

A7 Our approach to the net cost calculation

- A7.1 In this annex we set out in further detail the approach, assumptions, modelling methodologies and results of our calculation of the net cost of the USO. As we explain in the main document, this exercise is not a full statutory assessment. Such an assessment would take some time and require the making of regulations and consultations. We have nevertheless attempted to simulate the approach to that assessment to provide indicative information and context to readers when considering whether the USO should be changed to be more aligned with user needs and to support the future sustainability of the USO.
- A7.2 Following the model in the legislation, the exercise we have undertaken takes a hypothetical scenario in which Royal Mail is not subject to the USO – the Counterfactual – and compares Royal Mail’s profitability in that scenario to its current profitability (based on financial year 2021-22 and after making appropriate adjustments). The Counterfactual is our point of comparison to assist in determining what the level of any financial burden might be due to the USO. It is therefore not intended to estimate the savings Royal Mail could make if it were subject to an alternative scope of the USO.
- A7.3 The accuracy of the modelling is, naturally, subject to some limitations. Ofcom cannot predict exactly what Royal Mail would do if it were given complete commercial freedom outside of the USO. Nevertheless, this annex describes the careful approach we have taken to estimating the net cost of the USO.
- A7.4 In relation to the calculation of the net cost in a Counterfactual scenario, we first set out our estimated range for the net cost and the scenarios on which this is based. We then elaborate on the approach we have taken (the decremental approach) and compare it to alternative available approaches to calculating the net cost of the USO, explaining our choice of approach. We then go into detail on the assumptions we have adopted when applying the decremental approach.
- A7.5 We describe the models we have developed as part of our overall work programme on post and explain how we have applied the decremental approach and modelled changes in Royal Mail’s revenues and changes to the costs of Royal Mail’s delivery network (including accounting for VAT).
- A7.6 Finally, we set out how the approach, assumptions and modelling methodologies have been applied to inform the alternative USO options described in chapter 9 of the main document.
- A7.7 The ordering of this annex is as follows:
- | | |
|--|---------|
| a) Results and range | page 2 |
| b) Net cost calculation methodologies | page 3 |
| c) Assumptions used for this calculation | page 10 |
| i) Revenue assumptions | page 14 |
| ii) Cost assumptions | page 20 |
| d) Models used for the calculation | page 22 |
| iii) Revenue modelling | page 24 |

iv) Delivery cost modelling	page 28
e) Assumptions used for alternative USO scopes	page 36

Results

- A7.8 To estimate the net cost to Royal Mail of complying with the USO, we have sought to determine to what extent Royal Mail could be financially better off if it did not have the obligation to provide the universal service.
- A7.9 To do that, we have estimated the profits Royal Mail might make in the Reported Business (which encompasses the shared network that provides the USO products as well as non-USO products such as bulk mail and access) if it were no longer required to meet these obligations, also taking into account the loss of any benefits associated with being the USP.
- A7.10 In the main document, we set out that our estimate of the net cost of the USO is in the range of £325m to £675m (see chapter 8).¹
- A7.11 In producing an estimate of the net cost, we have considered a number of hypothetical scenarios of what Royal Mail would do if it were not subject to the USO (we call these 'Counterfactual' scenarios). The primary difference between each of these scenarios is the number of days per week on which Royal Mail would deliver letters to every address in the UK, which has a direct impact on the delivery speed of its products. The frequency of delivery is the most important driver of costs, which is by far the largest portion of variable network costs. We have identified four scenarios with three, two and a half, two and one day(s) frequency of letter delivery, informed by the delivery models we have observed in Europe. We do not consider Royal Mail would have a different number of delivery days for parcels than it has currently as it already exceeds the 5 days delivery requirements in the current scope of the USO.
- A7.12 For each scenario, we have made a series of assumptions about the commercial and operational decisions that Royal Mail would make to maximise profits (including changes in product ranges, pricing, and application of VAT), and have then estimated the impact of those decisions. The reduction in the number of delivery days leads to cost savings but the reduced services, and some pricing effects related to this reduction, lead to revenue losses.
- A7.13 We have presented our net cost estimates for each of our Counterfactual scenarios in ranges. These ranges account for (i) uncertainty around the prices Royal Mail may set for its products, (ii) the consumer response to pricing and operational changes (i.e. the number of delivery days and other differences in the service), and (iii) the degree of efficiency savings required to bring the current cost base down to that of an efficient operation. Table A7.1 below sets out the results of our net cost calculation in each scenario.

¹ As explained later in this annex, the net cost is calculated based on the 2021-22 financial year, because we consider this year to be the most appropriate for the purposes of our initial estimate of the current net cost.

Table A7.1: Scenarios modelled for net cost calculation, £ millions

Scenarios ²	3 day letter delivery	2.5 day letter delivery	2 day letter delivery	1 day letter delivery
Standard speed	2 nd Class D+3	2 nd Class D+3	2 nd Class D+3/D+4	3 rd Class D+5/slower
Cost savings	£675m to £750m	£750m to £850m	£875m to £975m	£1,125m to £1,250m
Revenue losses	-£250m to -£525m	-£275m to -£525m	-£300m to -£550m	-£400m to -£650m
Net cost	£150m to £500m	£225m to £575m	£325m to £675m	£475m to £850m

A7.14 Given these results, it appears most likely that, absent the USO, Royal Mail would reduce the frequency of letter delivery in its operation. The one Counterfactual scenario with the largest net cost is the Counterfactual under which Royal Mail’s commercial performance would be most improved in the absence of the USO, and that Counterfactual should be the basis of the net cost range. Based on the above ranges, this would be that of 1-day letter delivery.

A7.15 However, we recognise that there may be operational limitations which mean that a 1-day delivery operation would, in reality, be more costly to implement than we have been able to model. We also recognise, as explained below in paragraph A7.61, that our revenue-loss results become more speculative for lower delivery frequency scenarios. We have therefore considered the 2-day scenario as well as the 1-day scenario in producing our headline range.

A7.16 Our range of net costs of the USO is therefore informed by both the 2-day and 1-day letter delivery scenarios, which we consider to be the most likely operational approaches Royal Mail may take absent the USO. We have also considered, further below, how the commercial rates of return of other postal operators (both European USPs and global parcel operators) compare against the range we have calculated. Considerations around the robustness of the estimates from the 1-day scenario, and this cross-check comparison, have led us to limit the upper bound of our range to the mid-point of the 1-day scenario. Overall, this results in a net cost in the range of £325m to £675m.

Methodologies to calculate the net cost of the USO

Decremental approach

A7.17 As set out in chapter 8 of the main document, to calculate the net cost of the USO we have estimated the net avoidable costs assuming that Royal Mail is not subject to the USO. This approach is often referred to as the ‘decremental approach’. This approach estimates the difference between the USP’s profitability with and without the USO. For example, if it would choose to provide all the services currently specified under the USO when completely free to choose which services to offer, then there would be no difference in profits and the net cost would be zero.

² Under all scenarios we have assumed that parcel delivery would remain unchanged.

The future of the universal postal service

- A7.18 We consider our decremental approach to be more appropriate for our current purpose of calculating an initial estimate of the net cost than the alternatives ('Full counterfactual' and 'USO revenue and cost' approaches) for the reasons set out below.
- A7.19 As discussed in chapter 8, in a formal assessment under section 44 of the Act, we would be required to calculate the financial burden on Royal Mail of complying with the USO. The decremental approach starts with Royal Mail's network and considers what changes it would make in the absence of the USO, given the network it has. This approach allows us to consider the USO products that Royal Mail must currently provide under the USO but also the other products that it is able to provide commercially via the USO network. Therefore, it takes into account all of the costs and benefits of running the USO network, not just the costs of running that network and the revenues from the USO products.
- A7.20 This approach also has the following advantages:
- a) It is consistent with the approach we take in assessing the net cost savings of alternative lesser specifications for the USO (see chapter 9); and
 - b) It is practicable given our available resources and current modelling tools.

Alternative methodologies

- A7.21 There are other approaches that we could take to estimate the net cost of the USO. These are described widely in the literature on this topic.³ We discuss some of these briefly below, along with reasons why we consider them inappropriate for this exercise.

Full counterfactual approach

- A7.22 In the full counterfactual approach, the counterfactual scenario consists of a non-specific postal operator, not necessarily the USP, setting up a completely new network to provide all postal services that make commercial sense to do so, in the most efficient manner. If this approach were applied to Royal Mail, it would require a fundamental redesign of Royal Mail's network and resources in order to match what a completely new provider would do when designing a network. A redesigned network would be expected to have lower operational costs. Therefore, this approach is likely to provide a higher estimate of net costs of the current universal service compared with the approach we have used because, unlike Royal Mail, a new post operator would have no existing network and would build a new one in the most efficient manner for current and expected levels of demand instead of being constrained by a legacy network scale and design.
- A7.23 We do not consider this approach to be appropriate for this assessment. Section 44 requires us to assess the financial burden of the USO for Royal Mail as the designated USP and not any other operator. Effectively, the Act requires us to take Royal Mail and its network, rather than a hypothetical new entrant, as the starting point. Additionally, given the current exercise is to simply derive an initial estimate, we consider this alternative approach would be too burdensome to apply here. However, this approach may suit certain purposes and we understand this approach has been adopted by some postal regulators in other countries (mainly for the purposes of state aid). We welcome views on whether this approach could

³ Such as Frontier Economics, 2013. [Study on the principles used to calculate the net costs of the postal USO](#); and ERGP, 2014. [Exploration of challenges to overcome when implementing a net cost calculation methodology based on a reference scenario - Benchmark of experiences](#).

The future of the universal postal service

be relevant in the context here, where we are primarily considering whether changes to the scope of the USO may be appropriate.

USO revenue and cost approach

- A7.24 In this approach, the revenues and costs of providing only the USO products are calculated and the difference between them is taken to be the net benefit or cost of the USO.
- A7.25 While it is straightforward to identify the revenues arising from USO products, it is difficult to identify the appropriate costs of the USO products for the purposes of the net cost calculation. The main reason for this difficulty is that both USO and non-USO products are often provided by the USP using the same network.
- A7.26 In the case of Royal Mail, the network within the Reported Business provides the USO and also a wide range of products outside the scope of the USO, such as bulk and access mail and non-USO parcels (including all tracked products and the accounts products that are not single piece). The operations and activities related to the USO and non-USO products overlap greatly and are mostly the same in some parts of the network, such as delivery where a mix of USO and non-USO products are carried and delivered together.
- A7.27 This means that a considerable proportion of the costs are common to both USO and non-USO products. The difficulty we refer to above stems from the fact that there are no simple and reliable ways of allocating these common costs for the purposes of the net cost calculation.
- A7.28 The methodology used in the regulatory financial statements of Royal Mail, which is in line with our requirements set out in our Regulatory Accounting Guidelines, uses Fully Allocated Costs (FAC) using an Activity Based Costing methodology (ABC).⁴ This methodology allocates the common costs of all products, including USO and non-USO products, using the level of activities required to provide each product. This is achieved based on operational reality rules set out in our Regulatory Accounting Guidelines.⁵ These rules consider mainly the time and effort applied to each product. They do not make a distinction as to whether a product is a USO or non-USO product.
- A7.29 This approach is applied in the 2021-22 regulatory accounts published by Royal Mail⁶ and it results in a net benefit of £457 million for the USO products, not a net cost. This approach is needed for certain ongoing monitoring and business as usual regulatory considerations such as pricing and returns on products. However, it is not appropriate for net cost considerations, which are not part of our ongoing monitoring programme. The main shortcoming of this approach for a net cost calculation is that it does not account for the reasons why the network within the Reported Business is organised and run the way it is. One key reason is to deliver the USO. In order to account for this, a larger proportion of common costs should be allocated to the USO products than are allocated under this approach.
- A7.30 The approach using FAC therefore considerably underestimates the net cost of the USO by not accounting for all of the relevant costs. We accordingly do not consider this approach to be appropriate for the exercise we are undertaking.

⁴ Ofcom. 2023. [Regulatory Accounting Guidelines](#) (RAG)

⁵ Ofcom. 2023. [Regulatory Accounting Guidelines](#) (RAG)

⁶ Royal Mail, 2022. [Regulatory Financial Statements 2021-22](#), page 10.

The future of the universal postal service

- A7.31 One related approach to address the above issue is to estimate the Stand-Alone Costs (SAC) of the USO. The SAC includes all the costs that must be incurred for the network to deliver only the USO. The SAC of the USO would be considerably higher than its FAC, as a significant proportion of the costs that are currently shared between the USO and non-USO services would still be incurred even if only the USO services were being delivered, and that proportion of costs would be significantly higher than the shared costs that are allocated using the FAC approach.
- A7.32 Our estimate of the net cost based on the 2021-22 financial year using the SAC approach is £1.9 billion. We set all non-USO product volumes to zero and calculate the total costs of delivering the USO volumes (we explain our cost model from paragraph A7.142 below). This way of estimating the SAC relies on the assumption that the structure of the network remains largely unchanged, i.e. remains as Royal Mail's current network (see paragraph A7.94-A7.96). In reality, a USP providing only the USO would probably use a rationalised network with a smaller number of sorting centres and delivery offices etc. This means our estimate of the SAC is likely to be at the higher end.
- A7.33 Our estimate of the SAC means that, if only the USO was provided without providing any other products, then the net cost of the provision would be £1.9 billion. This is a much larger net cost than the range we have calculated using our preferred decremental approach. This is partly due to our assumption regarding the network we have explained above. Further, as we explain below, we do not consider the SAC approach would be appropriate for the exercise we are undertaking, even if it were applied using more realistic assumptions about the structure of the network.
- A7.34 Firstly, this approach does not account for the fact that any network that was used to deliver the USO could, for sound commercial reasons, also be used to provide some products outside the scope of the USO. These non-USO products would generate considerable additional revenues (net of their incremental costs) which would reduce the net cost of the USO. As we explain in chapter 8 of the main document, section 44 of the Act requires a net cost calculation to take account of all the market benefits of the USP designation. We consider the above-mentioned additional non-USO revenues are part of the market benefits which must be taken into account.
- A7.35 Secondly, we consider that there is a distinction between the 'universal service obligation' and the 'USO products'. Section 44 of the Act requires us to calculate the net cost of the 'universal service obligation'. We assume Royal Mail would provide a large proportion of the 'USO products' (some in a modified form), whether there is a 'universal service obligation' or not, because there would be commercial reasons to do so. For example, in the absence of the USO, Royal Mail might provide a slow low-frequency letter service, quite possibly the current USO Second Class letter but delivered with a lower delivery frequency than 6 days a week.
- A7.36 The SAC approach calculates the net cost of 'USO products' as a whole and not the 'USO obligation'. This means the SAC approach does not appear to answer the question under section 44.
- A7.37 In light of the above, our view is that the SAC approach is not appropriate for the net cost exercise we are undertaking in this Call for Input. Relative to our preferred (decremental) approach, this approach considerably overestimates the net cost and it would, at best, represent an upper bound on any net cost results.

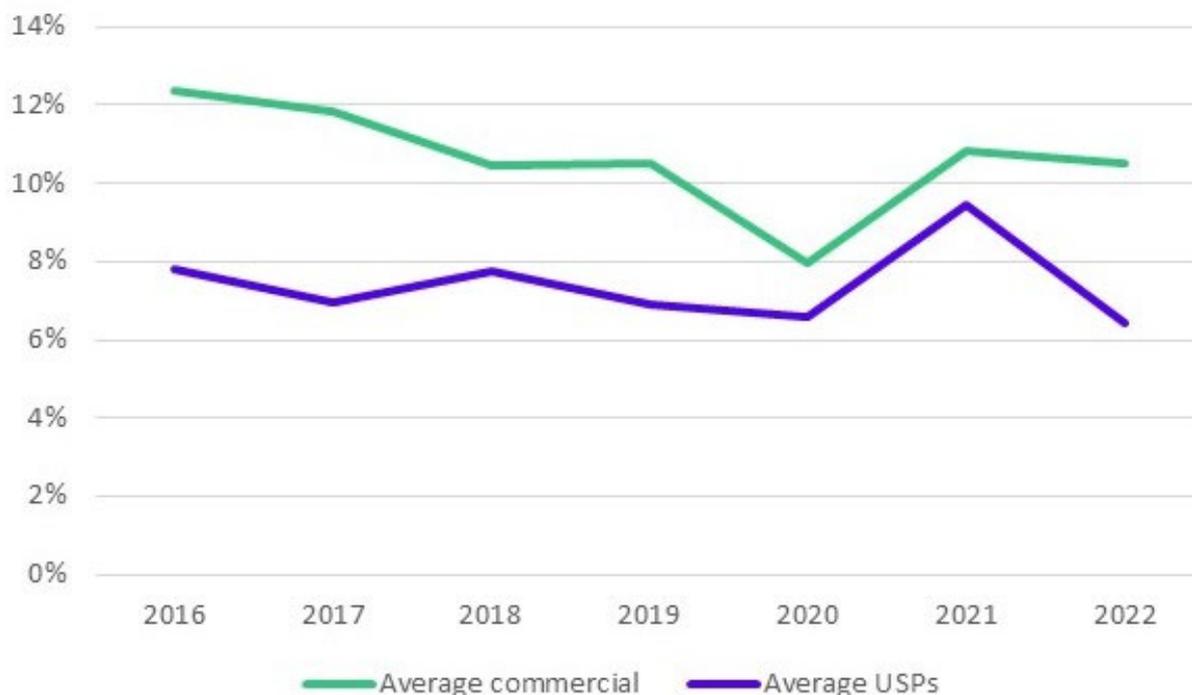
Rate of return considerations

- A7.38 We have undertaken a cross-check of the results of our net cost calculation by observing the rates of return of other postal companies with and without a USO and using these rates to estimate what additional rate of return Royal Mail could make if it did not have the USO. We are not aware of any other country using a rate of return approach to calculate the net cost, and we have not used it to determine a range for the net cost of the USO in our current exercise. Nevertheless, we consider it a useful further check on the result we have produced using the decremental approach. In addition, we have used the results from this check to establish the upper point of our range for our estimate of the net cost of the USO to Royal Mail, as explained below.
- A7.39 We have carried out this check by estimating the average rate of return of some European universal service providers and compared this to the average rate of return of some global parcel delivery companies which are not subject to a USO. The difference between the average rates of return could be interpreted as an approximation of the difference between the rate of return that would be achieved by an efficient delivery company subject to a USO and the rate of return that would be achieved by an efficient delivery company not subject to a USO. This, in turn, provides a cross-check on what might be a reasonable estimate of the net cost of the USO.
- A7.40 For this purpose, we have used information on returns of the European USPs which we already use as comparators to inform our indicative range for a commercial rate of return for Royal Mail (which is an EBIT margin between 5-10%).⁷ These consist of Deutsche Post (Germany)⁸, PostNL (the Netherlands), Austrian Post and bPost (Belgium). These USPs are recognised for their timely modernisation and efficiency record and are all fully or partly privatised.
- A7.41 We have also looked at the returns of global parcel delivery companies, UPS and FedEx. We have used those divisions of these companies that are comparable to Royal Mail: FedEx Ground and FedEx Freight taken together; and UPS Domestic Packages. For the purpose of this comparison, we refer to these as the ‘commercial operators’.
- A7.42 Figure A7.1 below shows that over the last six years the global parcel companies tend to have higher returns than the USPs. This could be mainly due to the USPs having to meet the requirements of their USOs.

⁷ Ofcom, 2022. [2022 Review of Postal Regulation](#), Annex 8.

⁸ No operator is designated as the USP in Germany. The assumption is that the market will provide the universal service. In practice, Deutsche Post provides the universal services products.

Figure A7.1: Graph showing the difference between European USPs and commercial operators, % EBIT



Source: Ofcom analysis of the relevant company Annual Report and Accounts

A7.43 We have calculated that the difference between the average rate of return of the commercial operators and the average rate of return of the European USPs is between 3% and 4%. We then applied that difference to Royal Mail’s revenues and returns in 2021-22 to estimate the additional returns Royal Mail would receive if it were not subject to the USO, assuming that Royal Mail would increase its rate of return by this difference (while recognising that Royal Mail’s returns have tended to be lower than the European USPs we have used in this analysis).

A7.44 This analysis produced an increase to Royal Mail’s returns of between £200-300 million. We consider this range represents a lower bound to our net cost estimate using the decremental approach, and it is indeed close to the bottom end of our estimate of £325-675 million. This is because, in our net cost calculation, we estimate the net cost of the current USO in the UK, whereas our comparator USPs have a range of USO scopes, from 2/2.5 days letter delivery for bPost to 6 days letter delivery for Deutsche Post (in line with Royal Mail). Therefore, Royal Mail’s USO may be more demanding and costly than some of these comparators.

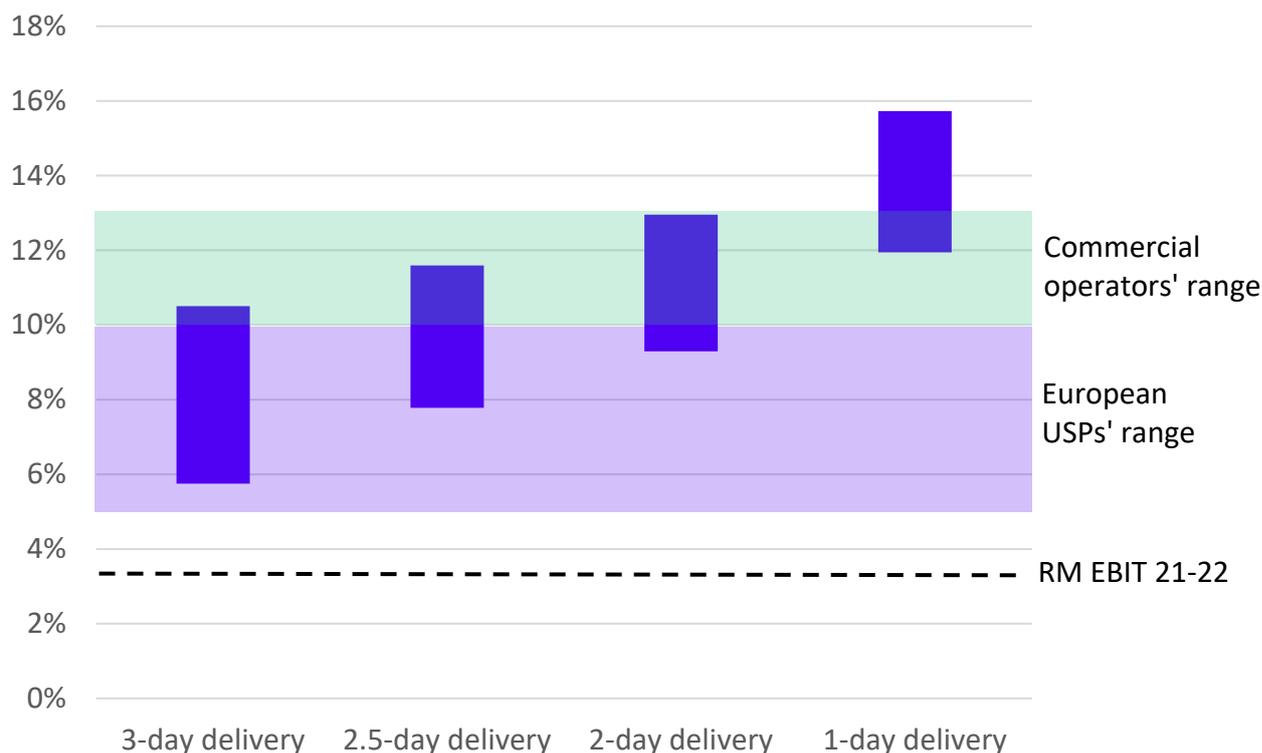
A7.45 Further, we consider the commercial operators such as FedEx and UPS are likely to be subject to a comparatively higher level of competition, which could put downward pressure on their returns. USPs and Royal Mail are not subject to such levels of competition in the letters market (only the parcels market) and, so, their returns could actually be higher in the absence of the constraints of a USO than the returns of the commercial operators.

A7.46 Both of these factors would broaden the difference between a commercial return and a return for Royal Mail, as the current USO may push its returns below those of comparator USPs, and it may achieve higher returns relative to global parcel operators in the absence of the USO if it faced less competition than they face.

The future of the universal postal service

A7.47 To test the reasonableness of our results further, we have compared the EBIT margins achieved by Royal Mail in our Counterfactual scenarios to the range of EBITs for the other operators that we calculated above. Figure A7.2 sets out the results of this comparison. The columns show, for each of the Counterfactual scenarios, the implied EBIT percentage margin range when the net cost ranges from Table A7.1 are converted into an EBIT percentage margin.

Figure A7.2 – EBIT % of the decremental approach scenarios compared to the European USPs and commercial operators



Source: Ofcom analysis

A7.48 The EBIT results for the 2.5 days and 2 days scenarios in the decremental approach appear to be fully within and/or below the range of the returns that the commercial operators without a USO make (10%-13%, excluding the years impacted by Covid). However, the higher EBITs for the 1 day scenario appear to be higher than the range for the commercial operators. This suggests that the net cost range in the 1 day scenario might be somewhat overstated. We explain in paragraphs A7.15 and A7.61 our reasons why this might be the case.

A7.49 We therefore consider that the mid-point of the 1 day scenario should represent an upper bound on the results from the decremental approach. The range for the net cost of the 1 day letter delivery Counterfactual has been estimated as £475m to £850m. The mid-point of this figure is approximately £675m.⁹ This is therefore the upper point of our range of the net cost of the USO.

⁹ All outputs of the modelling have been rounded to the nearest £25m for publication.

Applying the decremental approach

- A7.50 As discussed above, in the decremental approach, we estimate the net avoidable costs assuming Royal Mail is not subject to the USO. To do that, we consider what would happen if Royal Mail used the commercial and operational freedom to change the products and service features it provides to maximise the profits of the Reported Business (which encompasses the shared network that provides the USO products as well as non-USO products such as bulk mail and access). As explained above, we refer to each hypothetical scenario as a Counterfactual scenario. The net avoidable cost of the USO is the difference between the profit of the Counterfactual and the actual profit (as adjusted for the factors explained in paragraph A7.59).
- A7.51 We have considered and modelled several possible Counterfactual scenarios. As explained above, we have identified these scenarios based on the frequency of letter delivery. The frequency of delivery is the most important driver of costs and delivery activities make up by far the largest portion of total network costs. We have identified four scenarios with 3, 2.5, 2 and 1 day(s) frequency of letter delivery, informed by the delivery models we have observed in Europe.
- A7.52 To develop these scenarios, we have also considered the other key features of the USO, which derive from the current Postal Services (Universal Postal Service) Order 2012 (the USO Order).¹⁰ The features include product offerings, frequency of parcels delivery, frequency of collection, speed of delivery, and affordability. We then assessed what changes Royal Mail might make to these features in each Counterfactual scenario.
- A7.53 Next, we considered the changes that Royal Mail might make, which we assume would include the following:
- i) Royal Mail would **cease to provide some USO products** and/or features. The cessation of any product or feature would avoid some costs. It would also reduce or eliminate the revenues earned from those products or features. We expect Royal Mail to cease those USO products and features that have a net cost and would continue to have a net cost, even if their prices are increased (as the price elasticity effects would depress volumes so much as to outweigh the benefits of higher prices).
 - ii) Royal Mail would also **make changes to some USO and non-USO products** and/or features, if these changes result in net costs being avoided, i.e. costs avoided are greater than lost revenues.
 - iii) Royal Mail would **add new products and/or features**, which would only be made possible because of the increased operational freedom and flexibility (including the freedom to no longer offer USO products) resulting from the removal of the USO. We expect Royal Mail to do this if these products and features bring in net revenues, i.e. earn more revenues compared with the costs incurred.
- A7.54 We set out the main changes to products and features under each scenario in Table A7.2 below.

¹⁰ [The Postal Services \(Universal Postal Service\) Order 2012 \(legislation.gov.uk\)](https://legislation.gov.uk).

The future of the universal postal service

Table A7.2: Counterfactual scenario key products and features

USO features		Current USO	3 days letters	2.5 days letters	2 days letters (D+3)	2 days letters (D+4)	1 day letters
Frequency of delivery Article 6 ¹¹	Letters	6 days a week (Mon-Sat)	3 days a week (XY fixed days model, Mon-Sat)	2.5 days a week (XY alternate days model, Mon-Fri)	2 day a week (XY fixed days model, Mon-Thu)	2 day a week (XYZ fixed days model, Mon-Sat)	1 day a week (petal fixed day model, Mon-Fri)
	Parcels	5 days a week (Mon-Fri)	7 days a week (Mon-Sat/Sun)				
Frequency of collection Article 7	Letters	6 days a week (Mon-Sat)	6 days a week (Mon-Sat)	5 days a week (Mon-Fri)	5 days a week (Mon-Fri)	6 days a week (Mon-Sat)	5 days a week (Mon-Fri)
	Parcels	5 days a week (Mon-Fri)	7 days a week (Mon-Sat/Sun)				
Speed Article 8 and Schedule 1	1c	1 st Class D+1	Replaced by higher price 'Express next day letter' product	Replaced by higher price 'Express next day letter' product	Replaced by higher price 'Express next day letter' product	Replaced by higher price 'Express next day letter' product	Replaced by higher price 'Express next day letter' product
	2c	2 nd Class D+3	2 nd Class D+3	2 nd Class D+3	2 nd Class D+3	Slower 2 nd Class D+4	3 rd Class D+5 or slower
	SD	Special Delivery 1pm	Special Delivery end of day				
Affordability Article 8 and Schedule 1		Safeguard cap on 2c stamps	Removed	Removed	Removed	Removed	Removed
Price uniformity Article 8 and Schedule 1		Uniform prices throughout the UK	No change				

¹¹ All statutory references in this table are to the USO Order.

The future of the universal postal service

USO features		Current USO	3 days letters	2.5 days letters	2 days letters (D+3)	2 days letters (D+4)	1 day letters
Free services Article 9 and Schedule 2		Free services for petitions and for blind or partially sighted persons	Removed	Removed	Removed	Removed	Removed
Addressee services Article 10 and Schedule 3		Redirection and retention and free Post restante	Remove non-revenue generating products				

Key assumptions

A7.55 As explained above, to apply the decremental approach we have had to apply some operational and commercial assumptions. We have based these assumptions on our knowledge of Royal Mail's business and operations, as well as evidence and information we have gathered from Royal Mail through our regulatory reporting requirements and various engagements we have had with Royal Mail.

A7.56 We have grouped these assumptions by base year, revenue-related and cost-related assumptions.

Financial year

A7.57 We have modelled the Counterfactual scenarios starting with the actual data for the financial year 2021-22.

A7.58 We consider the 2021-22 financial year to be the best year for the purposes of our initial estimate of the net cost, even though it was impacted by Covid-19, for the following reasons:

- a) 2019-20 was pre-Covid-19 pandemic and therefore outdated, such that the mix of letters and parcels is not representative of the current market;
- b) 2020-21 was affected due to: Covid-19 reducing the number of delivery days which impacted quality of service; increased sickness levels; pandemic control methods, using additional resources to deliver mail safely; and national lockdowns – there are therefore significant levels of uncertainty in this data such that it is comparatively outdated; and
- c) 2022-23, while impacted less by Covid-19, was affected considerably by industrial action and the continuation of Quality of Service ('QoS') issues.

A7.59 We have identified some of the specific factors (arising from Covid-19) which impacted 2021-22 revenues and costs but are not likely to persist. We have made some adjustments to take account of these one-off impacts as follows:

- a) QoS – We have adjusted the worked hours (therefore costs) up to reflect a theoretical state where delivery was happening six days a week across all delivery offices.
- b) Absence – We have adjusted down the absence hours (therefore costs) to reflect the pre-Covid levels.
- c) Other Covid costs – We have removed costs of extra vehicles, PPE, additional space incurred as a direct result of government guidance on Covid-19 linked protection measures.
- d) Government contract – We have removed the revenues and costs associated with the government contract for distributing Covid-19 test kits. We were able to identify these products directly from the regulatory submissions as Royal Mail had reported these volumes and revenues separately. In 2021-22, Covid-19 test kits accounted for around 7% of total parcel volume.¹²

A7.60 Apart from the adjustments above, we have not made any further adjustments to exclude the impact of Covid-19 on the mix of letter and parcel volumes and create a non-Covid volume base case scenario (i.e. as if Covid-19 never happened). This is because we have made various assumptions regarding volumes in a Counterfactual scenario, and to add an additional layer of complexity by speculating about what the market might have done in the

¹² Royal Mail, 2022. [Annual Report and Financial Statements 2021-22](#), page 7.

The future of the universal postal service

absence of Covid-19 would overcomplicate the exercise which is intended to provide an initial estimate.

Revenue related assumptions

A7.61 In this section, we set out the key assumptions underpinning our estimates of revenue losses in the Counterfactual scenarios. Some of these assumptions are more difficult to determine for the scenarios with lower letter delivery frequencies because we have some of the required data only for higher frequencies from our previous work and we have had to extrapolate for lower frequencies using our own judgement. As a result, our revenue loss results become more speculative for lower delivery frequency scenarios.

Product changes and their impact on volumes

A7.62 Table A7.3 below sets out some of the main changes to products and features that we consider would occur in the Counterfactual scenarios. In addition, the table provides a high-level description of the types of impact we expect these changes to have on the volume and price of Royal Mail's products.

A7.63 We have assumed that in the Counterfactuals, Royal Mail would no longer provide the free of charge services it is obliged to provide under the USO.

Table A7.3: Impact of each change to Royal Mail's product offerings in our Counterfactual

Product/feature change	Volume impact	Price impact
Remove First Class USO letter and replace with new express letter product	<ul style="list-style-type: none"> Some volume would move to a new express product Some would down-trade to Second Class The rest would leave the market 	Express letter price, e.g. 3x First Class stamp price
Remove First Class bulk retail and access products (no new replacement product)	<ul style="list-style-type: none"> Some volume would down-trade to Second Class Some retail bulk would switch to standard D+3 access (see below) The rest would leave the market 	N/A
Bulk retail delivered at reduced frequency	<ul style="list-style-type: none"> Some volume would down-trade to slower speeds Some would switch to standard D+3 access (see below) Some would leave the market The rest would remain 	Reduce the price to provide some compensation to customers for the reduced frequency, e.g. by 10%
Access delivered at reduced frequency and slower speed (D+3 instead of D+2)	<ul style="list-style-type: none"> Some volume would down-trade to access with slower speeds – D+5 Some would leave the market The rest would remain 	Reduce the price to provide some compensation to customers for the reduced frequency, e.g. by 10%

The future of the universal postal service

Product/feature change	Volume impact	Price impact
Remove VAT exemption from USO products¹³	<p>All letters:</p> <ul style="list-style-type: none"> Overall reduction in volume as some volume would leave the market due to price increases <p>First Class parcels:</p> <ul style="list-style-type: none"> Some volume would down-trade to Second Class Some would switch to competitors (may become part of parcels access) The rest would remain <p>Second Class parcels:</p> <ul style="list-style-type: none"> Some would switch to competitors (may become part of parcels access) The rest would remain 	Increase retail price, e.g. by 20% to account for VAT charge
Remove safeguard cap	<p>Letters:</p> <ul style="list-style-type: none"> Some would leave the market The rest would remain 	Increase retail price, e.g. Second Class stamps for letters and large letters by 50% (See A7.65)
No change – product groups we do not consider would be impacted	<ul style="list-style-type: none"> International, Election mail, Redirections, Special Delivery before 9am, Tracked 24/48, Untracked domestic account, Access parcels, and Retention (Keepsafe). 	N/A

Pricing

A7.64 We consider that, absent the requirements of the USO, Royal Mail’s product offering and associated prices are likely to be different. These price changes arise for a number of different reasons, but we have aimed to choose prices such that Royal Mail is able to maximise profits. We have given regard to information from Royal Mail when deciding the specific assumptions we have made for individual price changes.

A7.65 Royal Mail would no longer be bound by a safeguard cap on Second Class stamps, so may choose to increase prices on these products. We have taken into account Royal Mail’s views of the prices that the market could bear, with reference to the EU median. We assume it would only increase prices on letter products as parcel prices are already constrained by competition from other parcel operators.

¹³ This is discussed in more detail in paragraph A7.80.

The future of the universal postal service

- A7.66 As our Counterfactuals also reduce the number of delivery days, this means the frequency of delivery of some products will reduce. We have assumed that Royal Mail would set slightly lower prices for these products to encourage users to continue to purchase them despite the less frequent delivery.
- A7.67 In addition, we consider that in the Counterfactual scenarios, Royal Mail would no longer offer a First Class letter service as we know it. Instead, we have assumed it would introduce a premium letter product that is priced considerably above the current First Class stamp price, but still below the basic Special Delivery product.
- A7.68 As discussed below (A7.80-A7.89), we have also considered how prices may change in the absence of the USO as Royal Mail would seek to cover the costs of the change in VAT status on some of its products.
- A7.69 We recognise that the assumption of complete pricing freedom in our approach might allow for some benefits of market power or monopoly pricing. However, we have not been able to determine whether this is the case and, in any case, we have not constrained the new prices in our modelling in order to mitigate these concerns. The relevant benchmark of prices will vary based on the exercise undertaken, and attempting to benchmark prices to a competitive level will inherently involve a great deal of speculation as Royal Mail is the only operator for the end-to-end delivery of letters across the whole of the UK. We therefore have no data on which to base estimates of what competitive price levels would be in this market.
- A7.70 We have used complete pricing freedom as our benchmark in our modelling. For other purposes, an appropriate benchmark may provide services at lower prices than some of the prices we have assumed as part of our modelling. If a competitive pricing approach were used instead, then the calculations would result in a higher revenue loss, with the resulting net cost being lower to the same extent.
- A7.71 For the purposes of our modelling we have also assumed that Royal Mail would continue to maintain price uniformity for letter and parcel products. In reality, as we have seen for other parcel operators, Royal Mail may choose to differentiate pricing for some postcode sectors. However, based on the postcode sectors for which other operators charge an additional amount, this would impact less than 5% of Royal Mail's total volumes (including Access).¹⁴ Therefore, we do not think this would make a particularly material difference to our revenue projections within the Counterfactual scenarios. To the extent that it would affect our outputs, this would be to reduce revenue losses and increase cost savings, increasing the estimated net cost figures.

Elasticities

- A7.72 As part of our revenue modelling, we account for the impact of changes in prices on volumes using price-elasticity assumptions on a product-by-product basis. Price elasticities are the degree to which volumes change in response to a change in prices.¹⁵ The elasticity estimates

¹⁴ Royal Mail, Response to Ofcom's Post Cost Model: Final Notice requiring the provision of specified information under Section 55 of, and Schedule 8 to, the Postal Services Act 2011, dated 8 June 2023, Tranche 1 and 2 and Evri postcode sectors for geographical surcharges, <https://www.evri.com/location-charge-postcodes>

¹⁵ For example, a product with a price elasticity of -0.5 that has its price raised by 10% would expect to see its volume change by $10\% \times -0.5 = -5\%$, so volume would fall by 5% in response to the price increase. This price elasticity is described as 'inelastic', because the volume demanded falls by a lower percentage than price increases and, so, the price increase leads to an increase in revenues.

The future of the universal postal service

we use are those which Royal Mail has estimated based on its experience of how volumes respond to prices.¹⁶

- A7.73 In all cases, products are estimated to be price-inelastic – that is, for a small increase in prices there will be a smaller reduction in volumes, meaning that such a price change would increase revenues. If variable costs do not increase, then the price increase would also increase profits. In general, business letters and C2X parcels are estimated to be more price-inelastic, while other products are assumed to be less inelastic.
- A7.74 There are limitations to these Royal Mail estimates as they are somewhat out of date (for example, not reflecting more recent price increases since they were estimated) and do not always capture the level of product granularity we are considering. These elasticities also have not been derived accounting for other changes we model, such as new, changed and withdrawn products. In addition, these elasticity estimates have been derived for a particular price point and the further one departs from this price point, then the less robust they would be.
- A7.75 Where we consider that the elasticity estimates risk giving misleading results, we have made adjustments based on how we expect these elasticity estimates to change as prices rise. For example, in some of our scenarios we assume Royal Mail would increase prices of some products by a relatively large percentage, beyond the scale at which elasticities are likely to be accurate.¹⁷
- A7.76 We deal with this by assuming that Royal Mail would raise prices to, but not beyond, the point at which additional revenues from higher prices are entirely offset by lost revenues from lost volumes (known as the point of unit-elasticity). Any price rises beyond this point would reduce the revenues. We assume that the price change assumptions we have made, informed by information provided by Royal Mail, take prices to this point of unit-elasticity. This gives us two elasticity points, the initial estimate from Royal Mail based at the original price point and unit-elasticity at the final price.
- A7.77 In our model, as a modelling simplification, we use a single elasticity assumption across an entire price change rather than allowing the elasticity to change over the course of a price rise. Therefore, we use an average elasticity to approximate the varying elasticity over the price rise interval. The average we use is the mid-point between its starting elasticity and unit-elasticity.
- A7.78 As explained above, we use granular data for product volumes and revenues. This enables us to have a better and more targeted assessment of the impact on the users and their volumes. This also enables us to assess more precisely the impact of new prices and volume changes on revenues.

Access

- A7.79 Given its near monopoly in the letters market, we assume in each counterfactual scenario that Royal Mail would continue to be required by regulation to offer access to its network. However, we assume that the terms of that access would be aligned with any changes to frequency and speed of Royal Mail's other product offerings, in order to maximise the cost

¹⁶ Data from Royal Mail's Inland Letter Traffic Models and formal information request submissions to our Review of Second Class Safeguard Caps.

¹⁷ Price elasticities are likely to grow in magnitude as prices increase. As such, while assuming static point-elasticities may be reasonable for relatively small price changes (e.g. up to 10%) they will not be accurate for larger price changes.

The future of the universal postal service

reductions from such operational changes. So, if the number of delivery days were to be reduced in the absence of the USO, then this would similarly impact on the frequency and speed of delivery of letters received by Royal Mail via access. We discuss below the possible implications of this assumption on the VAT exemption status of some access products and input VAT recovery.

VAT

- A7.80 Under the Value Added Tax Act 1994, the USO products currently provided by Royal Mail are exempt from VAT. Given that Royal Mail would no longer offer these products pursuant to the USO if there were no USO, we assume that, in the Counterfactual scenarios, this exemption would no longer apply and Royal Mail would be required to charge VAT on these products. This includes both letter and parcels products.
- A7.81 For illustration, we describe below two possible scenarios regarding VAT:
- a) Royal Mail would not change the USO product retail prices that customers face. Rather, it would decide that the prices now include a VAT charge as they are. This would lead to a loss of revenues because Royal Mail would have to pay VAT to HMRC out of those revenues, and this would directly impact its profitability; or
 - b) Royal Mail would add the full 20% VAT charge to its existing USO product retail prices, so fully passing on the VAT to its customers. This higher retail price would impact the demand for the products and reduce the volumes. The extent of the reduction in demand would depend on the price elasticity of the products concerned.
- A7.82 There are other possible scenarios in which Royal Mail would only pass through different proportions of the VAT charge into retail prices.
- A7.83 Within our modelling we assume, for the current USO products, that Royal Mail would pass through the entirety of its VAT charge via a 20% price increase, leading to a consequent loss of volumes. We think this is the most likely course of action Royal Mail would take considering the relatively inelastic demand for these product groups. We estimate revenue losses from this loss of volumes to be c.£300m for USO services.
- A7.84 It is important to note that, when Royal Mail makes price changes to its products, there are two offsetting effects – an increase in revenue from customers buying the product, and a loss in revenue from customers switching away from the product. When we model increases of prices due to a change in VAT status only the second of these effects is present, as Royal Mail must pass through the increased revenue it generates to the Treasury.
- A7.85 As noted above, we have assumed that Royal Mail would continue to be required to offer access to its network. Some of Royal Mail's access products are currently exempt from VAT, but they could become subject to VAT if the regulation requiring Royal Mail to provide access were changed.¹⁸ Therefore, for each Counterfactual scenario, we have modelled two further sets of scenarios where i) Royal Mail retains the VAT exemption for the relevant Access products, and ii) Royal Mail loses the VAT exemption for the relevant Access products and applies a 20% price increase. We estimate revenue losses from loss of volumes associated with this price rise to be around c.£150m for Access services.

¹⁸ Royal Mail is currently required to allow other postal operators to access its network by the [USP Access Condition](#), imposed under section 38 of the PSA 2011. Ofcom also has a power to impose a general access condition on a postal operator under section 50 of the PSA 2011.

The future of the universal postal service

- A7.86 A company that is registered for VAT can reclaim the VAT levied on the inputs it has purchased in order to produce the outputs it has to charge VAT on. This prevents the VAT from being charged at every step of a supply chain, ensuring it only applies to the end consumer which is the purpose of VAT as a tax on consumption. To calculate its VAT bill, the company calculates the VAT it has charged on its outputs and then deducts the VAT it has been charged on its inputs. The difference would represent the VAT payable or refundable.
- A7.87 In cases such as Royal Mail, where some output products are exempt from VAT, only a portion of the input VAT can be deducted from the output VAT. The remaining portion of the input VAT that could not be claimed is referred to as irrecoverable VAT and is an added cost to Royal Mail.
- A7.88 The removal of the VAT exemption would result in Royal Mail being able to deduct a greater proportion of its input VAT (claim back this irrecoverable VAT), and it would therefore generate some cost savings. It is important to account for these cost savings to avoid overstating the net financial impact of Royal Mail losing VAT-exempt status on its products.
- A7.89 We have estimated these costs by reviewing Royal Mail's data regarding irrecoverable VAT and its regulatory financial data for the financial year 2021-22. We adjust these numbers in different scenarios to account for the cost reductions in those scenarios, to avoid overestimating irrecoverable VAT.

Intangible benefits

- A7.90 The USP designation confers a status which could lead or contribute to further commercial benefits for the USP. Such benefits are often referred to as 'intangible benefits' and would have to be taken into account in a statutory net cost calculation. It is important to realise that these intangible benefits arise only by virtue of Royal Mail being the USP and not through Royal Mail being the main mail provider in the UK for many years prior to its designation as the USP, or other factors not related to being the USP. It is therefore difficult in practice to identify intangible benefits that solely relate to being the USP.
- A7.91 We consider the following could be areas in which intangible benefits may be enjoyed by Royal Mail due to its status as the USP:
- Royal Mail brand and the impact it has on stimulating and maintaining demand for its services;
 - Greater visibility and reach due to the nationwide infrastructure (buildings, post boxes etc), the stamps, the fleet and the personnel all bearing the Royal Mail logo which could enable considerably more efficient and effective advertising campaigns; and
 - Greater negotiating and bargaining power which could give Royal Mail a better chance at winning contracts with large companies or public bodies.
- A7.92 As noted, these intangible benefits should be considered only to the extent that they are derived from Royal Mail's designation and status as the USP. The net cost should then reflect any losses in the value of the USP-related proportion of the intangible benefits in the Counterfactual.
- A7.93 Since our current exercise is to provide an initial estimate of the net cost, we have not quantified the impact of the intangible benefits. This would be a difficult exercise that involves some speculation, particularly with regard to quantifying the USP-related proportion of the intangible benefits and any losses in those benefits. However, we do not expect that including the impact of any intangible benefits in the net cost would significantly

The future of the universal postal service

change the range we have calculated, given its size, nor would it change the key findings we have set out in this document.

Cost related assumptions

The network

- A7.94 We have based our analysis on the 'Reported Business'. This is the business within Royal Mail UK, which encompasses the network that delivers the universal service, as well as non-USO mail such as end-to-end bulk and access bulk mail. The Reported Business excludes other networks that IDS operates such as Parcelforce Worldwide, eCourier and GLS networks.
- A7.95 We have modelled the Reported Business's network broadly as it existed in 2021-22, e.g. assuming it includes the same mail centres and delivery offices (see explanations regarding the financial year in paragraphs A7.57-A7.60) and do not attempt to model any significant change to this network. We consider this appropriate because, as we have explained in paragraphs A7.19 and A7.23, we are attempting to calculate an estimate of the net cost to Royal Mail of the USO, based on the 2021-22 financial data, rather than how a non-specific postal operator would design its network if establishing a new network from scratch.
- A7.96 Consistent with the decremental approach, our model assumes that certain aspects of Royal Mail's operation, such as the locations of its buildings, are fixed. This is referred to as a 'scorched node' approach, as opposed to a 'scorched earth' approach where all aspects of the model could be flexed to better optimise operations, and which may be utilised if we were to adopt the 'full counterfactual' methodology.

Efficiency

- A7.97 As explained in chapter 8 of the main document, section 44 of the PSA 2011 states that, when carrying out a statutory assessment, Ofcom must consider the extent to which the provider is complying with its universal service obligations in a cost-efficient manner. The section 44 and 45 review is the first step in compensating for any unfair financial burden (either through a state subsidy or an industry fund), but the PSA 2011 seeks to ensure that no compensation is received for inefficiently incurred costs. We have therefore sought to account for this in our modelling by starting with the costs Royal Mail incurs on its current network, and to the extent that there may be inefficiencies, we seek to adjust for these.
- A7.98 In 2023, we introduced new regulatory financial reporting requirements on Royal Mail to publish its planned efficiency improvements for the next five financial years. These published estimates will form the basis for our efficiency monitoring for that period. We have used these estimates as the basis for our modelling, which show cumulative expected efficiency gains of 9%, between 2023-24 and 2027-28.¹⁹ We have reduced Royal Mail's cost base by these efficiency expectations and, to account for uncertainty over this number, we have used a range of efficiency gains of between 5% and 15%. These assumptions are applied both to the factual and Counterfactual scenarios, so that we do not model any additional costs saved via efficiency gains when moving from the factual to the Counterfactual scenarios (i.e. we do not double-count).

¹⁹ IDS, "[Publication of a five year cumulative expectation for PVEO and Weighted items per Gross Hours \(WIPGH\) measures](#)", 30 June 2023.

Hours and pay

A7.99 Our cost model is built to vary the resources needed for the different scenarios but does not involve changing the structure of the network, as explained in paragraphs A7.94-A7.96.

These variable resources include worked hours. Therefore, to the extent that the Counterfactual may involve changes in worked hours or the number of staff employed, we have assumed that Royal Mail is free to make these changes.

A7.100 The cost of worked hours depends on the pay rates which are negotiated and agreed with Royal Mail's employees' unions. We do not make any assumptions about how the current pay arrangements might change in the Counterfactual because we consider this would be too speculative.

A7.101 As we explain further in A7.11, the Counterfactual scenarios that we have modelled are hypothetical scenarios, which are developed to aid us in calculating the net cost of the USO. These scenarios do not represent expectations of how Royal Mail's business and/or the USO may evolve in the future. Therefore, any transition costs including organisational restructuring and redundancy costs are not relevant to the Counterfactual scenarios used in the calculation of the net cost of the USO and, as such, we have not considered these costs in this exercise.

A7.102 Since the Covid-19 pandemic, Royal Mail has also experienced an increase in its absence rates driven by Covid-19.²⁰ In order to adjust the cost base to represent 'normal' absence levels, we calculated the expected level of absence hours using the absence rates pre-pandemic. Given the similarity in detailed cost and hours data we have gathered to update the Delivery model, we have used 2018-19 data (the last year for which we have comparable cost modelling data) as the comparator for pre-pandemic levels. We have adjusted both the number of sickness hours and total sick pay accordingly, using average wage rates to convert between hours and costs.

Quality of service

A7.103 Under current performance targets, Royal Mail is required to ensure that a certain percentage of its mail is delivered within the specified timeframe.²¹ In our model, we assume that all mail is delivered 'on time'. This is because we use volumes and product specifications as the basis for the modelling and calculate the resources required to deliver them. This is a modelling simplification which, all else being equal, would tend to cause our model to overstate the costs of the Counterfactual scenarios as most of the QoS targets may not in practice be set to 100%. However, this issue will be mitigated through model calibration (set out later in this annex, A7.164-A7.168) and so we do not expect this assumption to lead to significant overestimation of costs.

A7.104 As noted above, the base year costs provided by Royal Mail relate to the financial year 2021-22 in which it did not meet its QoS targets which means that actual costs are likely to be an understatement of what they would have been had QoS targets been met. We have adjusted the base year to account for this by projecting the hours required to reach the QoS targets based on Royal Mail's 'workload' metrics.

²⁰ Royal Mail, [Annual Report and Financial Statements 2021-22](#), page 7.

²¹ For example, at least 93% of First Class mail must be delivered within one working day of collection (excluding Sundays). At least 98.5% of Second Class mail must be delivered within three working days of collection (again excluding Sundays).

The future of the universal postal service

A7.105 'Workload' is a metric that is intended to work as a common denominator for comparing the amount of work required to handle volumes of different types of mail. In 2021-22 the ratio, of 'actual hours worked to workload', reduced. This is what we would expect in years where QoS targets are not met, as operations can run more cheaply if operating at lower levels of QoS (while workload would be the same for the same volume of mail regardless of QoS).

A7.106 We have adjusted the hours-to-workload ratio back up towards the 2018-19 level, accounting for other changes over that period, to estimate the additional hours that would have been required had Royal Mail hit its QoS targets in 2021-22. We have converted this adjustment in hours to a total cost using average wage rate data.

Transition costs

A7.107 We recognise that major changes to Royal Mail's operations will result in transition costs, for example the costs of workforce re-organisation and hours reduction, equipment and IT, route and network re-design, and management time etc.

A7.108 However, as we explained in A7.11 above, the Counterfactual scenarios that we have modelled are hypothetical scenarios, which are developed only to aid us in calculating the net cost of the USO. They do not represent expectations of how Royal Mail's business and/or the USO may evolve in the future. The scenarios compare two 'settled states', one actual and one hypothetical, and how they would differ in their costs and revenues.

A7.109 Therefore, transition costs are not relevant to the Counterfactual scenarios and, as such, we have not considered them in this exercise.

A7.110 Transition costs would be relevant to the estimate of cost savings to Royal Mail which might be achieved by changing the scope of the USO. We discuss these alternative USO options further below. However, we have not sought to estimate transition costs for these potential alternative scopes of the USO. This is because we do not have sufficient data on the operational constraints and the associated costs of the changes needed for these alternatives. These constraints and costs may include the terms of the future contracts with its staff and redundancy costs which Royal Mail might incur.

Modelling

A7.111 In this section, we describe how we have used two models, a Revenue model, and a Delivery cost model, to apply the decremental approach and estimate the volumes, revenues and costs that would arise under the various Counterfactual scenarios we have considered.

Background to the models

A7.112 As part of our overall work programme on post we have built several bottom-up models of different aspects of the postal pipeline. We built these models to enable us to look in detail at how Royal Mail's costs and revenues could change in response to a variety of operational and pricing changes. Our modelling informs policy development, our engagement with Royal Mail, and any exercise in calculating net costs and exploring alternative USO scopes.

A7.113 We most recently used these models as part of our 2020 Review of Postal Users' Needs. The full suite of models comprise a Collections model, a Processing & Logistics model, a Delivery model, and an Overheads and Other Costs model, as well as a Revenue model. The models were based on 2018-19 financial year data.

The future of the universal postal service

A7.114 For the exercise of calculating the net cost, we have updated the Delivery model to be based on 2021-22 financial year data to run scenarios which allow us to interrogate the Counterfactual scenarios and alternative USO scopes outlined earlier in this annex. This models all activities from the point at which mail arrives at delivery offices to it being delivered at delivery points. We have not updated any of the other cost models due to the time and resource implications not being proportionate. However, we would expect the large majority of cost changes from these scenarios to be found in the Delivery part of the postal pipeline.

A7.115 This is because the Delivery element of Royal Mail's network is where the large proportion of costs arise and also where the key changes we have identified (frequency of delivery days) have most impact. For example, in the 2020 Review of User Needs work, cost savings in delivery were the majority (often the large majority) of all cost savings identified.²² Therefore, we do not believe that updating only the Delivery model with 2021-22 figures undermines our estimates of the net cost or the potential savings from changes to the USO.

A7.116 As discussed in greater detail below, the Delivery model captures in considerable detail Royal Mail's network from when post arrives in Royal Mail's c.1200 delivery offices to its delivery of this post to addresses. It does not, therefore, capture that part of the network which includes collection of post (from post boxes, post offices, bulk mailers or access operators) or the initial sorting and trunking of mail to delivery offices.

A7.117 Where we have accounted for cost changes outside of Delivery,²³ these have been handled on an ad-hoc basis using separate calculations of adjustments. We have uplifted the Delivery cost saving estimates from our updated modelling by 15% to reflect potential savings made elsewhere in the network. This number is based on the rough proportion of non-delivery costs we found in our similar analysis from the 2020 Review of User Needs. We have taken this simple approach to ensure that our outputs are of the right magnitude but without trying to be overly-specific with elements of the cost base which we are not specifically modelling, and noting that the differences between the prior and present exercises prevent more detailed comparison.

A7.118 Though we have not updated any of the other cost models, we have updated the Revenue model to account for 2021-22 financial year data, to incorporate additional calculations and to account for the changes that are tested in our Counterfactual scenarios. This model is described later in this annex.

Overview of the models

A7.119 The calculation steps in the Revenue and Delivery models are explained later in this annex. In summary, they are:

- a) Take Royal Mail data relating to the costs, revenues and volumes of its Reported Business in 2021-22;
- b) Adjust the volumes to account for changes to the products and services provided in a Counterfactual scenario;

²² See Table A5.2 of the [2020 Review of Postal Users' Needs](#) which shows the proportion of costs saved in a variety of scenarios by the part of the pipeline from which they are saved.

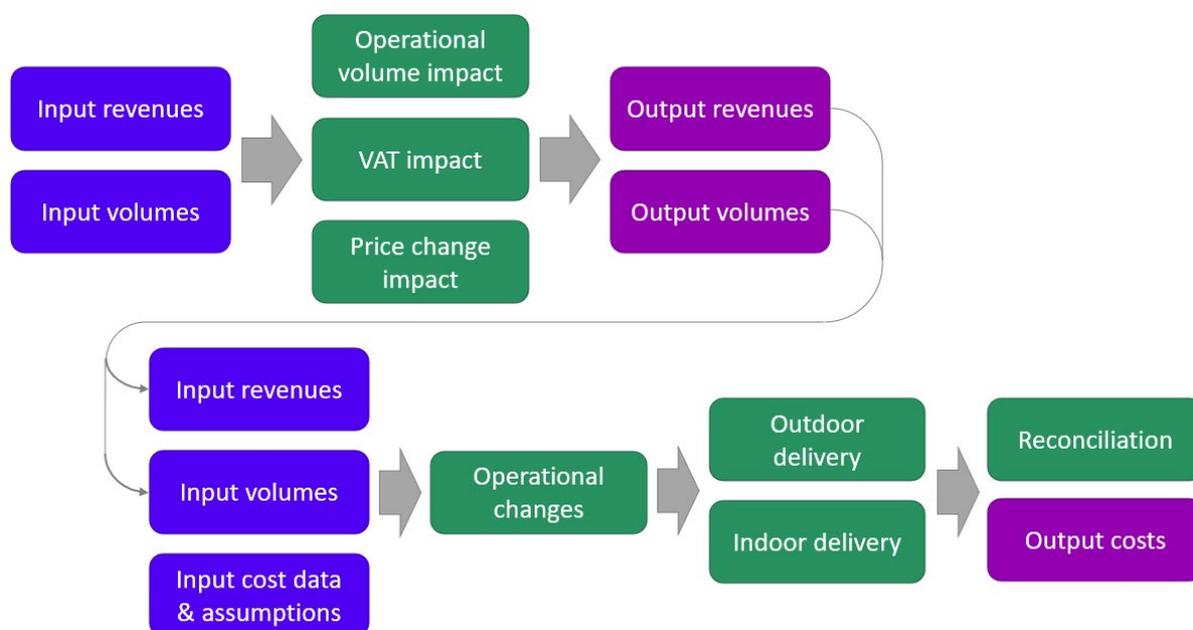
²³ For example, costs saved in processing mail at mail centres from a change to delivery speeds, or in the logistics network in scenarios with significant changes in volumes to be transported.

The future of the universal postal service

- c) Adjust the prices Royal Mail charges for its products and services (including pricing freedom and changes in VAT status when relevant), and the volumes to account for consumer consumption and switching behaviour from these changes;
- d) Estimate the costs of running a restructured outdoor²⁴ delivery operation, accounting for the volume adjustments made in previous steps;
- e) Estimate other costs relating to indoor²⁵ and non-frontline²⁶ parts of this restructured delivery operation; and
- f) Compare the resulting costs and revenues to Royal Mail's actual data to estimate the potential net cost saving from moving to the modelled Counterfactual scenario.

A7.120 These calculation steps are illustrated in Figure A7.3. The rest of this section first details the modelling approach of the Revenue model and then subsequently that of the Delivery model.

Figure A7.3: Illustration of the Revenue and Delivery modules of the model suite



Source: Ofcom

Revenue modelling

Modelling approach

A7.121 The revenue modelling takes volumes and revenues from a single financial year and adjusts them for each Counterfactual scenario based on different sets of assumptions. The model is structured to provide the impact on volumes and then the impact on revenue.

A7.122 To calculate the revenue impact of each Counterfactual scenario, we:

- a) Start with Royal Mail's 2021-22 financial year volumes and revenues;

²⁴ The people costs relating to the part of the delivery operation which involves sending postal workers out from delivery offices on delivery routes to deliver mail to various delivery points.

²⁵ The people costs relating to the part of the delivery operation which involves receiving, sorting and preparing mail at delivery offices to get it ready for outdoor delivery.

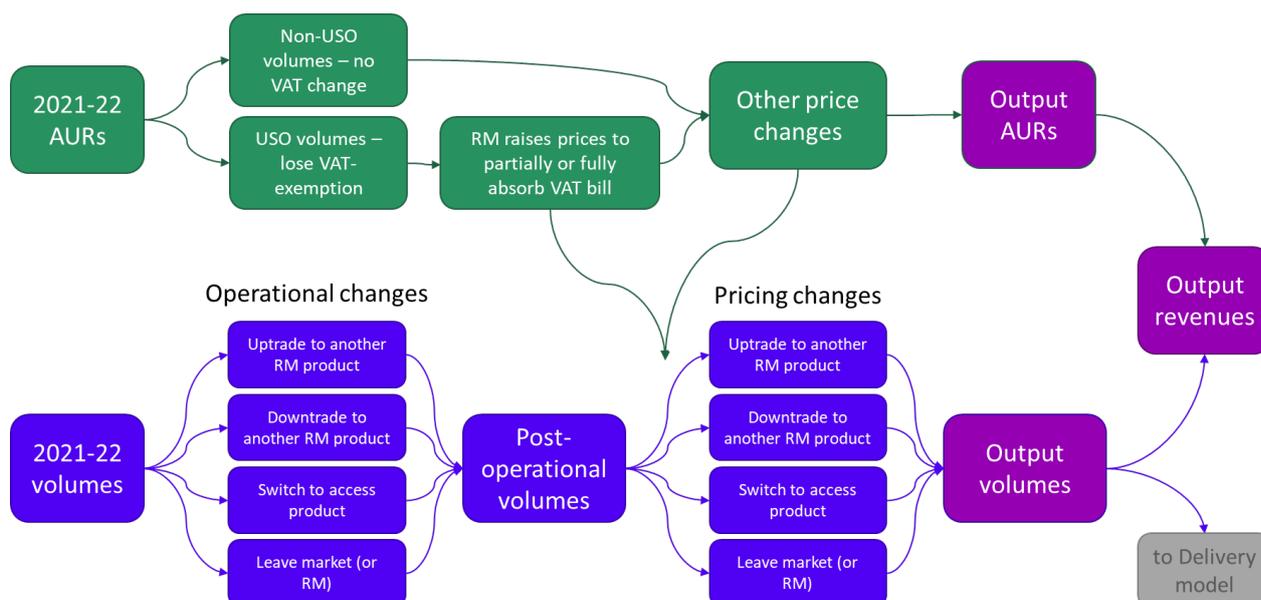
²⁶ All other costs relating to the delivery operation including accommodation, vehicle and management costs.

The future of the universal postal service

- b) Adjust these volumes based on what we expect consumers' responses would be given changes to product characteristics and availability – e.g. with the removal of First Class mail or the slowing down of delivery speeds more broadly. This includes some customers 'downtrading' to cheaper products provided by Royal Mail, others 'uptrading' to more expensive products, others switching to access providers and some customers leaving the market entirely;
- c) Adjust the prices charged for these products to account for changes in VAT treatment and to account for changes Royal Mail would make absent USO regulations in order to maximise profits, such as by introducing a new high-priced express letter product;
- d) Reflect the volume impact of these price changes by also adjusting product volumes, in a similar way as in step b) above, accounting for data on the price-elasticity of different product categories; and
- e) Calculate a total revenue using these adjusted prices and volumes. By comparing this calculated revenue to Royal Mail's actual 2021-22 revenues, we estimate the expected revenue impact of the changes in the Counterfactual.

A7.123 This approach is illustrated in Figure A7.4, and details on each step are explained later in this annex.

Figure A7.4: Revenue model calculation flow



Source: Ofcom

Input data

A7.124 As explained above, we have used Royal Mail's 2021-22 actual volumes and revenues submitted to us as part of its regulatory reporting requirements. This is to ensure our analysis is comparable with our cost modelling, also based on 2021-22 data.

A7.125 The model uses granular data on volumes, revenues and Average Unit Revenues ('AURs') of Royal Mail's products. The AUR of a product is calculated by dividing its total revenues by its total volume. While in theory AURs and prices should be the same, in reality these numbers differ (for example, due to volume discounts). Using AURs ensures consistency with the total revenues, while using prices may lead to discrepancies in the calculations.

The future of the universal postal service

A7.126 We have added new products where our counterfactual assumes they would be provided (for example a new express letter product). We group the products into different types. For example, in relation to letters, we group business mail, advertising mail and consumer mail separately.

Input assumptions

A7.127 Where possible we have considered inputs from Royal Mail. This includes information from our 2019-20 user needs project which included data and information from Royal Mail.²⁷ Additionally, we have used elasticities informed by Royal Mail's internal model, which it uses to forecast letter volumes. However, we have also relied on our knowledge and experience of Royal Mail's products and its markets.

A7.128 Details of the assumptions we have made for the purposes of this net cost calculation are set out above. In particular:

- a) Product changes and their impact on volumes – A7.62
- b) Pricing assumptions – A7.64
- c) Elasticities – A7.72
- d) VAT – A7.80

Switching routes

A7.129 In this subsection, we explain in more detail the steps shown in Figure A7.4 above relating to how volumes respond to changes in the services which Royal Mail is assumed to offer, and the prices which it sets, under each of the Counterfactual scenarios we consider.

A7.130 As explained, we consider that the change in services has an impact on demand and that each product type has a different response to those changes in offering or price.

A7.131 We identify which product groups are likely to be affected by each change and what proportion of those volumes are impacted. These are known as 'switching factors'. For example, First Class products will have 100% of their volumes impacted if we assume Royal Mail no longer offers the current First Class services.

A7.132 The 'switching routes' represent the possible outcomes for the impacted volumes. We assume there are four possible switching routes:

- a) Leave the Royal Mail network entirely, whether switching to an alternative end-to-end operator (for parcels) or choosing not to send the item by post;
- b) Move to a downstream access operator, which will still use the Royal Mail network in some way;
- c) Up-trade to another product (Royal Mail or Access) with higher specifications and/or price, for example, customers may up-trade to Special Delivery Next Day if the First Class service is not provided; and
- d) Down-trade to another product (Royal Mail or Access) with lower specifications and/or price, for example, customers may down trade to a Second Class service, if the First Class service is not provided.

A7.133 We then incorporate the impact of price changes (including VAT, see paragraphs A7.80 to A7.89) by applying a price multiplier to the AUR, which calculates the output AUR. The model then applies an elasticity to the change in price to calculate the proportion of those

²⁷ Ofcom, 2020. [Review of postal users' needs](#).

The future of the universal postal service

volumes which are impacted. Once again, the four ‘switching routes’ represent the possible outcomes for the impacted volumes.

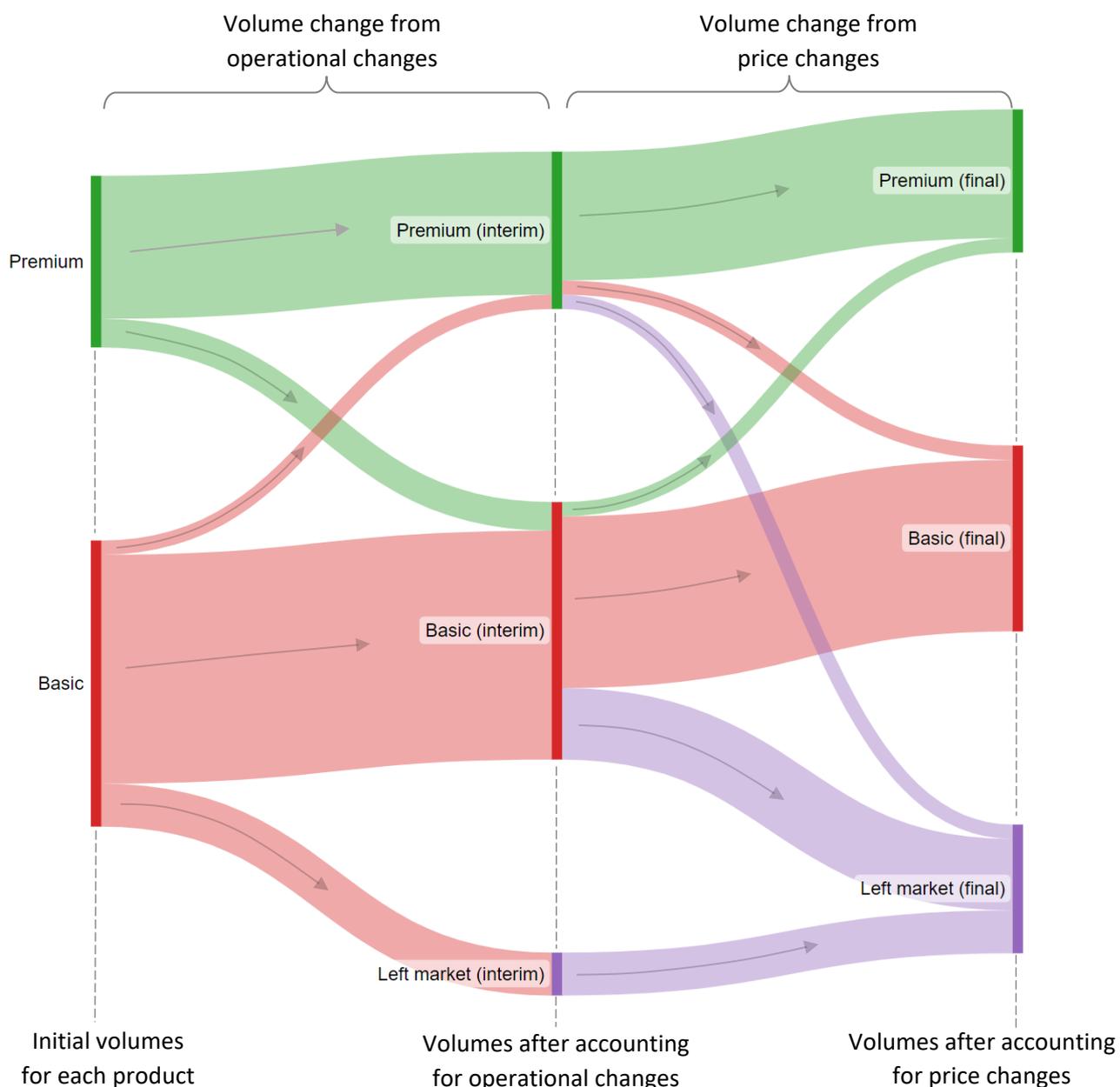
A7.134 The ‘switching factors’ and ‘switching routes’ we have used are based on information we have gathered on customer responses and judgements we have made. The sources of the information we have used include the 2019-20 work as part of our review of postal users’ needs²⁸, international precedents, our knowledge and experience of Royal Mail’s products and its markets, and Royal Mail’s submissions, including those from the recent safeguard cap review.²⁹

A7.135 For example, under the Counterfactual scenario of 3-day-per-week delivery, and implied reduced delivery speeds relative to current requirements, we assume that 3.5% of Second Class stamp volumes would divert to alternative products. Of these, we assume that the large majority would not switch to any alternative Royal Mail product and instead would leave the market, but that a small proportion would switch to the new ‘express letter’ product. In Figure A7.5 below, you might imagine that the ‘basic’ product is the Second Class stamp and that the ‘premium’ product is, initially, a First Class stamp but in the absence of the USO would be a higher priced ‘express letter’ product.

²⁸ https://www.ofcom.org.uk/data/assets/pdf_file/0014/208220/2020-review-of-postal-user-needs-report.pdf

²⁹ In its response to Ofcom’s consultation - Review of Second Class Safeguard Caps 2024, Royal Mail noted that, as of January 2023, the European average 2c Stamp letter price was £1.01, with a median of 94p, compared to 68p in the UK and that Ofcom should allow the combined basket cap to price 2c letters to the EU Median, https://www.ofcom.org.uk/data/assets/pdf_file/0035/269765/Royal-Mail.pdf

Figure A7.5: Illustration of movement of volumes between two hypothetical products



Source: Ofcom Sankey diagram built using SankeyMatic.com.

Each vertical bar represents a volume of one category of mail. Volumes are shown moving between different categories in each of two calculation steps – first, accounting for operational changes, then for price changes.

A7.136 The resulting output volumes are then multiplied by the output AUR (net of VAT) to calculate the expected revenue in each Counterfactual scenario.³⁰ Output volumes are also used as an input to the cost modelling to take account for the volume change impact on costs (see the next section for further explanations).

³⁰ Where product prices are impacted by the VAT status change (from exempt to standard VAT rated), there will be two AURs, one excluding VAT (net AUR) and the other including it (gross AUR). The new net AUR is used in the calculation of output revenue, while the gross AUR is the price paid by the end consumer and is used to calculate the volume impact of the new price.

Scenarios

A7.137 As explained, in producing an estimate of the net cost, we considered a number of Counterfactual scenarios of what Royal Mail would do if it were no longer subject to the USO.

A7.138 For each of these we have created a range of results intended to account for uncertainty around some of our assumptions such as the degree of price changes, the scale of reaction of residential and business consumers to changes to products, and the levels of efficiencies required to bring the cost base down to that of an efficient operator.

A7.139 For example, within the revenue model we have flexed the assumptions relating to price changes and their impact on volumes, including elasticities, to construct ranges for how revenues would change for different types of post products offered by Royal Mail:

- a) We have used our initial price change assumption and then flexed that up and down by the percentages, in addition to the price elasticity estimates, for the product groups in Table A7.4.
- b) For price elasticities, we have flexed the central case assumptions up and down by a factor of 1.2.
- c) And finally, we have flexed the impact on volumes of changing delivery days and speeds by ± 1 percentage point on our original demand change assumption.

Table A7.4: Percentage point increases and decreases to price change assumptions by product group

Product Group	Bulk	Consumer	Express product
Range applied to central assumption	$\pm 2.5\%$	$\pm 10\%$	$\pm 50\%$

Key outputs – central and range cases

A7.140 The revenues generated by each scenario are shown in Table A7.5. The next step is to combine these revenue losses with the cost savings from the delivery model to generate estimated profit figures under each scenario. This step is presented further up in this annex and in the Call for Input.

Table A7.5: Key outputs from the Revenue model

Scenarios	3 day letter delivery	2.5 day letter delivery	2 day letter delivery	1 day letter delivery
Standard speed	2 nd Class D+3	2 nd Class D+3	2 nd Class D+3/D+4	3 rd Class D+5/slower
Central case revenue losses	c.-£400m	c.-£425m	c.-£425m	c.-£525m
Range of revenue losses	-£250m to -£525m	-£275m to -£525m	-£300m to -£550m	-£400m to -£650m

Source: Ofcom analysis. All values rounded to nearest £25m.

A7.141 In the next section of this annex, we present further details on our approach to modelling the changes in costs of delivery for each of the Counterfactual scenarios.

Cost modelling

Overview

A7.142 The Delivery model calculates a bottom-up representation of Royal Mail's delivery network and operations, using the financial year 2021-22 cost data and excluding any one-off and exceptional impacts, as well as the volume outputs from the revenue model. We explain the structure of the model in further detail in the following sections.

A7.143 The model calculates the resources required for running the network for a range of operational and product specifications and volumes and then assigns costs to these resources. This allows us to test the broad effects of different scenarios, such as different levels of volumes or different operational assumptions, on the resources and costs needed for the network.

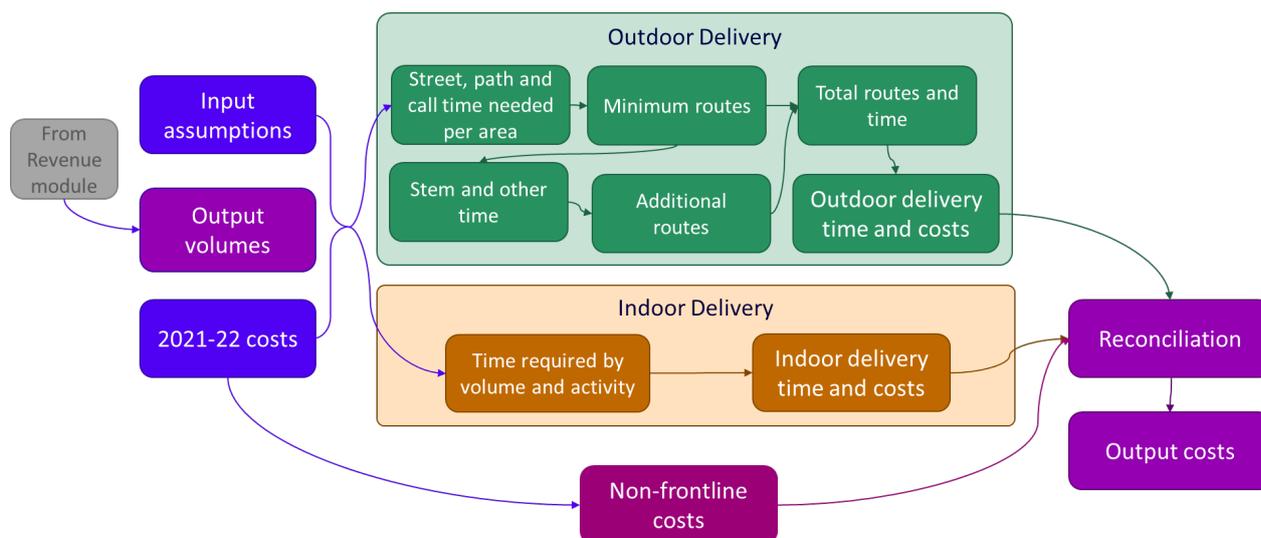
A7.144 The model is built to flex the resources needed for different scenarios but the model does not go so far as to involve changing the network in a structural way (e.g. by reducing or adding delivery offices or mail centres etc). These flexible resources include worked hours. We have not built any mechanism into the model to constrain this flexibility, e.g. by restricting how Royal Mail may alter or reallocate the activities of its staff or by putting a cap on the headcount reduction.

A7.145 To calculate the delivery cost impact of a particular Counterfactual, we:

- a) Take Royal Mail cost data for the 2021-22 financial year, as well as detailed estimates of resource requirements for different activities and the output volumes from our Revenue modelling;
- b) Estimate the total time required for the outdoor delivery operation, accounting for the time required by all delivery routes travelling to and from, and delivering mail at, all visited delivery points;
- c) Estimate the total time required for the indoor delivery operation to sort and prepare all mail for delivery;
- d) Estimate the wage costs of these time estimates using disaggregated average wage data from Royal Mail;
- e) Estimate the non-frontline costs relating to accommodation, vehicles, energy and other such costs;
- f) Either calibrate all estimated costs to Royal Mail actuals (in the base case) in order to account for potential limitations in the bottom-up modelling approach, or apply the results of this calibration (in a Counterfactual scenario) by uplifting output costs by the pro-rata values calculated in the base case calibration;
- g) By comparing total calculated costs in a Counterfactual scenario to Royal Mail's actual costs, we estimate the expected Delivery cost impact of the changes in that Counterfactual.

A7.146 These steps are illustrated in Figure A7.6.

Figure A7.6: Delivery model calculation flow



Source: Ofcom

A7.147 As explained above, we have not updated the input figures to 2021-22 (from 2018-19) for our bottom-up models of other parts of Royal Mail’s network. However, we have made high level cost estimations based on our prior modelling for the 2020 Review of Postal Users’ Needs to account for these pipelines in our net cost estimates; we uplift calculated cost savings in the Delivery pipeline by 15% to account for potential savings in the other parts of the network and operations of the Reported Business noted at paragraph A7.117.

A7.148 Bottom-up models may not capture all relevant cost drivers or constraints on changes to resources, such as contractual hours or working patterns that cannot be amended, and as such may understate costs or overstate the responsiveness of costs to changes in operations. For this reason, calibration is important to ensure that the modelled network aligns with reality – we discuss the calibration we have done later in this annex.

A7.149 The key elements of the Delivery model are set out below.

Input data

A7.150 We have used detailed cost information for the 2021-22 financial year provided by Royal Mail in response to a formal information request³¹ to inform the Delivery model. This comprises cost data disaggregated to individual delivery-office and postcode-sector level, as well as industrial estimates of resource requirements of different activities.

A7.151 As detailed earlier in this annex we have adjusted the 2021-22 base year data from Royal Mail to, where possible, remove the impact of the Covid-19 pandemic.

A7.152 We have used the output volumes from the Revenue model to provide the basis for the quantity of mail we expect to be delivered under each counterfactual scenario.

³¹ Royal Mail, Response to Ofcom’s Post Cost Model: Final Notice requiring the provision of specified information under Section 55 of, and Schedule 8 to, the Postal Services Act 2011, dated 8 June 2023, Tranche 1 and 2.

Input assumptions

A7.153 As explained earlier in this annex, the Delivery model takes a ‘scorched node’ approach to network design – i.e. it maintains the number and locations of Royal Mail’s delivery offices as given. In so doing, it likely underestimates the amount of cost that could be removed in Counterfactuals with significantly different delivery operations or volumes, as the 2021-22 estate of delivery offices may not be optimal for a very different delivery operation than was run in practice.

A7.154 Also as explained earlier in this annex, we have adjusted Royal Mail’s cost base to account for potential efficiency savings, using its forecast 5-year planned efficiency savings as a starting point. We have applied consistent assumptions to both the factual and Counterfactual cases, and so this has the effect of scaling the potential cost savings.³²

Outdoor delivery

A7.155 Outdoor delivery refers to the activities undertaken by postal workers conducting delivery routes, taking mail from a Delivery Office (DO) and delivering it to local Delivery Points (DPs). Outdoor delivery hours are largely based around the calculation of:

- a) the numbers of routes required to deliver all mail items; and
- b) the time required for each of those routes.

A7.156 These are built up on a postcode-sector (PCS)³³ basis in our model, with each PCS mapping to one DO (and each DO serving multiple PCSs). Each PCS is assigned one delivery method³⁴ which is then used in the model to serve all DPs in that PCS.

A7.157 Based on the delivery method chosen, the model then calculates the total time required to deliver all mail items in each PCS using Royal Mail’s planning values and geographic data regarding the distances between PCS and their respective DOs and the total lengths of streets in each PCS. This time is broken up into routes, ensuring that routes do not take longer than the maximum allowable shift duration. Routes are also constrained by the physical volume of mail that can be carried by the vehicle used on that route.

A7.158 We split the time taken to conduct a route into four different categories:

- a) Stem time: the time taken to get from the DO to the first DP, and the time taken to get back from the final DP to the DO;
- b) Street time: the time taken to walk or drive along the streets between DPs;
- c) Path time: the time taken to walk to/from the street from/to a DP; and
- d) Call time: the time taken at a DP to physically deliver mail, to wait for a response for mail that cannot fit through a letterbox, to wait for a signature, or any other time required by the postal worker at the DP.

³² For illustration, when we reduce both the factual and calculated Counterfactual cost bases by X%, this has the effect of reducing the difference between these two costs by X%. That is, the effect of efficiency adjustments does not change the relative level of cost savings from a given Counterfactual; rather, there is a linear relationship between the efficiency adjustment and the absolute level of costs saved.

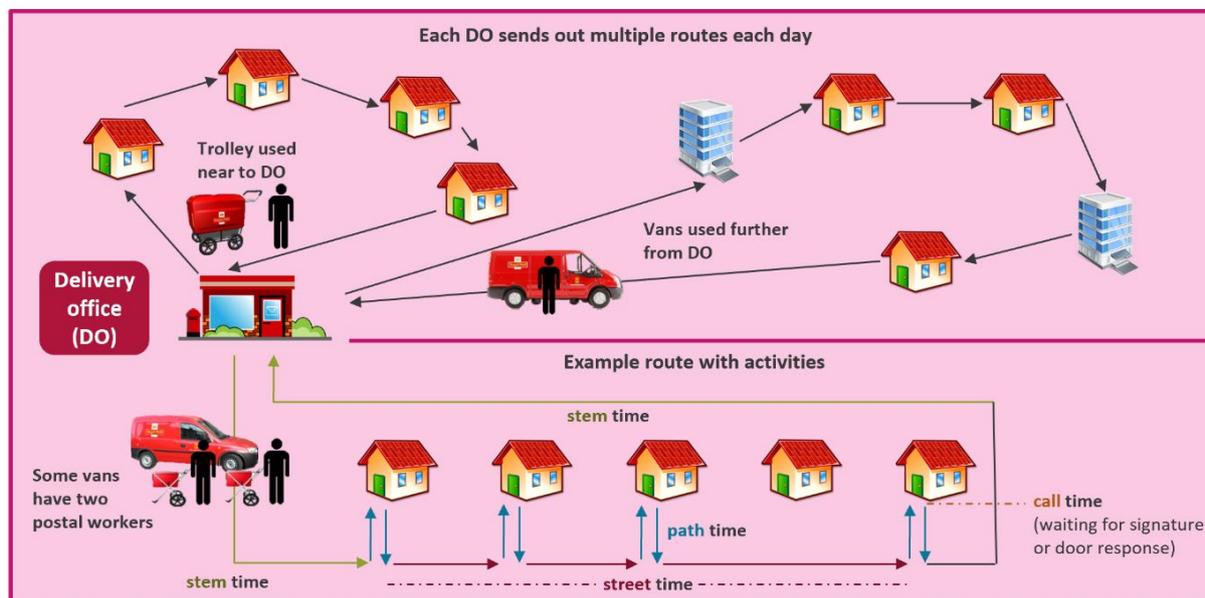
³³ A postcode sector comprises all characters of a postcode up to and including the first character in the second part of the code. For example, the postcode sector that contains ‘SE1 9HA’ would be ‘SE1 9’.

³⁴ The methods used in the Delivery model are either van-based delivery, which are delivered by either one or two postal workers, or on-foot delivery using a trolley. In a PCS where delivery is done on-foot, delivery is supplemented by van routes which deliver larger parcels which are not appropriate to be delivered using a trolley. The combination of on-foot trolley delivery of letters and small parcels, and van delivery of larger parcels, are considered a single ‘delivery method’ from the perspective of the model.

The future of the universal postal service

A7.159 We then convert this time into a labour cost using average wage information, provided by Royal Mail. The structure of outdoor delivery is illustrated in Figure A7.7 below.

Figure A7.7: Overview of outdoor delivery



Source: Ofcom

Indoor delivery

A7.160 Indoor delivery refers to activities required to prepare mail to be sent out on delivery routes. Some examples of indoor delivery activities are unloading mail from trucks that have arrived from the mail centre, sorting mail so that mail for proximate DPs can be included together on the same routes and in the correct order for easy retrieval by a postal worker, and correct handling of mail such as Special Delivery which has additional steps required to ensure it is kept especially safe.

A7.161 We calculate indoor delivery hours using Royal Mail's planning values – detailed assumptions calculated by Royal Mail's industrial engineers who break down high-level activities into their constituent tasks and estimate the time required to undertake each of these tasks. Many of these are variable and expressed in terms of minutes the task will take for a certain number of mail items. Others do not vary with the number of mail items and vary in other ways such as per-route or simply per-day at each DO.

A7.162 We use these planning values to calculate the expected time taken for each activity based on the volumes of mail at each DO. We then convert this time into a labour cost using average wage information, provided by Royal Mail.

Non-frontline

A7.163 Non-frontline costs are costs that do not relate to the 'frontline' labour required to prepare and deliver mail. These costs are separated into accommodation costs, vehicle costs, and other non-frontline costs. Within accommodation costs, we use Royal Mail data for rent and facilities management costs and then calculate energy costs based on the size of each DO. Vehicle costs are calculated based on the total miles driven to serve all routes, with a cost-per-mile assumption from Royal Mail. Aggregate other non-frontline costs (also provided by Royal Mail) are allocated to each DO in proportion with all other calculated costs.

Calibration and reconciliation

- A7.164 Any bottom-up model has a risk of missing key dimensioning relationships and producing a network which, while internally consistent based on the assumptions made, does not adequately match the reality it is designed to model. Calibration ensures that the model produces a reasonably realistic network.
- A7.165 Our model as described above builds a theoretical uncalibrated cost base. To ensure that it generates a realistic network, we have calibrated our base case to Royal Mail's actual costs, hours worked, and routes using data gathered under our formal information gathering powers. For costs, this is done as a mark-up. For hours and routes, we have changed input assumptions to ensure that our outputs are reasonably closely aligned with Royal Mail's actuals.
- A7.166 This process of calibration ensures that we do not underestimate costs unrealistically, but also means that we build in any inefficiencies from Royal Mail's operations into our modelling.³⁵ As explained above, we have accounted for Royal Mail's potential inefficiency through a separate adjustment – this is not something that is accounted for as part of the calibration process.
- A7.167 When running scenarios in our models, we apply the same mark-ups and use the same calibrated assumptions as with our calibrated base case. This gives us a reasonable level of confidence that the hypothetical operations created in our scenarios are realistic representations of how Royal Mail would operate under those circumstances.
- A7.168 In previous versions of the Delivery model, we calibrated on a DO-by-DO basis. In the current version of the Delivery model we calibrate using regional area totals, to avoid over-specification of costs at individual DOs. This means that, for example, we calculate the total modelled costs at DOs in the North-East of England, compare them with total actual costs in Royal Mail's data for DOs in this area, and calculate the difference as an uplift. This uplift is then applied uniformly to all DOs in this area.

Scenarios and producing ranges

- A7.169 We have used our Delivery model to model the potential cost savings achievable in each of our Counterfactuals. As explained earlier in this annex, we have accounted for uncertainty over the level of inefficiently-incurred costs in Royal Mail's 2021-22 base year costs by using a range of estimates of potential efficiency gains. This is the main element of uncertainty for the delivery cost modelling that we have included in our scenarios to create ranges around the potential cost savings from our Counterfactuals.
- A7.170 We have included fewer changing elements in our scenarios in our cost modelling than we have included in our revenue modelling. This is not intended to suggest that, other than efficiency, our cost estimates are highly-accurate – as with any major modelling exercise, we recognise that our model is a simplification of reality and therefore includes a variety of uncertainties.
- A7.171 However, due to the nature of what is being modelled in each of our two models, we believe the revenue modelling is inherently more uncertain as it covers more unpredictable

³⁵ All models involve abstraction and simplification of reality. Generally bottom-up models tend, in this simplification, to underestimate rather than overestimate costs which is why we focus on this here. Were the model to overestimate costs, the calibration would also work to correct for this effect similarly to how it corrects for underestimation.

The future of the universal postal service

elements, such as consumer responses to changes in product quality and pricing. Conversely our cost modelling relates to issues where the response of outputs to changes in inputs is relatively better understood. We have therefore limited the degree of uncertainty around our central case estimates of cost savings possible in each Counterfactual and focused more on the uncertainty regarding revenues.

Other pipelines

A7.172 As explained above, in the present case we have only updated our Delivery model for 2021-22 data, as we expect this to cover the majority of potential cost savings from changes in the Counterfactuals we are testing. However, we recognise that this will understate the cost savings available as there will likely be some degree of cost savings from other parts of the postal pipeline. For example, changes in delivery speed may allow for changes to the processing of mail in the core of the network, and to the logistics network to transit mail quickly to hit quality-of-service targets.

A7.173 In order to estimate the cost savings available in these other elements of the pipeline, we have used the results from our modelling for the 2020 Review of User Needs. In that review, we estimated that non-delivery cost savings amounted to around 15% of delivery cost savings.³⁶

A7.174 Therefore, we have uplifted our calculated delivery cost savings by 15% as an estimate of further potential cost savings. This is a modelling simplification and there will in reality be a non-linear relationship between non-delivery and delivery cost savings, with different features of different Counterfactuals unlocking different mixes of cost savings available in different elements of the pipeline. However, given the purposes of the present exercise, we consider that this simple estimate provides a reasonable first-order estimate of the potential cost savings available to inform the broad scale of potential net costs of our Counterfactuals.

Key cost saving outputs

A7.175 Key outputs from our Delivery cost model are set out in Table A7.6 below.

Table A7.6: Key outputs from the Delivery cost model, including uplift for other pipeline elements

Scenarios	3 day letter delivery	2.5 day letter delivery	2 day letter delivery	1 day letter delivery
Standard speed	2 nd Class D+3	2 nd Class D+3	2 nd Class D+3/D+4	3 rd Class D+5/slower
Central case cost savings	c.£725m	c.£825m	c.£925m	c.£1,200m
Range of cost savings	£675m to £750m	£750m to £850m	£875m to £975m	£1,125m to £1,250m

Source: Ofcom analysis. All values rounded to nearest £25m.

A7.176 As explained above, the savings include an adjustment for the VAT-related cost savings from Royal Mail being able to claim back the VAT on purchases, in the absence of the VAT

³⁶ See Table A5.2 of the 2020 Review of Postal Users' Needs which shows the proportion of costs saved in a variety of scenarios by the part of the pipeline from which they are saved.

The future of the universal postal service

exemption. We estimate this to be c.£80m for USO services and c.£40m for Access. We explain the reasoning for this cost saving in the assumptions section above, A7.86-A7.89.

A7.177 The range of cost savings in this table is then combined with the range of revenue losses identified at Table A7.5 to create a range of net cost estimates for the different Counterfactual scenarios we have modelled, as shown at Table A7.1. We then identify the appropriate headline range estimate for the net cost of the USO by combining the range for the 2 day letter delivery Counterfactual with the 1 day letter delivery Counterfactual, but limiting the upper bound of the range to the mid-point of the one day scenario.

Alternative USO Options

A7.178 As explained in chapter 9 of the main document, we have considered the implications of potentially changing the USO. Part of this has involved an estimate of the net cost savings (net of lost revenues) that could be achieved if the specification of the USO were changed.

A7.179 These options and their related net cost saving estimates are distinct from the Counterfactual scenarios and the calculations we have carried out to estimate the net cost of the USO. However, we have used the same cost and revenue models and many of the key assumptions remain the same.

A7.180 Table A7.7 below sets out the results of our net cost calculation for each of the potential options for USO reform and cost saving estimates (£ millions).

Table A7.7: Cost saving estimates for potential options for USO reform (£ millions)

Options	Reduction in letter delivery to 5 days per week	Reduction in letter delivery to 3 days per week	Reduction in speed of delivery for the majority of letters sent to D+3 or slower
Range of cost savings	£150m to £200m	£550m to £700m	£300m to £700m
Range of revenue losses	-£0m to -£50m	-£50m to -£150m	-£50m to -£150m
Range of net cost savings	£100m to £200m	£400m to £650m	£150m to £650m

A7.181 To develop these options, as with the Counterfactual scenarios, we have considered which key features of the USO might be changed or what features may need to be added. The features include frequency of delivery, speed of delivery, and product offerings. We then model only the impact of those specific changes.

A7.182 In modelling these options, we do not assume any further commercial freedom which may result from the absence of the USO in the Counterfactual scenarios. We also assume that the VAT exemption would continue because there would be a USO in place. We have therefore modelled the options assuming that USO and Access products would continue to be VAT exempt.

The future of the universal postal service

A7.183 For each of the alternative USO specifications identified above, we have assumed the following:

- a) Reduction in letter delivery to 5 days per week
 - i) Deliver letters 5 days a week (Mon to Fri);
 - ii) Keep the First Class stamp letter product; and
 - iii) Retain current Second Class letter pricing.
- b) Reduction in Letter delivery to 3 days per week
 - i) Deliver letters 3 days a week based on alternate day model (Mon-Sat);
 - ii) Replace First Class stamped letter with an express next day letter service; and
 - iii) Allow pricing freedom on Second Class products.³⁷
- c) Reduction in speed of delivery for the majority of letters sent to D+3 or slower
 - i) Hold letters back where possible, taking advantage of specified delivery speed, to increase the number of items being delivered per address, allowing fewer deliveries per week to each address. In the extreme, deliver 3-days a week using an alternate day model (Mon-Sat);
 - ii) Replace First Class stamped letter with an express next day letter service; and
 - iii) Allow pricing freedom on Second Class products.

A7.184 In all the scenarios for the alternative USOs we have kept the other features such as free services, collection days, price uniformity, etc. as under the current USO.

A7.185 As we discuss in chapter 9 of the main document and section 7 of our Statement on the Review of Second Class Safeguard Caps 2024, we cannot assume changes to the specification of the USO are compatible with the existing affordability based safeguard caps on Second Class mail, which are based on the existing approach to delivery of the USO. In the event of any changes, we will have to review what, if any, affordability interventions are required. Interventions are likely to have a cost to Royal Mail in terms of revenues foregone relative to the absence of affordability interventions, but we have not modelled those here.³⁸

A7.186 In the same way we have done for the Counterfactual scenarios we have presented our net cost estimates as ranges of results. These ranges account for uncertainties around the prices Royal Mail may set for its products, and the consumer response to USO changes.

³⁷ As discussed in Section 7 of our [Statement on the Review of Second Class Safeguard Caps 2024](#), we cannot assume that the existing Second Class affordability cap will be compatible with a revised approach to USO delivery. Accordingly, we have excluded the cap from this scenario but note there may be a requirement for an alternative affordability intervention.

³⁸ Ofcom, 2024. [Statement on the Review of Second Class Safeguard Caps 2024](#).