

POPULATION AND MIGRATION STATISTICS COMMITTEE (SCOTLAND)**International Migration to Scotland:****Purpose**

This paper summarises the current approach to measuring international migration in Scotland, for the purposes of Mid-year population estimates . It is compared to the new ONS method proposed following research as part of the National Statistics Quality Review in International migration.

GROS are considering this new work as part of a review of methodology GROS and are seeking user views and suggestions of further work which would assist in this evaluation.

Comparison of the current GROS method with the 2003 ONS method and the revised 2007 ONS method.

Both the Office of National Statistics (ONS) and the General Register Office Scotland (GROS) estimate yearly international migration (i.e. migration to and from outside the UK) into Scotland. Both ONS & GROS use the same data sources (and in many cases, the same numbers) and have roughly similar methods for estimating migration. However, differences do exist and the purpose of this paper is to summarise those differences and highlight any issues which GROS may need to consider.

The United Nations recommend that a long-term international migrant be defined as: "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 usual country of 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."¹

At the most basic level, international migration is estimated using the International Passenger Survey (IPS)². The IPS collects information from passengers as they enter or leave Great Britain via air, sea and the Channel Tunnel. Roughly 250,000 passengers are interviewed each year and around 1% of them are migrants. These are then grossed up to produce national migration estimates. In and out-migrants to and from Scotland are identified as those who give somewhere in Scotland (or possibly just 'Scotland') as their destination / point of origin.

¹ Recommendations on Statistics of International Migration, Revision 1. UN Statistics Division 1998.

<http://unstats.un.org/unsd/demographic/sconcerns/migration/migrmethods.htm>

² Estimating International Migration for Population Estimates – An Information Paper, National Statistics Centre for Demography, Office of National Statistics, General Register Office of Scotland, Northern Ireland Statistics & Research Agency, Welsh Assembly Government, July 2006.

<http://www.gro-scotland.gov.uk/files/uk-international-migration-paper.pdf>

The IPS excludes migration via land routes between the UK and the Republic of Ireland (ROI) and it also excludes many asylum seekers and their dependants. These figures are captured from data provided from the Irish Central Statistics Office and the UK Home Office data on asylum seekers.

IPS measures intended length of stay, which may not be the same as 'actual' length of stay. For this reason, the figures are adjusted to take account of two groups – people who initially plan to visit or leave the UK for a short period but subsequently stay for a year or more (Visitor Switchers) and people who intend to migrate either to or from the UK but in reality stay for less than a year (Migrant Switchers).

Data Sources: International Passenger Survey (IPS)
Home Office administrative sources on asylum seekers
Irish Quarterly National Household Survey & NHSCR – provides flows between the UK & ROI.
The Labour Force Survey (LFS)

In its most recent revision of its method, ONS used the Labour Force Survey (LFS) to calibrate the IPS figures, as they felt that the IPS results were biased in favour of London and large metropolitan areas and did not reflect the final destination of migrants (consider, for example, an Eastern European who gives London as their destination when questioned in the IPS, but later decide to work in Leeds after a couple of months).

In both ONS methods, an estimate of the number of visitor switchers (i.e. people who arrive/leave as visitors but then decide to migrate) is calculated based on separate estimates for European Economic Area (EEA) and non-EEA citizens. With the accession of ten eastern European countries to the EEA in 2004, this has fed through to a noticeable rise in visitor switcher estimates over the last three years.

2003 ONS Method³

Prior to 2002, ONS estimated Total International Migration using the International Passenger Survey (IPS), Home Office visitor switcher data (non-EEA (15) citizens only), Home Office asylum seeker data (asylum seekers were assumed to remain in the UK for at least a year and so were treated as normal 'migrants' – although a small percentage were quickly returned to their point of origin) and data on Irish Republic immigrants from the Irish Central Statistics Office⁴.

The IPS survey was adjusted to allow for visitor switchers, asylum seekers and ROI migrants, giving an estimate of Total International Migration (TIM). TIM migrants were then assigned to Scotland, Wales, Northern Ireland and English regions based on their responses in the survey.

In England and Wales, they were then assigned to (now defunct) intermediate geographies based on (former) health authorities. Further distribution to local authorities was based on Census data for inflows and population one year ago for outflows.

After research, ONS decided to make some revisions to the TIM estimation:

- a) A new method for estimating non-EEA (15) visitor switcher inflows & outflows was developed and a similar method to estimate EEA (15) visitor switcher inflows and outflows was developed. These new methods did not use Home Office data.
- b) An allowance for migrant switchers was included.
- c) An estimate of failed asylum seeker outflows (not captured in the IPS) was introduced as was an allowance for dependents of asylum seekers (inflows & outflows).

Visitor Switchers:

As Home Office data was not available for 2001 onwards, ONS identified two non-EEA (15) groups in the IPS as potential visitor switchers. These were 'Long Stay Visitors' (LSVs) who intended to stay 6 to 11 months and 'Possible Migrants' (LOS-7) who were not sure how long they would stay, but that it would probably be around 12 months.

Comparisons of historical figures for these groups and historical Home Office data suggested that 25% of LSVs and 75% of LOS-7s would produce a similar inflow of non-EEA (15) visitor switchers. Outflows of non-EEA (15) visitor switchers were calculated in a similar manner (again, Home Office data was not available for this group).

The same ratios were applied to outflows of EEA (15) citizens travelling to non-EU countries (as there is no difference between EEA (15) and non-EEA (15) citizens if they are travelling to outside the EU), otherwise, the inflow of EEA (15) visitor switchers was assumed to be 50% of LOS-7 EEA (15) passengers and the outflow of EEA (15) visitor switchers to EU countries was assumed to be 50% of the LOS-7 EEA (15) passengers (it was assumed that LSV switchers would be relatively small and net to zero because EEA (15) citizens can travel freely and work within the EEA).

³ Methodology for Revised International Migration Estimates, 1992-2001, Office for National Statistics, June 2003.

http://www.statistics.gov.uk/downloads/theme_population/Methodology%20for_Revised_International_Migration_Estimates.doc

⁴ Methodology to estimate Total International Migration since 1991, Office for National Statistics, 2003.

http://www.statistics.gov.uk/downloads/theme_population/Methodology_for_Revised_International_Migration_Estimates.doc

Migrant Switchers:

ONS revised their method to include an estimated 5% of IPS in-migrants (i.e. people who intended to migrate to the UK) that leave in under a year. The number of outflow migrant switchers (i.e. people who plan to leave the UK and migrate abroad but actually return in less than a year) was estimated at 1% of out-bound migrants.

Asylum Seekers:

Previously, asylum seekers were assumed to stay for a year and become 'normal' migrants – so there was no 'outflow' of asylum seekers in any given year. In reality, there are three groups – returning asylum seekers, asylum seekers who withdraw their application & definitely leave the UK and a proportion (10%) of those who withdraw their application and illegally stay are assumed to then leave clandestinely.

The IPS was assumed to undercount the dependants of asylum seekers and Home Office estimates were used instead. Around 30% of dependants were assumed to be double-counted in this adjustment, so it was downscaled accordingly. The overall impact of the changes applied to asylum seeker figures was found to be marginal

2007 ONS Method⁵

After the Quality Review of International Migration Statistics in September 2003⁶, ONS revised their 2003 method (detailed above) in light of further research they had been conducting. These wide-ranging revisions were driven by a need to improve the regional and sub-regional distribution of migrants throughout the UK and improve the estimation of visitor and migrant switchers. The definition of 'EEA citizens' was extended from citizens of the old EEA (15) country group to the new EEA (25) country group.

Geography⁷:

The sample size of the IPS is not large enough to support estimates at local authority level. ONS have reviewed the way in which they treated England and Wales geographies and have developed a method for treating 'central tendency bias' – that, when asked about their destination, people will often give the name of the nearest large urban area to their destination (or possibly just the most familiar large urban area) but will probably move onwards from their without registering with GPs, so will not be picked up as internal migrants.

New Migrant Geographies (NMGs) for in and out-migrants to England and Wales were constructed to account for central tendency bias and to replace the former (2003 method) intermediate geographies based on former health authorities. They were created (outside of London) by comparing local authority IPS results to the 2001 census and identifying the areas that exhibited central tendency bias. These 'hub' areas and their neighbouring 'feeder' areas were all fixed as the New Migrant Geographies. London was a special case – as individual boroughs within London can exhibit strong biases and migrants do not necessarily move to neighbouring boroughs, so the new geographies for London was constructed differently (taking into account ethnic populations and the LFS). In total, 58 New Migrant Geographies for inflows (NMGi) and 44 for outflows (NMGo) were created.

The IPS is now used to assign migrants to the New Migrant Geographies based on their responses. Further distribution amongst the local authority areas within the NMGs was estimated using the 2001 Census for in-migrants (which was retrospective and did not show central tendency bias).

In-Migration⁸:

IPS information is adjusted to allow for 'switchers', flows between the UK and ROI and asylum seekers and dependants. The resultant estimate is known as the Total International Migration (TIM) inflow, which is distributed to the UK countries (Scotland, Wales & Northern Ireland) and the nine English regions (London, South East, South West, West Midlands, East

⁵ Improved Methods for Estimating International Migration – Introduction and Overview, Office for National Statistics, April 2007.

http://www.statistics.gov.uk/downloads/theme_population/Intro_overview.pdf

⁶ Review of International Migration Statistics, NSQR Series Report No. 23, Office for National Statistics, September 2003.

<http://www.statistics.gov.uk/about/data/methodology/quality/reviews/population.asp>

⁷ Improved Methods for Estimating International Migration – Geographic Areas Used in Estimation, Office for National Statistics, April 2007.

http://www.statistics.gov.uk/downloads/theme_population/Geog_Areas.pdf

⁸ Improved Methods for Estimating International Migration – Geographical Distribution of Estimates of In-migration, Office for National Statistics, April 2007.

http://www.statistics.gov.uk/downloads/theme_population/Geog_distn_in-migs.pdf

Midlands, East England, Yorkshire & The Humber, North East and North West) by the Labour Force Survey distribution.

ONS have found that the LFS and 2001 census distributions are in much closer agreement than either with the IPS, which (as mentioned earlier) over-estimates inflows to London and other large urban centres. However, the LFS does not capture international students living in halls of residence. These excluded data make little impact at Wales/regional level, but have an impact at NMGi and local authority level, and so ONS have used the LFS to apportion migrants at the Wales/regional level. They have also provided TIM estimates for Scotland for our evaluation.

Out-migration⁹:

The new methodology does not change the approach to estimating out-migration at a regional/country level. However, as before, sample sizes were too small to distribute out-migrants amongst local authorities. Instead, New Migrant Geographies for outflows (NMGo) were developed as an intermediate geography (replacing an older intermediate geography based on defunct health boards). Out-migrants are assigned to UK countries and English regions by the IPS distribution, then to English and Welsh NMGoS by the IPS distribution smoothed over 3 years. The 2003 method would then assign out-migrants (from the defunct intermediate geography) to local authorities using 'population one year ago'. However, this method did not take into account 'propensity to migrate' – that different age / sex groups are more or less likely to migrate. So now out-migrants are distributed to local authority level (from NMGoS) using a 'Propensity to Migrate Model' – which is a stepwise multiple regression model that estimates (based on a variety of variables relating to the underlying local authority population) the number of local authority emigrants as a proportion of the NMGo emigrant total.

Visitor Switchers:

ONS had found that the differences in potential for visitors who switched and became migrants was hard to robustly measure and decided to merge the 'long stay visitors' (LSV) and 'potential migrant' (LOS-7) groups. These are broken down into EEA (25) and non-EEA (25) citizens and research found that 27.5 of the EEA (25) inward visitors became migrants and 15.5 of inward non-EEA (25) visitors became migrants. 30.0% of outward EEA (25) citizen visitors and 10.4% of outward non-EEA (25) citizen visitors (i.e. living in Britain and visiting somewhere abroad) switched and became emigrants from Britain.

A further change was also applied when assigning switchers to Scotland. Using the proportions above, the ONS calculated the total UK number of visitor switchers. They then used the proportion of the total LFS calibrated IPS estimate assigned to Scotland and applied this proportion to the number of visitor switchers to get a Scottish figure. This is in contrast to the previous method, where set proportions of visitors specifically going to Scotland were used to calculate switchers.

⁹ Improved Methods for Estimating International Migration – Geographical Distribution of Estimates of Out-migration, Office for National Statistics, April 2007.

http://www.statistics.gov.uk/downloads/theme_population/Geog_distn_out-migs.pdf

Migrant Switchers:

In January 2004, new questions were added to the IPS in order to provide a firmer evidence base for understanding what proportion of migrants switch. The results indicated that 3.1% of IPS in-migrants become migrant switchers (i.e. do not stay in Britain) and 4.4% of out-migrants become switchers and return to Britain in under a year. The method of assigning migrants switchers to Scotland did not change – the IPS estimates of migration to Scotland were used.

For both visitors and migrants, the proportions who switch will be estimated on a 6 monthly basis, using data from the previous three-year period as it is realistic to assume that these proportions will change, as attractiveness of the UK (in terms of employment, ease of migration etc) changes.

GROS Method

Total International Migration flows to and from Scotland are also estimated separately by GROS.

They are mainly based on IPS data (i.e. on the number of people who indicated that their destination / point of origin were within Scotland), adjusted for the Irish Republic (where data is supplied by the ROI). Migrant figures are distributed internally using NHSCR/CHI data – with the exception of asylum seekers who are subtracted from the total inflow and then added onto Glasgow City.

ONS currently supply GROS with the (un-calibrated) IPS estimate (including data for our visitor switcher categories) to Scotland at a 'Scotland' level. Distribution to regions within Scotland is not carried out in producing the TIM estimate.

Figures for migrants from the Irish Republic are provided by the Irish Quarterly National Household Survey & NHSCR and we do not foresee a need to review them.

No adjustment is made for migrant switchers. Broadly GROS assume that the number of in-migrant switchers (i.e. people who were going to migrate to Scotland but leave after a year) is balanced by the number of out-migrant switchers (i.e. people who were going to migrate abroad but return to Scotland after a year).

The visitor switcher adjustment from 2004 onwards is based on non-EEA visitors only and considers two classes of visitors – 'Long Stay Visitors' (LSV) – those intending to stay for 6-11 months, and 'Possible Migrants' (LOS-7) – those who do not know but may stay 12 months. Using UK level Home Office estimates of visitor switchers (1999-2000), 25% of Long Stay Visitors and 75% of Possible Migrants are (inward) visitor switchers. Before 2004, visitor switcher data was received directly from ONS and was based on the net figure calculated using the ONS method of the time.

GROS assume that there are no outward visitor switchers – and use the inward figure as the net. EEA visitor switchers are assumed to net to zero. (The GROS method was developed before ONS started measuring EEA citizens on the IPS, so no data on EEA citizens was available at the time.)

GROS only measure asylum seekers who enter Scotland (usually Glasgow City) – but assume that asylum seekers stay for at least a year and that when asylum seekers leave; it is part of the general out-migration. So GROS only use the inflow of asylum seekers from the Home Office data as the 'net'. The figures do not quite match the ONS figures, as GROS use raw Home Office data, whereas ONS apply adjustments.

Finally, GROS add a 'Migration error' value to allow for differences between GROS estimates and decennial census returns.

Differences between GROS and ONS methods

The GROS estimate differs from the current and previous ONS estimates for Scotland in several ways. Both ONS estimates (covered in more detail above) apply percentages to intending in-migrants and out-migrants to calculate migrant switchers, whereas GROS assume they net to zero.

The previous ONS method used the same percentages as GROS to calculate non-EEA visitor switchers – but calculated both inflows and outflows. GROS assumed that EEA visitor switchers net to zero.

The new ONS method assumes that LSVs and LOS-7s are approximately the same and adds the LOS-7 to the LSV sum - 27.5% of inward EEA (25) LSVs become Visitor Switchers and 15.5% of inward non-EEA (25) LSVs become Visitor Switchers. 30.0% of outward EEA LSVs become Visitor Switchers and 10.4% of outward non-EEA LSVs become visitor switchers. GROS has not adopted any of these changes.

When calculating the Visitor Switcher figures for Scotland, ONS calculate the UK figure and then apportion to Scotland, based the LFS distribution. The LFS distribution itself has a large effect on the number of visitor switchers apportioned to Scotland, as it reduces the number of international passengers whose destination is Scotland.

ONS measure both asylum seeker inflows and outflows, whereas GROS assume that asylum seeker outflows are counted in the general international migrant outflow figures. GROS also have slightly different migrant inflow figures as ONS make slight modifications to the Home Office data.

The new ONS IPS figures have been calibrated by the Labour Force Survey. GROS still use un-calibrated IPS estimates (provided by ONS).

GROS estimates also tend to give a larger figure for migrants than the census, so, the net migration figure is modified by a 'migration error' term to bring it into line. ONS take the view that, as the two are worked out using different methodologies, different figures would arise naturally.

Visitor Switchers

The following table summarises the differences in the ways that visitor switchers are calculated – visitor switchers are based on proportions of Long Stay Visitors (LSVs – those who plan to stay 6 to 11 months) and Potential Migrants (LOS-7s - those who are unsure but may stay more than a year). There is a further difference in the method that the 2007 ONS method apportions LSV and LOS-7s to Scotland based on Scotland proportion of the IPS calibrated by the LFS, rather than by IPS response (which is the way that the visitors are apportioned in the other two methods).

Inflows (Entering UK)				
	ONS 2003		ONS 2007	GROS
LSV				
<i>EEA</i>	0%		27.5%	0%
<i>Non-EEA</i>	25%		15.5%	25%
LOS-7				
<i>EEA</i>	50%		27.5%	0%
<i>Non-EEA</i>	75%		15.5%	75%
Outflows (Leaving UK)				
	ONS 2003		ONS 2007	GROS
	<i>To EEA</i>	<i>To Non-EEA</i>	<i>To EEA or Non-EEA</i>	<i>To EEA or Non-EEA</i>
LSV				
<i>EEA</i>	0%	25%	30%	0%
<i>Non-EEA</i>	25%		10.4%	0%
LOS-7				
<i>EEA</i>	50%	75%	30%	0%
<i>Non-EEA</i>	75%		10.4%	0%

It is important to note that in the ONS 2003 method, 'EEA' referred to the 15 pre-accession EU countries plus Liechtenstein, Norway and Iceland, whereas the 2007 method expanded the definition to include the 10 eastern European accession countries that joined the EU on the 1st May 2004.

The fifteen pre-accession countries are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Republic of Ireland, Spain, Sweden and the United Kingdom.

The ten accession countries are: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

The EEA countries that are not included in the ONS methods are Bulgaria and Romania because citizens of these countries do not enjoy the 'unrestricted freedom of movement for workers' Treaty provisions.

Comparison of Migration Methods

In order to greater understand the differences between the methods and to help form a view on whether to modify the GROS method to be more in-line with the ONS method, the following section provides a comparison of the different figures each method gives.

The following tables list the figures for each component of the TIM for the three methods discussed above. Migrant Switcher figures are negative for inflows and positive for outflows, because they represents 'would-be migrants' who then change to being visitors and need to be subtracted from their respective flows.

ONS 2003 TIM Estimation						
Mid-Year	Total International Migration (TIM)	<i>Components</i>		<i>Adjustments</i>		
		International Passenger Survey (IPS)	Irish Migrants	Asylum Seekers	Visitor Switchers	Migrant Switchers
Inflow						
2002	20,269	13,953	770	4,935	1,309	-698
2003	31,342	26,164	764	3,930	1,792	-1,308
2004	34,297	29,352	737	2,372	3,303	-1,468
2005	34,865	29,368	622	2,250	4,093	-1,468
2006	40,711	35,275	723	2,089	4,388	-1,764
Outflow						
2002	-27,399	-23,632	-1,400	-1,150	-1,453	236
2003	-28,470	-25,628	-893	-877	-1,327	256
2004	-26,798	-23,582	-898	-945	-1,609	236
2005	-30,368	-26,956	-991	-1,079	-1,612	270
2006	-32,033	-28,596	-928	-1,395	-1,959	286
Net						
2002	-7,130	-9,679	-630	3,785	-144	-461
2003	2,873	535	-129	3,052	465	-1,052
2004	7,500	5,770	-161	1,428	1,694	-1,232
2005	4,497	2,412	-369	1,171	2,481	-1,199
2006	8,120	6,679	-205	694	2,429	-1,478
Cumulative	15,859	5,717	-1,494	10,130	6,926	-5,422

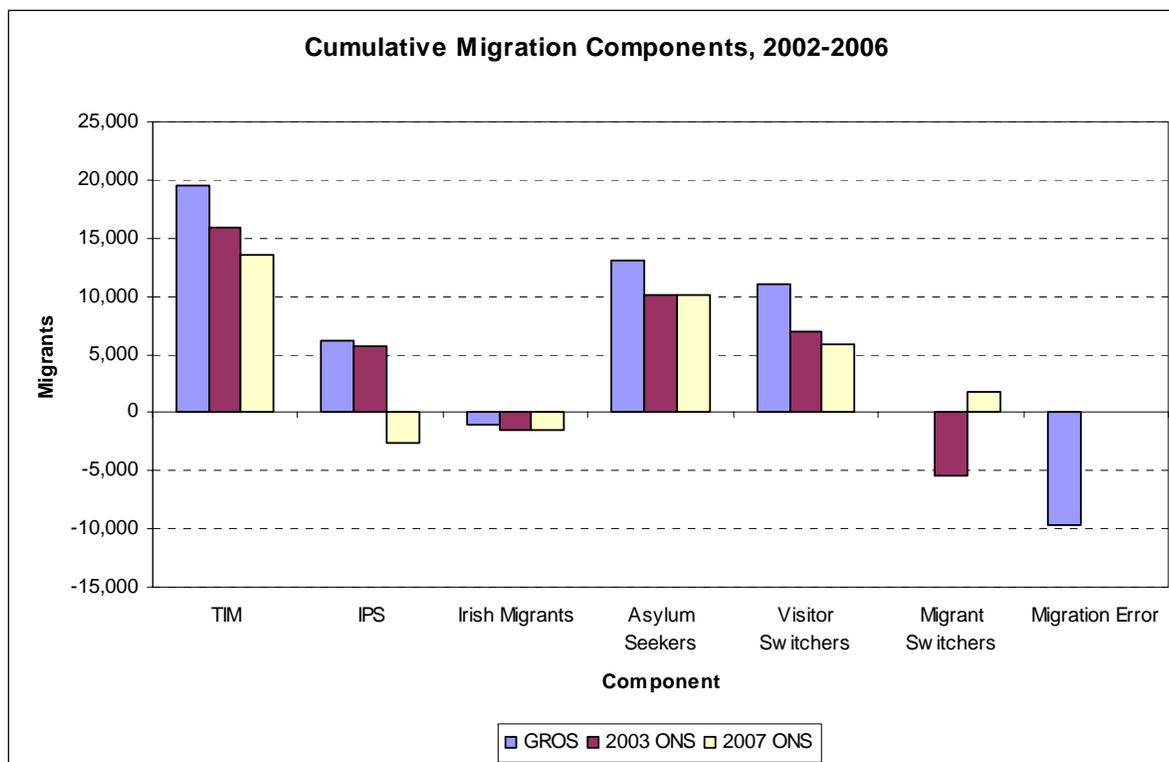
ONS 2007 TIM Estimation						
Mid-Year	Total International Migration (TIM)	<i>Components</i>		<i>Adjustments</i>		
		International Passenger Survey (IPS) Calibrated by LFS	Irish Migrants	Asylum Seekers	Visitor Switchers	Migrant Switchers*
Inflow						
2002	27,404	19,878	770	4,935	2,437	-615
2003	24,838	18,915	764	3,930	1,814	-585
2004	27,327	22,809	737	2,372	2,114	-705
2005	36,617	31,773	622	2,250	2,951	-979
2006	37,325	32,439	723	2,089	3,080	-1,006
Outflow						
2002	-26,600	-23,632	-1,400	-1,150	-1,453	1,035
2003	-27,603	-25,628	-893	-877	-1,327	1,122
2004	-25,815	-23,582	-898	-945	-1,422	1,033
2005	-29,011	-26,956	-991	-1,079	-1,162	1,176
2006	-30,911	-28,600	-928	-1,395	-1,246	1,258
Net						
2002	-804	- 3,754	- 630	3,785	983	420
2003	-2,765	- 6,713	- 129	3,052	487	538
2004	1,512	- 773	- 161	1,428	692	328
2005	7,606	4,817	- 369	1,171	1,790	196
2006	6,414	3,839	- 205	694	1,834	252
Cumulative	13,572	-2,584	-1,494	10,130	5,786	1,734

*ONS have not released Migrant Switcher figures for 2002 to 2004 using the same proportions as 2005 & 2006, because the proportions were based on data dating from 2005 onwards. Here they have been recalculated using the 05 & 06 proportions of the IPS figures, under the assumption that proportions would remain the same. Original figures were calculated using the old 2003 proportions (5% of inflow, 1% of outflow) of the new LFS calibrated IPS survey. The new figures are calculated using the 2005 & 2006 revised proportions (3.1% of inflow, 4.4% of outflow).

Year	Original Inflow Estimate	New Inflow Estimate	Original Outflow Estimate	New Outflow Estimate
2002	-994	-615	236	1,035
2003	-946	-585	256	1,122
2004	-1,003	-705	550	1,033

GROS (2002 onwards) TIM Estimation						
		<i>Components</i>		<i>Adjustments</i>		
Mid-Year	Total International Migration (TIM)*	International Passenger Survey (IPS)	Irish Migrants	Asylum Seekers	Visitor Switchers	Migration Error
Inflow						
2002	18,381	13,534	184	3,700	963	0
2003	30,258	25,986	764	3,200	308	0
2004	36,216	30,679	737	2,300	2,500	0
2005	35,206	29,386	622	2,100	3,098	0
2006	42,015	35,275	723	1,800	4,217	0
Outflow						
2002	-27,031	-24,011	-420	0	0	-2,600
2003	-28,953	-25,460	-893	0	0	-2,600
2004	-25,989	-23,591	-898	0	0	-1,500
2005	-29,582	-27,091	-991	0	0	-1,500
2006	-31,024	-28,596	-928	0	0	-1,500
Net						
2002	-8,650	-10,477	-236	3,700	963	-2,600
2003	1,305	526	-129	3,400	308	-2,600
2004	10,227	7,088	-161	2,300	2,500	-1,500
2005	5,624	2,295	-369	2,100	3,098	-1,500
2006	10,991	6,679	-205	1,800	4,217	-1,500
Cumulative	19,497	6,111	-1,100	13,100	11,086	-9,700

*The migration error is normally applied to migration figures once migrants from the Rest of the UK have been added to the international migrant figures. Therefore, official GRO(S) international migration figures may differ from the ones shown here, as they will not have had the migration error applied to the international migrant outflow figures. To correct, the migration error values should be subtracted from the outflow figures. (Further small differences may arise as the IPS and Irish migrant figures are often subject to minor revisions over time).



The 'Cumulative Migration Components, 2002-2006' chart shows how the differences add up over the years from 2002 to 2006. The first important point to notice is that the new ONS method gives about 5,900 migrants less than the GROS figure for Total International Migrants (TIM) over the last four years (13,600 migrants from the ONS method, 19,500 migrants from GROS) – and this is after the Migration Error (-9,700) has been applied to the GROS figure.

Major Differences

1) Visitor Switchers – whilst the change in ONS methods has had a slight effect to ONS estimates, both are very different to the GROS estimate – which does not measure EEA visitor switchers and assumes that there is no outflow. The figures also changed greatly when ONS began calculating the proportion of switchers assigned to Scotland by ONS using IPS figures calibrating to the LFS (as the calibrated figures give a lower proportion of migrants to Scotland).

In net terms, the overall effect has been that GROS give Scotland an extra 5,300 migrants over 5 years. (GROS = 5,300 more than new ONS method).

2) Migrant Switchers – are not measured by GROS, the 2007 ONS method revised the Scottish figure to a net inflow of 1,700 migrants over 5 years (this figure increased drastically from over 5,400 migrants leaving over 5 years in the earlier ONS method as the proportions were revised). (GROS = 1,700 less than new ONS method).

3) IPS adjustment – the original ONS and GROS IPS figures were very similar – and in fact only differed because GROS released the figures earlier than ONS (over which time they are revised slightly), giving a rough inflow of 6,100 migrants over 5 years. The new IPS figure, calibrated by the LFS, gives a rough outflow of 2,600 migrants. (GROS = 8,700 more than the new ONS method).

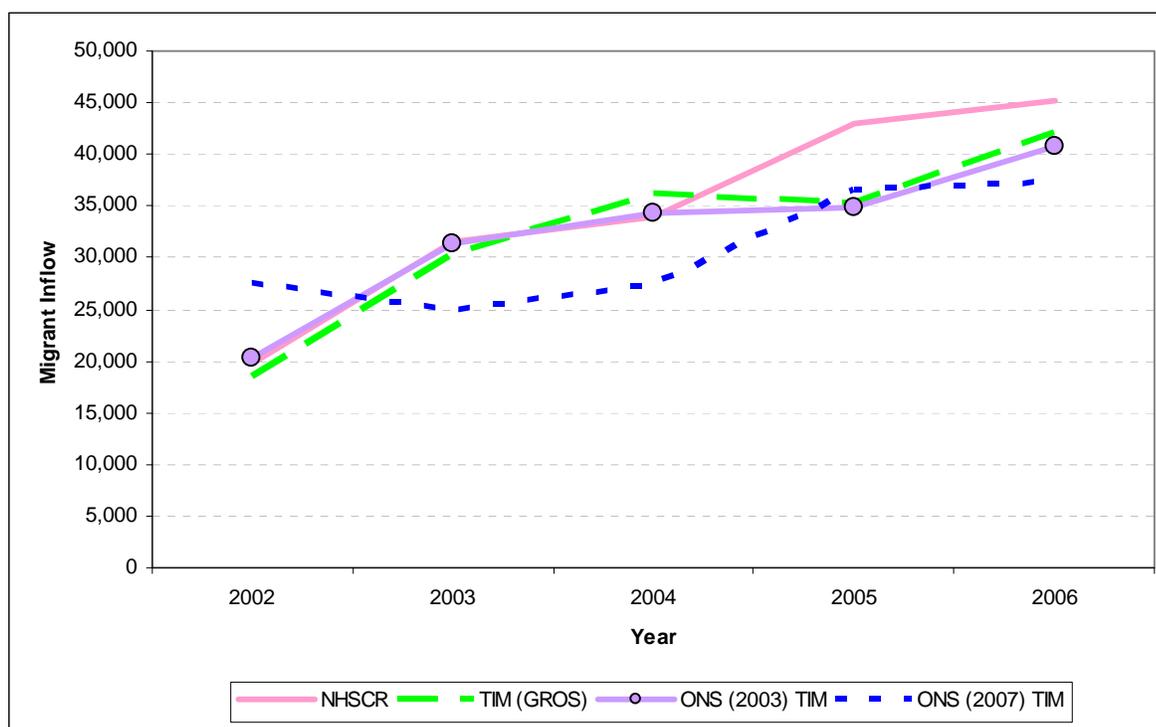
4) Asylum Seekers – All methods record similar numbers of asylum seekers going to Glasgow, however as GROS assume that outflows are picked up in the IPS as out-migrants (and that ONS is, by implication, double counting outflows), the GROS figure is around 13,100 over 5 years, compared to 10,100 for both ONS methods. (GROS = 3,000 more than the new ONS method).

5) Migration Error – The GROS figure is lowered by a migration error designed to bring the GROS estimate in line with the census. The ONS figures do not include this error term. The net effect is that the GROS figure is reduced by 9,700 over 5 years (GROS = 9,700 lower than the new ONS method).

In total, the GROS method, over 5 years, gives a figure that is approximately 5,900 migrants higher than the new ONS method (and 6,000 migrants higher than the old ONS method).

Comparison of Inflows with the NHS Central Register (NHSCR)

International Inflows				
	NHSCR	TIM (GROS)	ONS (2003) TIM	ONS (2007) TIM
2002	19,704	18,381	20,269	27,404
2003	31,521	30,258	31,342	24,838
2004	33,882	36,216	34,297	27,327
2005	43,004	35,206	34,865	36,617
2006	45,201	42,015	40,711	37,325
Average	34,662	32,415	32,297	30,702



The National Health Service Central Register records as international in-migrants the number of patients registering with a doctor, who have a previous address outwith the UK. As the table and chart above show, in general, the NHSCR shows a higher volume of international inflows than the TIM figures calculated from the IPS (calibrated or not). Note that the 2003 ONS and GROS methods should both use roughly the same figures (the un-calibrated IPS totals) – the differences in the two arise because GROS receives un-finalised ONS figures for its calculations.

It is important to remember that the NHSCR measures people once they have registered with a GP, so we can only compare it to the TIM figures if we assume that every international migrant registers with their GP and that everyone 'from abroad' who registers with a UK GP is a migrant, rather than (for example) someone who only stays for 11 months.

In 2005 the NHSCR was recording around 6,000 more international migrants than the calibrated IPS and 8,000 more than the un-calibrated ONS & GROS estimates. In 2006, the NHSCR was recording around 8,000 more than the calibrated IPS, 9,000 more than the un-calibrated ONS IPS estimate and 3,000 more than the GROS estimate.

Issues for Discussion

ONS are keen that Total International Migration estimate methodologies should be consistent between the different UK countries. With the new revisions to their methodology, there are now considerable differences between the GROS estimate and the ONS estimate for international migration to Scotland.

The following list covers the main issues that GROS would welcome views on and aims to discuss at the PAMS meeting in June 2006.

- 1) The Office for National Statistics now calibrates the International Passenger Survey using the results of the Labour Force Survey, which measures where migrants stay one year after they have arrived in the UK. This has caused the number of migrants assigned to Scotland to decrease, suggesting that more migrants state Scotland as their destination in the IPS than actually end up living there (according to the LFS) – which indicates that Scotland as a whole may suffer from a central tendency bias in IPS reporting. Alternatively, this could be a result of sampling issues within the IPS. Views on whether GROS should adopt the new ONS figures are welcome.
- 2) GROS lack a robust method for estimating asylum seekers arriving in Scotland, so it may be worthwhile simply using the ONS figures and their methodology.
- 3) GROS has no independent information on the numbers of visitor switchers or migrant switchers to or from Scotland, so would welcome views on whether to adopt the new ONS method or retain the existing GROS method. Views are also welcome on whether GROS should carry out further research into aspects of this methodology. For example, it may be that the ‘switcher rate’ for Scotland is different than that in the rest of the UK and/or the rates of long-stay visitors/possible migrants is different in Scotland.
- 4) How could the information from the NHSCR and/or forthcoming estimates of short-term migration from ONS be used in quality assuring or calibrating the estimate of international migration to Scotland. Are there any other information sources that GROS could use to estimate Total International Migration?

Nick Wright
GROS

June 2007