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**Royal Statistical Society and Statistics User Forum:
Submission to PASC migration statistics study**

Summary

This response is jointly submitted by the Royal Statistical Society and its Statistics User Forum (SUF).

The Royal Statistical Society (RSS) is the UK's only professional and learned society devoted to the interests of statistics and statisticians. Founded in 1834, it is one of the world's most influential and prestigious statistical societies. It aims to promote public understanding of statistics and provide professional support to users of statistics and to statisticians.

The Statistics User Forum (SUF) was established by the Royal Statistical Society in 2004 as an umbrella organisation for groups and networks of users of official statistics to represent the shared views of this very diverse community. The Forum is the successor to long-established Statistics User Council.

The RSS and SUF recognise the importance of Migration Statistics to inform the policy issues surrounding migration, understand the complexity of trying to measure migration into and within the United Kingdom, and appreciate the efforts made in recent years to improve such statistics. In the context of this, we suggest the following:

- There is a good story to tell in the development of migration statistics - enormous improvements have been made in the quality and quantity of the statistics over recent years. We are also pleased with the degree of user engagement, and many of the recent improvements have been implemented in response to user demand.

- Despite these recent improvements migration statistics are still not fully adequate for the task of producing robust population estimates or understanding patterns of migration.

- We are concerned about the capacity to improve migration statistics in an environment where government funding of statistics is being reduced. The potential for further improvements is also limited whilst we rely upon a relatively small sample of migrants from the International Passenger Survey.

- There is an issue with the quality and quantity of migration data at a local level, which has a significant impact upon population estimates in areas with high population turnover. It also inhibits the public understanding of migration.

- We still rely upon the Census for detailed statistics about migration and migrant characteristics, and to evaluate other estimates of migration. During a period of large migration, such as between the last two Censuses (2001 and 2011), waiting ten years for reliable estimates is not sufficient.

- The level of uncertainty in migration estimates is not fully appreciated or reported, and more needs to be done in this regard.

- Estimates of emigration from the UK are known to be hardest to produce. The potential for use of other countries' immigration data should be considered to validate the UK estimates. Furthermore, the Office for National Statistics could proactively encourage cooperation between member states of international organisations such as the European Union, OECD and UN to work together on this issue.

- Data from e-Borders should be used to supplement the International Passenger Survey, but will not be able to provide the same level of detail. A step change in migration statistics would require the development of a population register. This should be considered seriously, particularly if alternatives to a Census are being considered for the future.

Responses to specific questions

1. Do the published migration statistics – at the national, regional and local levels – meet the full range of their users' needs, namely:

   a. Are they easily discoverable and accessible to all users?

1.1 There have been improvements in making migration data more accessible, including the cross-department Migration Statistics Quarterly Report and the Local Area Migration Statistics report, a compendium of migration indicators at local authority level.

1.2 Whilst regular users of migration statistics generally know where to find them, there is concern that occasional or new users of the statistics may have more difficulty in finding and using them. In particular we are concerned about the poor quality of the Office for National Statistics (ONS) website – see our comments in submission to the Committee's inquiry into the communication and publication of statistics. Browsing to the page for international migration presents users with a list of myriad publications – bewildering to the non-expert. A user-friendly site would present the reader with the key facts on the topic and guide them on to the most appropriate detailed sources.

   b. Are they easy to use and understand?

1.3 The total long-term international migration estimates produced by the ONS are easily understood headline statistics, particularly when the net migration estimate is presented alongside the immigration and emigration components (see the migration timeline product referenced in 1.6).

1.4 Broadly speaking however migration statistics are inherently difficult to use and understand; the sheer complexity of migration does not lend itself to easy capture in a simple set of statistics. This is exacerbated by the fact that we have to rely upon multiple sources to infer the whole picture, and these sources sometimes tell apparently contradictory stories. This is particularly the case when understanding the impact of migration at a local level.

1.5   In order to use migration statistics effectively, users need to understand the concepts behind migration and the limitations of the data we are required to use. This is part of the rationale for bringing together all the migration statistics available as cross-government publications, which we welcome. The ONS have produced a brief guide, 'Interpreting Labour Market Statistics', which introduces new users to the statistical issues in that area – we would welcome a migration statistics version.

1.6   More efforts have been made to make the statistics easier to understand – an excellent example is the ONS interactive migration timeline, which presents migration statistics alongside an appreciation of the political, societal and international causes for the changing patterns. However the timeline is difficult to find unless you know to look for it – this is the sort of headline story which first-time users of migration statistics should be presented with on an international migration web page.

c. Do they provide an appropriate level of detail?

1.7   Over the last five years there has been an enormous improvement in the quantity and quality of international migration statistics available. The Migration Statistics Improvement Programme has brought access to immigration control data, refinements to the International Passenger Survey (IPS), use of HMRC and higher education data to understand the within-UK destination of immigrants and more timely publication dates.

1.8   However there are still gaps in the available data. This has been put into relief by the recent release of 2011 Census results which have given us the most definitive picture of the effect of a decade of high international migration. The Census has provided details on total migrant stock, country of birth and date of arrival, and future releases will tell us more about economic activity, household formation and more. Many of these statistics are unavailable from other sources. It is of concern that the Census – which provides us with the best quality statistics with which to evaluate previous estimates – has an uncertain future.

1.9   Flow statistics continue to be based on the IPS. The sample of migrants is small (around 5,000 per annum), and is based on intentions, and although the methodology has been improved over recent years we are about at the limits of what it can produce by way of detail.

1.10   The coverage of emigration is still poor, and furthermore there are no administrative statistics to supplement the IPS. A step forward has been made by matching the reason for leaving with the reason for entering. However, not enough use is made of data collected by other countries – this could be used to improve our understanding of the flow of emigrants from the UK.

1.11   There is anecdotal evidence of a large number of undocumented migrants in the UK. Whilst difficult to estimate, the existence of an uncounted population is a significant challenge to the credibility of migration estimates – a problem also encountered by the 2011 Census.

1.12 Changing patterns of international migration over recent years – and probably into the future – means that there is an increasingly wide matrix of countries of interest, for example the BRIC countries (Brazil, Russia, India and China). Yet the ONS continues with the same breakdown as in recent decades (Old and New Commonwealth, Other Foreign, EU etc.). New groupings need to be made available.

1.13 The lack of data on migration by ethnic group makes it difficult to estimate the impact of international migration on the ethnic composition of the population, needed for planning of various services such as education and health.

1.14 There is a continued problem with the quality and quantity of migration data available at a local level. Improvements have been made through the Migration Statistics Improvement Programme by allocating international migrants to local authority areas using administrative data, but the local-level estimates of migration are not robust, particularly for areas with high population turnover. For some local authority areas the Census has shown that the ONS population estimates have misrepresented the level of population growth, a problem caused by inaccurate internal and international migration estimates. Whilst the method of distributing international immigrants to local authorities has been improved, the method of distributing emigrants has not – and this may be a source of the problem. This issue should be examined further by the ONS and results published, if possible with some sensitivity analysis based on different assumptions.

1.15 The range of data available at local level is also an issue, though recent improvements, such as the provision of National Insurance number data, have been helpful. More information is required on age of migrants, reason for migration, short-term migrants and country of origin. At a sub-local authority level (e.g. wards) the only available migration data is from the Census every ten years, which means that the impact of high rates of international migration in particular neighbourhoods has been poorly understood. Until the Census results are published we have largely had to rely on anecdote.

d. Are they effectively summarised?

1.16 One of the ways in which migration statistics are summarised is through the Migration Statistics Quarterly Report. Whilst this is an extremely useful report for accessing the data, the report leaves much for the reader to infer about the overall story. We feel that communication of migration statistics would be better served by the authors going the extra mile in describing the story which is being told by the statistics. See also our comments in 1.2 about guiding the non-expert user to the most appropriate source.

2. How well have producers of migration statistics engaged with users? How responsive have they been to feedback from users of statistics?

2.1 We find the ONS extremely open to user engagement – they engage with users through reference panels, workshops, consultations, RSS events, conferences and CLIP (Central Local Information Partnership) groups. They have also been

proactive in approaching local authorities where migration patterns are more difficult to estimate. The Home Office also engages through some of these events and has hosted user group meetings to discuss migration statistics.

2.2   The above methods of engagement tend to attract regular, expert users of migration statistics. There is some concern that less frequent users who need an understanding of data quality – such as managers and policy makers – are not engaged so well.

2.3   Response to the feedback provided by users is more difficult to assess. Many of the improvements noted in our submission have been implemented in response to user demand, but many issues remain outstanding (see above). We understand that there are significant technical and financial barriers to meeting all of these demands. In addition, the demands of some users sometimes compete with the demands of others, leaving some unsatisfied.

3. Do the migration statistics which are published enable members of the public to gain a better understanding of the issues? Are the right migration statistics being collected?

3.1   The UK total long-term international migration figures, such as those presented in the ONS migration timeline, are excellent contributions to the understanding of migration. Many users see these statistics through the press, broadcasters, social media, and other secondary sources. The ONS could do more to help these mediators to disseminate statistics, through presenting them in simple formats with informative explanations to which links can be made. This would both widen the use of migration statistics and improve the accuracy with which they are reported.

3.2   Public understanding of the issues is undermined by the paucity of local level migration data. Whilst media comment – driven by the available statistics – tends to concentrate on the national picture, many members of the public also want to know about the impact of migration in their local area – how many people are arriving in the area, where they have come from, how long they will stay and what they are doing whilst they are living locally. This kind of detail is really only available from the Census, so in a decade where international immigration has been high the local level statistics have been found wanting. However, we do recognise the practical difficulties of producing robust statistics at the local level.

4. Is the degree of uncertainty surrounding estimates of migration properly reported and widely understood? Is the degree of uncertainty surrounding estimates of migration acceptable or should it be reduced? If so, how could it be reduced?

4.1   We believe that the understanding of uncertainty is not properly reported nor widely understood. Debate using migration statistics rarely takes place with an appreciation that migration is difficult to measure and that there is uncertainty around any given figure. This is an issue across the full range of official statistics.

4.2 In the latest (November 2012) Migration Statistics Quarterly Report, the existence of uncertainty and confidence intervals is acknowledged on the second page. However in the headline statistics no indication is given of the relative size of the confidence intervals compared to the estimates – it is left to the user to find the confidence intervals in the relevant table and make their own judgements. It would be helpful if confidence intervals were reported alongside the headline statistic; this would help to educate non-expert users about the existence of uncertainty.

4.3 Confidence intervals are relatively easy to convey because they are easily quantified, but non-sampling errors such as non-response bias in the IPS also need to be fully appreciated and communicated.

4.4 As already noted, the international migration estimates are based upon a small sample from the IPS, so levels of uncertainty are quite high. When these estimates are disaggregated to local level within the UK the uncertainty rises considerably, particularly around emigration. We address some ideas for reducing uncertainty in the response to question six.

4.5 The considerable uncertainty around migration estimates at a local level has previously gone undocumented and unrecognised. The ONS have done a significant amount of work to address this, and have recently published indicators and statistical measures of uncertainty at a local level – very welcome developments.

5. Are the migration statistics adequate for measuring the Government's progress against its net migration target?

5.1 We have limited opinion on this question, as clearly the Home Office itself is the primary user in this regard. However, the net migration target does not allow for the existence of uncertainty in the measurement of migration – perhaps it should. Also, net migration is influenced by movements in in- or out-migration and the components of each of these flows. The target should appreciate the variation in each of these components as well as measuring the net effect.

6. What more could be done to improve the quality of migration statistics? Should data from other sources, such as e-Borders, be incorporated?

6.1 Much has already been done to improve the quality of migration statistics. As a broad comment, we are concerned about the ability to further improve quality when the government is cutting back its spending on statistics.

6.2 Despite the recent improvements in the IPS, it remains a small sample survey of 5,000 migration contacts in an 800,000 contact survey. Further improvements to the survey are probably only to be gained by considerably increasing the sample size.

6.3   In the immediate future, we expect that the Home Office and ONS will be evaluating their migration estimates in the light of the 2011 Census data, and that further improvements will result.

6.4   E-borders data will be of marginal help and there are still lots of technical problems to be resolved. They will not fill the gaps in duration of stay; reason for migrating; nationality; long- and short-term travel; and we currently have no indication what kind of data outputs might result.

6.5   The measurement of emigration is a particular issue, and we have already noted above that more use should be made of other countries' data to understand the number and characteristics of UK emigrants. For example, the Australian, Canadian and USA statistical websites give annual estimates of immigrants from the United Kingdom. Through its membership of relevant international committees and working parties, the ONS could proactively encourage cooperation between member states of organisations such as the European Union, OECD and UN to work together on this issue. Many countries have an interest in migration statistics which help to improve their understanding of their labour markets, economies and social issues, and to plan appropriate services.

6.6   At a local level, the estimates of international emigration need to be linked more closely to the estimates of international immigration, to reduce any potential bias in the net migration estimates.

6.7   A step change in the quality of migration statistics would require the development of a population register as in many other European countries. This would not be a panacea, and would have many difficulties associated with it – but is worthy of a feasibility study. This is even more important in the context of the ONS considering alternatives to a future Census. In the meantime more people could be encouraged to register with a NHS GP – as this is the *de facto* population register used in population estimates.