

## NATIONAL STATISTICS CENTRE FOR DEMOGRAPHY (NSCD)

### WORK PROGRAMME FOR 2009/10

#### Background

1.1 The United Kingdom Population Committee (UKPC) has responsibility for co-ordinating and agreeing a UK-wide work programme on population statistics and demographic analysis that is policy relevant and meets users' needs. The NSCD Advisory Board advises it in that role and helps identify gaps in provision. The Population Theme exists under the new arrangements for statistical planning set out in the paper 'GSS Statistical Programming/Planning: A new system for Statistical Planning. A Population and Migration Theme Working Group (TWG) will be reconvened to take responsibility for drawing up the three-year Work Programme which UKPC has signed off at its May meeting each year.

1.2 In the past the Theme Group has met twice a year and has been formed from the main producers of population and migration statistics. A list of theme group members who contributed and useful websites can be found at the end of this document. There is a continuing need for producers to come together for the purpose of work planning and this group will review the membership and terms of reference of the reconvened TWG at its first meeting in the early autumn.

1.3 The Theme covers population estimates and projections, outputs from the Census, international and internal migration estimates, household estimates and projections, demographic analysis, as well as statistics on births, deaths, marriages and civil partnerships, divorces, citizenship, families and electoral turnout. These provide essential information about the characteristics, structure and dynamics of the population.

1.4 Population and migration statistics are produced using a range of data sources, both administrative and survey. The main government departments and devolved administrations involved in the preparation and production of these statistics are the Office for National Statistics (ONS), the General Register Office for Scotland (GROS), Northern Ireland Statistics and Research Agency (NISRA), the Welsh Assembly Government (WAG), the Home Office (HO) and the Department for Communities and Local Government (CLG) and these departments provide the core membership for the TWG.

1.5 Population statistics and demographic analysis are extensively used by a wide range of users including government (both central and local), commercial users, academics and the general public. For example, they are used by the Bank of England and HM Treasury in assessing the labour market and for economic forecasting; by DCLG, the Department of Health and the devolved administrations for local resource allocation; and by the Department for Work and Pensions for planning pension provision. A key primary resource allocation use is in the Barnett formula for allocating public finances across the United Kingdom. There is a significant level of interest in the statistics from local and health authorities, both from resource allocation and service planning and provision perspectives; there is a Central and Local Government Information Partnership (CLIP) sub-group to advise the ONS Centre for

Demography (ONSCD) on key issues. Immigration and citizenship statistics are used mainly for policy purposes by the Home Office and the Foreign and Commonwealth Office (FCO). Parliament, the media and the public also have a strong interest in population statistics.

## Context

2.1 We are currently experiencing a significant level of **population change** in the United Kingdom, especially in relation to the magnitude and diversity of migration, both international which affects all of the constituent countries and internal migration, which affects many local populations whether or not they experience international migration. This brings challenges in not only knowing what our population is, and its characteristics, but in understanding what impact the changes that are taking place now will have in the future.

2.2 Against this backdrop, users have expressed their wish to see **significant improvements** in the coverage and quality of our population and migration statistics. In 2006 the National Statistician established a cross-government Task Force into international migration statistics which reported in December 2006. Following that there were parliamentary reviews, of particular note was the Treasury Sub Committee on 'Counting the Population'. A cross-Government work programme has been established to take forward recommendations of key reviews of migration statistics including those of the interdepartmental Task Force into migration statistics. This improvement work is covering research and development of possible improvements that could be made to migration statistics and hence population statistics. A key aim of the programme is to improve trust in official migration and population statistics and to achieve wide acceptance of the figures as authoritative and informative. Delivery of the improvements is being achieved with a significant level of cross-Government collaboration.

2.3 ONSCD and the devolved administrations are continuing to **prepare for the next Census** in 2011. Census Tests were conducted in England & Wales (2007), Scotland (2006) and Northern Ireland (2007), and the outcomes and evaluations of these Tests have been published. Census rehearsals are taking place in 2009, in March in Scotland and in October in England & Wales and Northern Ireland. The Censuses in the UK will all be held on 27<sup>th</sup> March 2011.

2.4 Following the 2001 Census, concerns were expressed about the size of the gap between the 2001-based population estimates for England and Wales (rolled forward using the 1991 Census results) and the actual 2001 Census outputs. A significant amount of effort had to go into reconciling the two sources after the initial Census population estimates had been issued in 2002 and it took a further two years before this work was finished. Development work of ONS and the devolved administrations is aimed at avoiding these issues when the population estimates are released from the 2011 Census. By improving the population estimates based on rolling forward from the 2001 Census, developing demographic analyses and the quality strategy for the 2011 Census and building improvements into the Census itself, it should be possible to be able to better, and more readily, reconcile the rolled forward 2011-based population estimates with the 2011 Census results.

2.5 The **devolution** arrangements are now well established and we will continue to put a good deal of emphasis on finding the right balance between the requirements for UK statistics, for comparable statistics across the constituent countries of the UK, and the

individual needs of regional and local users in individual countries, including those in the devolved administrations in Scotland, Wales and Northern Ireland.

2.6 The work programme for NSCD was developed in parallel with the ongoing public consultation on development of the ONS statistical work programme for 2008- 2012. The ONS settlement from the Comprehensive Spending Review in April 2007 covered the years 2007-08 to 2011-12. Resources are increasingly scarce across government and we have a duty to be as efficient and effective as possible in meeting current needs and responding to future needs. We recognise we are unable to meet all demands and have sought user views to help prioritise this work. Once the resources for the statistical work programme are finalised the prioritised plans will be issued on the website.

2.7 The **Office for National Statistics** became independent in April 2008 and is overseen by a Statistics Board of the UK Statistics Authority. Two key areas where the introduction of the Statistics Act and the creation of the Statistics Board affect the NSCD work programme are:

- **Independent assessment of key statistics.** In January 2009 the Board published the Code of Practice against which it will independently assess the quality and integrity of key statistics (both produced in ONS and across government departments) for formal approval as National Statistics. Migration statistics are one of the top priorities for the independent assessment by the Authority. A Monitoring Review of migration statistics was established late in 2008. A draft interim report was issued in April 2009 and discussed at a public meeting in that month, the final report is expected in June 2009. The assessment of migration statistics was kicked off in April 2009.
- **Data Sharing.** The Act allows for increased sharing of data between ONS and other departments, subject to agreement by Parliament on a case-by-case basis. This will give all parts of NSCD the opportunity to use, exploit and create far richer demographic datasets than we have now. The first data set for which a data sharing regulation has been approved by parliament is the School Census data. ONS received the data in spring 2009 and are now investigating how these data can be used to improve migration statistics. ONS are also pursuing access to other data sets that cover migrants. In particular are Higher Education Statistics Agency data that are essential to improving the estimation of student populations and Department for Work and Pensions longitudinal data that may be able to identify migrants' locations within the UK and their periods of employment or unemployment which may provide a guide to length of stays in the UK.

## Work Plan for 2009/10

### Providing a relevant and accurate picture of the population

3.1 During 2009/10, we plan to provide a relevant and accurate picture of the population of the United Kingdom, updated for changing user requirements. In particular, we will:

#### 3.1.1 **Make High Level Statements on the Population of the United Kingdom** through:

- The National Statistician's Annual Article on the UK Population in Population Trends (December 2009);
- The Registrar General's Annual Review of Demographic Statistics 2008 in Scotland in July 2009;
- The Annual Report (2008) of the Registrar General for Northern Ireland in November 2009; and
- The fourth Annual Report providing a summary of demographic information for Wales in March 2010.

#### 3.1.2 **Produce and publish regular outputs containing statistics, analysis and associated metadata**, including:

- Population Estimates and Projections (National and Subnational);
- Small Area Population Estimates, Quarterly Population Estimates, Population Estimates by Ethnic Group;
- Household Estimates and Projections;
- Marital Status Estimates and Projections; including Cohabitation and Lone Parenthood;
- Migration Statistics Quarterly Reports and Annual Report (International - Immigrants and Emigrants - and Internal);
- Control of immigration statistics including statistics on Asylum and Persons Granted British Citizenship;
- Compendia reports, including Population Trends (quarterly);
- Regular Vital Events Statistics on births, deaths, marriages and civil partnerships, divorces;
- Detailed Fertility Analyses, including cohort fertility figures and true birth order estimates (some analyses are covered by the Health Theme, in particular conception, teenage pregnancy and infant mortality are all within that theme);
- Life Expectancy Data including cohort expectations of life;
- Settlement and Locality Population Estimates (for Scotland);
- Electoral Statistics;
- Additional analyses for internal/external customers, such as Worker Registration Scheme and National Insurance Numbers allocated to foreign nationals.

#### 3.1.3 **Develop new and improved outputs, in line with user requirements**, including:

- Continue the cross-departmental programme of work to improve migration statistics through better use of cross-government sources and improved methods (see section 4 for more information about the programme).
- In particular ONS plan implementation of improvements in 2008 population statistics for England and Wales to be published in 2010 e.g. making better use of administrative sources in the distribution of international migration and improving estimation of student migration.
- Continue to develop our longitudinal data capabilities, following the success of the ONS Longitudinal Study as a data source. We will further develop the Scottish Longitudinal Study (SLS) and the Northern Ireland Longitudinal Study (NLS) both launched in 2006/07;
- Continue to develop estimates of numbers of short term migrants (those who stay for periods of between 1-12 or 3-12 months and for certain purposes, most notably for work and study) at a national and local authority level;
- ONS to continue development work to provide demographic analysis to support the 2011 Census Quality Assurance Strategy and to assess the feasibility of producing population statistics on flexible output bases past 2011;
- ONS continue to develop a model to produce stochastic population projections and publish a set of stochastic projections on an experimental basis;
- Improve reporting on the demographic drivers and effects of an ageing population;
- Continued development and transition of recently introduced experimental statistics to National Statistics status – small area population estimates, quarterly population estimates, population estimates by ethnic group, short-term migration estimates, household population estimates, estimates of the very elderly and population estimates for Primary Care Organisations.

#### 3.1.4 **Improve the presentation of our population data through:**

- Continuing the implementation of the 2006 Migration Task Force recommendations on coherent reporting by continuing the development of quarterly releases covering ONS, DWP and HO migration related outputs. Four combined releases were achieved in 2008/09 and a new style quarterly report was issued in May 2009. A number of improvements were made to the range of statistics i.e. regular tables on stocks of migrant workers from August 2008, moved to Labour Market release in February 2009.
- Continue to expand the range of supporting data and metadata that are published on the web, and filling the gaps.
- Improved presentation, including more use of visual displays, is planned. Successful delivery is at least in part dependent on website development, in ONS (through the i-Dissemination project), GROS and NISRA.

3.2 Across the countries of the United Kingdom, we will strive to be **joined-up** in our approach to our regular population outputs across the individual countries of the UK and, where possible, produce headline statistics for the individual countries that coincide with the publication of key ONSCD outputs (including for the mid-year population estimates). In addition we will as far as possible ensure that tables produced by ONS include the whole UK, even where information is produced by devolved administrations.

3.3 During 2006/07, UKPC reviewed our **NSCD governance and committee structure** and recommended changes to how we keep up-to-date with changing user requirements - in particular, that we introduce a Central Government User Network and approach the Statistics Users Forum to see how non-commercial users might be better engaged. This will strengthen existing user links. These recommendations were taken forward in 2008/09, while maintaining the existing CLIP population sub-group arrangements.

3.4 We will meet our **International Obligations** to supply data to the European Commission, Eurostat, OECD, UNHCR, IGC and other international stakeholders.

3.5 We will continue to provide a **Source of Expertise and Advice** more generally and respond promptly to Parliamentary Questions and other requests for data/advice.

### **Developing further our population statistics**

4.1 The Centre for Demography within ONS has identified the work they need to do to develop population statistics. A board is held quarterly to oversee and prioritise this development work. A communication plan is in place to ensure stakeholder engagement is achieved at all levels including with the other key producers of population statistics who are members of the Population and Migration Theme Working Group. The strands of work that have been identified are aimed at providing answers to the following key questions:

- What will the population statistics of the future look like and how will we deliver them? This strand includes consideration of the timeliness of outputs, their definitional basis and the feasibility of flexible outputs.
- What are the best sources to underpin them, including the need for a 2021 Census, the use of administrative sources and the Integrated Household Survey?
- How do we avoid the issues arising following the 2001 Census, when there was a large difference between the Census results and the rolled-forward population estimates, and how do we best explain observed differences?
- How do we provide better estimates of migration at a national level and improved distributions of population locally, taking account of the Migration Task Force recommendations?
- How is the structure of the UK population changing, what is driving those changes and what are the implications?
- What does a fully modernised and automated population statistics system look like?
- How can we communicate to users a better sense of the quality of what we produce?

4.2 Migration is the key driver for population change and as explained in 3.1.3 there is a cross-Government programme of new work to improve migration, and hence population, statistics. A key aim of improvement work is to improve trust in official migration and population statistics and achieve wide acceptance of these figures as authoritative and informative. . The plan for achieving this is through improving:

- sources and methods leading to increased quality of population statistics,
- triangulation between the different sources used in estimation,
- user communications and engagement,

- reporting of statistics leading to more positive media reporting and less confusion for users.

Developments to methods and sources need to have long-term sustainability and be in line with work to develop future population systems i.e. the Beyond 2011 project.

4.3 The outcomes we need to achieve to realise the vision are:

- Development of existing source to ensure that they capture the information that is required
- Identification and engagement in the development of potential new sources of information
- More use of data from administrative systems that cover migrants to provide:
  - Better counts of the numbers of migrants coming to and leaving the UK
  - Better distributions of migrants at local area level
  - More information about migrant groups and the impact of migration at local levels
- Through data linkage and analysis, a better understanding of the reconciliation between sources and explanation of differences where these legitimately exist e.g. definitional differences.
- Reconciliation post 2011 between Census population estimates based and the intercensal series and understanding of legitimate differences that will exist..
- Methods for producing population statistics that are authoritative and sustainable and provide figures that are fit for purposes to which they are put.
- Quality measures for migration and population statistics
- Increased engagement of those with local knowledge and of external experts in the technical issues to achieve wide user recognition that the best approaches are being used
- Better reporting – more coherent across government, more orderly, more timely and better structured.

4.4 ONSCD, working together with Department for Communities and Local Government and the Home Office in particular, established the governance that oversees the migration improvement programme so that this was in place by the start of the programme in April 2008. A senior cross government Programme Board will steer and oversee progress, a Ministerial Group will help to ensure pace can be achieved in delivery of the Programme's aims. The National Statistician will ensure that the quality of the statistical work is high and will be assisted in this by a high level technical group – the Analysis Coordination Group. Five working groups corresponding to the five key strands listed below will report to the ACG and the Programme Board. An extensive programme of user engagement is planned, including user involvement in the quality assurance strategy for improvements to migration statistics which will be published during 2009/10.

4.5 Key strands of the work programme are:

- Improving the data available on numbers entering and leaving the United Kingdom;
- Making effective use of new and existing administrative and survey data sources;
- Improving local population estimates and projections used in allocating resources and developing services;
- Improving the public reporting of population and migration statistics; and

- Establishing a wider range of timely indicators and analysis to inform the evidence base on migration and its impacts on policy and public services.

Regular progress reports of this work will be issued on the IMPS pages via the web.

4.6 We will continue the programme of demographic research and development in Scotland, for example representing interests on projects to improve address lists in Scotland, including the Definitive National Address (DNA) Project and Assessors' Portal. GROS are also co-supervising a student at Leeds University doing a PhD on joint estimates of small area population and household characteristics.

4.7 Continuing to investigate the potential for developing more efficient population statistics systems in Scotland, including:

- Update current collections and reports: school census, child benefit, older persons, DVLA car registration, electoral registration;
- Continue work on evaluating additional data from school census to inform migration estimates;
- Continue work on record linkage projects to help better understand census coverage issues;
- Create regular extracts from the NHSCR for statistical purposes to enable better estimates of migration to be made at small area level.

4.8 We will continue to develop demographic statistics in Northern Ireland. In particular, NISRA is working to improve NI migration statistics, building on a sources and methods paper first published in 2006. Specifically migration questions are now included on the Northern Ireland School Census and further work is ongoing to develop further migration data from the health service patient register.

4.9 The Northern Ireland Longitudinal Study (NILS), launched in 2006, currently has 29 projects underway. A dedicated academic Research Support Unit for NILS will be established, through ESRC funding, in 2009/10.

4.10 NISRA is continuing to develop the spatial aspect of demographic statistics, and is working with the Land and Property Services Agency to exploit the value of the NI Address database, Pointer. Specifically NISRA are working to ensure that this address database will underpin the statistical use of administrative data and the 2011 Census in Northern Ireland

4.11 We will continue to research, develop and publish sub-national population projections down to local authority level in Wales, which were issued in 2008 for the first time at this level since local government reorganisation in 1996. As part of this, the Welsh Assembly Government will continue to lead the recently formed UK group which looks at the different sub-national projections methodologies in each of the countries and learns from the different approaches. Following the publication by the Welsh Assembly Government in summer 2008, the work will be reviewed and taken forward to the future. The Welsh Assembly Government will also continue to work with local authorities, and share the population projections base data with local authorities in order to allow them to produce their own population projections.

The main demands for sub-national projections in Wales include:

- Local authority and national park planners require such projections in order to inform their Local Development Plans, and in some cases have worked

towards developing their own projections in the absence of figures published by government;

- Those planning and assessing service provision sub-nationally require sub-national projections (e.g. demand from Social Services Inspectorate Wales as part of planning care services for the elderly);
- The Welsh Assembly Government also wish to investigate using sub-national projections for the allocation of resources to local councils on a three year basis
- There are similar demands for local authority household projections for planning purposes and local authority population projections are the basis for deriving these.

4.12 The Welsh Assembly Government are also planning to continue development work on household estimates and projections at local authority level in Wales that was initiated during 2008-09, following-on from the sub-national population projections project.

4.13 Conducting a review of the methodologies for forward household projections - by DCLG, SE/GROS and NISRA, learning from recent experiences across NSCD; GROS are also co-supervising a student at Liverpool University doing a PhD on “Incorporating Social Trends into Household Projections”.

4.14 **Continue to prepare for the 2011 Census**, including preparing for the 2009 Rehearsal. The Census plans are set out separately and not reported more fully in this theme document. However, as mentioned above, a key strand of our development work for the Population and Migration Theme will be preparing for the 2011 Census. This will include work on coverage and definitions, and planning for the demographic analysis needed to support QA of coverage adjustment. Census Division working alongside topic experts in analysis divisions will develop a broad based plan for quality assurance of the 2011 outputs. The first outputs from the Census will be the population estimates and Census and the NSCD will work closely to manage the risk of there once again being a sizeable gap between Census and rolled forward population estimates and that any gaps that do emerge can be explained.

4.16 We will continue work to move us further towards the vision for future population statistics system beyond 2011 (this is work formerly known as the Integrated Population Statistics System – IPSS, which was initially published in October 2003). Work in 2008/09 developed the business case, establishing the benefits and costs and some initial work on “proof of concept” feasibility studies. The proposed vision is for more integrated and flexible population statistics systems which would have 2011 Census data at its core but with the Census data linked to other sources (administrative and surveys data) at the person level. Developments for an address register, population register and the IHS would all facilitate the building of such a system.

## **Developing an improved understanding of the reasons for and the impacts of population change**

5.1 We are constantly seeking to produce and disseminate our regular outputs in more efficient ways so as to be able to put more effort and resource into **demographic analysis**. This was re-inforced as a priority by the NSCD Advisory Board.

5.2 The Demographic analysis that we undertake is critical to the assumptions underlying projections, for example current work on the impact of migration on fertility. The demographic and longitudinal studies will also be vital to the QA of the Census results and feeding in to requirements for the Beyond 2011 project.

5.3 Some of the demographic analysis work will be done in **partnerships**, for example with the Economic and Social Research Council (ESRC), the Local Government Association (LGA) and other organisations with an interest in demography. There is already precedent set in this respect in Scotland (see below) and through the ESRC seminar series in England. ONSCD has also started engaging with organisations where partnerships might be helpful and this work will be continued in 2008/09, in the light of the outcomes of the Spending Review. We are engaging with the new ESRC Centres of Population Change continuing the engagement started with them in advance of the formal start of the programme in October 2008.

5.4 During 2009/10, we will concentrate our efforts on:

- Existing demographic analysis and reporting plans (compendia; fertility; migration; ageing; children/young people; mortality/life expectancy; families; households). For example, we plan to work towards understanding intercensal population drift and its impact on sex ratios in particular;
- Establishing the demographic analysis requirements of key stakeholders, including policy departments. This will involve horizon scanning and lead to a comprehensive strategy for demographic and Longitudinal studies.
- Continuing the research on the impact of international migration on fertility;
- ONSCD will also develop its mortality analysis to complement the work currently undertaken for national projections;
- We will progress work to consider the demographic analysis required to help understand and reconcile 2011 mid-year estimates and the Census. A particular priority is to gain a better understanding of sex ratios in the population in comparison to other sources such as administrative data sources.
- Continuing the ageing program of work to better understand and report on the demographic process of ageing.
- Beginning work to look at establishing transition rates into and out of families, but in particular into and out of lone parenthood and cohabitation;
- Establishing improved links with ESRC (e.g. the new Centres for Population Change), LGA and other stakeholders, including on new ESRC programmes, learning from Understanding Population Trends and Processes (UPTAP) initiatives/studentships, as well as supporting specific projects - for example, "Migration, Race and Population Dynamics: Explaining Britain's Ethnic Geography" (Leverhulme Trust/University of Manchester);

5.5 The Scottish Government has a population target to increase the Scottish population in line with the EU 15 countries, by 2017. As part of the work to support the target, the Scottish Government is considering commissioning research to provide evidence to help inform policies.

5.6 Scotland has just completed a Demography Research Programme (ESRC/Scottish Executive), whose aims were to develop greater understanding of the key aspects of fertility, migration and ageing to inform the evidence base on demographic issues in Scotland. Plans to take forward some of this work and to explore new areas of research are being considered and a workplan is currently being consulted on. The British Irish Council work stream on demography is led by Scotland and will cover key themes including migration and healthy independent ageing.

## **2010-11 and beyond: Looking Forward**

6.1 In addition to continuing to progress the work identified in the 2009/10 programme, the following items have been identified as emerging issues. Taking them forward is subject to funding, planning and capacity constraints:

- Taking opportunities to develop potential new sources of improved data on emigration for which the International Passenger Survey is currently the only source.
- Making use of improved survey sources to improve migration statistics e.g. enhancements to the continuous household surveys that are part of the Integrated Household Survey.
- Enhancing working in partnerships with academia across the UK to broaden the scope of analyses and hence improve understanding of demographic change e.g. migration trends and drivers in particular.

## Theme Group Members

This Work Programme was developed by the following people:

Roma Chappell (Chair)	ONSCD
Chris Shaw	ONSCD
Patrick Collier	Home Office
Bob Garland	Department for Communities and Local Government
Robert Beatty	Northern Ireland Statistics and Research Agency
Luned Jones	Welsh Assembly Government
Kirsty MacLachlan	General Register Office for Scotland
Ian Cope	Office for National Statistics
Peter Goldblatt	ONSCD
Philippa Brimicombe (Sec)	Office for National Statistics

### Useful Websites

Further information on the statistics covered by this theme can be found at:

National Statistics	<a href="http://www.statistics.gov.uk">www.statistics.gov.uk</a>
Northern Ireland Statistics and Research Agency	<a href="http://www.nisra.gov.uk">www.nisra.gov.uk</a>
General Register Office for Scotland	<a href="http://www.gro-scotland.gov.uk">www.gro-scotland.gov.uk</a>
Home Office	<a href="http://www.homeoffice.gov.uk">www.homeoffice.gov.uk</a>
Welsh Assembly Government	<a href="http://www.wales.gov.uk/statistics">www.wales.gov.uk/statistics</a>
Scottish Executive	<a href="http://www.scotland.gov.uk">www.scotland.gov.uk</a>
Department for Communities and Local Government	<a href="http://www.communities.gov.uk">www.communities.gov.uk</a>