

Annual Statistical Bulletin: Usage of online channels to access public services in NI 2018

Background

The Northern Ireland Omnibus Survey¹ provides government with up to date facts and figures about life in Northern Ireland. It takes a snapshot of a range of societal issues of persons aged 16 or over. An omnibus survey is a survey which carries a number of different questions for various clients. The issues covered within the survey differ each year depending on interest, however a Digital Inclusion Module is included in the 2018 version.

The Digital Inclusion module includes a set of 16 questions covering a wide range of topics. This bulletin explores one of those questions, in relation to the measurement of usage of online channels to access public services by individuals in the previous 12 months. Responses are collated to report proportions who 'used online channels to access public services' and those who did not. The methodology has been scrutinised by a technical assessment panel, and deemed acceptable for use as a Programme for Government (PfG) indicator.

This bulletin provides data for population indicator 46, 'Usage of online channels to access public services', included in the outcomes framework underpinning the [draft Programme for Government](#) and the [Northern Ireland Civil Service Outcomes Delivery Plan](#). This population indicator contributes to reporting against Outcome 11 'We connect people and opportunities through our infrastructure'

¹ The NI Omnibus Survey has been suspended after 2018 – Further information can be found in Appendix A

Introduction

To measure usage of online channels to access public services the survey asked respondents the following question:

Which of the following public services have you used online in the past 12 months?

Respondents were shown a list of options and asked if they had used at least one of the services through an online channel in the previous 12 months. Responses were classified in to two categories, 'Yes', those who have used online channels to access public services and 'No', those who have not used online channels to access public.

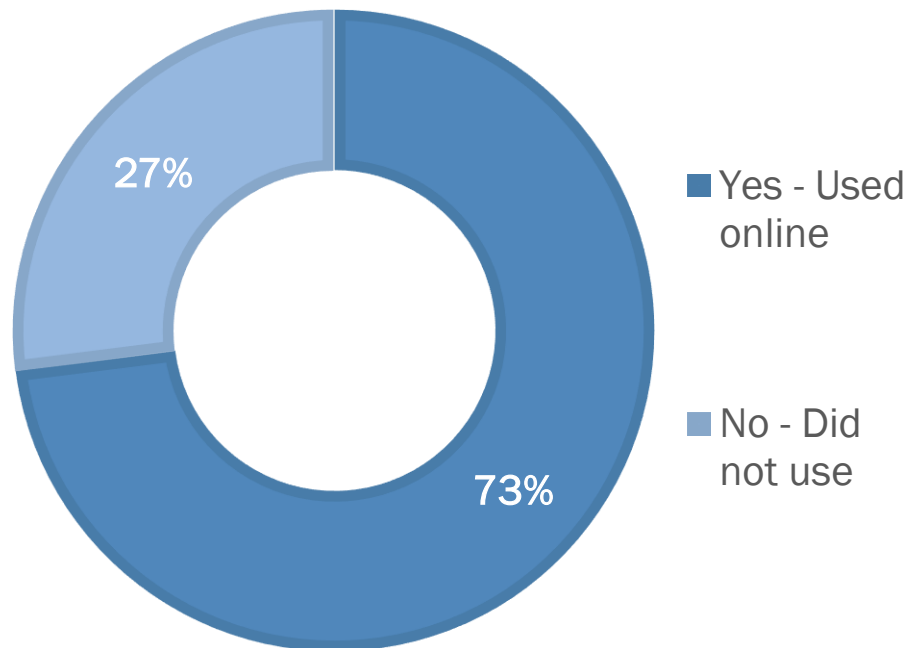
In this publication differences between groups are only reported on where they are found to be statistically significant, unless stated otherwise. Statistical significance was determined using 95% confidence intervals. Statistically significant (using 95% confidence intervals) means that we can be 95% confident that the differences seen in our sampled respondents reflect the population of Northern Ireland.

This indicator will use the 2018 data as the baseline year for trend analysis in the future.

Key Findings

In 2018, almost three quarters (73.4%) of individuals aged 16 and over in Northern Ireland have used online channels to access public services in the previous 12 months.

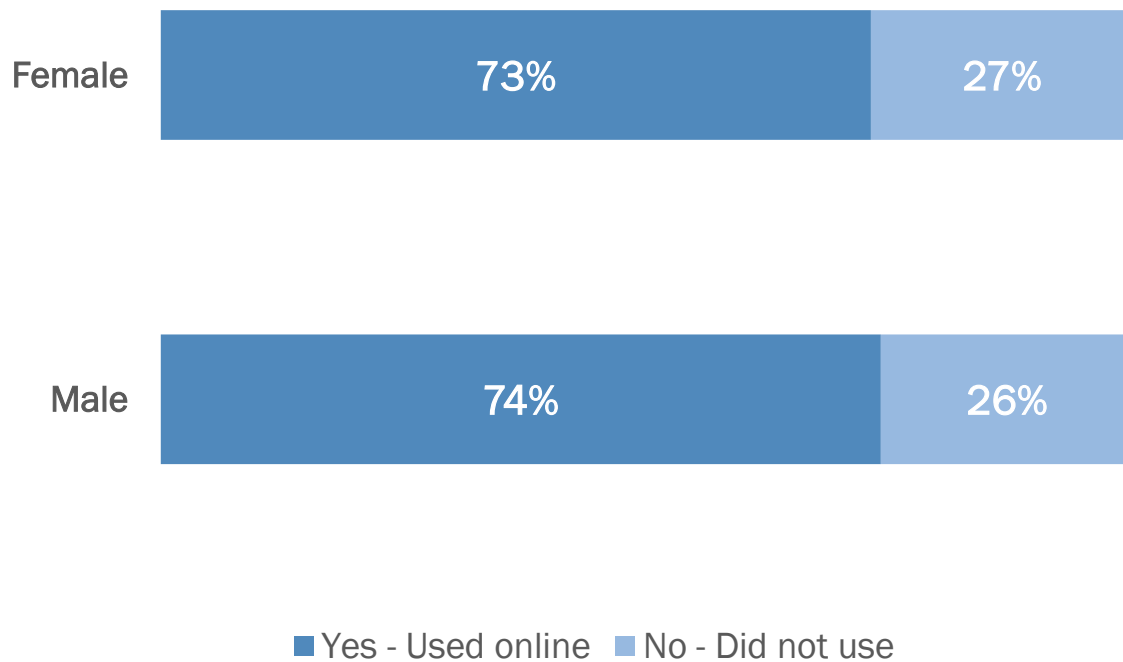
Chart 1: Usage of online channels to access public services (%)



Gender

A similar proportion of female respondents (73%) and male respondents (74%) reported they have used online channels to access public services.

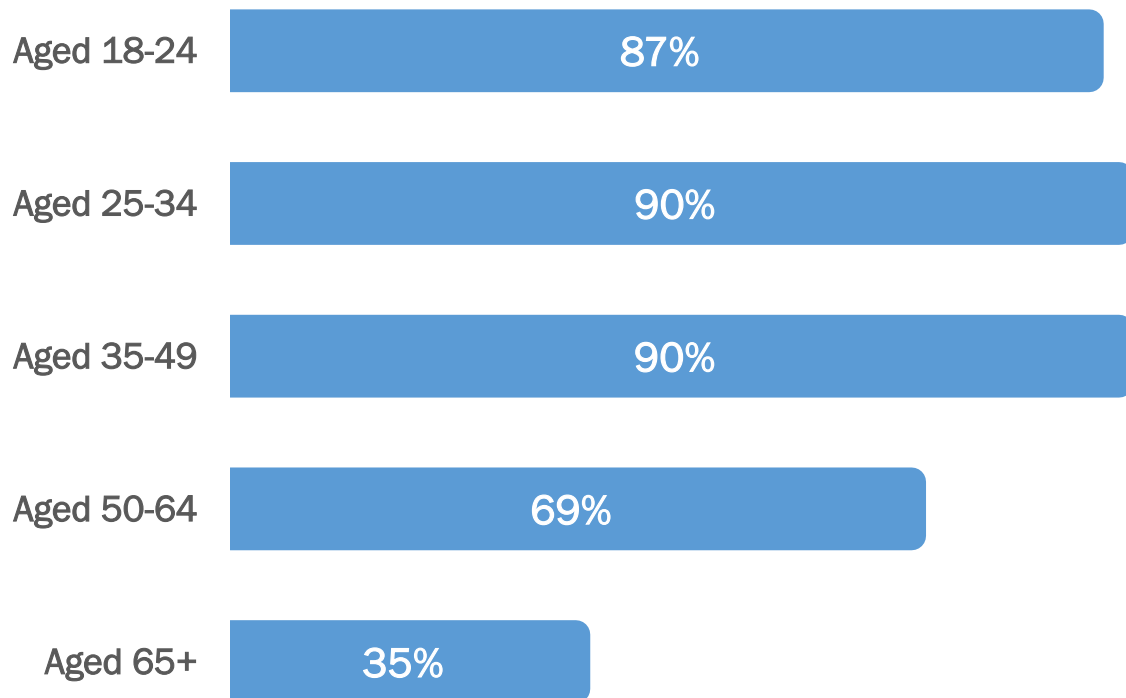
Chart 2: Usage of online channels to access public services by Gender



Age

The age group with the lowest proportion using online channels to access public services is 65 years+ (35%), which was significantly lower than all other age groups. People aged 50-64 are also significantly less likely to have accessed public services online than younger groups. A similar proportion of 18-24 year olds (87%), 25-34 year olds (90%) and 35-49 year olds (90%) have accessed public services online.

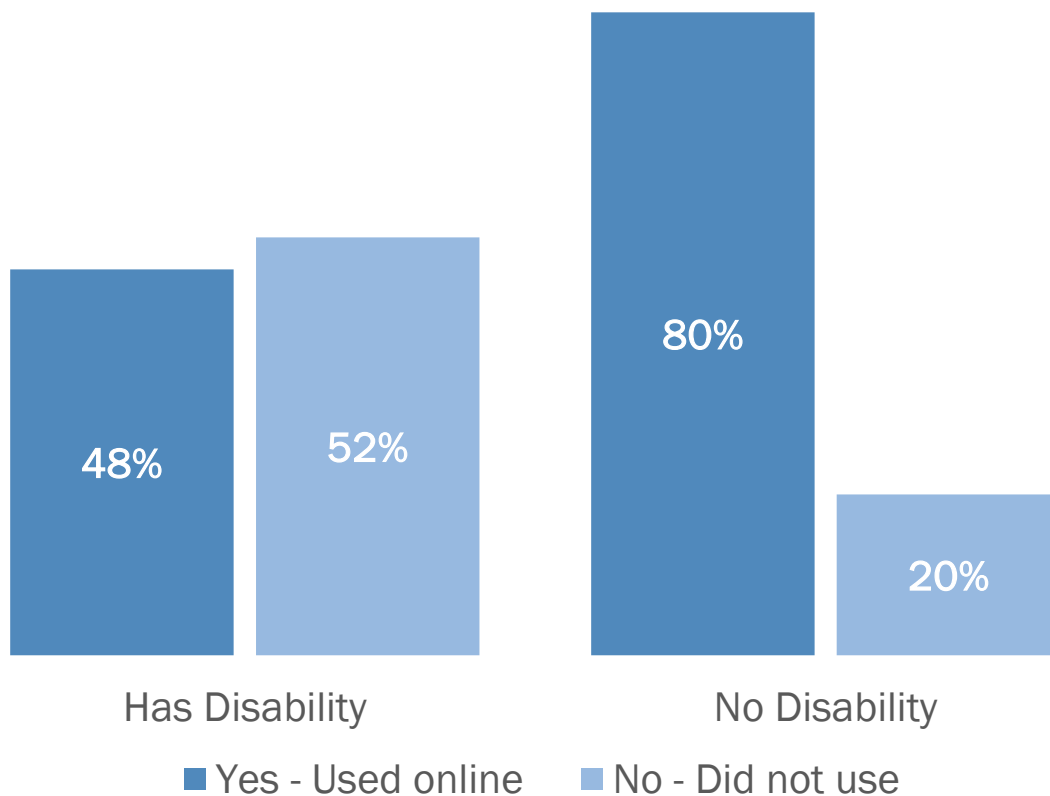
Chart 3: Percentage of respondents who have used online channels to access public services by age



Disability Status

Respondents who identified as having a disability were significantly less likely to have used online channels to access public services, with less than half (48%) reporting having done so, compared with those with no disability (80%). See the technical notes in Appendix B for the definition of disability used in the NI Omnibus Survey.

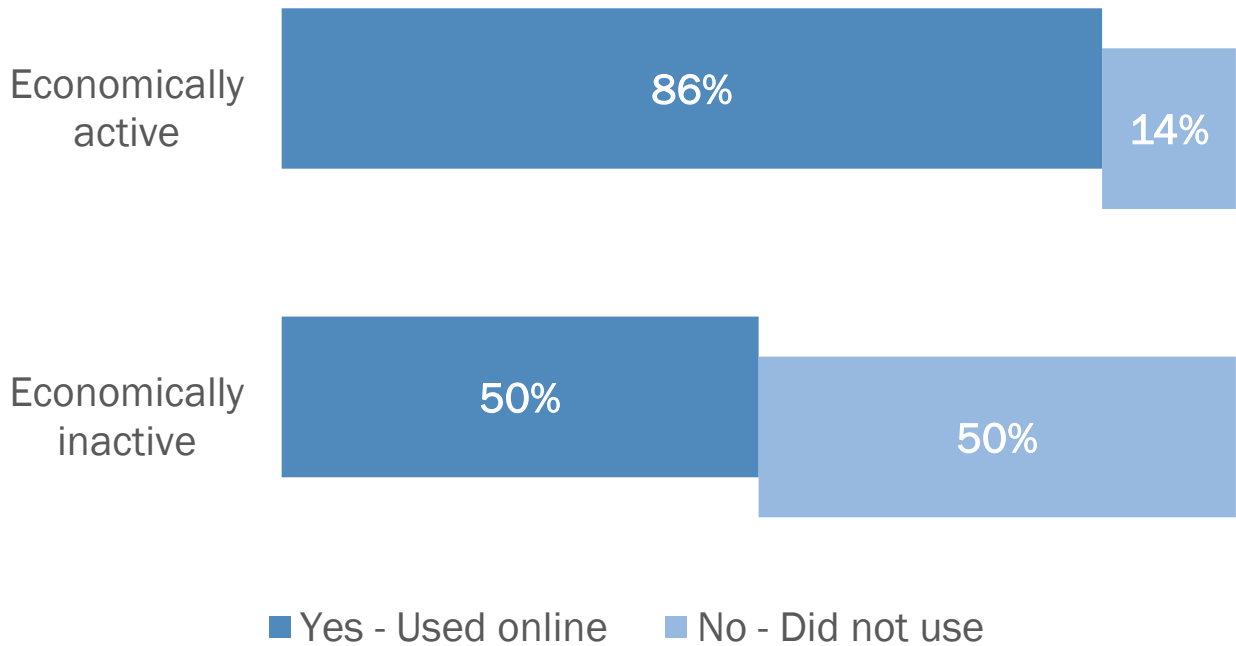
Chart 4: Usage of online channels to access public services by Disability



Economic Activity

Respondents within the population aged 16 years and over who are economically inactive are significantly less likely to have used online channels to access public services (50%), compared with 86% of respondents who are economically active.²

Chart 5: Usage of online channels to access public services by Economic Activity



² Full time students are excluded from either group in this analysis.

Appendix A: Methodology and Quality Information

NI Omnibus Suspension and Future Plans for Data Collection

Data for this bulletin was collected through questions asked in the NI Omnibus Survey Spring 2018. In particular responses to the question regarding online usage of public service was used for this analysis. This indicator will use the 2018 data as the baseline year for trend analysis in the future. However the NI Omnibus Survey has been suspended after 2018 and so therefore cannot be used to collect future data on an annual basis. In light of this it was decided to commission a similar question in the Continuous Household Survey (CHS) 2019/20. It is the intention to use the data collected from the CHS going forward to maintain trend data and enable future reporting of the indicator. Further methodological information will be available in subsequent reports to explain any differences, data issues or problems.

The Northern Ireland Omnibus Survey

The Northern Ireland Omnibus Survey is conducted several times each year by the Central Survey Unit of the Northern Ireland Statistics and Research Agency (NISRA) and is designed to provide a snapshot of the behaviour, lifestyle and views of a representative sample of people aged 16 and over in Northern Ireland. The survey comprises two distinct parts; core questions about the respondents and their individual circumstances and a variety of questions commissioned by clients, which seek information on a range of issues.

The Sample

The sample for the survey consisted of a systematic random sample of addresses selected from the Pointer database of private addresses. This is the most up-to-date listing of private households and is made available to the Northern Ireland Statistics and Research Agency for research purposes. People living in institutions (though not in private households in such institutions) are excluded. A total of 2,200 addresses were selected for interview.

The Pointer database provides a good sampling frame of addresses, but contains no information about the number of people living at an address. Further selection stages were therefore required to convert the listing of addresses to a listing of individuals from which one person (the 'selected respondent') is chosen to complete the questionnaire.

Interviewers are instructed to call at each address issued in their assignments. At the first stage of the survey, they have to identify the number of household's resident at the address and, where necessary, select one using a selection table (Table 1.1).

Table 1.1: Household Selection Table

Number of households	1	2	3	4	5	6	7	8	9	10	11	12
Household selected	1	1	2	3	4	4	2	7	6	8	6	6

The interviewers then list all members of the household who are eligible for inclusion in the sample: that is, all persons currently aged 16 or over living at the address. From this listing of eligible adults, the interviewer's computer randomly selects one adult. This person, the selected respondent, is then asked to complete the interview.

The Fieldwork

The fieldwork periods were Tuesday 1st May to Saturday 2nd June when addresses were issued to a panel of 152 interviewers and then again for the period Monday 4th June to Saturday 7th July when addresses were issued to a panel of 137 interviewers. From an eligible sample of 1,761 households, 917 interviews were achieved, giving a response rate of 52%.

Representativeness of the Sample

In any survey there is a possibility of non-response bias. Non-response bias arises if the characteristics of non-respondents differ from those of respondents in such a way that they are reflected in the responses given in the survey. Accurate estimates of non-response bias can be obtained by comparing characteristics of the achieved sample with the distribution of the same characteristics in the population at the time of sampling. Such comparisons are usually made to the current Census of Population data.

To assess how accurately the Omnibus Survey sample reflects the population of Northern Ireland the sample has been compared with characteristics of the Northern Ireland population from Mid-Year Population Estimates (Table 1.2). The Omnibus Sample has also been compared to the achieved sample of the Continuous Household Survey (CHS).

Table 1.2: Representativeness of the Sample

	Mid-Year Population Estimates 2016	CHS 2017/18 (all members of household 16+)	Omnibus (all members of household 16+)	Omnibus Selected Respondent	Omnibus Selected Respondent with new weight
Age					
16-24	15	13	10	8	15
25-34	17	15	16	15	17
35-49	25	26	24	24	25
50-64	23	25	27	30	23
65 and over	20	22	22	22	20
Gender					
Male	49	48	48	46	49
Female	51	53	52	54	51
Base=100%	1,586,373	8,391	1,660	917	917

Weighting for age and gender

As is clear from the Table 1.2, the age profile of the members of households and of selected respondents varies from that seen in the Census-based mid-year population estimates. Consequently, a variable called '**agesexweight**' was created to compensate for this in the analysis. This variable was previously not used in the Northern Ireland Omnibus Survey standard analysis. However, the divergence from other measures, particularly the census-based mid-year population estimates, has become so marked that we have recommended the use of 'agesexweight' as standard.

This means that for some previous customers of the Omnibus Survey new results are not given on quite the same basis as previous modules. However, the advantages of the new

weight are felt to outweigh this minor drawback.

The percentages in the data tables and charts are based on weighted data as are total counts in the sub population breakdowns.

Sampling Error

No sample is likely to reflect precisely the characteristics of the population it is drawn from because of both sampling and non-sampling errors. An estimate of the amount of error due to the sampling process can be calculated. For a simple random sample design, in which every member of the sampled population has an equal and independent chance of inclusion in the sample, the sampling error of any percentage, p , can be calculated by the formula:

$$\text{s.e. } (p) = \sqrt{p*(100 - p)/n}$$

where n is the number of respondents on which the percentage is based. The sample for the NI Omnibus Survey is drawn as a random sample, and thus this formula can be used to calculate the sampling error of any percentage estimate from the survey.

Confidence Interval

A confidence interval for the population percentage can be calculated by the formula

$$95 \text{ per cent confidence interval} = p \pm 1.96 * \text{s.e. } (p)$$

If 100 similar, independent samples were chosen from the same population, 95 of them

would be expected to yield an estimate for the percentage, p , within this confidence interval. The absence of design effects in the survey, and therefore of the need to calculate complex standard errors, means that standard statistical tests of significance (which assume random sampling) can be applied directly to the data.

Notation

The percentages quoted in data tables and charts have been rounded to the nearest number. The figures shown in the body of the table are weighted as are the base numbers shown in data tables.

Appendix B: Technical Notes

Data Collection

The information presented in this publication derives from the Northern Ireland Omnibus Survey May/June 2018 which was conducted by the Central Survey Unit (CSU) of the Northern Ireland Statistics and Research Agency (NISRA). The survey comprised two distinct parts; core questions about the respondents and their individual circumstances and a variety of questions commissioned by clients, which sought information on a range of issues. The Digital Inclusion NI question in relation to the usage of online channels to access public services which was commissioned is included in Appendix D of this publication.

Data Quality

Data were collected by CSU and various validation checks were carried out as part of the processing. CSU is the leading social survey research organisation in Northern Ireland and is one of the main business areas of NISRA, an Agency within the Department of Finance and Personnel. CSU has a long track record and a wealth of experience in the design, management and analysis of behavioural and attitude surveys in the context of a wide range of social policy issues. CSU procedures are consistent with the Official Statistics Code of Practice.

The Omnibus survey sample was assessed and considered to be a representative sample of the Northern Ireland population (aged 16 and over).

Whilst data quality is considered to be very good, note that all survey estimates are subject to a degree of error and this must be taken account of when considering results (see notes above on sampling error). This error will be reasonably small for the majority of Northern Ireland level results but care should be taken when looking at results based on smaller breakdowns.

Respondents

917 respondents took part in the May/June 2018 Omnibus Survey. All respondents were aged 16 and over. Some questions were only asked if the respondent had answered 'yes' to a previous question.

Exclusions

People living in institutions (though not in private households in such institutions) are excluded from the Omnibus survey.

Rounding Conventions

Percentages have been rounded to whole numbers and as a consequence some percentages may not sum to 100.

0% may reflect rounding down of values under 0.5.

Significant difference

Significance tests were carried out to determine if there were differences in responses given by various respondent groups. The significance tests were carried out at 5% significance level (range = -1.96 to +1.96) and only differences which were statistically significant ($p < 0.05$) are included in this report. This means that there is at least a 95% probability that there is a genuine difference between responses given by, for example, males and females and the difference between the two genders is not simply explained by random chance or sample error. When a significant difference is noted among survey respondents, it is likely that this same difference applies to the Northern Ireland adult population (persons aged 16 and over).

The following respondent groups were considered:

Age group

The age of the respondent is grouped into the following age bands; 16-24, 25-34, 35-49, 50-64, 65 and over.

Gender

Gender of respondent is defined as whether the respondent is male or female.

Disability status

Disability status is defined as whether the respondent has a disability or not. The definition

of disability is those answering yes to both of the following questions:

'Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?'

Yes/No

'Does your condition or illness/ (do any of your conditions or illnesses) reduce your ability to carry out day-to-day activities?'

Yes, a lot/ Yes, a little/ Not at all

Economic Activity

The economically inactive population is defined as people aged over 16 years, who are not in employment and are not unemployed on the ILO definition.

Appendix C: Data Tables & Confidence Intervals

Data Tables

	Usage of online channels to access public services (% of population who used online channels to access public services in the previous 12 months)		
	2018		
	Yes - Used online	No - Did not use	
	%	%	n
All	73	27	917
Male	74	26	445
Female	73	27	472
Aged 18-24	87	13	134
Aged 25-34	90	10	154
Aged 35-49	90	10	230
Aged 50-64	69	31	214
Aged 65+	35	65	185
Has Disability	48	52	197
No Disability	80	20	720
Urban	73	27	559
Rural	74	26	358
Professional	97	3	58
Managerial and Technical	76	24	236
Skilled Non-Manual	81	19	190

Skilled Manual	67	33	167
Partly Skilled	65	35	147
Unskilled Manual	46	54	47
Never worked	62	38	43
Full time students	93	7	29
Economically active	86	14	564
Economically inactive	50	50	324
Catholic	74	26	371
Protestant	69	31	386
Other	85	15	17
None/Refused	82	18	143
Single, that is never married	82	18	340
Married and living with husband/wife	77	23	389
Married and separated from husband/wife	73	27	45
Divorced	60	40	63
Widowed	30	70	80
Belfast	69	31	137
Outer Belfast	77	23	170
East of Northern Ireland	72	28	227
North of Northern Ireland	71	29	163
West and South of Northern Ireland	77	23	220

Confidence Intervals

A confidence interval represents the range of values in which the true population value is likely to lie. It is based on the sample estimate and the confidence level.

As the percentages are calculated from a representative sample of the Northern Ireland population (aged 16 and over), a confidence interval can be calculated to estimate the level of uncertainty in the sample estimate.

95% confidence intervals were calculated for the headline figures. Table C1 below summarizes the confidence intervals for the usage of online channels to access public services.

Table C1: Confidence Intervals for usage of online channels to access public services

	Estimate	95% Confidence Range +/-	Confidence Interval
All Population	73%	3	70% - 76%
Female	73%	4	69% - 77%
Male	74%	4	70% - 78%
Aged 18-24	87%	6	81% - 93%
Aged 25-34	90%	5	85% - 95%
Aged 35-49	90%	4	86% - 94%
Aged 50-64	69%	6	63% - 75%
Aged 65+	35%	7	28% - 42%
Has Disability	48%	7	41% - 55%
No Disability	80%	3	77% - 83%
Economically active	86%	3	83% - 89%
Economically inactive	50%	6	44% - 56%

Appendix D: Questionnaire

The question asked within the Northern Ireland Omnibus Survey to ascertain information on the usage of online channels to access public services is below:

Q6. Which of the following public services have you used online in the past 12 months, that is since (*computer inserts date one year ago*)?

- 1 View health record
- 2 Register to vote
- 3 Apply for driving licence
- 4 Apply for benefit
- 5 Pay a fine
- 6 Find/search for a local service
- 7 Report a fault
- 8 Education services
- 9 Careers and employment
- 10 Book MOT test
- 11 Renew car tax
- 12 Vote
- 13 Look up and comment on public consultation papers
- 14 Obtain certificates (e.g. Birth)
- 15 Obtain health information
- 16 Notify local councils of a fault
- 17 Apply for/renew passport

- 18 Pay rates
- 19 Look up school information
- 20 Find out about benefits
- 21 Book a GP appointment
- 22 Complete an income tax return
- 23 Benefits - e.g. job seekers allowance child benefit carers allowance
- 24 Pensions
- 25 Taxes
- 26 Registering birth(s)
- 27 Registering death(s)
- 28 Courts and tribunal processes
- 29 Environment food farming and rural issues - e.g. identifying plant disease, flooding,
fishing rod licences
- 30 Other - please specify
- 31 None of these

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