

Article

# International migration statistics preliminary adjustments update and feedback: February 2020

This background note provides an update of the progress with the preliminary adjustments for long-term international migration statistics so far, and summarises our main areas for further research and development.

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# 1 . Overview of progress

We published our first set of preliminary adjustments in the [August 2019 Migration Statistics Quarterly Report \(MSQR\)](#), which were applied to the headline Long-Term International Migration estimates (LTIM) to provide our best possible assessment of migration trends. As other new data sources become available, we will continue to refine our adjustments further and reflect this in our migration statistics.

For the [November 2019 MSQR](#) we applied the same method used in August. For the [February 2020 MSQR](#), as part of our commitment to iteratively develop our methods, we applied small refinements to the preliminary adjustments methods, which had a minimal impact on the estimates. This included:

- for the EU and non-EU preliminary adjustments, aligning the adjustment to use data for each year ending period rather than rolling the same adjustment through four time periods
- for the non-EU preliminary adjustment, to use the UK Higher Education Statistics Agency (HESA) dataset rather than England and Wales, include other Europe, adjust the HESA method to remove those on a course less than a year and use world region breakdowns

The [Long-Term International Migration estimates methodology](#) provides more detail on the preliminary adjustments.

We plan to develop the preliminary adjustments further in the May 2020 MSQR and expect final adjustments to be developed by summer 2020. While we go through this [transformation journey](#), the MSQR has been reclassified as [Experimental Statistics](#) to support this period of development and innovation to meet the public good.

## We want your feedback

Your feedback is important. We want to hear what you think about the methods we are developing, the detail of the methods you require, how this is presented and seek feedback during this period of development to better understand our users' needs.

# 2 . Main areas of research and development

Our plans for developing preliminary adjustments, as part of the [transformation of migration statistics](#), focus on six main areas of research, each undertaken in collaboration across the Government Statistical Service (GSS). The six areas of research are as follows:

- exploring further use of Department for Work and Pensions (DWP) administrative data
- developing the EU preliminary adjustment method
- developing the non-EU preliminary adjustment method
- applying the adjustments to our detailed tables
- further understanding uncertain intentions and switchers in the methods
- developing measures of uncertainty (confidence intervals)

## 3 . Exploring further use of DWP administrative data

We are continuing to work with the Department for Work and Pensions (DWP) to explore how further analysis could support us in measuring EU migration and improving our adjustment method.

To produce the current preliminary adjustment for EU migrants, we commissioned the DWP to provide some aggregate analysis of their Lifetime Labour Market Database (L2) dataset. The L2 dataset is a 1% sample of HM Revenue and Customs' (HMRC) National Insurance and Pay As You Earn (PAYE) System and is supplemented with benefit data from DWP. The L2 dataset allowed the DWP to analyse data on non-UK national adults who registered for a National Insurance number (NINO) in the UK, and had interactions with National Insurance, PAYE, DWP benefit and local authority benefit systems.

This analysis meant patterns of interaction with the tax and benefits system could be identified, and allowed the DWP to classify records which could, based on prolonged interaction with these systems, be classed as long-term migrants. Aggregate counts of these data have been shared with us and used to develop preliminary adjustments.

As part of the development of the preliminary adjustments, we are looking to replace the use of L2 with aggregate data from the DWP-created Registration And Population Interaction Database (RAPID). One of the main benefits of RAPID, compared with L2, is that RAPID uses 100% extracts of data, meaning it contains records for everyone with a NINO. An additional benefit of RAPID is that it contains data extracts from a wider range of DWP and HM Revenue and Customs (HMRC) systems than L2, including all benefit, employments, self-employment, pensions and in-work benefit interactions, for example tax credits and Housing Benefit.

RAPID provides a single coherent view of citizens' interactions with the DWP, HMRC's PAYE and Self Assessment systems and local Authorities' Housing Benefit systems within a tax year for the UK (between tax year ending 2011 and tax year ending 2019). To do this, RAPID collates 100% extracts of data and summarises the duration of individual interactions with the above systems for each tax year.

As well as all people who hold a NINO, RAPID also includes information on migrants registering for a NINO along with their date of registration and self-reported date of arrival in the UK. Information on migrant arrivals and registrations, combined with the data on interactions, allows an assessment of whether the duration of the stay in the UK may [classify them as long-term residents](#). As with the previous work using L2, DWP analysis of RAPID is undertaken on de-identified data, and only aggregate data will be supplied to us to be integrated into our preliminary adjustment methodology.

For both L2 and RAPID, the assessment of arrival and interactions data over time has supported the development of a methodology for adjusting Long-Term International Migration (LTIM) estimates, and may also enable the generation of a resident stock measure. In addition, we have commissioned DWP to do further research to identify if estimates of long-term departures can be made based upon the absence of system interactions for 12 months or more.

### **We want your feedback on the use of RAPID**

We want to hear our users' views on our plans to use RAPID within the preliminary adjustments, where else you think these data could be used for the purpose of measuring migration and population, and if there are any other factors or priorities we should take into account.

## 4 . Developing the EU preliminary adjustment method

In addition to using the Registration And Population Interaction Database (RAPID) in the EU preliminary adjustment, we will also compare RAPID data with findings from the [August 2019 coherence work](#), when looking at the divergence of LTIM EU net migration and the change in stocks as measured by the Annual Population Survey (APS). Once these patterns are better understood, we plan to extend the preliminary adjustments to the latest time period.

The current preliminary adjustments only adjust for EU8 migrants. Our coherence work will assess if other EU groups should be adjusted.

## 5 . Developing the non-EU preliminary adjustment method

We are continuing to develop the non-EU method, working with the Home Office to ensure we are using the most appropriate and up-to-date administrative data sources. Building timeseries of data will enable us to assess patterns over time.

The current preliminary adjustments only adjust for former non-EU students emigrating. Our coherence work will assess if our adjustments should be extended to cover other groups.

## 6 . Applying the adjustments to our detailed tables

Currently we have only been able to adjust the highest-level estimates. Further work is required to develop methods for the use of more detailed data. Developing these methods will allow us to apply adjustments below the top-level estimates, and ensure data totals are consistent across all tables.

## 7 . Further understanding uncertain intentions and switchers in the methods

The [coherence work](#) identified that certain groups of migrants have a higher degree of uncertainty in their intentions to move to and from the UK. This makes it more challenging to measure migration using traditional methods such as the International Passenger Survey (IPS), where our estimates are dependent on the information people give us about how long they intend to move to and from the UK for.

In our [Report on international migration data sources: July 2018](#), we reviewed whether the assumptions that underpin the [current “switcher” methodology](#) are still valid, and found that the switcher adjustments had a relatively small impact on net migration estimates.

The current preliminary adjustment draws on the combined strengths of survey and administrative sources to provide a better understanding of international migration. We will continue to develop our understanding of uncertain intentions using administrative data for all groups and how this affects the switcher methodology currently being used.

## **8 . Developing measures of uncertainty (confidence intervals)**

Confidence intervals for the preliminary adjusted estimates are not yet available. This does not mean that the estimates are more certain. As our work progresses, we will develop an approach for displaying uncertainty around estimates based on multiple data sources.

## **9 . We want your feedback**

Your feedback is important. We want to hear what our users think about the methods we are developing, and our transformation journey plans. During this period of development please send us your feedback so we can better understand your needs. Please email any feedback to [pop.info@ons.gov.uk](mailto:pop.info@ons.gov.uk).