Additional Analysis for Parcels Review C2X Research 2021

Produced and written by: BVA BDRC

Fieldwork: July/ August 2021

Introduction to the analysis

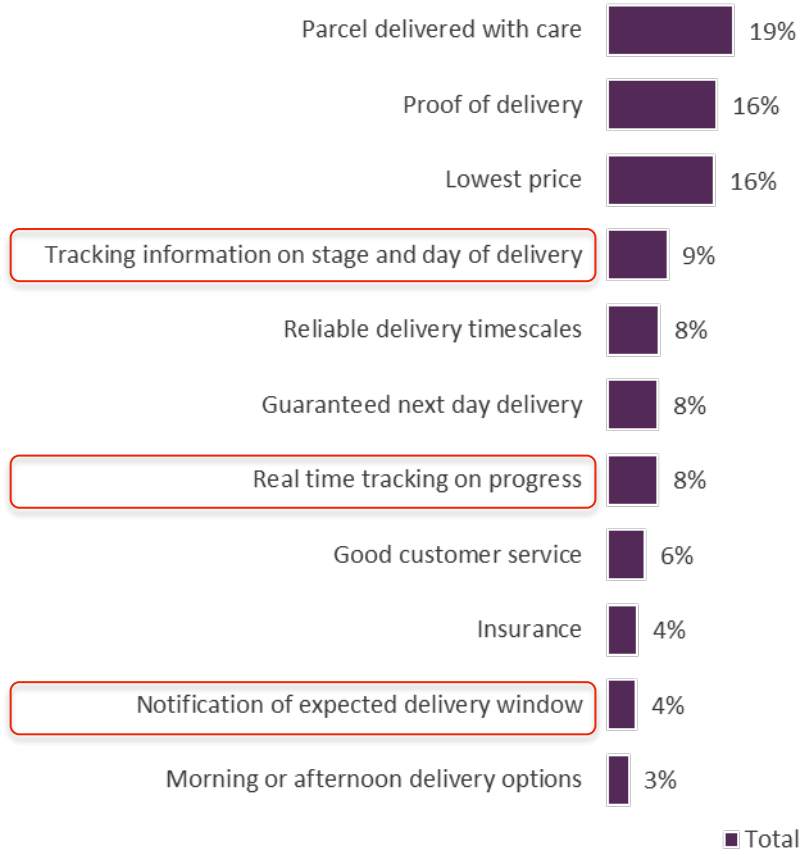
In July/ August 2021 we interviewed 3,379 C2X senders in order to understand more about their attitudes and experiences in regard to sending parcels and tracking.

One of the outputs from the research was a MaxDiff analysis which provided a measure of the relative importance of different attributes related to sending parcels.

The graph on the right shows the results of the MaxDiff analysis. Attributes related to tracking have been highlighted with a box. Ofcom commissioned BVA BDRC to undertake exploratory analysis to understand, as much as possible from the data we collected, the extent to which the tracking attributes could be combined.

Generally, MaxDiffs are not additive - because there is typically overlap between attributes. Indeed, in this case, there is overlap between the tracking attributes, in terms of functionality and also because the attributes can be perceived to do similar things. For example: 'real time tracking on progress' will provide information related to 'the stage and day of delivery'. In addition, the tracking attributes will not be the only attributes that overlap (for example, we would expect there to be overlap between guaranteed next day delivery and reliable delivery timescales).

Ultimately, we do not know how respondents would have replied to a single tracking offer that combined all three of the tracking elements. However, we have produced some estimates based on assumptions, but these are at best indicative.



Summary of assumptions

- In terms of functionality, the three different attributes related to tracking in the Max Diff exercise have overlaps – for example, real time tracking will indicate the stage and day of delivery. Using the evidence we have collected in the MaxDiff exercise, we have attempted to predict how respondents would have reacted to a combined tracking element.

- There are several assumptions we have had to make in terms of the value that consumers would place on a single combined tracking product that **explicitly** covered all three tracking attributes, when in reality this was not an option that was provided.

- Specifically, these assumptions were;

    - Respondents value an attribute that explicitly covers all the different elements asked about (**combined** tracking) at least as much as they value any of the **individual elements** of tracking asked about. (Note this assumption could inflate the calculated value for combined tracking, if respondents found any of the features negative or off-putting).

    - Respondents value **combined** tracking no more than the sum of the **individual elements** of tracking. (Note this assumption could deflate the calculated value for combined tracking, and the value may have been higher if respondents had been able to assess a combined tracking offer directly versus the other individual elements).

    - Where the **sum of the tracking elements** (but no **individual** tracking element) scores higher than the competing attribute, we cannot conclude whether combined tracking or the other (non-tracking) element would be preferred, and therefore leave the choice out of the calculation. (Note this assumption could either inflate or deflate the value of tracking).

- Using these assumptions, we have produced an estimate. However, these are at best indicative as we cannot know how respondents would have replied to a single tracking offer that combined all three of the tracking elements without directly asking them.

Source: Ofcom Parcels Review C2X Research 2021 – online survey, fieldwork carried out by BVA BDRC, July 2021/ August 2021

Summary of findings

- Although we have tried to predict how respondents would react to a combined tracking element, the value is highly assumption driven and cannot provide the same level of confidence as asking directly.
- Nonetheless, combining all three elements into a single tracking offer indicates a higher preference ranking (third) than the ranking achieved by the most popular tracking element (*tracking information on stage and day of delivery*, ranked fourth).*
- Based on our assumptions, we estimate the value of a combined tracking offer at 14.5%.
- These elements maintain their positions in the MaxDiff ranking:
  - *Parcel delivered with care* remains as most important.
  - *Proof of delivery* is next most important.
- *Lowest price* is the attribute that loses out most.

*This corresponds to the analysis we undertook with there being overlap between the three individual tracking elements while all contribute some unique appeal (see Annex). As they overlap, their individual preference shares are not additive (i.e. cannot simply be summed to derive the value for a combined tracking offer).

Source: Ofcom Parcels Review C2X Research 2021 – online survey, fieldwork carried out by BVA BDRC, July 2021/ August 2021

Detailed explanation of analysis

Combining tracking

We were commissioned to investigate how a **single combined** tracking option (encompassing all three of the elements originally asked about individually) would have performed if asked about in the MaxDiff analysis.

In order to do this we used the existing MaxDiff data to try to predict how each respondent would have reacted to combined tracking in relation to the non-tracking MaxDiff attributes.

By using their data and applying reasonable assumptions we aim to predict their reactions, but it is not possible to know with certainty how respondents would have reacted to combined tracking. Therefore the following slides present only an *estimate* of the preference of combined tracking.

It should be noted that combining the different features of tracking into a single option and then testing this against single-feature options increases the likelihood that the new tracking option will score well. There are also **non**-tracking features that are related to each other and if these were combined in a similar way into a single combined option, then that new combined option could score better than the combined tracking option. However these various potential **non**-tracking combined options have not been tested.

Combined option has all of:

- *Tracking information on stage and day of delivery*
- *Real time tracking on progress*
- *Notification of expected delivery window*

Source: Ofcom Parcels Review C2X Research 2021 – online survey, fieldwork carried out by BVA BDRC, July 2021/ August 2021

Combining tracking

By looking at the respondents' choices we infer how they would respond to a combined tracking service including all three of the individual features.

Where an individual tracking element 'wins' a contest – we are able to make an assumption about their response to a combined tracking product.
If a respondent preferred any of the three tracking options to a non-tracking item, we can be confident they would prefer a combined tracking option to that item. The assumption is that by adding additional features it will be at least as good as the single-feature option. We did this by looking at the actual choices the respondent made not using the computed utilities.

Where tracking 'loses' a contest – we are less clear about how the respondent would respond to a combined tracking product.

Where no **individual** tracking option is preferred against a non-tracking item this could be because tracking of any kind has less value than that item. However, what we don't know is that if there were a **combined** tracking option available to select from (which there wasn't) whether the respondent would have expressed a preference for that.

The utilities cannot be summed to give the total appeal of tracking (due to potential for overlap between attributes). However, using the 'winning' and 'losing a contest' principles, we use it to give an **estimated** level of appeal.

- If the sum of the three tracking elements is **lower** than the appeal of the competing element, we assume they would choose the competing element instead (whilst we don't know the score, we do know what would 'win' a contest).
- If the sum of the three tracking elements is **higher** than the appeal of the competing element (but no individual tracking element was higher) we we cannot assume either way how the respondent would choose* and leave the choice out of the calculation to reflect this uncertainty. This was the case for 22% of comparisons.

*We cannot assume that respondents would have preferred a combined tracking option that included all these elements when they didn't previously prefer an individual tracking element. There may have been some choices where this was the case, but it is possible that no kind of tracking is sufficiently valued. As we are not able to confidently predict we leave these scenarios out of the calculation.

Source: Ofcom Parcels Review C2X Research 2021 – online survey, fieldwork carried out by BVA BDRC, July 2021/ August 2021

Combining tracking – Illustrative example

As an example let us consider hypothetical respondents and examine the contest between lowest price and 'combined tracking'.

Tracking won for Respondent A as one of the 'tracking' elements (*real time tracking on progress)* has a higher utility than *lowest price.* (Although we used the actual choice the respondent made rather than the utility where they prefer *Real time tracking on progress* over *Lowest price* it is likely it will have a higher utility).

	Respondent A	Respondent B	Respondent C
Lowest price	20	50	20
Tracking information on stage and day of delivery	10	5	10
Real time tracking on progress	25	5	10
Notification of expected delivery window	10	5	10
Sum of tracking	**45**	**15**	**30**

Respondents B and C preferred *lowest price* to all three 'tracking' elements and from the analysis, with each element separate, produced the above utilities.

In this case Respondent B has a higher utility for *lowest price* than the sum of the 'tracking' elements. We therefore classify *lowest price* as winning and 'combined tracking' as losing the contest.

Conversely Respondent C has a higher sum of 'tracking' elements than the utility for *lowest price* we therefore cannot predict the winner and leave this contest inconclusive. Respondent C gets utility from 'combined tracking' in the range 10-30, so it could be higher or lower than the 20 attributed to lowest price.

Source: Ofcom Parcels Review C2X Research 2021 – online survey, fieldwork carried out by BVA BDRC, July 2021/ August 2021

Combining tracking

Using this approach, we can calculate what our assumptions determine to be the most likely way each respondent would react to a subset of the potential pairs of attributes. Based on the original non-tracking attributes and one single combined tracking attribute, we see this proportion of wins:

	Proportion preferring combined tracking
Lowest price	59%
Reliable delivery timescales	57%
Parcel delivered with care	48%
Good customer service	65%
Guaranteed next day delivery	71%
Insurance	75%
Morning or afternoon delivery options	82%
Proof of delivery	47%

Using this data, we have rerun the MaxDiff analysis with tracking combined to give the preference shares based on the assumptions we have made (noting that this cannot provide the same level of confidence as asking directly):

	Share of preference
Parcel delivered with care	18.2%
Proof of delivery	16.9%
Tracking combined	14.5%
Reliable delivery timescales	13.5%
Lowest price	10.4%
Good customer service	9.5%
Guaranteed next day delivery	7.7%
Insurance	5.6%
Morning or afternoon delivery options	3.7%

Source: Ofcom Parcels Review C2X Research 2021 – online survey, fieldwork carried out by BVA BDRC, July 2021/ August 2021

Annex: Comparing the three elements of tracking to each other

Comparing the three elements of tracking to each other

In the MaxDiff exercise each respondent saw nine sets of four items and was asked which of the four were most and least important. Across the nine sets, 11 items were asked about, including these three items relating to tracking:

- *Tracking information on stage and day of delivery*
- *Real time tracking on progress*
- *Notification of expected delivery window*

On average, each respondent would see each of these three against each other approximately once. Although this means not everyone will have seen each against both other tracking elements, we have sufficient information to indicate the preference between the three.

Where they were shown directly against each other we can use this to indicate their preference between each. Otherwise, we can infer it from their other preferences – i.e. where they prefer one over a non-tracking attribute.

For example, if they prefer *Tracking information on stage and day of delivery* over *Attribute A* and then prefer *Attribute A* over *Real time tracking on progress,* we deduce they prefer *Tracking information on stage and day of delivery* over *Real time tracking on progress*.

Source: Ofcom Parcels Review C2X Research 2021 – online survey, fieldwork carried out by BVA BDRC, July 2021/ August 2021

Comparing the three elements of tracking to each other

We see that *Tracking information on stage and day of delivery* is preferred to:

- *Real time tracking on progress* for 68% of respondents
- *Notification of expected delivery window for* 72% of respondents

and that *Real time tracking on progress* is preferred to:

- *Notification of expected delivery window* for 62% of respondents.

This shows that overall respondents value *Tracking information on stage and day of delivery* highest out of the three tracking elements. However, it also shows that a substantial proportion of respondents prefer one of the other two elements. This is illustrated by the fact that 27.7% of respondents preferred *Notifications of expected delivery window* over both the other tracking offers.

The resulting preference shares are as follows:

	Preference shares
Tracking information on stage and day of delivery	40.1%
Real time tracking on progress	32.2%
Notification of expected delivery window	27.7%

If the tracking elements overlapped completely – specifically each offered everything the more basic one/s did with some additional benefits, the most preferred one would have a preference share of 67%, the second preference 33% and the least preferred 0%. This is because the lowest ranked option would be preferred 0% of the time, the middle-ranked attribute would be preferred against the lowest ranked attribute but not against the highest ranked attribute, meaning it would be preferred 50% of the time, and the highest ranked option would be preferred 100% of the time. When translated into preference shares this results in a 67:33:0 share among the three attributes.

Even allowing for some degree of human error we would expect the lowest to have substantially less than the 27.7% that *Notification of expected delivery window* achieves.

Therefore, these results show that, while there is some overlap between the various tracking elements, each holds a unique appeal to some respondents.

Source: Ofcom Parcels Review C2X Research 2021 – online survey, fieldwork carried out by BVA BDRC, July 2021/ August 2021