

**Minutes from the Migration MARP Subgroup meeting held on Tuesday, 28 August 2025****Attending:**Panel:

Nik Lomax - University of Leeds (Chair)  
Marie McAuliffe - Independent Consultant  
Arkadiusz Wisniowski - University of Manchester

ONS representatives:

Nick Taylor  
Victoria Chenery  
Oliver Gomersall  
Brendan Georgeson  
Annabelle Tyrrell  
Liam Campkin  
Rhys Owen-Williams

**Apologies:**

Georgina Sturge - Migration Observatory  
Jakub Bijak - University of Southampton and Centre for Population Change

**Welcome and Introduction**

1. The change in Chair to Nik Lomax was explained to the panel. This is to ensure the independence of this group, align with the processes for the main MARP panel and provide ONS with the methodological input needed.
2. The process for providing input into methods was discussed. The panel is asked to provide comments directly onto papers in confluence ahead of the meeting to allow the conversation in meetings to be clarifying points and looking at specific points.

**EU+ Research Overview – presented by Annabelle Tyrrell**

1. The ONS provided an overview of the newly developed methods using Home Office Borders and Immigration (HOBI) data to estimate the long-term migration of EU+ nationals.
2. The 'First Arrival, Last Departure' (FALD) method has been adapted for EU+ visa holders and the "Cumulative length of stay in the UK" method has been developed to capture long-term migration of those with EU Settled Status.

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Using HOBI data will align methods for EU+ visa holders with the non-EU+ methods.

3. The ONS presented the key challenges that have been addressed with the new methods:
  - a. The new method has been developed to produce provisional estimates of immigration and emigration for the cumulative length of stay method. This method allows the ONS to produce estimates of migration 5 months after the end of the reference period, where we can't see if someone has spent 12 months in or out of the UK
  - b. The EEA cut of HOBI data contains travel information for EU+ nationals that travel on a visa and EU+ nationals with EUSS. One challenge has been to identify EU+ nationals with EUSS including those who join migrants with EUSS in the HOBI data as there is not a specific flag in the data to do so
  - c. The ONS outlined the current starting assumptions for estimating EUSS migration of those with full settled status and pre settled status.
  - d. The cumulative length of stay method relies on travel data to estimate time spent in and outside of the UK. Where we see two arrivals with no departure in between, or two departures with no arrival in between, we need to use imputation to predict when that missing departure or arrival may have been.
    - o The panel raised a query regarding synthetic data being used instead of raw data
  - e. The ONS presented findings of ONS' long-term international migration estimates for EU+ visa holders using FALD, when compared to statistics published by the Home Office.
  - f. The creation of an Irish nationals proportional adjustment using RAPID, to combat an under coverage of Irish nationals in the HOBI data. This is due to Irish nationals not needing a visa or to have EUSS, to travel through the Common Travel Area.
  - g. The ONS explained the breadth of publications in which sub-national LTIM estimates provide part of the international migration component for. Further to this, the recommendation of aligning the ONS' EU disaggregation approach with that used in the non-EU disaggregation.
4. The ONS went through how RAPID based EU estimates compare to HOBI based EU estimates for immigration, emigration and net migration.
  - o The panel questioned the possibility of linking the HOBI and RAPID data to disentangle the differences being seen
  - o The panel asked could we seek validation by looking at other countries data (mirror statistics), such as population registers
  - o The panel asked for clarification of the ONS definition of a long-term migrant and referenced that when Australia has used the 12/16

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- method, that it effected particular regions of it population. AW said that he would forward the paper on to the meeting attendees
- o The panel raised the conceptualisation of settled status immigration and emigration is not going to be the same as it is in the past. Historical concept of immigration and emigration is becoming less relevant with digital “nomadism.
  - o The panel asked if the Republic of Ireland and Northern Ireland statistics offices would have any reciprocal data which we could use to inform the trends seen
  - o The panel had further question surrounding the validation of the estimates produced using the EU HOBI data
5. The ONS outlined the case for change with estimates of migration flows using ONS new methodology being based upon travel (flow) events as opposed to assumptions from interactions from a stock dataset

The panel commented that the research is going in the right direction to address some of the longer-term challenges and raised some areas of further work. The workplan will be set out to the panel based on work carried out ahead of the methods changes and after the new methods and data sources have been implemented.

**British Nationals - presented by Brendan Georgeson**

1. The ONS presented the research on estimating long-term international migration of British nationals using administrative data, specifically RAPID, following the decommissioning of the International Passenger Survey for migration use in 2024.
2. The ONS has developed a new methodology to address several key challenges.
  - a. First, migration events from administrative data need to be identified. To do this, a set of residency rules were created— for example the gap year rule, pension rule, and child benefit rules—to infer whether someone is resident or not based on their activity and address changes in RAPID.
  - b. The challenge of naturalised citizens within the data was discussed. RAPID doesn’t track when foreign nationals become British citizens, so a weighting method is applied using Home Office Migrant Journey data and Census 2021 to estimate the probability of naturalisation. This helps to avoid undercounting British nationals who migrate after naturalising.
  - c. Age-related coverage biases were found. The rules we apply to the RAPID tend to overcount older working-age adults and undercount children. To correct this, our RAPID immigration estimate was compared with British nationals immigration estimate in the census. We compared age profiles and applied coverage adjustment based on this difference using scaling factors and Generalised Additive Models.

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- d. The lag in RAPID data updates was discussed. Since the ONS receive annual data only, the Fernandez method is used to disaggregate into quarterly estimates and forecast missing quarters using HOBI data.
- e. Uncertainty is a challenge and was discussed. Simulation-based approaches to quantify it across three areas have been developed for the: coverage adjustment, temporal disaggregation, and naturalisation adjustment. This allows the production of multiple plausible estimates and confidence intervals.
- f. Work to produce sub-national estimates is underway by constraining local RAPID data to national totals, similar to the approach for non-EU nationals.
- g. Throughout this work, there has been a focus on data quality and potential biases. RAPID was not designed for migration estimation, sensitivity analyses and peer reviews have been conducted to validate assumptions and mitigate biases.
- h. RAPID-based estimates have been compared with census data and found them to be more consistent than IPS figures. While further refinements are needed, the ONS believes this method meet the standards of the Statistical Code of Practice and provide a robust foundation for estimating British national migration.

**Action MMSG008:** ONS to confirm the distributions used in uncertainty measures for British Nationals estimates. See response from methodology team below.

**Action MMSG009:** ONS to investigate potential gaps in emigration estimates for British Nationals within RAPID.

**Action MMSG010:** ONS to explore the use of vaccination data to support the British Nationals methodology.

**Action MMSG011:** ONS to liaise with the DPM team to share relevant work on undercoverage of young people and age profile modelling.

**Prediction Intervals – presented by Sophie Palmer**

1. The ONS provided an overview of the research conducted to explore the feasibility of producing prediction intervals, by conducting a revision analysis to outline the reasons for revisions to LTIM non-EU+ estimates and their impact
2. The ONS introduced the new modelling-based approach and precocity error as a quality metric, which focuses on revisions and the stability of estimates
3. The results of the revision analysis were presented, which serves as a foundation for introducing the new approach to LTIM prediction intervals. The

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results focused on predictive accuracy, using root mean squared error, mean percentage revision and the standard deviation of percentage revisions as metrics.

4. The ONS briefly covered the conceptual framework used to examine the possibility of modelling revisions to LTIM estimates, which later would be used to predict a plausible range of revisions for current estimates.

The panel thanked Sophie for the presentation and commented that the research into this looks promising.

**Actions:**

**Action MMSG006:** Areas of further research have been suggested by the panel. The ONS to provide the panel with a workplan to set out research to be carried out before the change in methods and research to be carried out after the implementation of the new data sources and methods

**Action MMSG007:** Key messages to be agreed following the meeting in order to give time for further reflections on the papers.

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**Date and time of next meeting: 14 October 2025, 13:30 – 15:30**

**Glossary of acronyms**

ABME – Admin-Based Migration Estimates

DPM – Dynamic Population model

DWP – Department for Work and Pensions

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EUSS - EU Settlement Scheme

IPS – International Passenger Survey

HO – Home Office

HOBI – Home Office Borders and Immigration

LTIM – Long-Term International Migration

MARP – Methodological Assurance Review Panel

MSUG – migration Statistics User Group

NISRA – Northern Ireland Statistics and Research Agency

NRS – National Records Scotland

NS – National Statistician

ONS – Office for National Statistics

QA – Quality Assurance

RAPID – Registration and Population Interaction Database

UKSA – United Kingdom Statistics Authority