Office for National Statistics

International Passenger Survey: quality information in relation to migration flows

This background note provides an overview of the quality of the International Passenger Survey (IPS) for estimating international migration flows and has been updated following additional work carried out during 2017. This includes the implementation of electronic questionnaires on tablets to replace the current paper questionnaires, an out-of-hours pilot, and a comparison of how other countries measure long-term immigration.

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1 . What is the International Passenger Survey (IPS)?

The International Passenger Survey (IPS) is a continuous survey carried out by Office for National Statistics (ONS) since 1961. The questionnaire is used to collect (around 800,000) face-to-face interviews from a random sample of passengers to identify migrants as they enter or leave the UK. The data produced by the survey are the main source of information to measure international migration to the UK. However, the survey has a much wider purpose and is used to understand visitor characteristics, tourism trends, spending in the UK and abroad and the effect of tourism on the UK economy.

This report provides supporting information about the survey methodology and operations, and provides links to further information for a better understanding of how IPS data are used to produce Long-Term International Migration (LTIM) estimates.

2 . International Passenger Survey coverage

The International Passenger Survey (IPS) is carried out 362 days a year and approximately 90% of passengers entering and leaving the UK have a chance of being selected for an interview. The remainder are passengers travelling:

- via smaller airports and seaports with fewer passengers
- arriving to or departing from airports at night, between approximately 10:00pm and 6:00am; outside the normal IPS interviewing hours

The IPS covers all major airports, seaports and the Channel Tunnel but does not interview passengers travelling across the land border between the Republic of Ireland and Northern Ireland, or passengers travelling on international cruises (including cruise departures, terminations and port-of-call visits) [1].

Figure 1 shows each port at which IPS interviewing currently takes place.

Figure 1: International Passenger Survey locations, UK

UK

Source: Office for National Statistics – International Passenger Survey

Notes:

1. Folkestone (Cheriton) is where passengers and interviewers embark for Eurotunnel; it is not a Eurostar station.

Table 1 shows that most UK passenger traffic is covered by the International Passenger Survey (90%). Coverage varies throughout the year and by the type of port (air, sea and tunnel). Coverage is calculated as the proportion of sampled traffic divided by total traffic as supplied by the Civil Aviation Authority (CAA), Department for Transport, Eurostar and Eurotunnel.

Table 1: Proportions of passengers who were subject to sampling by the International Passenger Survey 2016, by route and quarter

Route	Quarter 1 (Jan to Mar)	Quarter 2 (Apr to June)	Quarter 3 (July to Sept)	Quarter 4 (Oct to Dec)	Total
Air	92.20%	87.10%	86.50%	90.40%	88.60%
Sea	97.70%	96.30%	95.20%	95.70%	96.00%
Tunnel	100.00%	97.90%	98.00%	97.80%	98.40%
Total	93.30%	88.80%	88.10%	91.40%	90.00%

Source: Civil Aviation Authority, Department for Transport, Eurostar and Eurotunnel.

Sampling is most complete on Channel Tunnel routes (98%), followed by sea routes (96% across the year) and air routes (around 89% across the year). Air traffic coverage is slightly lower during Quarter 2 (Apr to June) and Quarter 3 (July to Sept) than during Quarter 1 (Jan to Mar) and Quarter 4 (Oct to Dec). This may relate to seasonal changes in flight times and routes throughout the year. Only a small proportion of overall passenger flows are by sea and the Channel Tunnel (less than 18%), so the remainder of the analysis included in this background note focuses mainly on air passengers.

Comparison of International Passenger Survey data and Civil Aviation Authority data

The Civil Aviation Authority (CAA) collects data on activity from approximately 60 UK airports, including passenger numbers. This section presents comparisons between CAA data and weighted IPS data. Weighting is applied to IPS data to ensure that the sampled respondents in the survey represent the total traffic by port and by direction. The weighting process is also designed to compensate for not interviewing at certain ports and at certain times of the day, for example, between 10:00pm and 6:00am, in the survey sample.

Analysis of CAA and IPS data shows the proportions of passengers on flights between the UK and country groups' airports to compare the distributions by country group of flight origin and destination.

Table 2 shows few differences in distribution, since the proportions of passengers in the IPS estimates by origin and destination countries are similar to those shown in CAA data for the groupings presented. The proportions vary slightly across country groupings; for example, the CAA data show 1.6% of passengers on flights to or from EU2 countries, while the IPS estimates show 1.8% of passengers to or from EU2 countries. Likewise for EU8 countries, these proportions are 6.1% and 6.8% respectively.

Table 2: Proportions of passengers in the International Passenger Survey compared to Civil Aviation Authority data 2016, arrivals and departures combined

Country group	Proportions of passengers recorded by CAA[1]	Proportions of passengers in IPS (weighted)
EU2	1.6	1.8
EU8	6.1	6.8
EU15	57.7	56.8
Other EU[2]	2.4	2.3
Non-EU	32.2	32.2
Total	100	100

Source: Civil Aviation Authority and Office for National Statistics, International Passenger Survey.

Notes:

1. *Other EU consists of Cyprus, Malta and Croatia.

2. **Excluding internal flights, Channel Islands and Isle of Man.

What about passengers who travel by coach?

Passengers arriving by coach at UK seaports are either interviewed on arrival at a UK seaport, or on the ship. Since November 2015, migrants arriving by coach via the France-Portsmouth route are interviewed on arrival in Portsmouth. Prior to this, arrival interviews on this route were also conducted on departure from French quayside. Otherwise, passengers are sampled quayside at other ports, onboard the ferry or Eurotunnel train (Dover-Calais or Dunkirk and Eurotunnel routes to or from Cheriton). The choice between these methods is made on practical grounds, including cost, safety and permission by the ferry company.

Where interviews are conducted quayside or onboard the Channel Tunnel Shuttle with coach passengers, it is down to the discretion of the driver whether to allow IPS interviewers to board the coach and interview passengers. Feedback from interviewers indicates that this is not a frequent problem and there are high response rates on these routes.

Are we missing long-term migrants by not interviewing at night?

The IPS does not typically interview air passengers between 10:00pm and 6:00am. Since total passenger numbers from the CAA are used in the weighting process for these passengers, not interviewing passengers who travel at night is only a problem if the relative number and characteristics of those travelling during interviewing hours (“in-hours”) are different to those travelling “out-of-hours”. The IPS is periodically reviewed to ensure it provides accurate estimates of international migration estimates. The recent work on reviewing the out-of-hours traffic will be discussed later in this section.

The number of passengers arriving and departing outside IPS interviewing hours can be analysed using CAA data. For the purpose of this analysis a standard assumption was made that it takes approximately 45 minutes to get to the IPS counting line on arrival in the UK, or that passengers will cross the line 45 minutes before their flight takes off. Therefore, all the flights landing between 09:15pm and 05:15am and taking off between 10:45pm and 06:45am are treated as out-of-hours traffic.

Table 3 shows the percentage of passengers that arrived and departed out of hours. Also, it should be noted that the CAA data include passengers from airports that are not sampled by IPS due to low traffic flow, but the weighted IPS figures account for those passengers.

Table 3: Number and percentages of passengers arriving and departing out-of-hours UK, 2016

	Arrivals			Departures		
Country Group	In hours (thousands)	Out-of-hours (thousands)	% Out-of-hours	In hours (thousands)	Out-of-hours (thousands)	% Out-of-hours
EU2	1,576	269	15%	1,518	253	14%
EU8	5,754	1,184	17%	6,262	653	9%
EU15	54,327	10,800	17%	55,165	9,794	15%
Other EU[1]	1,734	928	35%	2,167	501	19%
Non-EU	32,291	4,243	12%	34,788	1,262	4%
Missing[2]	9	1	13%	7	3	32%
Total	95,691	17,425	15%	99,907	12,467	11%

Source: Civil Aviation Authority (CAA).

Notes:

1. *Other EU consists of Cyprus, Malta and Croatia.

2. ** There is a small number of missing data due to incomplete records in the CAA data or incomplete matching of IATA airport codes

Table 3 shows that overall, 15% of arriving passengers and 11% of departing passengers are not sampled by the IPS due to being out-of-hours. For all country groups, a slightly higher proportion of arriving passengers are more likely to travel out-of-hours than to depart out-of-hours. Similarly to site coverage, these figures vary by the country of origin or destination of the flight.

Other EU countries (Cyprus, Malta and Croatia) had the highest proportions of out-of-hours arrivals, followed by EU8, EU15 and EU2 countries. Non-EU countries had the lowest proportion of out-of-hours arrivals and the lowest proportion of out-of-hours departures (12% and 4% respectively). It is important to note that this is not how the coverage rates presented in Table 1 are calculated because not all CAA passengers are eligible for interview. For example, passengers who do not embark from the plane or who do not go through the security are classified as ineligible in the IPS methodology. It is not possible to separate out these passengers by area of origin or destination.

Table 4 shows further analysis of CAA data, broken down by the hour of passenger arrival.

Table 4: Proportions of passengers arriving out-of-hours by time, UK, 2016

	In hours	Out-of-hours							
Country group	05:15am to 09:14pm (thousands)	09:15pm to 5: 14am (thousands)	09: 15pm to 10: 59pm	11: 00pm to 11: 59pm	12: 00am to 12:59am	01: 00am to 01: 59am	02: 00am to 02: 59am	03: 00am to 03: 59am	04: 00am to 05: 14am
EU2	1,576	269	65%	11%	3%	4%	6%	5%	6%
EU8	5,754	1,184	74%	21%	3%	1%	0%	0%	1%
EU15	54,327	10,800	62%	19%	11%	4%	2%	1%	1%
Other EU[1]	1,734	928	31%	27%	25%	12%	3%	2%	0%
Non-EU	32,291	4,243	26%	9%	6%	4%	2%	7%	46%
Missing	9	1	98%	0%	1%	0%	0%	0%	1%
Total	95,691	17,425	53%	17%	10%	4%	2%	2%	12%

Source: Civil Aviation Authority (CAA).

Notes:

1. *Other EU consists of Cyprus, Malta and Croatia

Table 4 shows that the majority of out-of-hours passengers arrived on flights landing between 09:15pm and 11: 59pm (70%). It also shows that 46% of the non-EU out-of-hours passengers arrived between 04:00am and 05: 14am. Overall, the number of passengers arriving out-of-hours decrease each hour through the night and increase again between 04:00am and 05:14am.

Out-of-hours pilot

The IPS sample is periodically reviewed to ensure that it is representative, because it is possible that flight patterns may change, but also that the number and characteristics of passengers arriving or departing out-of-hours may be different from those arriving or departing the UK during normal interview hours. The IPS currently covers approximately 16 hours of passenger traffic between 6:00am and 10:00pm.

Since January 2017 “extended” shifts have been operating, which extend the evening shifts to later hours. The selected shifts have been extended until midnight, or until passengers from the final flight of the day have crossed the IPS counting line. So far the study has focused on arrivals and is designed to test whether the proportions and characteristics of out-of-hours passengers differ from those covered by current interviewing hours.

Early findings from the pilot so far suggest that a very small number of migrants arriving after 10:00pm have been sampled in the IPS since January 2017. The work on reviewing the out-of-hours traffic will continue until the end of 2017 with the aim of reporting results in early 2018.

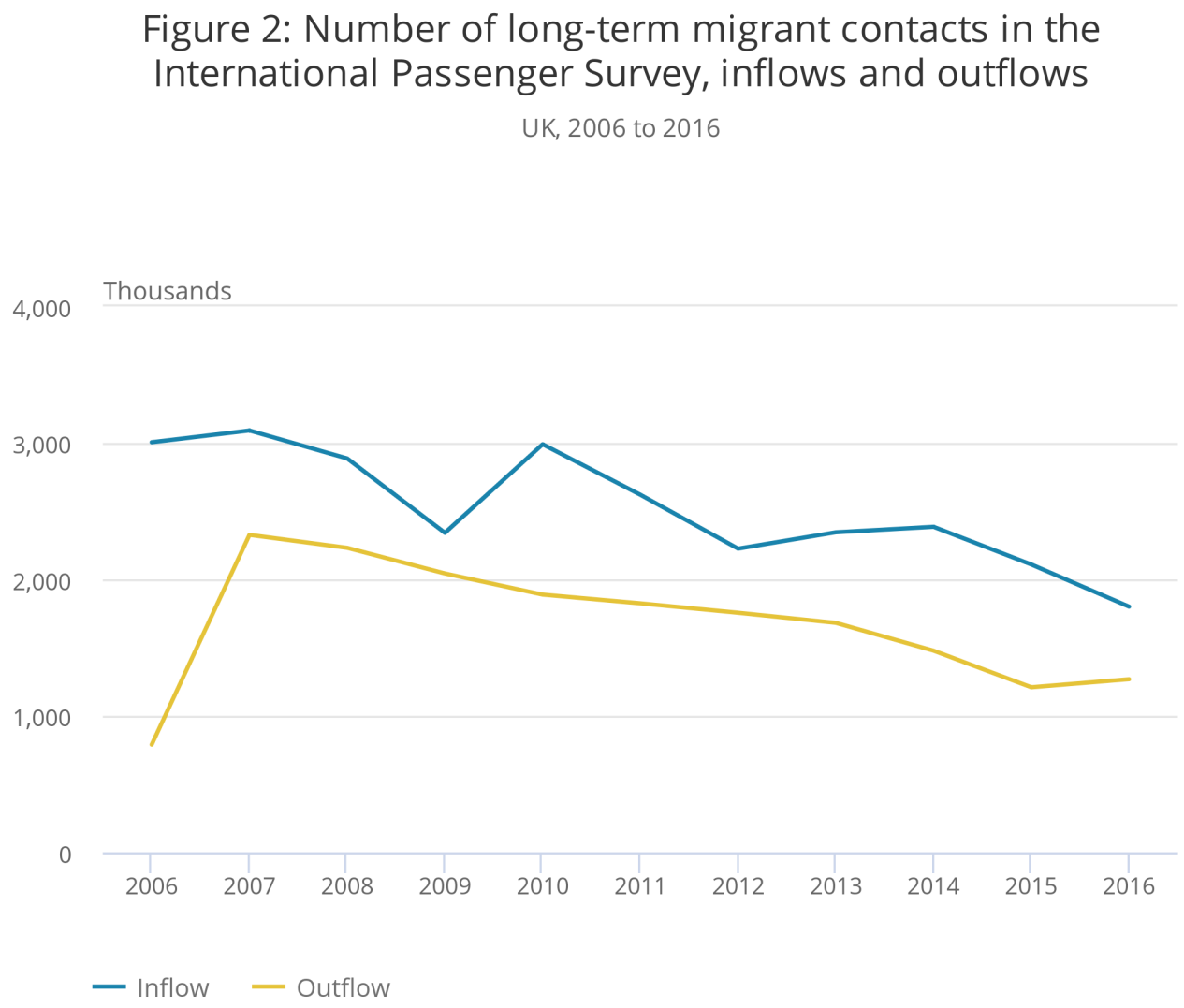
How many people does the International Passenger Survey collect information from?

In total, around 800,000 IPS interviews are conducted each year with passengers as they enter or leave the UK. This represents around 0.34% of the over 240 million passengers eligible for the survey who pass through UK ports each year. Of these, between 3,000 and 4,000 interviewees are identified as long-term international migrants, although the numbers vary from year to year (Figure 2).

The number of long-term migrant outflow contacts increased considerably in 2007, following the recommendation of the Port Survey Review to establish migration filter shifts[2] for emigration. Migration filter shifts were discontinued in 2009, but numbers of migrant contacts were largely maintained by increasing the proportion of passengers in regular IPS shifts who are asked questions to determine their intentions to migrate (travel and tourism participants are sub-sampled from respondents who are not migrants).

Figure 2: Number of long-term migrant contacts in the International Passenger Survey, inflows and outflows

UK, 2006 to 2016



Source: Office for National Statistics, Table 1.02, Long Term International Migration 1 Series

Figure 2 shows that the number of long-term migrant contacts sampled by the IPS has decreased in recent years, particularly for outflows. Lower numbers of contacts are likely to lead to increased sampling error around migration estimates (see section 4 “Sampling error”).

One possible explanation for the declining number of IPS contacts is increased overall passenger flows through UK ports. The more passengers there are to sample, the less likely it is that long-term migrants (a very small proportion of overall passenger flows) will be identified. The CAA data and other sources of data for measuring traffic flows show that total passenger flows to and from the UK increased by 21% between 2011 and 2016, from 223 million to 269 million. It has mainly been air traffic contributing to the increase in passenger flows, although tunnel passenger numbers have also increased slightly. When compared with 2015 traffic flow, both 2016 sea and tunnel traffic have decreased, whilst 2016 air traffic has increased by 8%. As mentioned previously, not all these passengers are eligible for IPS interview.

A sample optimisation exercise, designed to ensure the IPS sample is designed as efficiently and effectively as possible, was implemented in October 2016. Changes were made in the numbers of shifts conducted across sites and some smaller ports[3] were removed from the IPS sample, because the characteristics of passengers from these ports were sufficiently represented by passengers at other ports. Migration filter shifts were reintroduced at main sites in October 2016 to increase the precision of IPS migration estimates. We are monitoring the effect of the optimisation exercise on the sample and will report further in 2018 when we have a full year's worth of data.

In summary, the IPS identifies between 3,000 and 4,000 long-term migrants from interviews with approximately 800,000 passengers each year. The number of long-term migrant contacts is subject to sampling variation and has decreased slightly in recent years, reflecting higher passenger flows that make it less likely for long-term migrants to be sampled.

Notes for: International Passenger Survey coverage

1. Estimates of Long-Term International Migration (LTIM) use other sources of data to cover these routes. Please refer to the LTIM Methodology Document for further information.

2. Migrant filter shifts are IPS interviewing shifts aimed specifically at boosting the number of migrant contacts.

3. From April 2016, Bournemouth and Prestwick airports, Ashford and Ebbsfleet on the Eurostar route as well as Plymouth – Roscoff and Plymouth – Santander sea routes were removed from the IPS sample.

3 . How many people respond to the survey?

The overall International Passenger Survey (IPS) response rate (complete and partial interviews) for the 2016 IPS was 74.5%. Response rates vary across routes, as shown in Table 5.

Table 5: International Passenger Survey response rates, 2015 and 2016

Route type	Direction	Complete and partial response rate (%)	
		2015	2016
Air	Arrivals	76.1	71.4
	Departures	79.3	75.2
	Total	77.9	73.6
Sea	Arrivals	84.7	85
	Departures	81.9	85.2
	Total	83.2	85.1
Tunnel	Arrivals	76	69.3
	Departures	82.3	86.2
	Total	79	77.1
Total	Arrivals	76.8	72.1
	Departures	79.7	76.3
	Total	78.4	74.5

Source: Office for National Statistics, International Passenger Survey

It should be noted that a response rate of 74.5% does not mean that 25.5% of passengers approached to participate in the IPS refused to answer the survey. Around 70% of non-response is due to non-contacts and only around 5% of passengers approached provide a minimum response or refuse to take part. A complex weighting system (described in the International Passenger Survey methodology) takes account of all minimum responses and non-response in the IPS.

Non-contacts

Sometimes a passenger is sampled, but there is no interviewer available to approach them for an interview as they are likely to be interviewing other passengers. Passengers are systematically chosen for interview using a pre-set interval (for example, every 1 in 20) and cannot be substituted if an interviewer is not available. Sudden fast flows of passengers are common at some ports, for example, when a train arrives at St Pancras International. This number of non-contacts is unlikely to skew the profile of the IPS sample as their occurrence is independent of the characteristics of the passengers.

A small proportion of passengers (3.1% in 2016) are not being contacted for other reasons, for example, if they are using their mobile phone (it is IPS policy not to interrupt passengers when they are on the phone). Analysis by port shows that Heathrow airport has a higher number of non-contacts (5%).

Ineligible passengers

Some of the individuals who cross IPS counting lines are ineligible to participate in the IPS, for example, if they are travelling on a flight to another destination within the UK, or are flight crew members or airport employees.

Minimum responses and refusals

Minimum responses are used in the calculation of the number of visits to and from the UK, but cannot be used to estimate migration unless length of stay is collected. From 2015, interviewers have been encouraged to collect length of stay from respondents whenever possible even where the result is only a minimum response. Analysis by port shows that in 2016, 4.1% of interviews at Heathrow resulted in minimum responses, compared to 2.6% of interviews overall.

Heathrow also has a higher proportion of refusals at 2.4%, in comparison with the overall IPS refusal rate of 2.0%. Although refusals and minimums are higher at Heathrow compared with other ports, the overall rates of minimum responses and refusals for the IPS are still low, accounting for around 5% of cases. The response rate to the IPS remains high (74.5%).

Non-English speaking passengers

It is important that the IPS collects information from non-English speaking passengers, as these people may have different characteristics to English speaking passengers. IPS interviewers are provided with specific guidance and prompts for interviewing passengers whose first language is not English. The IPS team also produce foreign language sheets for use by non-English speaking passengers. IPS interviewers use these to guide the respondents through the questionnaire. Interviewing passengers who do not speak English can be a challenge, but interviewers are skilled at obtaining the required information.

4 . How reliable are migration estimates from the International Passenger Survey?

There are two broad types of variability associated with migration estimates from the International Passenger Survey (IPS). These are: variability because of the many different samples that could have been drawn during the interview period (known as “sampling error”); and variability due to other factors (“non-sampling error”).

Non-sampling error

Non-sampling error is when those who respond to the survey have different characteristics to those who do not respond. The weighting applied to the estimates of total passenger flows accounts for those who do not respond, but if their migration characteristics are different in some way then non-response bias would occur. Measurement error would be introduced, for example, if respondents provide incorrect information to the IPS interviewers. Confidence intervals do not take account of non-sampling errors such as non-response bias and measurement errors.

Sampling error

As is the case with all sample surveys, the estimates produced from the IPS are based upon one of a number of samples that could have been drawn during the interview period. This means that there is a degree of variability around the estimates produced. Since 2012, migration estimates based on the IPS have been accompanied by confidence intervals, which provide a measure of the uncertainty around an estimate.

The widely accepted 95% confidence interval is used, meaning that over many sampling repetitions under the same conditions, we would expect the confidence interval to contain the true value 95 times out of 100. Equivalently, we can say that there would be a 1 in 20 chance that the true value would lie outside of the range of the 95% confidence interval. Because of this variation, changes in estimates between survey years or between population sub-groups may occur by chance. In other words, the change may simply be due to which passengers were randomly selected for interview. We are able to measure whether this is likely to be the case using standard statistical tests at the 5% level of “statistical significance”. The phrase "statistically significant at the 5% level" indicates that the change we are seeing in the data is very likely to represent a real change and has not occurred by chance.

Confidence intervals are reported in the accompanying datasets. Users are advised to be cautious when making inferences from estimates with relatively large confidence intervals. For immigration and emigration estimates where the lower confidence interval is below zero, users should assume the estimate is above zero.

For more information on the accuracy of these statistics, comparing different data sources, and the difference between provisional and final figures, please see the International migration methodology.

5 . What plans are there for improving migration statistics?

International Passenger Survey (IPS) development

The International Passenger Survey (IPS) is subject to an ongoing programme of development, including the introduction of an optimised sample in October 2016, a modernised data collection approach from August 2017 and updated weighting adjustments, which will be introduced in April 2019. This IPS sample optimisation and data collection modernisation is further described in the Report on international migration data sources.

In September 2017, we implemented a seven-month programme to phase out our old paper-based data collection approach on the IPS and phase in a new tablet-based approach with roll-out complete at all data collection sites by April 2018.

On 17 May 2018, we announced the postponement of the regular quarterly long-term international migration statistics. This was because of an issue that was traced to the temporary processing change that was implemented as part of the move to tablet-based data collection. The issue does not relate to data collected from new tablets but to processing of the remaining paper-based questionnaires. To ensure full confidence in the data and to allow further review of the recent changes implemented in the IPS data collection and processing systems, an independent assurance review was commissioned. The results of this review, ongoing developments and the impact on international migration estimates are described in the Report on international migration data sources.

Future development plans

In relation to migration statistics, the International Passenger Survey (IPS) was designed for measuring total migration flows into and out of the UK in addition to some characteristics. However, the growing need for more information on the impact of international migration on the economy, labour market, services, housing and other themes in the UK cannot be fully met by the IPS.

In May 2018, we provided an update on our transformation work, which has been using opportunities available from the Digital Economy Act (2017) to access and link administrative data sources across government. This new evidence base will provide much better statistical information on international immigrants who interact with administrative systems and linking these sources together will provide a richer picture to inform public and policy debate. It should be noted that the IPS will continue to be essential as a leading indicator of migration patterns and the administrative sources could enhance the intentions-based IPS estimates.

6 . How do international migration statistics from the International Passenger Survey compare with those from other sources?

All sources of international migration statistics are valuable in their own right and provide us with an understanding of the flows of international migrants, as well as the numbers of international migrants in the household population. For information about the variations between different sources of migration data, please refer to the note on the comparability of migration sources , which summarises the main differences between sources of international migration statistics and provides links to further information.

How do other countries measure long-term immigration?

It is important to recognise the differences between the UK and other countries in the way in which long-term immigration is defined and measured.

In this section eight countries are considered, Australia, Canada, Cyprus, Germany, Italy, New Zealand, Poland and Spain, illustrating the varying ways of defining and measuring long-term immigration.

Definitions

According to the United Nations (UN), a long-term migrant is defined as:

“A person who moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence.” Countries such as the UK, Cyprus, Germany, Italy and Spain apply the UN definition of a long-term migrant, while other countries such as Poland use the “establishment of permanent residence” as the basis of their definition. Other countries such as Canada define the immigrant population based on their permanent or temporary status in the country, rather than on their minimum length of stay.

Measuring migration

The UK estimates long-term immigration based on data from the International Passenger Survey (IPS) that records people’s intentions of stay. This is supplemented by adjustments for asylum seekers and their dependants, flows into and out of Northern Ireland and an adjustment to account for people who change their intentions. Estimates do not include military and diplomatic personnel. However, apart from Cyprus, the UK is the only country in Europe to use a border survey as the basis for estimating long-term immigration.

The other European countries we review (Germany, Italy, Poland and Spain) base their immigration estimates, at least in part, on the recordings of the relevant population registers. Other countries such as Australia use a criteria-led visa system to grant migrants permanent residence.

Table 6 explains the differences and similarities in the definitional and measuring processes in more detail.

Table 6: How other countries define and measure long-term immigration

Table 6: How other countries define and measure long-term immigration

Country	Definition of a long-term migrant	How long-term immigration is measured?
Australia	The Department of Immigration and Border Protection (DIBP) data define long-term immigrants as those granted permanent visa status in a given year (except immigrants from New Zealand, who have the right to live and work in Australia). Visitors to Australia are given “temporary visas”.	Under the “Australia Migration Programme” any person is able to apply for permanent residence in Australia. However, the programme is selective and migrants are selected through three streams: skills, family and special eligibility. The government sets a limit on the number of people who can enter under the programme on an annual basis.
Canada	Statistics Canada does not define the immigrant population based on their minimum length of stay in the country, but on their permanent or temporary status in the country.	Statistics Canada differentiates between “immigrants” and “non-permanent residents”. An “immigrant” is defined as someone who has been granted the legal right to stay in the country or as someone who has been “naturalised”. A “non-permanent resident” is a person who is lawfully in Canada on a temporary basis under the authority of a valid document, for example, a work permit. Annual administrative data and five-yearly census data are used to provide information about the numbers of landed immigrants or permanent residents.
Cyprus	Uses the UN definition	Cyprus uses a similar system to the UK, via a survey to ask people entering the country about their intentions of stay. The Statistical Service of Cyprus then uses the data from this survey to make an estimate about the number of immigrants arriving in the country.
Germany	Uses the UN definition	To measure long-term immigration, Destatis uses the German National Register of Foreigners. The Register estimates the intention of stay of migrants by using the information on the register about long-term and short-term migrants the year before the reference year as a basis.
Italy	Uses the UN definition	Istat measures international migration using a population register. A pre-requisite of registration is a residence permit, with an ongoing requirement for regular demonstrations of continuous residence by the migrant in the municipality in which they reside.
New Zealand	New Zealand classifies people as having “migrant status” if they have spent 12 months out of a continuous 16 months residing in the country.	Statistics New Zealand adds people who have “migrant status” to the country's resident population. Statistics New Zealand currently uses landing cards, but is switching to electronic data collection.
Poland	Poland uses the “establishment of permanent residence” as the defining feature of a long-term immigrant.	The Central Statistical Office of Poland uses a population register to measure long-term immigration, registering people arriving in Poland for permanent residence on the register. Poland also uses a statistical survey, which gives information about the stocks of immigrants temporarily residing in Poland. Poland also uses the c ensus to receive information about migration stocks and flows.
Spain	Uses the UN definition	The migration statistics that the Instituto Nacional de Estadística collects are based on registrations and de-registrations on the Municipal Register .

Source: Office for National Statistics

The different ways in which countries define long-term immigration present inconsistencies when comparing other countries' migration data with UK migration data. In addition, simple comparisons of annual immigration between countries can be difficult as countries can submit their data at different times of the year and collect it for different reference periods.

There are challenges in the measurement of migration, which Table 7, in part, demonstrates. One of the ways countries may check the accuracy of their migration data would be to compare flows and stocks from countries of origin with the relevant countries' data. However, the lack of harmonisation in the definitions and methodologies makes this a problematic task.

Table 7 considers the advantages and disadvantages of population registers, visa systems and border surveys to measure long-term immigration.

Table 7: The advantages and disadvantages of the measures of long-term immigration

Method of measurement	Potential advantages	Potential disadvantages
Population registers	· It covers more of the population than a sample survey.	· Population registers may include both short- and long-term immigrants, which could potentially confuse public spending planning.
	· It would provide a firmer basis for other statistics, for example, working out the size of the population.	· In some cases, there may be little incentive to de-registering when emigrating, since there can be some benefits to remaining on the register, such as entitlements to benefits and services.
	· It provides local authorities with reliable information about local migration and population change, allowing the councils and the government to plan public spending effectively.	· There may be lags between individuals arriving in the country and registering, and leaving the country and de-registering .
Visa system	· It should give authorities a clear understanding of how many people are in the country and for how long.	· A visa expiry date does not always mean that a person will emigrate at that time.
	· It provides reliable information about migration patterns at a national level, which allows governments to plan public spending effectively and control immigration.	· It requires a great deal of administration for the system to function properly and effectively.
	· Visa type (and changes in visa type over time) may indicate why migrants are immigrating to the country.	
Border survey	· Given the processes in place in the UK, it is the best method available to measure long-term immigration.	· There are sampling and non-sampling errors around the estimates provided by a border survey.
	· Using a border survey often means that you can separate long- and short-term immigration, helping councils and governments to plan more effectively.	· Although adjustments are made for this, there is the potential that a border survey based on intentions of stay could result in intentions not always matching reality.
	· A border survey allows authorities to collect richer information about migration characteristics.	

Source: Office for National Statistics

We have previously published an article comparing international estimates of long-term migration (PDF, 383.87 KB) in 2014.

7 . Links to related publications

- International migration methodology
- International Migration – table of contents
- International Passenger Survey Quality and Methodology Information report
- International Passenger Survey methodology
- Migration Statistics Quarterly Report
- Note on the differences between Long-Term International Migration flows derived from the International Passenger Survey, and estimates of the population obtained from the Annual Population Survey
- Note on the comparability of migration sources
- Port Survey Review
- Travel Trends