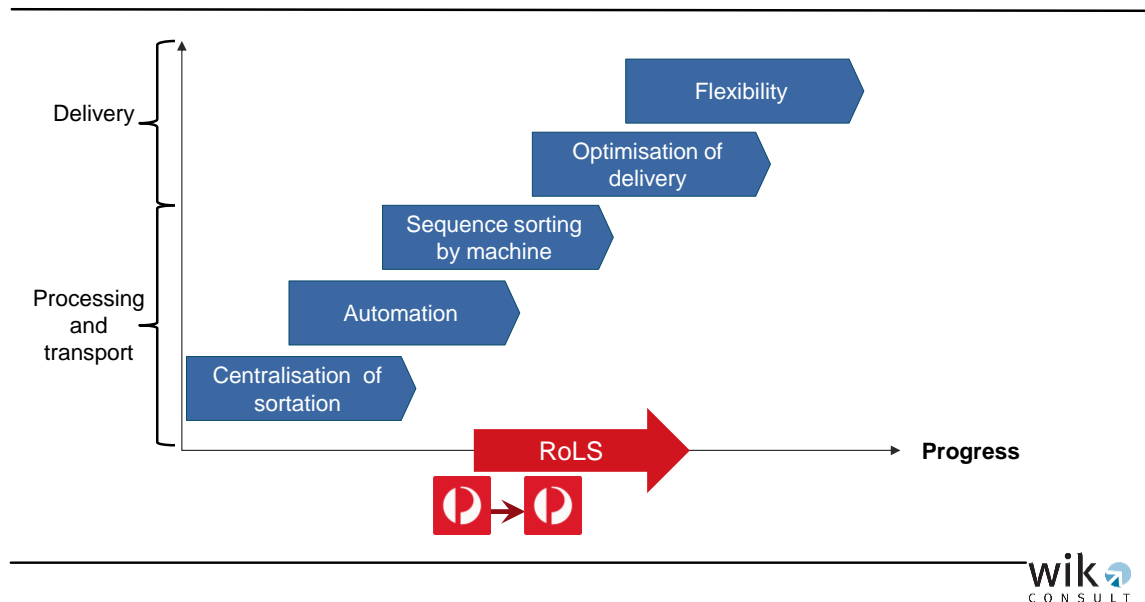
12. The EPM/CAM is not the documentation which allows identifying the efficiency of Australia Post's production process. All resources employed by the company are the resource input which is allocated to products and services. This holds independent of whether certain resources are actually needed for (efficient) production. The EPM also is not the instrument to develop a view on the appropriate level of input or resource prices, e.g. labour, accommodation. Efficiency of production and the appropriate level of input prices have to be assessed by conducting other types of analyses like comparing Australia Post's production process with that of other postal operators to see whether it meets the level of efficiency of state-of-the-art operating postal operators. For assessing the appropriateness of input prices, international peer benchmarks also provide some indication for the efficient level. Resource costs, however, are also strongly impacted by national conditions. Thus, international benchmarks have to be at least complemented (or corrected) by input prices in other sectors in Australia which are comparable to those of Australia Post.
13. Since 2014, Australia Post has launched two major efficiency programs: the Reform our Letter Services Program (RoLS Program) and the One Network Program. Regarding the RoLS Program, those elements were implemented that were related to improvements in automation of small and large letters. Australia Post has not implemented the final part of the initial RoLS Program, the 'National Delivery Model' (NDM) [C-i-C]. Instead, Australia Post changed the plan from NDM to Streaming which is a core element of the One Network Program.
14. Investments in new sorting machines for small and large letters in combination with the launch of the slower regular letter service have generally increased the share of letters processed by machine. Particularly, the share of sequenced small letters and the share of round-sorted large letters have considerably increased. More automation in combination with significant letter volume decline has reduced the manual workload in delivery centres. Improvements in letter automation have therefore had an impact on the time span of Postal Delivery Officers assigned to indoor delivery activities. The share of working time allocated to indoor delivery activities declined by five percentage points from 48 per cent to 43 per cent in FY2018. Despite improvements in automation, a reduced time span for indoor delivery activities and much less letter volume, the number of staffed delivery rounds (served by Postal Delivery Officers) has increased since 2008. Australia Post argues that the number of staffed delivery rounds is driven by the growth in delivery points and by the increased number of packets and parcels delivered by Postal Delivery Officers. However, the delivery appears to be still organised in a more traditional and less flexible way following the rule 'one postie – one round'.
15. In light of increasing volumes of domestic and international parcels and packets, Australia Post changed its initially followed strategy to reduce the letter network and decided to integrate letter and parcel operations to make best use of the

existing resources instead. For this purpose, Australia Post launched the One Network Program in the FY2017. The expansion in parcel handling will be facilitated by a three-year investment program of \$900 million in infrastructure and automation, commenced by Australia Post in 2018.

16. Australia Post reports that the combined RoLS and One Network Programs exceeded the projected benefits of the initial RoLS Program by \$12.8 million by the FY2019. While total full-time equivalents have declined slightly between 2014 and 2018 (but much less than projected by Australia Post in 2015) the number of FTEs allocated by function changed considerably in 2017. This structural break cannot be explained by operational changes alone but could be more the result of the revised cost allocation methodology. Australia Post's forecasts on FTEs allocated to reserved services indicate a steady decline which, overall, reflects a shift of allocated labour cost from reserved to non-reserved services.
17. The full impact of the One Network Program on letter operations is not yet visible but Australia Post plans to use free capacities in letter operations (processing and delivery) for parcel operations by installing small parcel sorters in the four major letter sorting centres and by systematically increasing the share of packets and parcels delivered by Postal Delivery Officers. Australia Post does not provide specific forecasts of the benefits resulting from the One Network Program. Australia Post expects that the One Network Program will assist Australia Post's overall profitability. In terms of cost allocation, the One Network Program should result in a shift of costs from letter to parcel products driven by the divergent volume trends.

18. The RoLS Program supported Australia Post to partly catch up in terms of operational efficiency to the current levels of its international peers. Moreover, while basically achieving the projected targets in automation, efficiency gains in delivery remained limited. Australia Post's progress made is illustrated in the figure below.

Progress made by Australia Post in letter operations (2014, 2018)



- Automation: Australia Post has replaced its sorting machines for small letters and large letters ('flats'). This has generally increased the proportion of letters sorted by machine. Moreover, the new flat sorters enabled Australia Post to sort large letters to delivery rounds.
- Sequence sorting of small letters by machine: In 2015, the corporation planned to automatically sequence-sort more than 90 per cent of small letters by FY2019. Australia Post has not yet achieved this self-defined target and is therefore still below international standards.
- Optimisation of delivery: Australia Post has made little progress in minimising indoor activities and to extend delivery rounds. The share of working time assigned to indoor activities only slightly declined from 48 per cent to 43 per cent, as – according to Australia Post – there is still significant manual handling of letter items as well as increased indoor handling of parcels. Progress made in automation has not been translated in a significant reorganisation of the delivery processes, so far.
- International peers have achieved further reductions in indoor activities by more progress made in automation and translation into less manual handling

in delivery centres. Separation of manual mail preparation from outdoor activities in combination with further centralisation of mail preparation in delivery centres resulted in additional efficiency gains.

19. Australia Post and its international peers have to tackle the same challenges, decline in letter volume and growth in parcel volume. As all postal operators expect that these trends will continue in the next years they have heavily invested and are still investing in their parcel operations. Additionally, all have looked for opportunities to best combine the letter and parcel operations. Australia Post's One Network Program is its strategic answer on the demand trends in the letter and parcel markets. This program is fully in line with developments at international peers. Overall, all benchmark operators follow similar strategies with the objective to transform from postal companies with parcel delivery to parcel companies with letter delivery. However, Australia Post has made little progress in the re-organisation of its staffed delivery network that, in our view, suffers from growing overcapacities. Therefore, an important element of the One Network Program is to shift packet and parcel volume to the Postal Delivery Officers' delivery network to make better use of its existing and potential capacity. Generally, this is a very useful strategy.
20. Compared to the benchmark operators, however, Australia Post is again a late starter regarding the launch of the One Network Program. The systematically organised shift of packets and parcels across Australia Post's network started only two years ago and is still not fully implemented in all delivery centres (to our understanding). Moreover, transport capacities of Postal Delivery Officers are limited as most rounds are still served by motorcycles. The switch to electric delivery vehicles is a step in the right direction but even their transport capacity is limited. Therefore, first thoughts of Australia Post to switch to van delivery by Postal Delivery Officers are quite useful. There is urgent need that Postal Delivery Officers become more flexible in delivery modes.
21. The change in volume structure and the growth in volume fluctuations over time (peak and off-peak periods) require a more flexible design of delivery rounds. Parcel delivery (including 'carding') requires much more time than letter delivery (because parcels usually do not fit into the letter box). For this reason Australia Post should put more effort to transpose progress made in letter automation into a reduced time span for indoor activities and thus more time for outdoor activities. Nevertheless, now there is less indoor work on letters, although more is required on parcels. With regard to Postal Delivery Officers, there is still a long way to go for Australia Post. Experiences at other postal operators show that the reorganisation of delivery takes much more time than changes in processing due to automation.

22. However, the example of PostNord Denmark illustrates that 'normal' efficiency measures (and PostNord Denmark is highly efficient from an operational point of view) or improvements in the joint handling and delivery of letters and parcels in a given network with five or six delivery days a week are useful instruments as long as there is still enough letter volume to deliver. However, if letter volume declines further (as forecasted by Australia Post, with decline rates above 9 per cent per year until 2022) this strategy may lose its sustainability within the next five years. Thus, there is a point in time defined by the relative volume of letters and parcels where joint delivery is no longer optimal but the efficient solution then would require separated delivery networks depending on the delivery timetable (priority/express and regular).