Office for National Statistics' transformation of Long-Term International Migration Estimates: OSR progress report, December 2023

This report provides an update of progress made by the Office for National Statistics (ONS), OSR's evaluation of the actions that ONS has taken and a statement of actions remaining against each of our recommendations outlined in our [Review of Migration Statistics](#).

Summary of our findings

ONS has made excellent progress with the transformation of international migration statistics and in responding to OSR's recommendations. There were thirteen recommendations set out in our report last year. This report closes nine of these recommendations and recognises the ambitious and innovative work that ONS is progressing.

The remaining four recommendations focus on:

- Plans for the ongoing review of data sources.
- Developing and publishing measures of uncertainty
- Publishing long-term plans for international migration statistics.
- Publishing a population and migration transformation road map.

Whilst these gaps are still present, we recognise the significant improvements made to the statistics since we published our report. ONS has taken a much more proactive approach to user engagement, seeking out the views of a wide range of users from a variety of settings and using the insights gained from this engagement to prioritise and direct aspects of the transformation.

ONS has improved the clarity and coherence of communication around the migration transformation and the November 2023 suite of publications is an excellent demonstration of this. The material is tailored to meet the needs of expert and less technical users alike and will support public confidence in the use of these statistics.

A. ONS should publish details of which data sources it intends to use for the administrative data-based migration estimates (ABME) (strategic) and provisional state space model (tactical) approaches. It should also set out how each additional source impacts the migration estimates and the implications for how users should interpret the different provisional and updated (previously referred to as final) estimates.

Actions taken and commitments made by ONS to meet the recommendation

ONS is no longer using the state space modelling approach. At the moment, it is using three main data sources to produce migration estimates for different groups of migrants:

- Home Office Borders and Immigration (HOBI) data for non-EU nationals

- Department for Work and Pensions' Registration and Population Interaction Database (RAPID) for EU nationals; and

- the International Passenger Survey (IPS) for British Nationals.

ONS has published information about the key data sources alongside estimates and provided users with links to Home Office data user guides. ONS is exploring implementing HOBI data into long-term international migration estimates (LTIM) instead of the Department for Work and Pensions' RAPID data to estimate EU citizen migrants in 2024. ONS published [International migration research, progress update: November 2023](#) which informs users about the future implementation of HOBI data for estimating EU citizen migration. This publication also informs users that this work is ongoing, and a further update will be published next year.

ONS has published a range of documents telling users about data sources, including [Long-term international migration: quality assuring administrative data](#) which informs users about ONS's quality assurance of administrative data processes. ONS also signposts users to Home Office data user guides for information on the HOBI data.

The IPS arrivals data source used to measure British National migrants will cease in Spring 2024. ONS is still researching alternative data sources for estimating the number of British Nationals migrating in and out of the UK. ONS provided an update for users in the research update published in November and plan to provide a further update in May 2024.

ONS has a [revisions policy](#) for population and international migration statistics. This policy is clearly signposted from the LTIM bulletin to support users understanding of the differences between provisional and updated LTIM estimates.

OSR's evaluation of evidence

Even though ONS is changing its approach to producing these statistics, the principles of openness around the use of data sources still need to be followed. ONS has now published information on data sources, particularly on quality assurance, ongoing developments and future plans to support use of the estimates.

ONS should keep users informed about the progress of its research into alternative methods for measuring British National migrants as it develops them, to build user confidence in the future of migration estimates.

ONS's revision policy supports users' understanding of how ONS revises estimates. This was clearly signposted from the LTIM bulletin, ensuring that this information is easily accessible for users. This further develops public understanding and confidence in the estimates.

We welcome the progress ONS has made against this recommendation and expect ONS to continue its approach throughout the transformation.

Recommendation Closed

> B. ONS should ensure data sources used in the estimates remain up to date. It should be clear with users how it will achieve this, for example by identifying points when it will review the data sources, such as use of historical IPS data and Home Office visa data.

Actions taken and commitments made by ONS to meet the recommendation

ONS is still developing the methods and implementing data sources at this stage. ONS told us that it has a culture of continuous improvement, and it regularly reviews data sources and communicates its plans with users. It is also developing a policy for the ongoing review of data sources, which it plans to publish once the statistics are more stable.

OSR's evaluation of evidence

Although ONS has a culture of continuous improvement, examples of which can be seen in recent publications, it is important that ONS communicates with users clearly on how this culture is applied to LTIM estimates to provide reassurance to users. Given that ONS is still working on implementing planned data sources, we would not expect it to share plans for ongoing review at this stage. However, ONS should continue to ensure that its data sources remain up to date and publish plans for the ongoing review of data sources as soon as possible. This will contribute to users having the best possible estimates and give them confidence that this will continue to be the case.

Actions remaining

– ONS should publish information on how it will ensure that its estimates remain up to date and how it will review data sources going forward.

> C. ONS should make the modelling approach more transparent and easier to understand for less expert users. It should support users to understand when and how to use the estimates calculated in this model, for example by writing an explainer piece on the state space modelling, including its strengths and limitations, and the impacts of different assumptions.

Actions taken and commitments made by ONS to meet the recommendation

ONS used the state space modelling approach as a temporary methodology while researching and implementing administrative data sources. ONS is no longer using the state space modelling methodology in LTIM estimates. ONS had previously published [Using statistical modelling to estimate UK international migration](#) in April 2021 containing high level information and linked users to a more technical [methodology paper](#) providing users with some information, but an explainer piece has not yet been published.

OSR's evaluation of evidence

We recognise that the complex nature of this method means that explaining it to non-technical users in a meaningful way is particularly challenging.

The published material provides users with either very technical or very high-level information but lacks mid-technical level information. It is important that ONS continues to recognise the different levels of technical expertise amongst its users and meets the needs of all user groups to maximise users understanding of the estimates and generate maximum engagement. Given that ONS are no longer using the modelling approach that this recommendation refers to, publishing additional material is no longer relevant.

Recommendation Closed

> D. ONS should keep under review the underpinning assumptions of the state space model and the impact of these assumptions on the use of these statistics.

Actions taken and commitments made by ONS to meet the recommendation

ONS told us that when the model was in use, the team had monthly checkpoints with ONS methodologists to review the assumptions and their impact on the statistics.

ONS also seeks external challenge for many aspects of the statistics, including model assumptions through the Migration Statistics Expert Group as well as

methods assurance panels including the methodological assurance review panel (MARP).

OSR's evaluation of evidence

While the state space model was in use, we were satisfied that ONS reviewed the model assumptions at regular intervals with experts as part of this development process.

Recommendation Closed

E. Users need a clear understanding of uncertainty associated with the estimates and how the estimates can be used appropriately. ONS should share detailed plans for how uncertainty will be measured and communicated.

Actions taken and commitments made by ONS to meet the recommendation

ONS published Measuring uncertainty in international migration estimates in June 2023, and International migration research, progress update: November 2023 which shares ONS's progress on its work on measuring uncertainty in migration statistics. ONS has also added higher and lower confidence intervals into one of the graphs in the LTIM bulletin for the periods covered by the work on uncertainty to date.

ONS informed users in the latest publication on uncertainty that it will publish further work on uncertainty in the coming months.

OSR's evaluation of evidence

ONS's work on uncertainty is ongoing but it has demonstrated its commitment to providing users with a clear and comprehensive understanding of uncertainty. We were pleased to see the measures of uncertainty being used in the LTIM bulletin published in November 2023. ONS's analysis of uncertainty has not fully investigated all sources of uncertainty. However, ONS told us that it will meet this requirement in full when it publishes its forthcoming work on uncertainty in the coming months. The work on uncertainty is making good progress relative to this stage in the transformation.

Actions remaining

-   ONS should publish further work on uncertainty to enable appropriate use and avoid misuse of the LTIM estimates.

F. ONS should provide clearer information about its longer-term plan for measuring migration estimates. For example, what the longer-term model will look like and how the state space model method (tactical approach) and the admin-based

> method (strategic approach) will be integrated with this longer-term model and how this fits with ONS plans for a Dynamic Population Model.

Actions taken and commitments made by ONS to meet the recommendation

ONS published What is coming up on population and migration statistics in November 2023 and publishes regular blog posts. ONS also provides updates in sections of other publications on future plans for the population and migration statistics transformation. A recent example is the Future Developments section in the latest Methods to produce provisional long-term international migration estimates publication.

ONS has also launched a public consultation on the future of population and migration statistics to gather user views on its proposals for measuring the population and inform a recommendation on the future of the census. This consultation closed on 26 October 2023 and will inform long-term plans for population and migration statistics.

OSR's evaluation of evidence

ONS's blog posts and transformation updates within other publications share important information with users. However, they tend to contain information about next steps. Information on ONS's long-term plans has not been shared with users.

Whilst we appreciate that the consultation has just closed and responses are still being analysed, it would increase public confidence in ONS's migration statistics if it shared more information on its future plans with users. We appreciate that this is an ongoing transformation and ONS plans to share some information on its longer term plans through its planned revisions policy, but ONS should share more information with all user groups as soon as possible.

Actions remaining

- ONS should publish its longer-term plan for migration statistics and keep users informed of its progress.

> G. To help users understand the implications for their use of data, ONS should provide more detail on its plans to maintain a consistent time series, including the rational for its plans.

Actions taken and commitments made by ONS to meet the recommendation

On 23 November 2023 ONS published Estimating UK international migration:2012 to 2021. Ahead of this ONS published a statement on 21 September 2023, which informed users of its plans to publish a consistent back series.

OSR's evaluation of evidence

We note that ONS has published [revised UK international migration statistics (2012-2021)](#) in November 2023 and ONS shared its plans for the back series with users in advance in September 2023.

ONS planned to publish the back series in September 2023, but this was postponed. Users were informed about this postponement in a statement published on the ONS website which was published on the ONS website on the same day as the rebased time series migration estimates were scheduled to be published. ONS did update the release calendar in advance, but we would have liked to see ONS be more proactive in its communication with users, for example, sending all known users an email alert ahead of the scheduled publication. ONS attributed the postponement to it working towards more coherent population and migration estimates in November 2023 and we support this approach. However, ONS should communicate any changes to planned publications more prominently ahead of the scheduled publication date. This would help users feel more informed and build trust.

Recommendation Closed

> H. To give users greater confidence in ONS's quality assurance, ONS should set out its approach to validating migration estimates, particularly migration flows.

Actions taken and commitments made by ONS to meet the recommendation

In May 2023 ONS published a [quality and methods information document](#) alongside the latest estimates.

ONS also told users in its [most recent methods publications](#) that it consults with the Government Statistical Service Migration Steering Group and the Migration Statistics Expert Group and compares trends with other comparable data and statistics for quality assurance purposes.

In November 2023, ONS published [Long-term international migration: quality assuring administrative data](#) and [Improving international migration statistics using administrative data](#) which sets out why ONS is more confident in administrative data-based estimates than the IPS estimates in November 2023.

OSR's evaluation of evidence

Whilst the transformation has been ongoing published quality information has been lacking so it is good that ONS has recently published quality assurance publications. We recognise that this is an ongoing transformation and expect ONS to keep this information up to date as methods and data sources develop to improve users' understanding of the statistics and improve public confidence in ONS's work.

Recommendation Closed

> I. ONS should improve the accessibility of migration data and information:
>
> - relating to the migration transformation programme so it is clear to all users what is the most up-to-date data and information and what should be used in what context.
>
> - available across Government so it is clear to users what related information is produced by other Government Departments.

Actions taken and commitments made by ONS to meet the recommendation

ONS publishes blog posts alongside statistical publications which provide users with an overview of the key issues, a brief update on the transformation and provides links to the statistics and any other relevant material including methods papers and research updates. The most recent publications contain links to information from other sources including the Home Office.

ONS informs its users about any relevant publications through user groups and mailing lists.

ONS has clear labels on statistical publications which tell users whether they provide the most up-to-date information and if they don't, ONS provides users with appropriate links.

ONS published a dashboard on the Government Analysis Function (AF) website which includes links to a wide range of migration statistics – not just those published by ONS.

OSR's evaluation of evidence

Navigating the ONS website can be a challenge for users. The migration team have tried to mitigate this challenge to support users of migration statistics in several ways, but information can be a bit disjointed and difficult to find.

We support the use of blog posts to bring together a range of outputs being published simultaneously, but the blog posts tend to only point to material being published at that time. The AF dashboard is a really helpful tool for users but links users only to statistical publications and doesn't provide links to research papers, methods papers or any other material. This means that users may find navigating their way through the relevant websites challenging.

Whilst we recognise that ONS has met our requirement, ONS should continue to keep abreast of user needs and ensure migration statistics are easily accessible to provide users with a more coherent picture of migration.

Recommendation Closed

Actions taken and commitments made by ONS to meet the recommendation

ONS includes a regular glossary section in the LTIM bulletin and most other publications to explain the key terms used in each one. ONS also published Understanding international migration statistics, an FAQs article and Improving international migration statistics using administrative data, a plain English article to support the understanding by non-expert users.

ONS also told us that it is taking a more joined up approach to publications about the population and migration statistics transformation using repeatable messaging, so that users can find it easier to understand the relationship between the transformation programmes.

OSR's evaluation of evidence

ONS has published the plain English article and the FAQs. Both of these publications are clear, use non-technical language and support the understanding and use of the statistics for a range of users.

We recognise the value of these two publications and the glossary sections added to most publications. This will support users' understanding of ONS's work, increasing the public value of the statistics. It is important that ONS ensure consistency of language, not only as part of the migration transformation, but of the wider population and labour market transformations. Users often use a range of statistics produced by multiple divisions within ONS and it would improve users' understanding if ONS is consistent with its use of terms.

Recommendation Closed

K. ONS should publish a high-level roadmap for the population, migration and labour market transformation programme, including how migration fits with the rest of the transformation plans, when migration outputs are due to be published and how users can get involved.

Actions taken and commitments made by ONS to meet the recommendation

ONS regularly publishes blog posts which contain high-level information. It told us that it is committed to continuing to publish blog posts throughout the transformation.

ONS has told us that it is working on how best to approach this recommendation. Responses received from the consultation may feed into this work.

OSR's evaluation of evidence

We recognise that ONS has made good progress in improving the clarity and coherence in its communications. However, ONS should publish a high-level roadmap as soon as possible and keep it up to date, so that users have a clearer picture of how migration fits in with the wider population and labour market transformations.

Actions remaining

- ONS should publish a transformation roadmap which is regularly updated to reflect new information including that which comes from the consultation.

L. ONS should engage with a wide range of users to ensure the estimates available will meet the needs of a variety of users. It should also be clear on what the statistics can and cannot be used for and any decisions it has had to make based on the availability, strengths and limitations of the underpinning data which impact on use.

Actions taken and commitments made by ONS to meet the recommendation

ONS engages with and actively seeks feedback from a wide range of users in a variety of settings.

The migration team at ONS is also receiving user feedback as part of the future of population and migration statistics consultation which closed on 26 October 2023.

In May 2023 ONS published Admin-based long-term international migration estimates QMI which sets out uses of the statistics along with strengths and limitations in a non-technical way.

OSR's evaluation of evidence

ONS has improved its user engagement. Given the high profile of migration statistics, it is important that ONS continues to improve its engagement with users in an open and transparent way to feed into the transformation process and ensure the statistics are meeting user needs.

The QMI also provides users with non-technical strengths and limitations information to support users' understanding of appropriate uses of the statistics.

Recommendation Closed

M. ONS is planning further work to develop its thinking on how frequently migration estimates are updated. As part of this work ONS should engage with a wide range of users to ensure it:

- Understands how frequently different sets of users need updated migration estimates and why

- Understands user views on having provisional and updated estimates

- Clearly communicates the difference between the provisional and updated estimates, e.g., different data sources and/or methods used, and how this will impact different uses?

Actions taken and commitments made by ONS to meet the recommendation

ONS has engaged with a range of users including the migration expert group, individually with key stakeholders, the Government Statistical Service Migration Steering Group and it has presented at multiple conferences including the Migration Statistics User Forum. The future of population and migration statistics consultation also seeks feedback from users to further develop ONS's understanding of user needs.

ONS told us that users have said that they are happy with the frequency of the statistics. Users have also shared with ONS their preference for fewer revisions of estimates unless there are significant changes to the estimates.

ONS has recently published a [revisions policy](#) for population and international migration statistics which supports users' understanding of the difference between provisional and updated estimates. This revisions policy is signposted from the LTIM bulletin.

OSR's evaluation of evidence

ONS has a good range of user engagement activities and has actively sought user views in a range of settings on the frequency of publications and on having provisional and updated estimates. Through our regular engagement with ONS, we can see that this feedback is incorporated into ONS's decision making.

ONS's revision policy supports users' understanding of how ONS revises estimates. We were pleased to see that this was clearly signposted from the LTIM bulletin, ensuring that this information is easily accessible for users.

Recommendation closed