Office for
National Statistics

Long-Term International Migration Estimates Frequently Asked Questions and Background Notes

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1.0: What has been released and where can I find it?

1.1 Which are the latest available migration estimates?

The latest estimates released on 26 May 2016 are for the **year ending December 2015**. These are detailed provisional estimates for Long-Term International Migration (LTIM) alongside provisional estimates from the International Passenger Survey (IPS).

Final LTIM and IPS data are available each November for the previous calendar year (and mid-year). The latest final estimates available are for 2014.

1.2 What migration estimates are available?

There are 2 types of estimates on long-term international migration flows that are published on a regular basis.

i) Long-term international migration from the International Passenger Survey (IPS) – these are the IPS tables.
ii) Long-Term International Migration (LTIM) – these are the LTIM tables.

The 2 sets of estimates cannot easily be compared and should not be confused. Users need to be aware of which set of tables they are using. For more information on the difference between LTIM and IPS estimates see Section 3 on methods and coverage.

Provisional and **final** estimates are produced for each type of long-term international migration flow data. Provisional estimates give a timely indication of the flow levels of international migration, being produced 5 months after the reference date, compared with 11 months for final data.

- **Provisional IPS (rolling year quarterly):** These estimates are based solely on data collected by the IPS. They offer an early indication of changes in patterns of long-term international migration to and from the UK. The rolling year based estimates are produced every quarter and provide up to date data on citizenship and main reason for migration. These are available for the last 10 years and can be found on the International Migration Topic Page.

- **Provisional LTIM (rolling year quarterly):** Estimates of LTIM are about 90% based on data from the IPS. In addition they are adjusted to account for asylum seekers (including a non-asylum enforced removals adjustment and people resettled in the UK under various resettlement schemes), migration to and from Northern Ireland and people whose length of stay changes from their original intentions. They offer the most comprehensive early indication of migration flows into and out of the UK.

  Releases of provisional LTIM data every quarter show overall estimates of immigration, emigration, and net migration by citizenship and main reason for migration. These are available for the last 10 years and can be found on the International Migration Topic Page.

- **Final IPS calendar year (3-series):** These estimates are published annually in November. They provide detailed cross-tabulated data of all available variables. Since November 2012, the data within the 3-series tables have been available from 1975 onwards (superseding the 2-series tables previously published covering 1975 to 1990).

  Characteristics of migrants that are in 1 or more of the tables are: citizenship, country of last or next residence, country of birth, age and sex, sex and marital status, usual occupation (prior to migration), main reason for migration, previous main reason for migration, origin or destination within the UK, intended length of stay, actual length of stay and route. They can be found in the Long-Term International Migration release.

- **Final LTIM calendar year (1-series and 2-series):** LTIM estimates provide the most comprehensive estimates of long-term international migration to and from the UK. The IPS provides the foundation of these estimates. Final LTIM estimates are published annually in November. Data are available from 1991 and includes tables by calendar year, half year and mid-year.

  2-series tables usually focus on 1 characteristic of migrants, from the following list: citizenship, country of last or next residence, country of birth, age and sex, sex and marital status, usual occupation (prior to migration), main reason for migration, origin or destination within the UK and intended length of stay. They can be found in the Long-Term International Migration release.

  1-series (methodology) contains tables showing the components and adjustments for LTIM and the confidence intervals and non-response associated with the IPS estimates. These are available from 1975 onwards and can be found in the Long-Term International Migration release.

  Underlying datasheets (final IPS data): International Passenger Survey underlying datasheets. These annual tables provide further breakdowns of migrant characteristics. Underlying datasheets are published from 2000 to the latest annual estimates (2014) can be found here.

For a comprehensive list of published tables and variables please see Section 6.

1.3 What is the difference between provisional and final data?

Provisional figures allow for a timely comparison of recent migration patterns on a quarterly basis. However, these are subject to change as their calculation is based upon provisional data. The final LTIM estimates are considered to provide a more reliable picture of migration and allow for annual comparisons over time.

For more information see MSQR Information for Users.

2.0 Trends in long-term international migration

2.1 How has international migration changed over recent decades?

Net migration is the difference between the estimated number of immigrants arriving to the UK for at least 1 year and the estimated number of emigrants leaving the UK for at least 1 year. Figure 1 shows rolling annual estimates from the year ending June 2005 onwards. Latest provisional estimates show net migration was +333,000 in the year ending December 2015.

Figure 1: Long-Term International Migration for the UK, 2005 to 2015
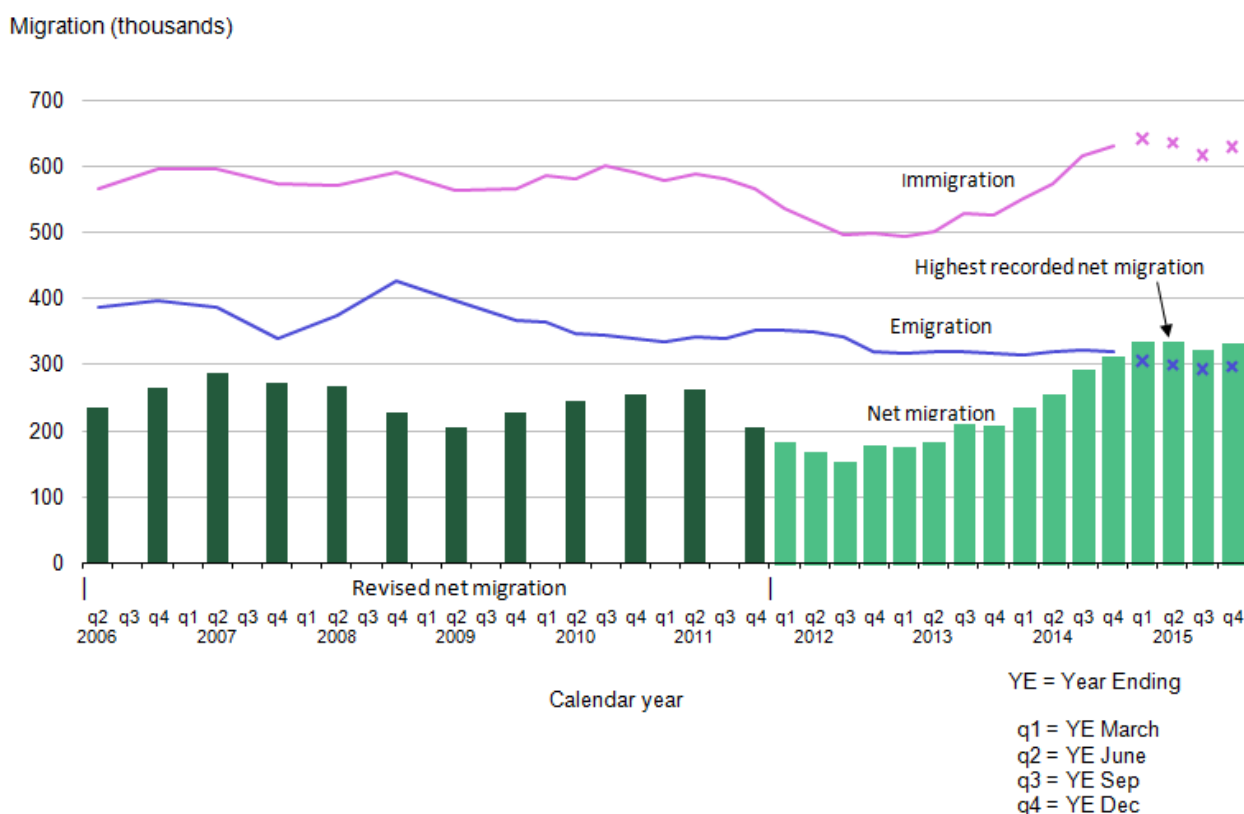
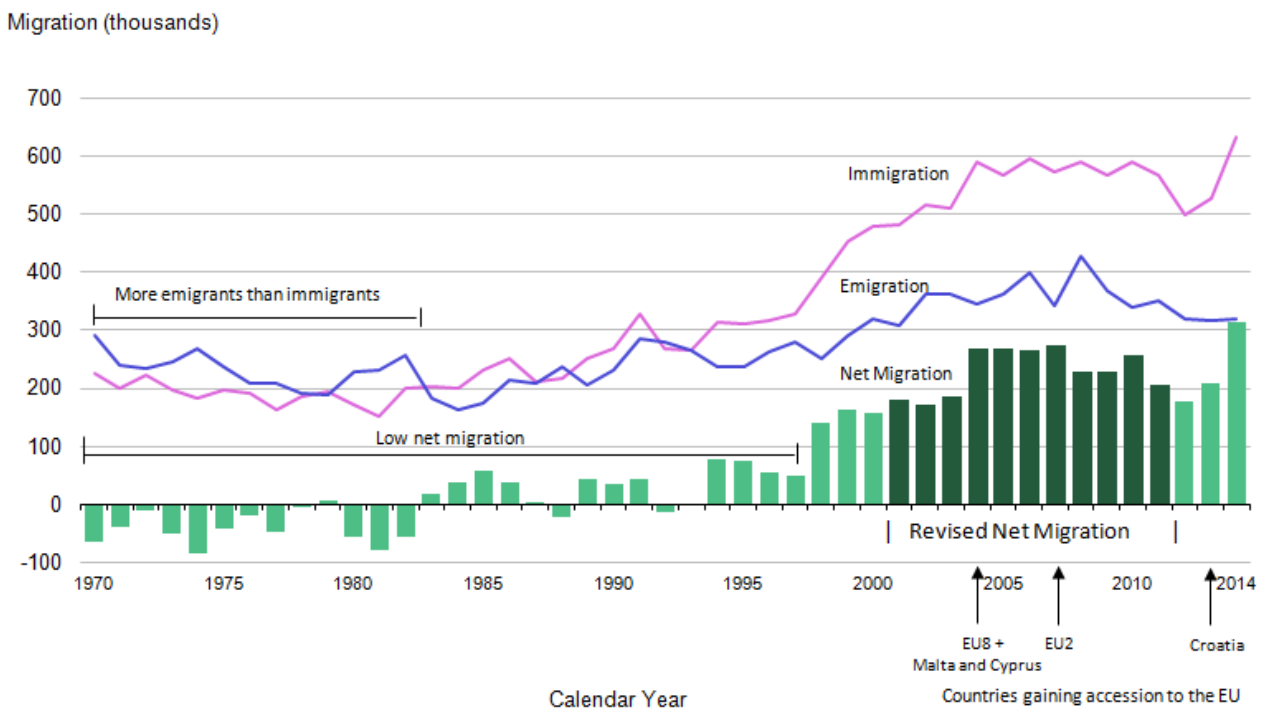*Source: ONS, Long-Term International Migration*
Notes:

1. *Figures for 2015 are provisional. All other figures are final calendar year estimates of LTIM.*

2. *Net migration estimates for the period 2001 to 2011 have been revised in light of the 2011 Census. Therefore they will not be consistent with the separate immigration and emigration figures shown. For more information see underline.*

Figure 2 shows the calendar year estimates for net migration from 1970 to 2014. During the 1960s and 1970s, there were more people emigrating from the UK than arriving to live in the UK. During the 1980s and early 1990s, net migration was typically above zero, but negative in some years. Since 1994, it has been positive every year and rose sharply after 1997. During the 2000s, net migration peaked between 2004 and 2007, in part as a result of immigration of citizens from the countries that joined the EU in 2004. Before the current peak, annual net migration has mostly fluctuated between around 150,000 and 250,000.

Figure 2: Long-Term International Migration for the UK, 1970 to 2014 (annual totals)

Source: ONS, Long-Term International Migration
Notes:

1. *All figures are final calendar year estimates of LTIM.*
2. *Net migration estimates for the period 2001 to 2011 have been revised in light of the 2011 Census. Therefore they will not be consistent with the separate immigration and emigration figures shown. For more information see here.*

ONS has published a Long-Term International Migration Timeline showing immigration, emigration, and net migration as well as some key events, from 1964 to the latest final estimates. The timeline is updated with final LTIM data in November each year.

ONS has published a short story on Immigration Patterns of Non-UK born Populations in England and Wales based on 2011 Census data.

2.2 What impact has EU Accession had on levels of international migration?

In 2004, 10 additional countries – the EU8 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia) as well as Malta and Cyprus – acceded to the EU. Net EU migration increased in the years immediately following accession, especially from EU8 countries. Levels of EU8 net migration declined briefly between 2008 and 2009 due to a decrease in inflows and increase in outflows. Since then immigration of EU8 citizens has remained relatively steady.

In 2007, Romania and Bulgaria (EU2) acceded to the EU. Between 2007 and 2013, these countries were subject to transitional controls restricting their access to the UK labour market. These restrictions were lifted on 1 January 2014. Following accession, immigration of Bulgarian and Romanian citizens peaked at 17,000 in the year ending December 2008, before decreasing to 6,000 by the year ending June 2011. In 2011/2012, immigration of Bulgarian and Romanian citizens remained steady at about 10,000 per year. Since 2013 immigration of EU2 citizens has increased and stood at 65,000 in the year ending December 2015.

2.3 What are the latest immigration estimates for Bulgarian and Romanian migrants?

There has been significant public interest in Bulgarian and Romanian migration to the UK, due to the end of transitional employment restrictions that took place on 1 January 2014. These restrictions had previously placed limits on the kind of employment Bulgarian and Romanian citizens could undertake in the UK.

There are now 2 full years of data available since these employment restrictions were lifted. In the year ending December 2015, an estimated 65,000 Bulgarian and Romanian citizens migrated to the UK. This represents an increase (although not statistically significant) of 16,000 when compared with the estimate for the year ending December 2014, when an estimated 49,000 Bulgarian and Romanian citizens migrated to the UK. 84% of the Bulgarian and Romanian citizens who immigrated to the UK in the year ending December 2015 arrived for work-related reasons.

2.4 Have results from the 2011 Census been compared to long-term international migration estimates?

Every 10 years the Census provides the opportunity to compare mid-year population estimates with a count of the population at a given point in time. Population estimates are produced from administrative records on births and deaths and Long-Term International Migration (LTIM) estimates, in addition to other adjustments.

The Census-based 2011 mid-year population estimate for England and Wales was 464,000 or 0.8% higher than the mid-year population estimates rolled-forward from the 2001 Census base. There are several possible causes for this small difference but it was considered that the "largest single cause is most likely to be underestimation of long-term immigration from central and eastern Europe in the middle part of the decade" (ONS, 2012). This was before improvements were made in 2009 to the International Passenger Survey.

In light of these differences, ONS has published a revised series of net migration estimates for 2001 to 2011 (shown in Table 1) as part of a review into the 'Quality of Long-Term International Migration estimates from 2001 to 2011'. The main findings of the review were:

1. There is evidence that shows the IPS missed a substantial amount of immigration of EU8 citizens that occurred between 2004 and 2008, prior to IPS improvements from 2009.
2. The IPS has underestimated the migration of children.
3. The IPS improvements have both reduced the relative error around the IPS estimates, as well as improving the balance of the sample.
4. There is no evidence to suggest that the current methodology used in LTIM calculations needs adjusting.

Table 1 shows the revised calendar year net migration estimates for the UK for 2001 to 2011.

Table 1: Revised net international migration estimates for United Kingdom

			Thousands
	Revised Net migration estimates	Original Net migration estimates	Difference
2001	+ 179	+ 171	+ 8
2002	+ 172	+ 153	+ 19
2003	+ 185	+ 148	+ 37
2004	+ 268	+ 245	+ 23
2005	+ 267	+ 206	+ 61
2006	+ 265	+ 198	+ 67
2007	+ 273	+ 233	+ 40
2008	+ 229	+ 163	+ 66
2009	+ 229	+ 198	+ 31
2010	+ 256	+ 252	+ 4
2011	+ 205	+ 215	- 10

The adjustments applied increase the overall estimate of net migration across the decade, but most particularly in 2005 to 2008, when the evidence suggests that the majority of migrants who were missed by the IPS immigrated to the United Kingdom.

In 2009, improvements were made to the IPS to make it much better focused on migration and to increase the geographical coverage of ports of entry to the UK. For more information see International Passenger Survey: Quality Information in Relation to Migration Flows. It is important to note that if these improvements had been made prior to 2009, then ONS would have expected the rolled-forward population estimates and the 2011 Census count to have been closer.

Users who wish to see a more detailed breakdown of inflows and outflows of long-term international migrants between 2001 and 2011 by variables such as reason for migration, age and sex, citizenship and country of birth should continue to use the existing LTIM and IPS 1, 2 and 3-series tables, but should bear in mind the caveat that the headline net migration estimates have now been revised as outlined above.

Further plans for continuous improvement of migration estimates include the following:

- addressing ongoing issues with the quality of migration estimates for particular subgroups of the population

- exploring whether additional administrative data sources can be used to improve the quality of migration and population estimates

- continuous quality assurance of the IPS estimates

2.5 Are there any planned changes to the Long-Term International Migration (LTIM) estimates methodology?

ONS has been working with the Home Office to include the Syrian Vulnerable Persons Relocation Scheme figures within the LTIM estimates. The first LTIM data to include figures from the expanded resettlement scheme has been published in May 2016 and cover the year ending December 2015. Given that the Home Office bulletin contains these figures, ONS does not separately identify the Syrian refugees in the LTIM data. However, it does signpost users to the Home Office bulletin.

For 2013 data onwards, it is possible to identify long-term migrants within the data on non-asylum enforced removals. This allows an adjustment to be made to include these data in the processing of LTIM estimates for final 2013 estimates onwards. The approximate impact of applying the adjustment is to increase emigration estimates by 2,000 to 3,000 per annum and reduce net migration by around 1%. This increase of estimate is based on the figures for 2011, 2012, 2013 and 2014, which were 1,538, 2,616, 1,890 and 1928 respectively. However the impact in 2009 and 2010 was much lower (542 and 932 respectively).

3.0 Methods and coverage

3.1 How are estimates of long-term international migration calculated?

3.1.1 Data sources

There is not a single, all-inclusive system in place to measure all movements of migrants into and out of the UK. Therefore, it is necessary to use a combination of data from different sources that have different characteristics and attributes in order to produce estimates of long-term international migration. None of the data sources used, while offering the best data currently available, are specifically designed to capture information solely on long-term international migration.
The sources of data used are listed below:

- the International Passenger Survey (IPS), a voluntary sample based survey. It is the prime source of long-term migration data providing estimates of both inflows and outflows, but does not cover all migration types.
- Labour Force Survey (LFS) – provides a geographical distribution of long-term immigrants for the calibration of IPS inflow data.
- Home Office immigration administrative systems, which provide data on asylum seekers and their dependants for 1991 onwards. From 2013, Home Office data on non-asylum enforced removals are also used and from 2015, adjustments for people resettled in the UK under various resettlement schemes.

- forecasted Long-Term International Migration estimates based on previous GP registrations from the Northern Ireland Statistics and Research Agency (NISRA) for estimating long-term international migration to and from Northern Ireland and the rest of the world, from 2008 onwards. Forecasted data is replaced with final data for LTIM final annual estimates.

3.1.2 LTIM tables of estimates

The IPS has some limitations with respect to measuring immigration and emigration, as it:

- is a sample survey and so the estimates are subject to a degree of uncertainty
- captures very few asylum seekers who may be entering or leaving the UK, or non-asylum enforced removals from the UK
- does not take into account the changing intentions of passengers; these are passengers who intended to remain in or out of the UK for 12 months, but actually spent less than a year (migrant switchers) and those who believed they would be staying or leaving for less than a year but actually spent longer (visitor switchers)
- does not capture those who are crossing the land border between the UK (Northern Ireland) and the Republic of Ireland

A more comprehensive estimate of long-term international migration is produced by combining the IPS data with the information provided by the additional sources listed above. Adjustments are also made for migrants who change their intentions known as visitor and migrant switchers. This more inclusive estimate is referred to as **Long-Term International Migration (LTIM)**.

Long-Term International Migration =
IPS flows (including the Republic of Ireland) + Northern Ireland migration flows
+ visitor switcher flows + asylum seeker flows (including non-asylum enforced removals
adjustment and people resettled in the UK under various resettlement schemes)
- migrant switcher flows

Data received from these supplementary sources are not as detailed as the data collected by the IPS, which limits the level of analysis that can be performed on the LTIM data. While LTIM tables usually contain just 1 variable, cross-tabulations of IPS data are available in the IPS 3-Series Tables.

Further information on the methodology to produce IPS and LTIM estimates ('Methodology to estimate LTIM'), including changes to the methodology over time, is available on the ONS website. This also includes copies of the questionnaires used in the International Passenger Survey (IPS).

3.2 What about those migrants who stay less than a year?

LTIM estimates do not include estimates of short-term migrants. The LTIM estimates use the recommended definition of an international long-term migrant (see Section 5.1). UK population estimates do not currently include short-term immigrants as usually resident in the UK, nor do they exclude short-term emigrants from the usually resident population.

In May 2016, ONS released the [Short-Term International Migration Annual Report (STIMAR)](#) for England and Wales, for mid-2014. The STIMAR includes estimates of short-term immigration and emigration to and from England and Wales for periods of 1 to 12 months, 3 to 12 months and 3 to 12 months for work or study on the basis of the UN definition of a short-term migrant. Local authority level estimates of immigration for England and Wales are also produced on the basis of the UN definition.

For more information about Short-Term International Migration estimates, please refer to the [Short-Term International Migration Frequently Asked Questions](#).

3.3 How can I find out about long-term international migration in my local area?

Final IPS and LTIM estimates of long-term international migration are available for the countries of Great Britain and the regions of England. Final LTIM estimates also provide separate estimates for Northern Ireland.

National and regional migration flows are disaggregated to local area level in order to produce mid-year population estimates by local authority. The [Population Estimates Analysis Tool](#) can be used to investigate population change, including migration into and from each local authority.

To compare ONS estimates with other sources of migration data at local area level, please use the [Local Area Migration Indicators Suite](#).

Further data from the 2011 Census is available on the [Census Data](#) section of the ONS website.

3.4 How can I find out any information on non-UK born residents living in my area?

Estimates based on the Annual Population Survey (APS), which is the Labour Force Survey (LFS) plus various sample boosts, are published annually, providing information on the [Population by Country of Birth and Nationality](#). These estimates of countries of birth/nationality by region and non-UK can be split down to the local authority level.

The main published tables are also accompanied by datasheets, supplying lower level detail on individual countries of birth and nationality.

Additionally, in May 2013, ONS released detailed [country of birth and nationality analysis from the 2011 Census of England and Wales](#).

In November 2014, ONS released a report on ['Social and Economic Characteristics by Length of Residence of Migrant Populations in England and Wales'](#).

3.5 Is there any information about international migrants' ethnicity available?

The IPS collects information on individuals' citizenship, but not specifically on ethnicity.

The Labour Force Survey provides detailed [Labour Market characteristics by ethnicity](#) for regional and local areas.

Data on ethnicity from the 2011 Census of England and Wales are available on the Census Data section of the ONS website.

3.6 Is it possible to sum together the Long-Term International Migration (LTIM) data and population figures for resident foreigners in the UK, for a single year, to get the following year's foreign population estimate?

No, not for long-term migration, that is for migration longer than a 12 month period. This is mainly because of the definitional differences between the 2 surveys used to estimate migrant flows (International Passenger Survey, IPS) and the foreign resident population (Annual Population Survey, APS).

A discussion on the differences between international migration data from the LFS/APS and IPS/LTIM can be found in the report: 'Estimating International Migration: An exploration of the definitional differences between the Labour Force Survey, Annual Population Survey, International Passenger Survey and Long-Term International Migration'.

3.7 Do you have data on the numbers of UK migrants living abroad?

No. The data published contain estimates on the flow of migrants into and out of the UK. They do not contain data on the number of UK migrants living abroad. For more information about UK migrants abroad, please see the World Bank publication 'Migration and Remittances Factbook 2011'.

Alternatively, an individual country breakdown for Europe can be found on the Eurostat website. The US Census Bureau website contains a list of International Statistical Agencies.

3.8 Is it possible to produce an accurate figure for the number of people who are in the country illegally?

The London School of Economics[1] identified 3 main categories of illegal or 'irregular' migrants, which include:

- Illegal entrants – including both those who evade formal migration controls and those who present false papers.
- Migrants who have been lawfully present in the country but remain after the end of the permitted period. This category includes two main subcategories:
  i. failed asylum seekers who stay in the country despite a final decision refusing them continuing right to remain.
  ii. overstayers whose period of legal residence has expired without renewal. This group includes those who are no longer eligible to apply for extensions because of the introduction of the points system.
- Children born in the UK to irregular migrant couples. They are not migrants themselves, but have no right to remain.

By its very nature it is impossible to quantify accurately the number of people who are in the country illegally. For this reason ONS does not produce estimates on the size of the illegal migrant

population. However, while our data do not identify illegal migrants separately, many will be included in our data. Those who overstay their visa would have been counted in our immigration figures by the IPS when they originally entered the country and those who arrived illegally and then subsequently claimed asylum will also be included.

Furthermore, every 10 years ONS conducts the Census and at this time a notable proportion of the illegal migrant population should be captured in the population estimates. The 2011 Census initially captured 94% of the resident population using an address register and focusing on hard-to-count areas. Adjustments were then made following the Census Coverage Survey to estimate the whole population.

In June 2005, the Home Office published the outcome of an assessment of whether methods used in other countries to estimate the size of the illegal population could be applied to the UK. The outcome estimated that the total unauthorised migrant population living in the UK in 2001 was 430,000. Please see the following reports for more information: 29/05 - Sizing the unauthorised (illegal) migrant population in the United Kingdom and 58/04 - Sizing the illegally resident population in the UK. As mentioned above a report written by the London School of Economics[1] estimated that in 2007 the number of 'irregular' migrants was 618,000 (which includes all of the above listed main categories)[2].

1. 'Economic impact on the London and UK economy of an earned regularisation of irregular migrants to the UK', London School of Economics, (Greater London Authority, 2009)
http://www.lse.ac.uk/geographyAndEnvironment/research/london/pdf/irregular%20migrants%20full%20report.pdf
2. A more recent report has been published by Migration Watch who have updated the LSE report based on several different assumptions http://www.migrationwatchuk.org/briefing-paper/190

3.9 Why do estimates of long-term international migration differ from the number of National Insurance Numbers allocated?

On 12 May 2016 we published an information note explaining the reasons why long-term international immigration figures from the IPS could differ from the number of National Insurance Number (NINo) registrations. It noted that the two series are likely to differ because of short-term immigration and timing differences between arriving in the UK and registering for a NINo. It emphasised that the estimates derived from the IPS are the most appropriate for measuring long-term immigration. NINo registrations data are not a good measure of LTIM, but they do provide a valuable source of information to highlight emerging changes in patterns of migration.

The analysis used 1 to 12 month short-term migration estimates for employment, study and work (other) to help explain the gap as this group was most likely to contain people who might register for a NINo. In YE June 2014 there were 251,000 EU citizens immigrating to England and Wales for 1 to 12 months for the reason of employment, study or work (other) compared with 239,000 the previous year. This is not the total level of short-term international migration but the most appropriate to help explain the gap. An adhoc analysis was also run to estimate the number of short-term international migrants in 2015 using 'intentions' data. Two estimates were included to reflect the uncertainty and the fact that they can be estimated in different ways. The paper provides more information on this. The mid-2015 'actual' STIM estimates will be published in May 2017.

Adding together LTIM and STIM estimates does not provide a reliable measure of all immigration to the UK within a specific time period. Short-term immigration flows are based on journeys, not people, and have methodological differences from LTIM flows. In addition, it is possible for someone to be both a long-term and short-term migrant in the same period, and STIM estimates are based on actual flows whereas LTIM covers migrants' intentions.

However, although they cannot be added together to provide one single, accurate measure of international migration, LTIM and STIM estimates of immigration and emigration should be considered alongside and in the context of each other. As these estimates represent different people immigrating for different reasons but they can help to provide an overall picture of international migration. Historical data on short-term and long-term international migrants are published on the ONS website, and there is a [summary](#) of the definitional differences between these data. For more detail on the NINo and IPS comparison, users are encouraged to read the [report](#).

3.10 Why do IPS formal study estimates not match student visas figures?

The IPS formal study figures provide an estimate of the number of migrants indicating their main reason for migrating is to attend a formal study course in the UK. This may not match other measures of 'student' immigration such as the number of student visas issued, for the following reasons:

- IPS estimates only include those people who intend to stay for 12 months or more, whereas visas data include people coming to the UK for less than 12 months
- the IPS category includes accompanied children, who are not included in the student visas figures
- the IPS only records the stated main reason for entering the UK (this may not correspond with the nature of the visa they hold because they may also have other reasons for immigrating)

3.11 Can we use IPS formal study data to estimate the net balance of students entering and leaving the country?

Care should be taken when interpreting net migration estimates by main reason for migration and particularly for students. For example, a migrant who arrived in the UK to study may subsequently leave to take up a job abroad and so not be included in the estimate of net migration for formal study which can be found in provisional IPS estimates of migration flows by citizenship and main reason for migration. These balance migration figures are the difference between the numbers of migrants arriving to study and the numbers of migrants leaving to study.

From January 2012 new questions were added to the IPS to ask those leaving the UK what their main reason for migrating was when they arrived. Data from these new questions for the year ending December 2012 were published for the first time in August 2013, showing outflow of migrants by citizenship and, for former immigrants, previous main reason for immigration. 3 final IPS 3-series tables, including the previous main reason for migration variable, were also published in November 2013. Caution should be exercised when comparing these new data with other IPS estimates of international migration, particularly when estimating net flows. A [guidance note](#)

('International Migration – How to interpret Table 4') explains what the new data show and how they can be interpreted in relation to estimating the net balance of students entering and leaving the country.

Similarly, caution should be applied when considering the 'student' usual occupation prior to migration. If, for example, a student has worked part time before leaving the country, their prior occupation will be work related.

3.12 Why is there a gap between the number of non-EU students arriving in the UK and the number leaving who originally came to study?

Specifically looking at non-EU students some explanations could include:

- non-EU students extending their visas to remain in the country longer
- IPS respondents not recalling that they originally entered the UK as a student
- sampling error of the IPS
- some non-EU students remaining in the UK without a valid visa
- some non-EU students granted British citizenship or settlement
- timing - those migrants arriving as long-term international students will not leave until at least a year after arriving and often this will be several years later due to the length of their course

In 2012, a new question was added to the IPS asking current emigrants who had previously immigrated to the UK about their main reason for migration at the time that they arrived. The available information is reported on in the Migration Statistics Quarterly Report and its accompanying downloadable tables. However, further analysis of these data is ongoing to fully understand what the figures are showing, and it is likely that more years of data will be needed for conclusions to be drawn. ONS is carrying out work to understand this more fully looking at a range of information such as visa extension data and will be producing a report in due course.

3.13 Is it possible to produce alternative breakdowns of net migration, for example excluding students or asylum seekers?

ONS may consider alternative breakdowns of any published figures where it would be helpful. Current sources that measure net migration limit the types of alternative variations that can be produced, for example, the IPS is not suitable for identifying how many students leave the UK in isolation since some non-EU students may remain in the UK after their studies and switch to non-study visas, apply for settlement and others may eventually become British citizens. However, administrative data sources are being developed that may provide a better understanding of student migration in the UK, particularly what students do following their studies.

If an alternative net migration figure excluding students were produced the impact of doing so would vary depending on whether international student immigration is stable, increasing or decreasing.

- If stable each year: there will be no impact on net migration of removing students. This is because they will either emigrate after their studies or will remain in the UK, contributing to

the non-student population who are resident in the UK and therefore still be included in the net migration excluding students data.

- If increasing each year: excluding students is likely to initially result in a lower net migration figure. Depending on the length of their study, if immigration were to stabilise, the size of the initial decrease would reduce each year resulting in little or no impact on the net migration figures in the long term.

- If decreasing each year: net migration will initially be higher if students were excluded. As above, if immigration for study were to then stabilise, the size of the initial increase would lessen each year resulting in little or no impact on the net migration figures in the long term.

3.14 How does the UK compare with how other countries measure migration?

It is difficult to accurately compare migration trends internationally, because countries have different ways of defining what is meant by a long-term migrant. Table 2 compares various countries definitions of long-term migration, and how it is measured.

Table 2: Comparing international definitions of Long-Term International Migration

Country	Definition of a long-term migrant and Department Responsible for Collection of Statistics
Australia	**Department of Immigration and Border Protection** 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). Figures do not include those on student, skilled graduate, or any other temporary visas. Long-term emigration statistics are collected from passenger cards as residents leave the country. These data only include those intending to leave permanently. **Australian Bureau of Statistics** estimates of the usually resident population include residents who have been in the country for 12 of the sixteen months prior to when the estimate is made. They also include students and other temporary residents.
Canada	**Statistics Canada** define long-term immigrants as those granted the right to live in Canada permanently by immigration authorities in the given year, including those who have recently arrived in the country and those who have changed status while temporarily resident. Figures for emigrants, returning emigrants, temporary and non-permanent residents are also available.
Germany	**Destatis** long-term migration figures are based on local population registers and the central register of foreigners. Long-term immigrants are defined as those resident for more than 12 months. Figures do not include military and diplomatic personnel and those not registered.

USA	**The Office of Immigration Statistics** defines long-term migrants as those obtaining Legal Permanent Resident status in the given year, and include those who have recently arrived in the country or have changed their status while temporarily resident. It only includes non-US citizens entering the US. No emigration data are recorded.
	US Census Bureau data are used to estimate immigration, emigration, and net migration. Foreign-born respondents who lived abroad in the prior year are considered immigrants. Emigration is estimated by obtaining the difference between the foreign-born population in the country from 1 year to the next.

3.15 How do other countries define net migration?

In general, net migration refers to the difference between the number of migrants entering a country and the number leaving it over a given period of time.

Number of Immigrants – Number of Emigrants = Net Migration

Beyond this general definition, different countries may have different criteria for deciding which migrants to include in this calculation and which to leave out. An important consideration for many countries, including the UK, is the United Nations recommended definition of a long-term international migrant, as 'someone who changes his or her country of usual residence for a period of at least a year, so that the country of destination effectively becomes the country of usual residence.' Net migration figures for many countries, including Australia, Canada, Germany, New Zealand and the USA refer to the 'usually resident' population of international migrants. It should be noted that there are different ways of defining 'usually resident'. In New Zealand, as in the UK, 'usually resident' means being resident for 12 months or more. In Australia, however, it means being resident for at least 12 of the 16 months prior to when the estimate is made. Nevertheless, these countries refer to the 'usually resident' population in net migration estimates, regardless of visa status, or whether people are migrating for study, work or other reasons. The main exception to this approach is with regards to foreign military and diplomatic personnel, who are excluded from net migration figures in several countries (including the UK), regardless of the duration of their posting.

4.0 Reliability of migration estimates

4.1 How reliable are these estimates of international migration?

Estimates of Long-Term International Migration are:

- the best estimates available at this time
- based on a consistent definition since 1991 and
- produced in accordance with the National Statistics Code of Practice

To see how these estimates of long-term international migration measure against the code of practice dimensions of quality, please see the Quality and Methodology Information Report for International Migration.

The results of a review into the Quality of Long-Term International Migration (LTIM) estimates have been described in Question 2.4. This showed that the quality of international migration estimates improved following the introduction of fundamental changes to the IPS. These changes included:

- redesigning the sample design at the beginning of 2009 to make the survey more focused on identifying migrants
- rebalancing the IPS interviewer resource away from Heathrow and towards other routes; and
- introducing a new IPS processing system early in 2009 to enable improvements to be made to the IPS weighting methodology

Further information on these changes can be found on the Improving Migration and Population Statistics web pages. Further information about the Quality of the IPS in relation to migration flows can be found on the ONS website.

ONS continue to keep abreast of available administrative sources and explore whether additional administrative data could be used to improve international migration and population estimates. The results of exploratory analysis on an early set of Semaphore data were published at the end of the MSIP in March 2012.

4.2 How accurate are these estimates of long-term international migration?

As with all sample surveys, the estimates from the IPS are based on only 1 of a number of possible samples of passengers that could have been drawn at a given point in time. Each of these possible samples would produce an estimated number of migrants which may be different to the *true value* that would have been obtained if everyone passing through were interviewed.

The published estimate for migration is the best available and most likely figure based on the data collected of international migration flows during a particular time period.

Since the IPS is based on a sample survey, and not an exact count of passengers, it is good statistical practice to publish confidence intervals around the estimates. These provide a measure of the reliability of the estimates and can be used to identify statistically significant changes.

A confidence interval is the range within which the true value of a population parameter lies with known probability. For example the 95% confidence interval represents the range in which, over many repeats of the sample 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. The uppermost and lowermost values of the confidence interval are termed 'confidence limits'.

Since February 2014, the back series of provisional LTIM estimates are shown with confidence intervals to give an indication of the robustness of the estimate. These confidence intervals relate to the IPS component of the estimate. In November 2014, this extended to adding confidence intervals to all tables.

For a more detailed explanation of confidence intervals, please see the MSQR Information for Users.

4.3 What does it mean if a change is statistically significant?

As the estimates produced from the IPS are based upon 1 of a number of different samples that could have been drawn at that point in time, there is a degree of variability around the estimates produced. This variability may sometimes present misleading changes as a result of the random selection of those included in the sample. If a change or a difference between estimates is described as 'statistically significant', it means that statistical tests have been carried out to reject the possibility that the change has occurred by chance. Therefore statistically significant changes are very likely to reflect real changes in migration patterns.

4.4 How do you determine if a change is statistically significant?

When comparing 2 estimates, a t-test is performed which results in the calculation of a 95% confidence interval for the difference between these estimates. If this interval excludes the value 0, then we can conclude that the difference is very likely to be a real difference in migration figures and not a result of sampling variation.

A quick method of identifying if the difference between 2 estimates is statistically significant is to determine if there is an overlap of their confidence intervals. If they do not overlap, then the differences can be described as statistically significant. However, if they do overlap, then a t-test should be performed to determine statistical significance.

4.5 What is a t-test?

A t-test ascertains if the difference between 2 estimates is statistically significant, that is, if it were repeated with a different sample, the difference would occur 19 out of 20 times. This test divides the difference of the estimates by the square root of the sum of the squared standard errors. The resulting t-value needs to be greater than 1.96 to be 95% certain that the estimates are different. It can also be used to create a confidence interval around the difference. It calculates the standard error of the difference directly from using the difference between the 2 individual standard errors. All main statistical software packages have the functionality required to perform a t-test. If you need assistance with identifying whether the difference between 2 international migration estimates is statistically significant then please contact migstatsunit@ons.gsi.gov.uk.

4.6 Is there a test that compares LTIM estimates for significance?

LTIM is calculated from IPS estimates with additional components. These are administrative data held on asylum seekers and health card data on migration to and from Northern Ireland. There is also a mathematical adjustment made for those who change their intentions (switcher adjustments). These additional components result in data that provide a more complete picture of international migration into and out of the UK. However, these additional data sources are not subject to the uncertainty associated with a sample survey, although it is recognised that they are unlikely to be error free (such as incorrect recording of information).

Since February 2014, confidence intervals around the IPS component of LTIM estimates have been shown alongside LTIM estimates to give users an indication of the accuracy of the estimates. Additionally statistically significant changes are highlighted in the LTIM tables. However, users should note that there is no method of quantifying the possible error associated with the non-survey components of LTIM, which are unlikely to be random.

4.7 What quality assurance has ONS undertaken on these estimates?

Extensive quality assurance has been carried out on the LTIM estimates. The Social Survey division within ONS are responsible for carrying out the IPS and producing the IPS estimates. They have carried out quality assurance on the data collected, focusing particularly on the relationship between migrant contacts, visitor contacts and weighted estimates. This included investigating any anomalies and checking the data provided by the Civil Aviation Authority (CAA), which are used to weight the estimates.

IPS data have been examined in relation to estimates for previous years. The focus of this quality checking has been on any statistically significant increases or decreases and the contributing factors for these changes.

The LTIM estimates are quality assured at every stage of the processing.

5.0 Definitions and terms

5.1 Migrants

ONS use the UN recommended definition of a long-term international migrant:

'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.'

This is the definition used to calculate net migration, and is also used for the UK usually resident population estimate series. This definition does not necessarily coincide with those used by other organisations.

5.2 Citizenship

Citizenship is defined as the nationality of the passport which the traveller is carrying.

The British Nationality Act 1981, which came into force on 1 January 1983, replaced citizenship of the United Kingdom and Colonies with British citizenship, British Overseas citizenship, and British Dependent Territories citizenship. British Overseas citizens are recorded as New Commonwealth citizens, instead of as British citizens. Persons with British Overseas Territories citizenship are shown under the country that issued their passport.

Following a recent user consultation new citizenship groupings have been introduced to IPS tables which group citizenship differently. A list of which countries are in each of the old and new country

groupings is also [available](). More information on the consultation can be found in section 5.3 below.

5.3 Countries and country groups

A range of different country groupings are used in the migration statistics. The various definitions and groupings are defined in the [Glossary]() and in the notes accompanying the tables. Unless otherwise stated, country groups in tables are presented as they were constituted on 1 May 2004.

In 2014 ONS ran a user consultation on country groups used in the reporting of International Migration statistics. A response to the consultation has been published and as a result, new country groupings are now being used in tables 3b and 4b of the [Provisional Long-Term International Migration (LTIM) estimates]() and the annual [final IPS 3-series tables](). The old country groupings remain also. A list of which countries are in each of the old and new country groupings is also [available]().

5.4 Main reason for migration

Migrants in the IPS are asked the survey question 'What is the main reason for your visit?'. This question was intended to cover all types of travellers to and from the UK; that is, it was not specifically designed for migrants who constitute only a tiny group of the survey contacts. Nevertheless, it provides our only source for information about reasons for entering or leaving the UK. It should be noted that a person's main reasons for entering the UK might not be their only reason, for example someone arriving to study may also work while in the UK. The "main reason for migration" groupings used in the tables are explained below:

Definite job	Those migrating who have a definite job to go to, on 'business' (excludes diplomats, military personnel, merchant seamen and flight crews) and au pairs. This category was previously known as 'work related'.
Looking for work	Those migrating for work reasons, but who do not have a definite job to go to. This was a new category in 2005 which was previously part of the 'Other' category.
Work related	Those migrating who either have a definite job to go to or who are looking for work. Estimates for the above 2 categories are summed together to produce the estimates for this category.
Formal study	Those whose main reason for migrating is to attend a formal study course in the UK. This category includes unaccompanied school children.
Accompany/join	Those migrating to 'accompany/join' a partner/immediate family. This includes those migrating to get married and those who, on prompting, gave no further reason of their own for migrating.

Other	This category includes working holidaymakers, asylum seekers, those visiting friends and family, anyone taking a long holiday as well as migrants who are travelling for religious reasons. In previous published tables, this category also included those 'looking for work'.
Going home to live	Those migrants who were 'going/coming home to live' and would not give any other reason relating to work, study or accompany/join when prompted.
No reason stated	Those migrants who were 'immigrating/emigrating' and would not give another reason when prompted.

Interpreting net migration estimates by reason for migration is not simple. For example, a migrant who arrived in the UK to study may subsequently leave to take up a job abroad, and until January 2012, the IPS did not record the initial reason for coming to the UK when interviewing those migrants leaving. The net migration figures are the difference between the numbers of migrants arriving to study and the numbers of migrants leaving to study.

In January 2012 new questions were added to the IPS which ask current emigrants, who had previously immigrated to the UK, about their main reason for migration at the time that they immigrated to the UK. Data from these new questions were published for the first time in August 2013 and can be found in Table 4 of the Provisional Long-Term International Migration estimates. The data from these new questions give ONS more information on the number of current emigrants who previously immigrated to the UK for a particular reason, such as for work-related reasons or for formal study. Caution should be exercised when comparing these new data with other IPS estimates of international migration, particularly when estimating net flows.

5.5 Usual occupation (prior to migration)

The IPS includes the following question 'What has been your regular occupation?' to ascertain usual occupation prior to migration. This question was designed for migrants only. The usual occupation groupings used in the tables are explained below:

Professional and managerial:	Administrators, managers, and people with professional and technological qualifications.
Manual and clerical:	All other occupations.
Other adults:	Includes retired people and people with no paid occupation.
Children:	Those aged under 16 years.

Other categories available are: "Students", and "Total employees" (which is a sum of the "Professional and managerial" and "Manual and clerical" groupings).

Migrants who, prior to migration, were students but undertaking part-time work are grouped as "Professional and managerial" or as "Manual and clerical" (according to the nature of their part time work) and not as "Students".

Interpreting net migration estimates by usual occupation is not simple. For example, a migrant whose usual occupation prior to arriving in the UK was a student may subsequently have a different usual occupation when emigrating from the UK.

5.6 Area of destination or origin within the United Kingdom

This is shown by countries of the United Kingdom (Scotland, Wales and Northern Ireland), and regions of England; North East, North West, Yorkshire and The Humber, East Midlands, West Midlands, East, London, South East, and South West.

Estimates for Northern Ireland are included in the United Kingdom total in the **provisional** and **final IPS** tables and the **provisional LTIM** tables, but are only shown separately in the **final LTIM** tables from 2008 onwards.

Calibration is used to improve the regional distribution of immigrants. IPS data are adjusted to the geographical distributions provided by the LFS (known as 'calibration'). Further information can be found in the Methodology paper (see Section 3.1.2).

5.7 Age groups

The following survey question is asked of migrants and long stay visitors in the IPS 'What is your age now?' Results from this question are aggregated and presented as broad age groups; All Ages, Under 15, 15 to 24, 25 to 44, 45 to 59/64 and 60/65 and over. Further explanation of the older age groups is given below:

45 to 59/64	This age group includes females aged 45 to 59 years and males aged 45 to 64 years to reflect the differing traditional UK retirement ages between the sexes.
60/65 and over	This age group includes females aged 60 years and over and males aged 65 years and over to further reflect the different ages at which male and females traditionally retire.

6.0 A guide to the published tables

6.1 Symbols
The symbols used in the tables are listed below:

:	not available
z	not applicable
.	no contact
0~	rounds to zero
p	year includes provisional estimates

6.2 Provisional IPS tables

Provisional IPS estimates are published in 2 tables and 1 chart. They are listed below:

- **Table 3** - International Passenger Survey (IPS) estimates of long-term international migration by citizenship and main reason for migration. **Table 3a** refers to the old country groupings and **Table 3b** refers to the new country groupings
- **Table 4** – International Passenger Survey (IPS) estimates of long-term international emigration by citizenship, and for former immigrants, by previous main reason for immigration. **Table 4a** refers to the old country groupings and **Table 4b** refers to the new country groupings
- **Chart 3** - All migrants by citizenship and by all main reasons for migration. **Chart 3a** refers to the old country groupings and **Chart 3b** refers to the new country groupings

Table 3 and 4 use 95% <u>confidence intervals</u> to indicate the robustness of each estimate.

These can be found on the ONS website on the <u>Long-Term International Migration data</u> page.

6.3 Provisional LTIM tables

Provisional LTIM estimates are published in 2 tables and 3 charts:
- **Table 1** – **Provisional estimates of Long-Term International Migration (LTIM) by citizenship**
- **Table 2 – Provisional estimates of Long-Term International Migration (LTIM) by main reason for migration**
- **Chart 1 – Long-term international migrants, citizenship**
- **Chart 2a – Long-term international migrants, immigration/emigration by main reason for migration**
- **Chart 2b – Long-term international migrants, main reason for migration**

From February 2014, provisional LTIM tables include IPS confidence intervals to indicate the reliability of each estimate.

Provisional LTIM tables and charts can be found on the ONS website on the <u>Long-Term International Migration</u> page.

6.4 Final LTIM and IPS tables (1975 to 2014)

These tables are grouped into 3 series':

- **1-series, Tables 1.01 to 1.03.** These tables relate to aspects of the methodology.
  - **Table 1.01, LTIM components and adjustments, 1991 to 2014:** This table shows the components and adjustments that make up the estimates of LTIM for the UK, from 1991 to the latest year. This table should be viewed in conjunction with the Methodology paper which covers the methodology used to produce LTIM (see <u>Section 3.1.2</u>)

- **Table 1.02, IPS margins of error, 1975 to 2014:** This table provides contact figures and confidence intervals for individual variables provided in the **3-series tables**
- **Table 1.03, IPS non-response, 1977 to 2014:** This shows the percentage of migrants who did not give a response to specified IPS migration questions and whose response was therefore imputed

- **2-series, Tables 2.01 to 2.11**, **LTIM tables, 1991 to 2014**

These tables show a time series of estimates of Long-Term International Migration (LTIM) for the UK, and for England and Wales. They are by calendar year unless otherwise stated.

- **2.01a, LTIM citizenship, 1991 to 2014**
- **2.01b, LTIM citizenship, half years, 2002 H1 to 2014 H2**
- **2.02, LTIM country of last or next residence, 1991 to 2014**
- **2.03, LTIM country of birth, 1991 to 2014**
- **2.04, LTIM main reason for migration, 1991 to 2014**
- **2.05, LTIM usual occupation prior to migration, 1991 to 2014**
- **2.06, LTIM area of destination or origin within the UK, 1991 to 2014**
- **2.07, LTIM age and sex, 1991 to 2014**
- **2.08, LTIM sex and marital status, 1991 to 2014**
- **2.09, LTIM intended length of stay, 1991 to 2014**
- **2.10, LTIM citizenship, mid years 1991-1992 to 2013-2014**
- **2.11, LTIM area of destination or origin within the UK, mid years 1991-1992 to 2012-2013** (please note this table has been discontinued. A link to more accurate regional migration data can be found within the published 2013 table).

1-series and **2-series tables** can be found on the ONS website on the [Long-Term International Migration](#) page.

- **3-series, Tables 3.01 to 3.26, IPS tables, 1975 to 2014**

These tables show estimates of long-term international migration based on IPS only. These tables are more detailed, showing a cross-tabulation of at least 2 variables. They cover each calendar year, from 1975 unless otherwise stated.

- **3.01, IPS citizenship by country of last or next residence, 1975 to 2014**
- **3.02, IPS country of last or next residence by area of destination or origin within the UK, 1975 to 2014**
- **3.03a, IPS country of last or next residence by sex, 1975 to 2014**
- **3.03b, IPS country of last or next residence by age, 1975 to 2014**
- **3.04, IPS country of birth by sex, 1975 to 2014**
- **3.05a, IPS citizenship by sex, 1975 to 2014**
- **3.05b, IPS citizenship by age, 1975 to 2014**

The estimates given in these tables must be considered alongside the confidence intervals that are given for each estimate. When subtracted from and added to the estimate this gives the range within which the true value of the estimate is expected to be (with 95% confidence). The confidence intervals for the IPS estimates are relatively large where the estimates are based on a small number of contacts. A larger confidence interval indicates greater uncertainty over the true value of the estimate.

More information on confidence intervals is given in the published table 1.02 and in the MSQR Information for Users.

Please note: From November 2012, all 3-series IPS tables use 95% confidence intervals to indicate the robustness of each estimate, as opposed to Standard Error used in previous tables.

3-series tables can be found on the ONS website on the Long-Term International Migration page

6.5 Underlying datasheets (2000 to 2014)

- **4.01**   **IPS Citizenship Group by Sex by Age by Country of Last or Next Residence**
- **4.02**   **IPS Main Reason for Migration by Citizenship**
- **4.03**   **IPS Country of Birth by Country of Last or Next Residence**
- **4.04**   **IPS Area of Destination or Origin within the UK by Citizenship**
- **4.05**   **IPS Main Reason for Migration by Country of Last or Next Residence**
- **4.06**   **IPS Country of Birth by Citizenship**
- **4.07**   **IPS Sex by Age by Citizenship**
- **4.08**   **IPS Sex by Age by Country of Birth**

7.0 Further information and data requests

7.1 What other information is available on international migration?

The Migration Statistics Quarterly Report (MSQR) series summarises the regular quarterly and annual migration and related data published by the Home Office, the Department for Work and Pensions (DWP) and the Office for National Statistics (ONS). The quarterly reports provide main messages from the latest data. Web links are provided at the back of the reports for those who wish to access the underlying datasets.

The Home Office publish quarterly statistics which relate to people who are subject to immigration control under Immigration Acts (that is, to people who do not have the right of abode in the UK). They are produced mainly as a by-product of the process of immigration control. DWP provide quarterly figures for the number of National Insurance numbers (NINo) allocated to overseas nationals, for the purposes of work, benefits or tax credits entering the UK.

More information on these statistics can be found in the Migration Statistics Quarterly Report published on the ONS website.

Other migration data released on an annual basis include the international migration component of the mid-year population estimates and 'Migrant 4 GP Registrations' and can be compared at the local level using the Local Area Migration Indicators Tool.

7.2 Can I request further information on migration?

It is possible to request more detailed information and data on international migration by emailing the Migration Statistics Team at migstatsunit@ons.gsi.gov.uk.

8.0 Glossary

This glossary includes words found in documentation related to the long-term international migration estimates, which are not explained above.

Calibration	An estimation procedure which constrains sample-based estimates of auxiliary variables to known totals (or accurate estimates). Calibration is used to improve the regional distribution of immigrants. Further information can be found in the Methodology paper (see <u>Section 3.1.2</u>).
Coherent reporting	Key information on migration which has been collected across government. The report provides a united approach to the release of statistics on migration, helping customers and the public to understand the different outputs published.
Confidence interval	This is the range within which the true value of a population parameter lies with known probability. For example the 95% confidence interval represents the range in which, over many repeats of the sample 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. The uppermost and lowermost values of the confidence interval are termed 'confidence limits'. This is obtained as +/-1.96 times the standard error.
Country of usual residence	The country in which a person has a place to live, where he or she normally spends the daily period of rest. Temporary travel abroad for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimages does not change a person's country of usual residence (UN based definition).
EEA	European Economic Area (EEA) consists of the EU Member States as constituted at the time as well as Iceland, Liechtenstein and Norway.
European Union	The European Union (EU) consists of 28 countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Republic of Ireland, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom. Croatia joined the EU in July 2013; data with a reference period after that date will include Croatia within the EU grouping.
EU2	The EU2 are the 2 countries that joined the EU on 1 January 2007: Bulgaria and Romania. Between 2007 and 2013, EU2 nationals had certain restrictions placed on them; in the first 12 months of stay, working Bulgarian and Romanian nationals were generally required to hold an Accession

Worker Card or apply for 1 of 2 lower-skilled quota schemes. Other Bulgarian and Romanian nationals could apply for a registration certificate, giving proof of a right to live in the UK. These restrictions were lifted on 1 January 2014.

EU8 The EU8 are the 8 central and eastern European countries that joined the EU on 1 May 2004: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

EU15 The EU15 consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Republic of Ireland, Spain, Sweden and the United Kingdom. However, EU15 statistics exclude the United Kingdom.

Emigrant (Outflow) A person who leaves their country of usual residence to take up residence in another country for a period of at least 12 months.

Estimate An indication of the value of an unknown quantity based on observed data. The estimated number of migrants is calculated by weighting up the number of contacts collected by the IPS. Further information about the weightings used by the IPS can be obtained in this overview of International Passenger Survey (IPS) methodology.

Immigrant (Inflow) A person arriving or returning from abroad to take up residence in a country for a period of at least 12 months.

IPS International Passenger Survey – a sample survey of passengers arriving at, and departing from, United Kingdom air and sea ports and the Channel Tunnel.

LFS Labour Force Survey – a quarterly household survey run by ONS.

Long-term international migrant Someone who moves to a country other than that of his or her usual residence for a period of at least a year so that the country of destination effectively becomes his or her new country of usual residence. From the perspective of the country of departure the person will be a long-term emigrant and from that of the country of arrival, the person will be a long-term immigrant (based on UN definition).

LTIM Long-Term International Migration (LTIM) estimates are produced by combining migration data from the IPS, Home Office data on asylum seeker flows (including non-asylum enforced removals and people resettled in the UK under various resettlement schemes), migration to and from Northern Ireland (from the Northern Ireland Statistics and Research Agency) and adjustments for visitor switchers and migrant switchers.

Margins of error The margins of error express the maximum expected difference (positively and negatively) between the true population and a sample estimate of that population. The margin of error is qualified by a probability statement, which is expressed in the form of a confidence interval (see above).

Migrant switchers	Travellers who stated the intention in the IPS to stay in the destination country for at least a year, who were therefore counted as migrants, but who actually left sooner.
Migration Statistics Improvement Programme (MSIP)	The Migration Statistics Improvement Programme (MSIP) at ONS worked to improve the quality of population and migration statistics, which aimed to make migration statistics as accurate as possible and relevant for user needs. Further information is available on the MSIP webpage.
Net emigration (outflow)	A situation where more people are migrating out of a country (for at least 12 months) than are entering that country in a given time period.
Net immigration (inflow)	A situation where more people are migrating into a country (for at least 12 months) than are leaving that country in a given time period.
Net migration (flow or balance)	The difference between immigration and emigration.
New Commonwealth	The New Commonwealth statistical grouping consists of African Commonwealth countries (Botswana, Cameroon, The Gambia, Ghana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Seychelles, Sierra Leone, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe), Indian subcontinent countries (Bangladesh, India, Pakistan and Sri Lanka), and other Commonwealth countries in the Asian, Caribbean, and Oceania regions.
	It also includes British Dependent Territories and British Overseas citizens. Up to and including 2003 Malta and Cyprus are included in the New Commonwealth grouping. For 2004, the year of accession, they are included in the EU. Malta and Cyprus are members of both the Commonwealth and the European Union from May 2004 onwards. However, for estimation purposes they have only been included in the EU grouping for 2004 onwards.
	Rwanda was admitted to the Commonwealth in November 2009, but the definition for this statistical grouping has remained unchanged. Zimbabwe withdrew from the Commonwealth in December 2003 and The Gambia withdrew from the Commonwealth in October 2013, but the definition for this grouping also remained unchanged.
New country groupings	ONS introduced new country groupings in 2014. These are only currently available for IPS estimates, not LTIM. A listing of which countries are in each of the old and new groups is available.
Non-contacts	People counted by the IPS but not interviewed. For example, during peak periods an interviewer may not finish an interview before their next assigned contact has crossed the IPS counting line.

Non-response   Failure to obtain any survey information due to respondent refusal, non-contact or inability to reply.

Non-sampling error   Non-sampling errors may arise from many different sources. These may include misunderstanding or misreporting by respondents, variations between the way interviewers administer the survey, non-coverage of the population due to an inadequate sampling frame or sample design and errors made when processing the error attributable to all other sources other than sampling.

Old Commonwealth   The Old Commonwealth statistical grouping consists of 4 countries: Australia, Canada, New Zealand and South Africa.

Other Foreign   Other Foreign is defined as the non-EU countries within Europe, the United States of America, the Middle East, and the remaining countries in North, Central and South America, Africa, Asia and Oceania which are not included in either the New or Old Commonwealth country groupings.

Rolling year   Any 4 consecutive quarters that make up a 12 month period. In the **provisional** tables the rolling year moves on 1 quarter for each row of estimates in the tables. For example the rolling year January 2009 – December 2009, is followed by the rolling year April 2009 – March 2010.

Sampling error   The difference between an estimate derived from a random sample and the true population value; the difference being attributable to the fact that only a sample of values was used. That is, sampling error results because not every migrant who enters or leaves the UK is interviewed.

Standard error (SE)   An indication of the accuracy of an estimate and how much a sample estimate is likely to differ from the true value because of random effects.

Visitor switchers   Visitors who enter or leave the UK intending to stay in the destination country for less than a year but who actually stay for a year or longer.