

'Where's my post? A cross-country analysis of delivery frequency under USO'

An exploration of the impacts of changes to frequency of delivery days

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Introduction

The postal market is evolving, and an increasingly important factor to the functionality and longevity of the USO is letter delivery frequency.

Delivery frequency varies across countries depending on various factors.

This paper first explores four main developments in the postal letters market: digitalisation, user needs, costs and environmental sustainability.

Then, it examines changes to the frequency of letter delivery days in various USPs, and, in particular how this mechanism may be used to overcome the current challenges in the evolving postal market.

Outline:

- *Section 1: Main developments in the postal market*
- *Section 2: Case Studies*
- *Section 3: Impacts of changing frequency of delivery days*
- *Conclusion*

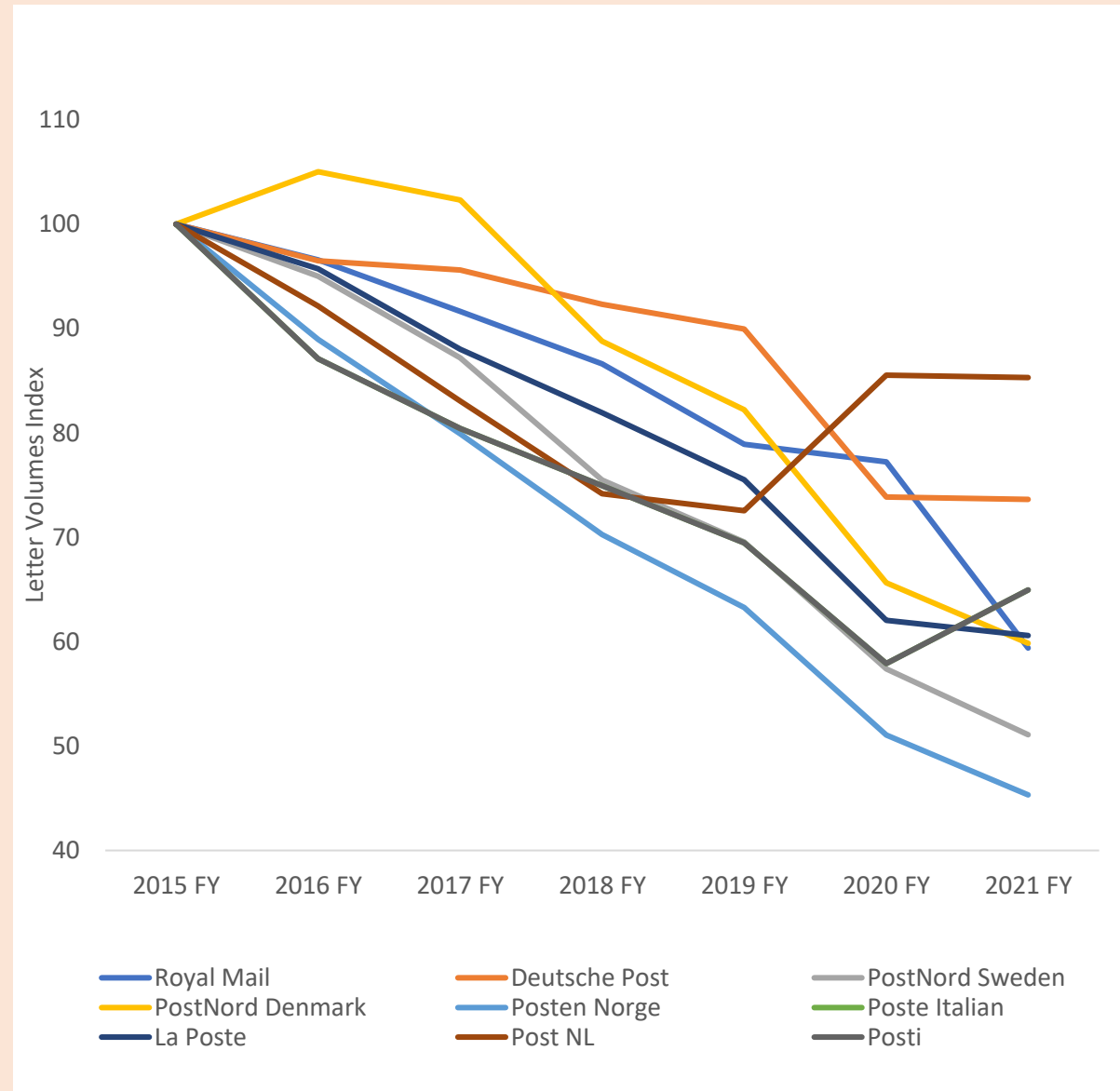
Section 1: Main developments in the postal market

Digitalisation

How has digitalisation changed the postal market?

- *Global declining letter volume*
- *Increase of e-alternatives*
- *Increasing parcel volumes*

Key Question: Can delivery day frequency help USPs to overcome and adapt to the impacts caused by digitalisation?



User Needs

How are user needs changing in the postal market?

- *Reduction in the reliance on letters as a medium to communicate (linked to digitalisation)*

Considerations when looking at User Needs and delivery day frequency:

- *On one hand, User Needs help to inform the government and policymakers' decisions when determining frequency of delivery days*
- *On the other hand, 'the number of delivery days could influence a user's postal needs and market demand'.*
 - *Could instigate a tipping point**
- *They vary significantly depending on country-specific factors (user type, digitalisation, availability of alternatives)*

**the point at which consumers substitute letters for an alternative*

Key Question: What role does the frequency of delivery days play on User Needs?

Cases in point:

- Ofcom found that reducing letter delivery frequency to 5-days a week 'would have a very small impact on residential (-1 %) and SME users (0 %), suggesting it would continue to meet the needs of virtually all users'.
- 91.7 % of the entire Danish population and 700,000 businesses and other enterprises actively using Digital Post. A User Satisfaction survey from 2021 shows that 83 % of asked citizens were 'satisfied' or 'very satisfied' with Digital Post.

Costs

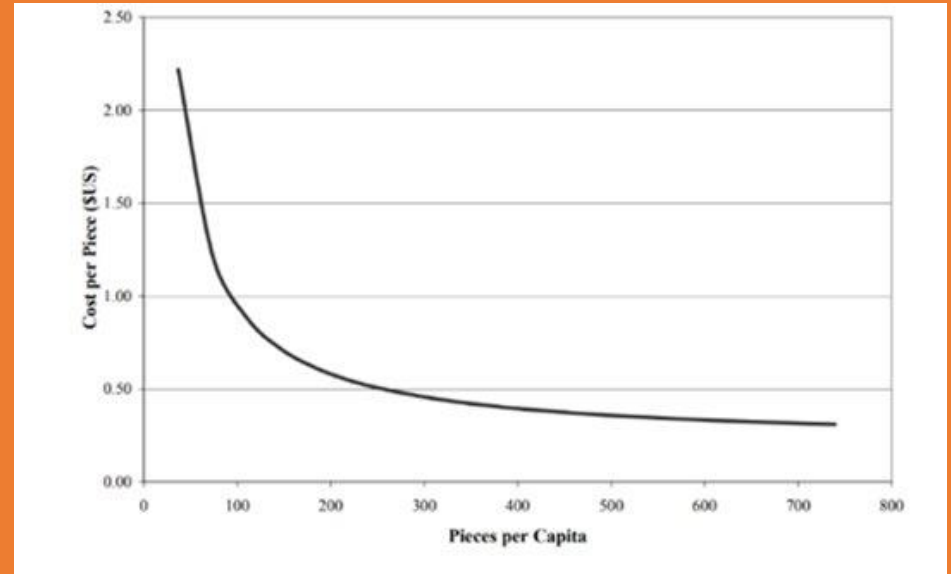
How are costs changing in the postal market?

- *Average unit costs per letter increasing as letter volumes decline*
- *Delivery costs constitute a greater proportion of the total costs*
- *Pre-existing costs remain (geographical and locational)*
- *Changing cost structure*

Key Question: Can delivery day frequency help USPs to overcome and adapt to the increased costs?

Case in point:

- Australia Post reported an increase in losses of 24.3 % to AUD 255.7 million in 2022 from the fall in letter volumes



Cohen, Jeffrey P., Panos Kouvelis, and Mark L. Spearman. "The Role Of Scale Economies In The Cost Behavior Of Posts." *Journal of Productivity Analysis* 21, no. 2 (2004): 125-146.

Environmental Sustainability

How is Environmental Sustainability changing in the postal market?

- *Changing attitudes towards Environmental Sustainability*
- *Main drivers of carbon emissions (speed of delivery, mode of delivery transportation, and delivery day frequency).*
- *Delivery plays an increasingly important role on environmental costs and sustainability*

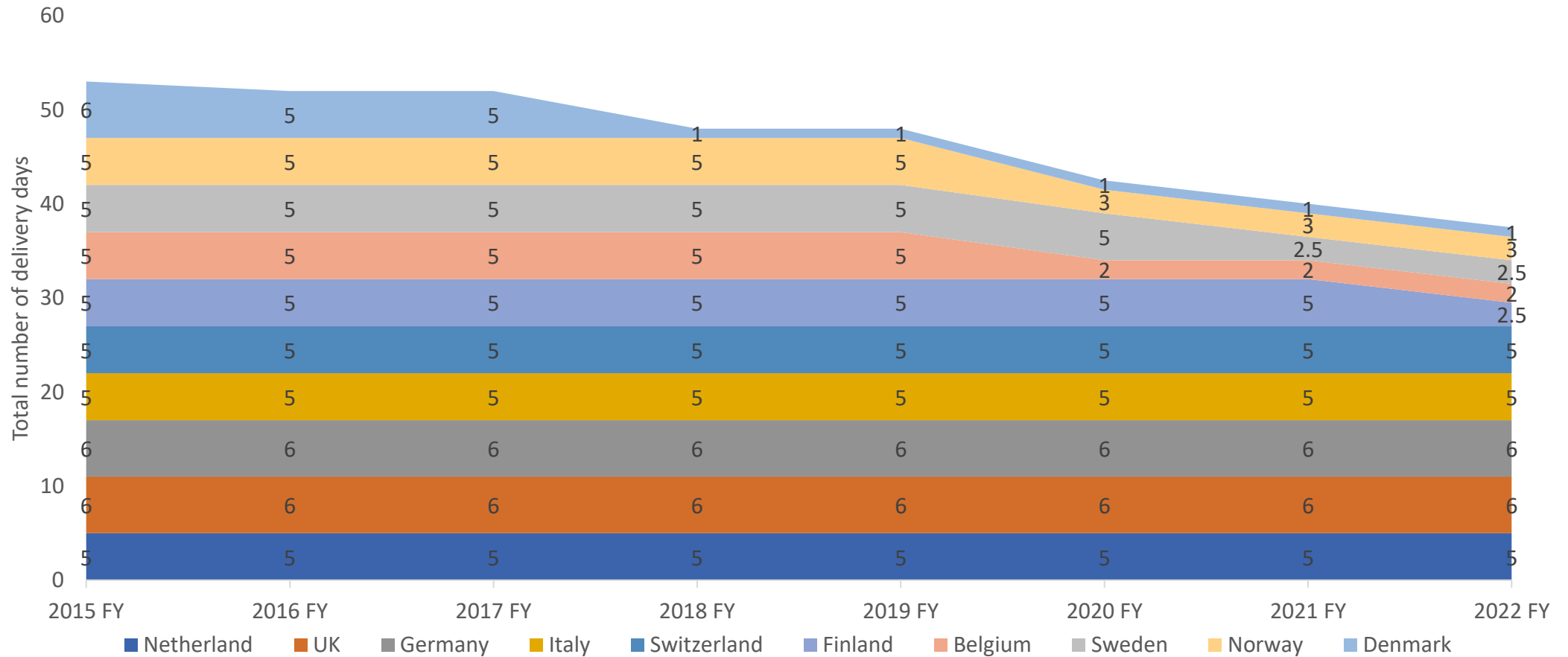
Key Question: What part does the frequency of delivery days play on Environmental Sustainability?

Cases in point:

- Royal Mail reported that 70% of UK consumers would prefer a carbon-free delivery over a traditional delivery.
- La Poste reported that 80% of La Poste Groupe's greenhouse gas emissions are due to logistic activities.
- PostNord stated that road transportation accounts for around 60% of their total climate footprint.

Section 2: Case Studies

Total delivery day frequency across USPs from 2015 -2022 (letters only)



Brief Overview of Changes Across Various European USPs

USO	Changes to delivery days	Reasoning
Belgium-Bpost	From 2022, alternating delivery days instead of fixed for non-priority items.	<ul style="list-style-type: none"> ➤ Decline in letter volumes ➤ Emergence of digital alternatives (Up to 12% in FY2020 according to Bpost Annual Reports)
Norway-Posten Norge	From 2020, alternating delivery model.	<ul style="list-style-type: none"> ➤ Low mail volumes per capita ➤ Geographical conditions ➤ Cost savings
Sweden-PostNord	From 2021/22, alternate day delivery model.	<ul style="list-style-type: none"> ➤ Lower mail volumes ➤ Cost cutting
Denmark-PostNord	From 2018, delivery one day per week for standard letters.	<ul style="list-style-type: none"> ➤ Digitalisation and e-substitution ➤ Increased costs

What about outside of Europe?

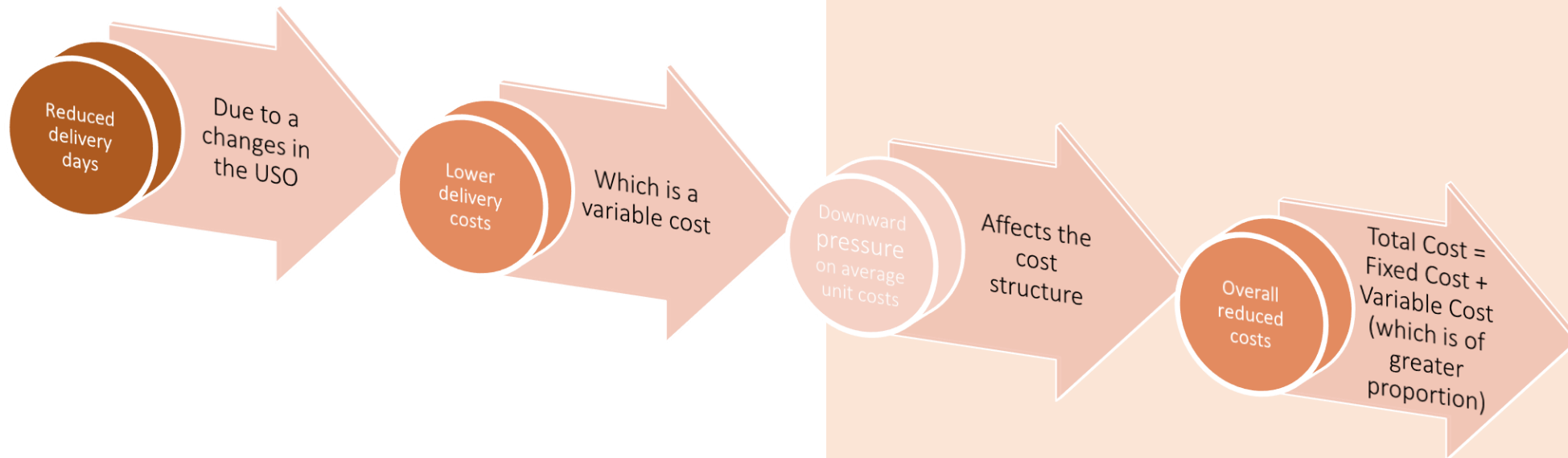
USO	Changes to delivery days	Reasoning
Australia- Australia Post	During Covid-19 there were temporary changes introduced from 16 May 2020 to 30 June 2021, including a change to every second business day letter delivery, and increasing maximum intrastate letter delivery timeframe to 5 business days.	<ul style="list-style-type: none"> ➤ Letter volume decline (less than 3 % of letter volumes are sent by consumers) ➤ E-substitution away from letters (Australian households receive one-third of the letters they once did) ➤ Operational constraints and limitations
New Zealand- NZ Post	From 2015, alternate day delivery in non-rural areas.	<ul style="list-style-type: none"> ➤ Loss-making letter services
USA- USPS	No changes (letters 6-days week (Mon-Sat)). However, implementation of '10 year plan', including increasing service standard by one day and price rises.	<ul style="list-style-type: none"> ➤ Letter volume decline ➤ E-substitution away from letters ➤ Outdated and misaligned mail network (due to increasing parcel volumes) . ➤ Over-reliance on air transport (costly and less reliable) ➤ Increased network efficiencies

Section 3: Impacts of changing frequency of delivery days

Costs

- Letter volume decline → lower economies of scale → higher average unit costs

The frequency of delivery days directly affects the variable costs under the USO as they contribute towards collection, delivery and other costs. Likewise, delivery costs are a large proportion of total costs. Thus, reducing number of letter delivery days should have a large impact on reducing overall costs.



Case in point:

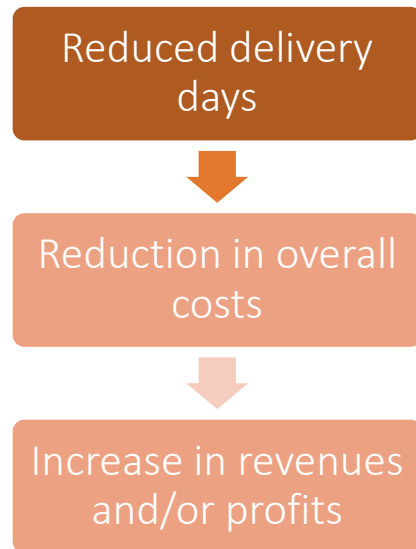
New Zealand reduced its costs – practical case of ‘reduction in delivery days leading to decline in costs’ for New Zealand when transport and wage costs reduced significantly following the introduction of alternate day delivery in 2013.

Volumes, revenues and profits

We present two hypotheses on the potential impacts of reduced delivery days -

Hypothesis 1:

Supply-side perspective: Revenues and/or profits increase as costs fall due to fewer delivery days



Case in point:

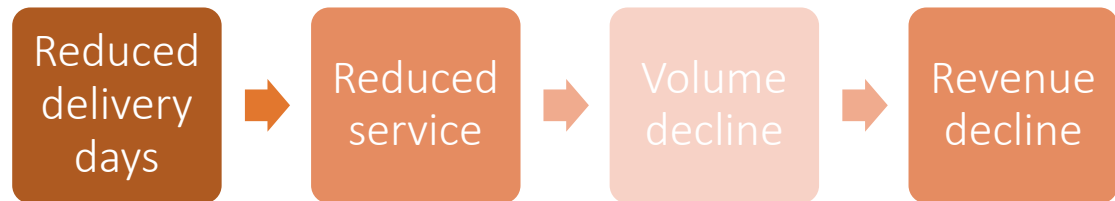
Potential positive net impact on profits in the UK - an Ofcom report (2020) suggested 'that a reduction of one letter delivery day per week could lead to a positive net impact on profits of £125-225m per year, both in 2018/19 terms and in 2022/23 terms.'



Volumes, revenues and profits

Hypothesis 2:

Demand-side perspective: Volumes may decrease due to reduced service of delivery days, causing revenues to decline



Case in point:

Potential loss of revenues in the UK - According to Ofcom's review of postal users' needs (2020), it was found that a 5-day delivery model in the UK for letters was likely to result in a relatively modest adverse impact on mail volumes and revenues.

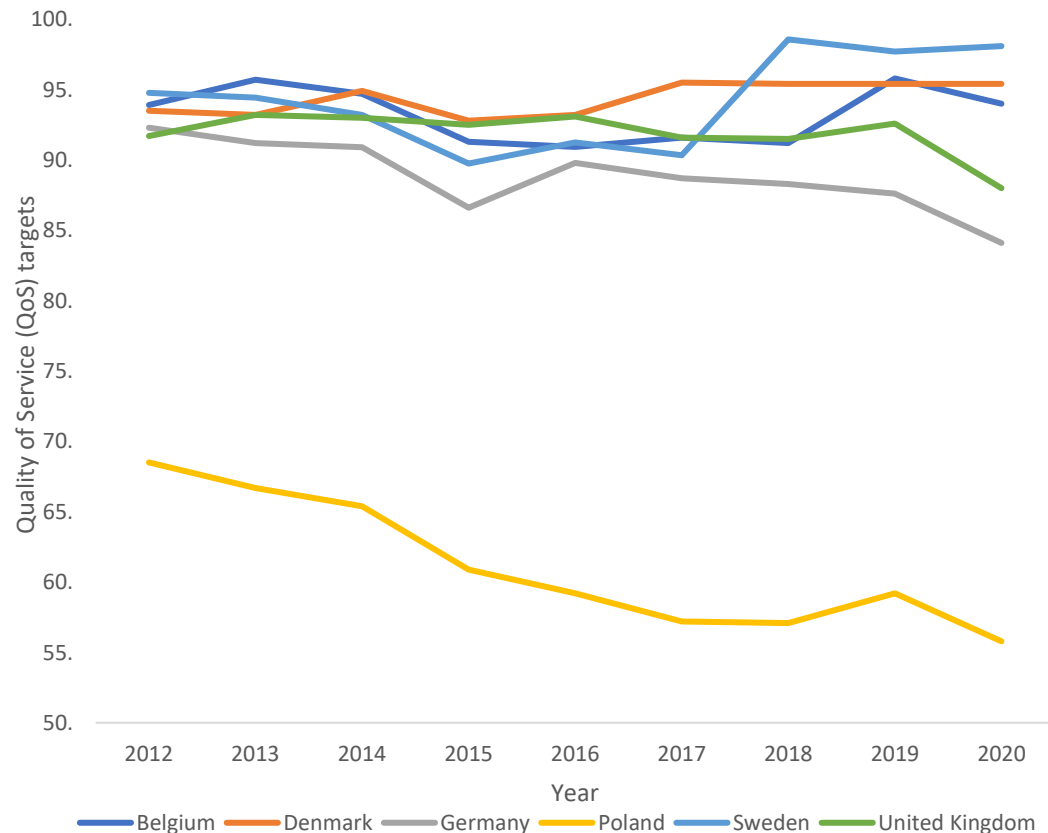
Whereas, a 3-day delivery model could have a much larger adverse impact on revenues, estimating a revenue reduction of around £400-450m in 2018/19 terms for Royal Mail.

Therefore, a large change to the nature of letter deliveries could carry a risk of substantial reductions in letter volumes and revenues.

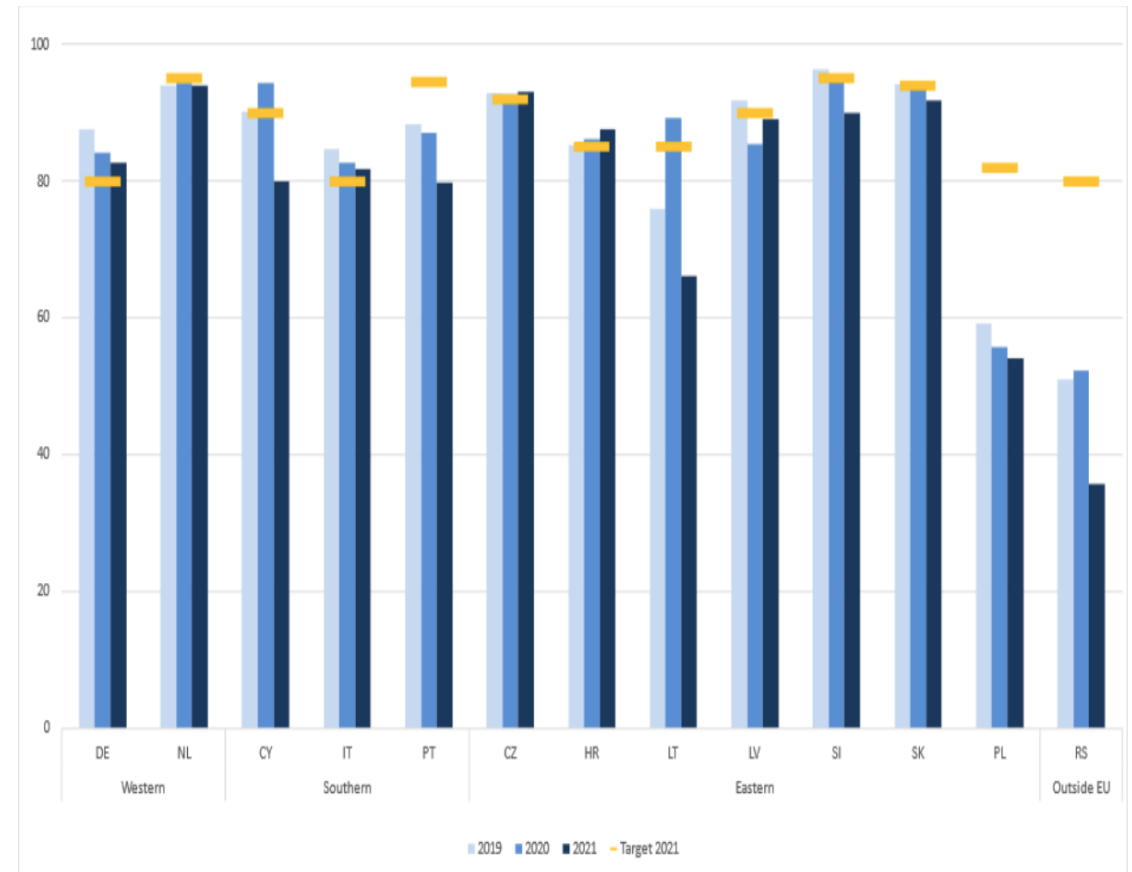
Quality of Service

Understanding QoS is a complex process where targets are decided based on various country and USP specific factors, including environmental, geographical and economic considerations - such as domestic needs, performance expectations by the law and extent of public subsidy, etc.

Percentage of letters delivered on-time across USPs (USP under direct or indirect designation)



QoS Targets (2021) and results (2019-2021) for different countries across Europe

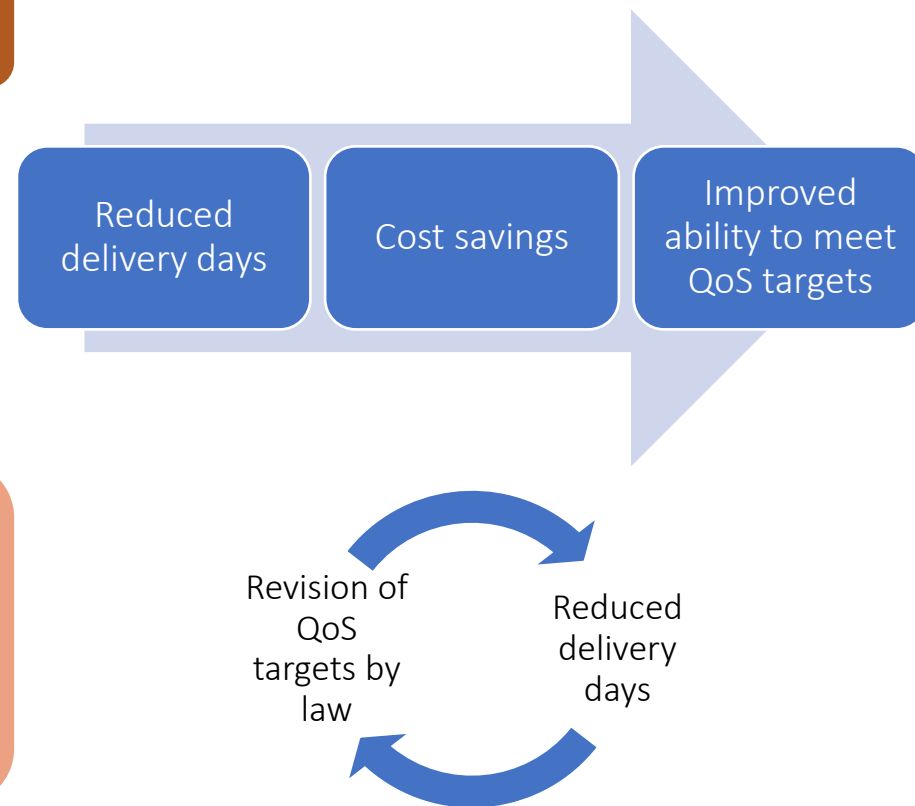


Quality of Service

Two mechanisms through which a change in QoS could occur in relation to a change in the frequency of delivery days:

1. To the extent lower QoS is caused by commercial and financial pressures on USPs, a reduction in delivery days, if this were to lead to higher returns arising from cost savings, could increase the resources with which USPs are able to comply with QoS standards more fully.

2. QoS targets are likely to change with delivery frequencies. For instance, a change to a 3-day delivery model would mean Royal Mail would no longer be required to provide a next day delivery First-Class letters service under the USO. This would remove what is arguably the most difficult QoS target to meet.



Environmental Sustainability

As discussed earlier, the speed at which deliveries are made, the mode of transportation used for deliveries, and the frequency of delivery days are the primary factors that contribute to carbon emissions in the postal network.

Generally, the introduction and increased use of environmental initiatives and practices , including a reduction in the frequency of delivery days, will influence the carbon emissions generated by USPs, leading the path towards net zero.

Cases in point:

Posten Norge (Norway) - From 2019 to 2021, Posten Norge's CO2 emissions declined by 26.6% per unit of currency. Over this period, Posten Norge reduced their number of letter delivery days a week from 5-days to an alternate day delivery model. This suggests fewer delivery days has a positive impact on carbon emissions*.

Posti (Finland) - Alternate-day delivery supports Posti's climate goals – 'alternate-day delivery allows us to optimize delivery routes and thereby reduce our mileage, fuel costs and CO2 emissions'.

*However, carbon emissions may also, or alternatively, have reduced due to a change in vehicle use - during this time the group's share of vehicles running on renewable energy increased to 37 per cent, up from 26 per cent in 2020 .

Conclusion

Overall, the frequency of letter delivery days is a perplexing question for governments, the USPs and regulators in the evolving postal world. USPs are facing complex issues which are likely to be present in the future - e-substitution, higher unit costs and managing capabilities by introducing innovation and technology.

Our paper concludes:

- *Reducing delivery days for letters is an efficient method of cost-cutting with economic justification.*
- *There is a strong case to be made for reducing the frequency of delivery days in order to improve environmental sustainability.*
- *However, implications with regards to volumes, revenues and QoS are more unclear, and country specific.*
- *Future work would hope to develop on this study with both quantitative and qualitative research.*

Thank you for listening!