## **Ofcom Residential Postal Tracker**

# Technical Report Q1-Q4 2017

#### 1. Preface

Ofcom's Residential Postal Tracker is a continuous tracking study that measures opinion, usage and attitudes to postal services among UK adults. In 2017, the study was run by kubi kalloo with fieldwork conducted by Facts International.

Since January 2016, data has been collected using a combined methodological approach: face-to-face interviews conducted using random probability sampling and online interviews using quota sampling. The data from both methodologies is then combined and weighted to nationally representative proportions in terms of age, gender, ethnicity, country and socio-economic group (SEG), and, where relevant, weighting to account for 'positivity bias' is also applied (explained below).

The data tables published in February 2018 include data collected from January – December 2017. 5,895 respondents participated in this fieldwork period. 65 respondents could not be included in the final dataset, as they did not provide an answer to demographic questions used in weighting and could therefore not be assigned a weighting factor. The final number of respondents included in the 2017 dataset is: 5,830, including 1,869 face-to-face respondents (32%) and 4,026 online respondents (68%).

This document provides details of the sampling frame, research methodology and weighting procedures.

#### 2. Fieldwork

In January 2016, Ofcom decided to break from a pure face-to-face approach to include representation from an online audience. Face-to-face respondents are approached to participate by door-to-door interviewers; they then self-complete the survey using a tablet (CAPI). Online respondents from SSI's online panel are invited to complete the same survey separately via email.

Methodological bias has been reduced as far as possible operationally, by designing both workstreams to be as similar as possible: both methods involve self-completion surveys, identical questions and continuous interviewing (with fieldwork being conducted for at least three weeks in every month). In January 2016, a one week pilot study was conducted to trial the combined methodologies and resolve any operational issues; this was followed by a three month observational fieldwork period to monitor the impact of methodological shift on trend data. Following this observation period, it became clear that face-to-face respondents consistently gave more positive responses than their online counterparts – an effect we have described as a 'positivity bias'. In order to correct this effect, a short omnibus study was conducted to quantify the impact of 'positivity bias' on surveys conducted face-to-face versus online, and consequently, an 'evaluative weighting' factor was calculated to eliminate any methodological bias (see 'Weighting' for more details).

The introduction of additional survey questions over the course of 2016 resulted in an increased survey length, which could potentially have reduced the participation rate. In order to ensure comparable data quality, 11 questions were selected for inclusion in the monthly rotation plan; that is, that they are now asked <u>either</u> on odd <u>or</u> even months. This approach

has the benefit of reducing the average survey length without needing to remove questions, and monthly (rather than quarterly) rotations mean that seasonal patterns can still be monitored. Questions selected for the monthly rotation plan all relate to habitual and/or long term behaviour that does not vary on a monthly basis, e.g. changes in mail received over the last 2 years. The published tables indicate which questions are rotated, where relevant, in the table footers.

# 3. Sample design

Each workstream has its own sample design, appropriate for each respective methodology.

- A. <u>Random probability sampling</u> is applied to <u>face-to-face interviewing</u>. As in previous waves, random sampling points are selected in each region to determine the 'starting address' for interviewing in a given month. From this point, interviewers invite individuals to participate in every third house, applying the 'next birthday rule' if more than one person at a given address is willing and able to participate. This approach ensures a random selection of respondents: that is, everyone in the population of potential respondents has an equal chance of being selected for participation
- B. <u>Quota sampling</u> is applied to <u>online interviewing</u>. There is no way of replicating the offline sampling approach online, as the demographic spread of panellists in each region is not nationally representative (and is, by no means, universal). For this reason, a quota sampling approach was adopted to ensure nationally representative responses

	CAPI	Online
North East	100	250
North West	150	250
Yorkshire and Humber	115	250
East Midlands	115	250
West Midlands	115	250
East of England/ East Anglia	115	250
London/ Greater London	175	250
South East	175	250
South West	115	250
Additional CAPI quotas		
Northern Ireland	200	
Wales	200	
Highlands and Islands of Scotland	25	

The following annual geographic minimum quotas were applied for each methodology:

Rest of Scotland	200	
Additional online quotas		
Northern Ireland – Urban		250
Northern Ireland – Rural		250
Wales – Urban		250
Wales – Rural		250
Scotland – Urban		250
Scotland – Rural		250
Total	1,800	3,750

# 4. Weighting

Following the three month observational fieldwork period (as detailed above), it became apparent that there was a need for two types of weighting:

- A. **Demographic & Geographic Weighting** for all questions, to ensure the data is nationally representative by gender, age, socio-economic group, location (England vs. Devolved Nations) and ethnicity
- B. **Evaluative Weighting** for questions that include an evaluative judgement, to redress the effect of positivity bias, i.e. behaviour, attitudes and experiences (excluding most demographic and screening criteria)

# 4.1 Demographic & Geographic Weighting

Data from all questions are weighted to be nationally representative of the UK population in terms of gender, age, socio-economic group, country and ethnicity; actual population figures and estimates have been taken from the 2011 Census and Annual Mid-Year Population Estimates 2014.

The initial unweighted sample and the final weighted sample profiles are illustrated below: the 'Unweighted' column indicates the actual proportion of interviews completed January – December 2017; the 'Weighted' column indicates the weighted size of each sub-group, calculated by applying the individual weighting factors listed in the final, right-hand column.

Demographic or Geographic Weighting Category	Sub-Population	% Unweighted: Interviews achieved	% Weighted: Profile	Individual (not RIM) Weighting Factor
Gender	Male 16yrs+	48%	49%	1.021
	Female 16yrs+	52%	51%	0.981

Age	16-24yrs	14%	14%	1.000
	25-44yrs	33%	33%	1.000
	45-64yrs	31%	32%	1.032
	65yrs+	22%	21%	0.955
SEG	ABC1	54%	53%	0.981
	C2DE	46%	47%	1.022
Country	England	63%	83%	1.317
country	Scotland, N.I. & Wales	37%	17%	0.459
Ethnicity	White	92%	87%	0.946
	BAME	8%	13%	1.625

# 4.2 Evaluative weighting

The separately commissioned omnibus survey revealed that face-to-face respondents are more likely to give high scores to statements measuring positivity than their online counterparts, even when they score similarly on behavioural questions. An Evaluative adjustment weighting was developed using the average of the ratios between online and offline populations for the four statements below.

Top 2 box responses on 5 point Likert (agreement) scale	Online	Offline	
"I am satisfied with my life"	47%	74%	
"I feel very positive about my future"	38%	63%	
"I don't like people to think badly of me"	54%	66%	
"White lies are acceptable to avoid hurting people"	28%	40%	

These four statements have been included in the tracking questionnaire since April 2017. This allows for positivity bias by methodology to be continuously monitored and Evaluative weighting calculations to be adjusted where relevant.

#### Appendix: Guide to Statistical Reliability

This section details the variation between the sample results and the "true" values, or the findings that would have been obtained with a census approach. The confidence with which we can make this prediction is usually chosen to be 95%: that is, the chances are 95 in 100 that the "true" values will fall within a specified range. However, as the sample is weighted, we need to use the effective sample size (ESS) rather than actual sample size to judge the accuracy of results. The following table compares ESS and actual samples for some of the main analysis groups.

		Actual (n=5,830)	ESS (n=4,067)
Gender	Male	2,813	1,962
Conder	Female	3,017	2,105
	16-24yrs	804	561
Age	25-44yrs	1,961	1,368
~90	45-64yrs	1,828	1,275
	65yrs+	1,237	863
SEG	AB	1,386	967
	C1	1,761	1,228
	C2	1,196	834
	DE	1,487	1,037
Rurality	Urban	4,038	2,817
	Rural	1,780	1,242
Working	Yes	2,923	2,039
	No	2,874	2,005

The table below illustrates the required ranges for different sample sizes and percentage results at the "95% confidence interval":

Effective sample size	10% or 90% ±	20% or 80% ±	30% or 70% ±	40% or 60% ±	50% ±
4,067 (Total)	0.92%	1.23%	1.41%	1.51%	1.54%
1,962 (Male)	1.33%	1.77%	2.03%	2.17%	2.21%
1,228 (C1)	1.68%	2.24%	2.56%	2.74%	2.80%
1,242 (Rural)	1.67%	2.22%	2.55%	2.72%	2.78%

Approximate sampling tolerances applicable to percentages at or near these levels

For example, if 30% or 70% of a sample of 4,067 gives a particular answer, the chances are 95 in 100 that the "true" value will fall within the range of +/- 1.41 percentage points from the sample results. When results are compared between separate groups within a sample, different results may be obtained. The difference may be "real", or it may occur by chance (because not everyone has been interviewed). To test if the difference is a real one – i.e. if it is "statistically significant" – we again have to know the size of the samples, the percentages giving a certain answer and the degree of confidence chosen. If we assume "95% confidence interval", the difference between two sample results must be greater than the values given in the table below to be significant:

#### Differences required for significant at or near these percentages

Sample sizes being compared	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%
	±	±	±	±	±
1,962 vs. 2,105 (Male vs. Female)	1.85%	2.46%	2.82%	3.01%	3.08%
967 vs. 1,228 (AB vs. C1)	2.53%	3.37%	3.86%	4.13%	4.21%