

Assessment of compliance with the Code of Practice for Official Statistics

Statistics on Population and Demography in Scotland

(produced by the National Records of Scotland)

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About the UK Statistics Authority

The UK Statistics Authority is an independent body operating at arm's length from government as a non-ministerial department, directly accountable to Parliament. It was established on 1 April 2008 by the *Statistics and Registration Service Act 2007*.

The Authority's overall objective is to promote and safeguard the production and publication of official statistics that serve the public good. It is also required to promote and safeguard the quality and comprehensiveness of official statistics, and good practice in relation to official statistics.

The Statistics Authority has two main functions:

1. oversight of the Office for National Statistics (ONS) – the executive office of the Authority;
2. independent scrutiny (monitoring and assessment) of all official statistics produced in the UK.

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ASSESSMENT AND DESIGNATION

The *Statistics and Registration Service Act 2007* gives the UK Statistics Authority a statutory power to assess sets of statistics against the *Code of Practice for Official Statistics*.

Assessment will determine whether it is appropriate for the statistics to be designated as National Statistics.

Designation as National Statistics means that the statistics comply with the *Code of Practice*. The *Code* is wide-ranging. Designation can be interpreted to mean that the statistics: meet identified user needs; are produced, managed and disseminated to high standards; and are explained well.

Designation as National Statistics should not be interpreted to mean that the statistics are always correct. For example, whilst the *Code* requires statistics to be produced to a level of accuracy that meets users' needs, it also recognises that errors can occur – in which case it requires them to be corrected and publicised.

Assessment Reports will not normally comment further on a set of statistics, for example on their validity as social or economic measures. However, Reports may point to such questions if the Authority believes that further research would be desirable.

Assessment Reports typically provide an overview of any noteworthy features of the methods used to produce the statistics, and will highlight substantial concerns about quality. Assessment Reports also describe aspects of the ways in which the producer addresses the 'sound methods and assured quality' principle of the *Code*, but do not themselves constitute a review of the methods used to produce the statistics. However the *Code* requires producers to "seek to achieve continuous improvement in statistical processes by, for example, undertaking regular reviews".

The Authority may grant designation on condition that the producer body takes steps, within a stated timeframe, to fully meet the *Code's* requirements. This is to avoid public confusion and does not reduce the obligation to comply with the *Code*.

The Authority grants designation on the basis of three main sources of information:

- i. factual evidence and assurances by senior statisticians in the producer body;
- ii. the views of users who we contact, or who contact us, and;
- iii. our own review activity.

Should further information come to light subsequently which changes the Authority's analysis, it may withdraw the Assessment Report and revise it as necessary.

It is a statutory requirement on the producer body to ensure that it continues to produce the set of statistics designated as National Statistics in compliance with the *Code of Practice*.

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1 Summary of findings

1.1 Introduction

1.1.1 This is one of a series of reports¹ prepared under the provisions of the *Statistics and Registration Service Act 2007*². The Act requires all statistics currently designated as National Statistics to be assessed against the *Code of Practice for Official Statistics*³. The report covers a number of National Statistics produced by the National Records of Scotland (NRS) in the following publications:

- *Mid-year population estimates Scotland*⁴;
- *Projected Population of Scotland*⁵;
- *Population Projections for Scottish Areas*⁶;
- *Life Expectancy for Administrative Areas within Scotland*⁷; and
- *Electoral Statistics, Scotland*⁸.

1.1.2 The *Statistics and Registration Service Act* also allows Ministers to request an assessment of other official statistics in order for them to gain National Statistics status. This report also covers the following publications in response to such a request:

- *Small Area Population Estimates*⁹ (SAPE);
- *Population Estimates for Settlements and Localities in Scotland*¹⁰;
- *Mid-year Marital Status Population Estimates*¹¹;
- *Centenarians in Scotland*¹²;
- *Population Projections for Scotland's Strategic Development Plan Areas and National Parks*¹³.
- *Life Expectancy in Special Areas (Urban/Rural, Deprivation and Community Health Partnership (CHP)) within Scotland*

1.1.3 This report was prepared by the Authority's Assessment team, and approved by the Board of the Statistics Authority on the advice of the Head of Assessment.

¹ <http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html>

² http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga_20070018_en.pdf

³ <http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>

⁴ <http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/mid-year/index.html>

⁵ <http://www.gro-scotland.gov.uk/statistics/theme/population/projections/scotland/index.html>

⁶ <http://www.gro-scotland.gov.uk/statistics/theme/population/projections/sub-national/index.html>

⁷ <http://www.gro-scotland.gov.uk/statistics/theme/life-expectancy/admin-area/index.html>

⁸ <http://www.gro-scotland.gov.uk/statistics/theme/electoral-stats/index.html>

⁹ <http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/special-area/sape/index.html>

¹⁰ <http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/special-area/settlements-localities/index.html>

¹¹ <http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/special-populations/marital-status.html>

¹² <http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/special-populations/centenarians/index.html>

¹³ <http://www.gro-scotland.gov.uk/statistics/theme/population/projections/sdp-areas-national-parks/index.html>

1.2 Decision concerning designation as National Statistics

1.2.1 The Statistics Authority judges that the statistics covered by this report are readily accessible, produced according to sound methods and managed impartially and objectively in the public interest, subject to any points for action in this report. The Statistics Authority confirms that the statistics detailed in 1.1.1 are designated as National Statistics and has determined that the statistics detailed in 1.1.2 can be designated as National Statistics, subject to NRS implementing the enhancements listed in section 1.5 and reporting them to the Authority by August 2011.

1.3 Summary of strengths and weaknesses

1.3.1 NRS works hard to ensure that the statistics it produces address the needs of users. The statisticians engage with users through a range of committees, working groups, seminars and other fora. NRS publishes minutes, papers and presentations to ensure that this engagement is open and transparent.

1.3.2 NRS produces a wide range of demographic statistics for different geographies which have been requested by users. NRS makes extensive use of data from administrative systems in producing these statistics.

1.3.3 The standard of commentary accompanying these statistics varies: some of the releases include informative commentary that aids interpretation, but other releases include very little commentary.

1.4 Detailed recommendations

1.4.1 The Assessment team identified some areas where it felt that the NRS could strengthen its compliance with the *Code*. Those which the Assessment team considers essential to enable designation as National Statistics are listed in section 1.5. Other suggestions, which would improve the statistics and the service provided to users but which are not formally required for their designation, are listed at annex 1.

1.5 Requirements for designation as National Statistics

- | | |
|----------------------|--|
| Requirement 1 | Improve the information available about the quality of the marital status estimates (para 3.10). |
| Requirement 2 | Document how the population estimates, life expectancy statistics and marital status estimates compare with the equivalent statistics for the other countries of the UK, and the impact for users of the statistics (para 3.11). |
| Requirement 3 | Put in place written confidentiality protection agreements for all exchanges of confidential data (para 3.13). |
| Requirement 4 | Ensure that all releases provide commentary that aids user interpretation (para 3.19). |
| Requirement 5 | Review the summary text in the population projections release to convey more prominently the nature of projections and their difference from forecasts, to aid user understanding (para 3.20). |

2 Subject of the assessment

2.1 The National Records of Scotland (NRS) produces a range of statistics that provide information about the population and demography of Scotland for various levels of geography. On 1 April 2011, the General Register Office for Scotland (GROS) merged with the National Archives for Scotland to become the National Records for Scotland (NRS)¹⁴. These statistics are widely used by Scottish Government, local authorities (LAs) and academics and are reported by the news media:

- The Scottish Government uses the population estimates and projections to inform policy, for example on health and education and to inform how it distributes grants. The statistics provide evidence to monitor progress towards meeting some of Scottish Government's purposes, National Outcomes, and Indicators as part of the Scotland Performs programme¹⁵.
- Local authorities use the population estimates and projections to help deliver services and identify future spending priorities.
- Statistics on electoral registrations are requested in Parliamentary Questions in both the Scottish and Westminster Parliaments.
- Life expectancy statistics are used to help deliver local and national health services.
- Academics use the statistics to inform research in a range of areas including health and wellbeing, poverty and deprivation.

2.2 The General Register Office for Scotland (GROS) produced these statistics until 1 April 2011. On 1 April 2011 GROS merged¹⁶ with the National Archives for Scotland creating a new body – NRS – which took over responsibility for all the statistics covered by this Assessment. NRS publishes the following statistical releases annually on its website in a variety of formats including HTML, Excel spreadsheets, CSV and PDF:

- *Mid-year population estimates, Scotland* presents estimates of the population of Scotland and its administrative areas. The statistics are ultimately based on Census data and take account of the population changes since the Census using data from administrative sources covering the components of population change – births, deaths and migration. The release presents statistics on these components of change as well as the effect on the overall population estimates. Historical information and population densities are also provided. The Scottish Government has a target to match average European (EU15) population growth over the period from 2007 to 2017¹⁷. The population estimates in this publication are used to measure progress towards this target. ONS uses the population estimates to produce UK population estimates. Estimates of the population in Scotland have been produced since 1855, when civil registration of births, deaths, marriages and divorces began. NRS publishes

¹⁴ <http://www.scotland.gov.uk/News/Releases/2011/03/10144001>

¹⁵ <http://www.scotland.gov.uk/About/scotPerforms/indicators>

¹⁶ <http://www.scotland.gov.uk/News/Releases/2011/03/10144001>

¹⁷ <http://www.scotland.gov.uk/About/scotPerforms/purposes/population>

supplementary tables on migration, on its website, to support the main release.

- *Small Area Population Estimates (SAPE)* presents population estimates for Scotland at data zone¹⁸ level. NRS also provides population estimates for areas that can be derived by combining data zones (special geographies), such as Westminster Parliamentary Constituencies, in response to user demand. NRS published these first in 2009 as supplementary material that supports the SAPE release. They are published 5 months after the SAPE release. SAPE and other derived area statistics are made available on the Scottish Neighbourhood Statistics¹⁹ (SNS) website.
- *Population Estimates for Settlements and Localities in Scotland* presents estimates of the number of people living in particular 'built-up' areas. These areas are the readily identifiable towns and cities of Scotland, rather than administrative areas such as Councils or NHS Health Boards. The statistics are based on the SAPE, but use additional postcode-level information to produce boundaries that are close approximations to towns and cities.
- *Mid-year Marital Status Population Estimates* presents mid-year population estimates of Scotland broken down by marital status, single year of age and sex.
- *Centenarians in Scotland* presents an analysis of those people aged 90 to 104 by single year of age and the total number of people aged 105 and over in Scotland. It also includes a breakdown by sex.
- *Life Expectancy for Administrative Areas within Scotland* presents figures on life expectancy at different ages from birth to 85. The release covers all 32 LAs in Scotland and the 14 NHS Board areas in existence since 1 April 2006.
- *Life Expectancy in Special Areas (Urban/Rural, Deprivation and Community Health Partnership (CHP)) within Scotland* presents figures on life expectancy at different ages from birth to 85 analysed by the Scottish Government's urban rural classification²⁰; deprivation areas based on the Scottish Index of Multiple Deprivation²¹; and Community Health Partnership areas. NRS also publishes supplementary analysis for other special geographies, such as Westminster Parliamentary Constituencies.
- *Electoral Statistics Scotland* presents an annual summary of the data held on the Electoral Registers as at 1 December of each year. The registers hold the names and addresses of everyone registered to vote in the different elections (Westminster Parliament, Scottish Parliament and local government). The statistics are available for various electoral geographies.

¹⁸ There are 6,505 data zones in Scotland which are the standard small area geography used by the Scottish Government – <http://www.scotland.gov.uk/Publications/2004/02/18917/33244>

¹⁹ www.sns.gov.uk

²⁰ <http://www.scotland.gov.uk/Publications/2010/08/2010UR>

²¹ <http://www.scotland.gov.uk/Topics/Statistics/SIMD>

The statistics are released to coincide with the publication of equivalent UK data by the Office for National Statistics (ONS).

2.3 NRS publishes some additional releases which explore both national and sub-national population projections and life expectancy at smaller geographical areas:

- *Projected Population of Scotland* presents an estimate of the future population of Scotland, and some variant projections (alternative projections based on different underlying assumptions). ONS produces the UK and constituent country national projections, but responsibility for the publication of the projections rests with each devolved administration. The national publications are co-ordinated for release on the same day. The projections are trend-based and do not, for example, take account of future policy. The Government Actuary's Department (GAD) was responsible for producing the projections from the first estimates in 1954 until 2006. The latest NRS release concentrates on the period up to 2033, although it occasionally refers up to 75 years ahead.
- *Population Projections for Scottish Areas (Sub-National Population Projections)* presents population projections for council and NHS Board areas of Scotland. These statistics are consistent with the national projections produced by ONS. The projections are broken down by age and sex and provide information on the effects of migration, fertility and mortality. In response to user requests, additional sub-national variant projections²² were released for the first time in January 2011.
- *Population Projections for Scotland's Strategic Development Plan Areas and National Parks* presents projections of the population in Scotland's Strategic Development Plan (SDP) areas and National Parks. The latest release includes projections up to 2033 based on the estimated population of these areas in mid-2008. National Parks are protected areas of countryside, wildlife and cultural heritage. SDP areas cover the regions around Aberdeen, Dundee, Edinburgh and Glasgow. The four SDP areas were created in November 2008 to aid strategic development planning. Additional variant population projections for SDP areas and National Parks²³ were released for the first time in 2010, around six weeks after the main projections.

2.4 NHS National Services Scotland's Information Services Division (ISD) publishes some related statistics on life expectancy *Healthy Life Expectancy in Scotland*²⁴ (HLE). HLE is defined as the number of years people expect to live in good health. NRS also publishes *Population by Country of Birth and Nationality*²⁵, which presents supplementary information derived from the

²² <http://www.gro-scotland.gov.uk/statistics/theme/population/projections/sub-national/variant-08-based/index.html>

²³ <http://www.gro-scotland.gov.uk/statistics/theme/population/projections/sdp-areas-national-parks/variant-sdp-natparks-08-based.html>

²⁴ <http://www.scotpho.org.uk/hle/>

²⁵ <http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/special-populations/country-nationality.html>

Annual Population Survey (APS). ONS runs the APS and publishes the results²⁶ from the survey – NRS uses the data to produce more detailed council (local authority) area estimates, for those councils where the data support such analysis.

- 2.5 NRS has recently consulted users to seek their views about its Demography Statistical Work Programme for 2011/12. The consultation ran from 1 December 2010 to 9 February 2011. NRS has published²⁷ an analysis of the responses.
- 2.6 These statistics are almost entirely based on existing administrative data sources and registrations records held by NRS. The statistics are all produced by a team of seven people, with some additional input from other statisticians in NRS.

²⁶ <http://www.statistics.gov.uk/Statbase/Product.asp?vlnk=10855>

²⁷ <http://www.gro-scotland.gov.uk/statistics/user-consultation-groups-seminars/consultations.html>

3 Assessment findings

Principle 1: Meeting user needs

The production, management and dissemination of official statistics should meet the requirements of informed decision-making by government, public services, business, researchers and the public.

- 3.1 NRS engages with users of these statistics through its Population and Migration Statistics Committee (Scotland) ²⁸ (PAMS). This committee includes representatives from Scottish Government, LAs, academics, ISD and ONS. NRS consults PAMS about the development, production and dissemination of population statistics and responds to its views. NRS publishes agendas, papers and minutes of meetings promptly on its website. We consider the way that NRS engages with this committee an example of good practice.
- 3.2 NRS co-chairs a Demography Analytical Working Group, which aims to raise awareness of demographic issues across Scottish Government. NRS also engages with users through other working groups and by running seminars for LAs, to showcase its statistics. This open, active approach to engaging users was reflected in the very positive responses we received from users who responded regarding this assessment.
- 3.3 The needs and experiences of users are well-documented in the minutes and papers of PAMS meetings and other working groups. While NRS engages well with its users, especially through PAMS, much of this engagement focuses on LAs. This means that the development of some outputs, which are of less interest to LAs, might not be given sufficient attention. NRS told us that it targeted a wider range of users across all its outputs in its consultation on its statistical work plan. The consultation was communicated to all users on ScotStat²⁹, an open forum for users and producers of Scottish Official Statistics, as well as many other user groups, fora and networks. NRS's published analysis of responses documents the range of users and uses of these statistics. NRS told the Assessment team that in the light of responses to this consultation it will consider inviting users from under-represented sectors to participate in fora such as PAMS.

²⁸ <http://www.gro-scotland.gov.uk/statistics/user-consultation-groups-seminars/pams/index.html>

²⁹ <http://www.scotland.gov.uk/Topics/Statistics/scotstat>

Principle 2: Impartiality and objectivity

Official statistics, and information about statistical processes, should be managed impartially and objectively.

- 3.4 NRS presents its statistics impartially and objectively. NRS states on its website that it follows the wider Scottish Government revisions policy and publishes a list of all revisions and corrections on its website, with links to the relevant outputs. The outputs themselves also highlight any revisions and corrections.
- 3.5 Changes to the methods used to produce the statistics are usually discussed at the relevant working groups or committees, and the details are available in the published papers and minutes of the meetings. NRS statisticians told us that when significant changes are introduced, for example the change in methods used to produce the mid-year population estimates in 2007, they inform known users in advance in writing.

Principle 3: Integrity

At all stages in the production, management and dissemination of official statistics, the public interest should prevail over organisational, political or personal interests.

- 3.6 No incidents of political pressures, abuse of trust or complaints relating to professional integrity, quality or standards were reported to or identified by the Assessment team. NRS takes a very open approach to developing and communicating these statistics, with active and transparent user engagement, which places the organisation in a strong position to maintain its integrity.
- 3.7 In June and October 2009, NRS held shared educational seminars with the Scottish Government on the Code of Practice, with particular emphasis on maintaining integrity.

Principle 4: Sound methods and assured quality

Statistical methods should be consistent with scientific principles and internationally recognised best practices, and be fully documented. Quality should be monitored and assured taking account of internationally agreed practices.

- 3.8 NRS presents information on its website about the methods used to compile these statistics in the form of a short document *About this Publication* accompanying each release. These documents often provide links to where more detail can be found. The mid-year estimates and sub-national population projections are accompanied by a dedicated guide to methods. For other outputs, the methods are described in detail on NRS's website or in the release itself.
- 3.9 NRS provides some clear commentary about the quality and reliability of the estimates in most of the publications for these statistics. Each *About this Publication* document provides summary information about the different aspects of quality. The publications that include migration³⁰ statistics emphasize the difficulty of accurately measuring migration. The population projections publications provide an analysis of the change since the previous set of projections. NRS has also included comparisons of the projections against actual population estimates. NRS regularly discusses data quality matters at PAMS meetings. NRS monitors and engages with work undertaken by ONS, including a current project to develop quality measures for population estimates. NRS statisticians participate in the UK wide Migration Statistics Improvement Programme³¹. During the assessment NRS produced additional background information and explanatory notes to support the electoral registration statistics to inform users about their range of uses and limitations.
- 3.10 The marital status estimates do not include marriages abroad, civil partnerships or residents of other countries who travel to Scotland to get married. This is documented, but NRS could publish more information about the likely impact on the published statistics. As part of the designation as National Statistics, NRS should improve the information available about the quality of the marital status estimates³² (Requirement 1).
- 3.11 The methods NRS uses to produce these statistics are usually consistent with methods used in the other UK countries, but there are exceptions. Differences in the methods used to produce sub-national population projections have been well-documented in a published information note³³ on ONS's website. NRS provides links to this note on its website. However, while the note describes the methods adopted by each country, it could do more to describe the implications for comparisons between countries. Each country also uses different sources of information to generate its population estimates and different methods are used to produce life expectancy and marital status estimates. There is insufficient documentation about the reasons for and the impact of the different methods used across the UK. NRS told us that it is working with other organisations

³⁰ <http://www.gro-scotland.gov.uk/statistics/theme/migration/mig-stats/index.html>

³¹ <http://www.ons.gov.uk/about-statistics/methodology-and-quality/imps/index.html>

³² In relation to Principle 8, Practice 1 of the Code of Practice

³³ http://www.statistics.gov.uk/downloads/theme_population/snpp-2008/SNPP_guidance_for_users.pdf

(including the team in ISD that produces Healthy Life Expectancy figures) to document the differences for the life expectancy statistics and to try to harmonise methods. As part of the designation as National Statistics, NRS should document how its population estimates, life expectancy statistics and marital status estimates compare with the equivalent statistics for the other countries of the UK, and the impact for users of the statistics³⁴ (Requirement 2). We suggest NRS works with ONS, the Welsh Assembly Government and the Northern Ireland Statistics and Research Agency (NISRA) to achieve this.

³⁴ In relation to Principle 4, Practice 6 and Principle 8, Practice 2 of the Code of Practice

Principle 5: Confidentiality

Private information about individual persons (including bodies corporate) compiled in the production of official statistics is confidential, and should be used for statistical purposes only.

- 3.12 NRS has published a confidentiality policy³⁵ that outlines the steps it takes to protect confidential information. NRS statisticians told us that they apply statistical disclosure control techniques to ensure that confidentiality is not compromised.
- 3.13 NRS told us that it does not have up-to-date formal documentation to cover all the exchanges of confidential data that take place in the course of the production of these statistics. For example, data from the Community Health Index and the Scottish and English National Health Service Central Registers are shared on the basis of historic arrangements, which have not recently been reviewed. NRS told us that it is in the process of updating its documentation to ensure that it has formal agreements in place. As part of the designation as National Statistics, NRS should put in place written confidentiality protection agreements for all exchanges of confidential data³⁶ (Requirement 3).

³⁵ <http://www.gro-scotland.gov.uk/statistics/about/data-access-confidentiality.html>

³⁶ In relation to Principle 5, Practice 6 of the Code of Practice

Principle 6: Proportionate burden

The cost burden on data suppliers should not be excessive and should be assessed relative to the benefits arising from the use of the statistics.

- 3.14 Most of these statistics are based on data from administrative sources. The only survey data come from the Station Commanders return, which collects information on the location of armed forces in Scotland. NRS writes to Station Commanders to request the data each year. The covering letter does provide some information on the purpose of the data collection and confidentiality, but we suggest that NRS provide more information on the use of the data and how confidentiality will be protected, to encourage voluntary response.
- 3.15 NRS has published information about the burden imposed by the Station Commanders return³⁷, based on discussions with a small number of survey respondents. However, it does not routinely monitor the burden of data collection. There is also a burden associated with the supply of data on electoral registrations, from the administrative systems maintained by Electoral Registration Officers in each council. We suggest that NRS monitor the burden of the Station Commanders return and electoral registration data collection and explore with data suppliers whether there are options to reduce the burden.
- 3.16 NRS has a team responsible for investigating the potential use of alternative sources in the production of population estimates. This Alternative Sources Branch was established in 2005 to begin investigating options to replace the Census. NRS statisticians told us the branch aims to develop knowledge of administrative systems and to establish possibilities for data linkage, which might be used to produce demographic statistics. NRS is currently investigating whether administrative data from the Defence Analytical Services Agency could be used to replace the Station Commanders return. These data are already used by ONS, the Welsh Assembly Government and NISRA in their population estimates.

³⁷ <http://www.gro-scotland.gov.uk/files2/stats/about/Cost-respond-af-unit-survey.pdf>

Principle 7: Resources

The resources made available for statistical activities should be sufficient to meet the requirements of this Code and should be used efficiently and effectively.

- 3.17 NRS told us that adequate resources are available to produce these outputs. NRS has published its statistics plan³⁸ for these statistics, which lists deliverables and staff resources and costs. NRS has adopted the Scottish Government's recruitment and continuing professional development procedures.
- 3.18 The use of existing administrative sources in the production of these statistics, rather than surveys, represents good value for money. NRS has recently consulted users on its future demography statistical work programme in order to identify possible savings (see paragraph 2.5).

³⁸ <http://www.gro-scotland.gov.uk/statistics/about/what-we-do/stats-plan/2010-11.html>

Principle 8: Frankness and accessibility

Official statistics, accompanied by full and frank commentary, should be readily accessible to all users.

- 3.19 NRS publishes these statistics in different formats, but all releases are accompanied by standard basic metadata, in the form of a short *About this Publication* document. We regard this as good practice. The mid year population estimates and sub-national population projections are presented in detailed reports, with accompanying guides to methods. Other sets of statistics are released just as tables of data, with little or no accompanying commentary. For example, the electoral registration statistics release is just a collection of tables. In March 2011, NRS published a background document³⁹ outlining the collection of the electoral registration statistics and their interpretation and use. Separate notes explain the definitions⁴⁰, but there is no commentary about the statistics themselves. The commentary in other releases, in particular the marital status estimates and SAPE, could also be improved to offer more insight into what is driving changes. As part of the designation as National Statistics, NRS should ensure that all releases provide commentary that aids user interpretation⁴¹ (Requirement 4). As part of improving the commentary, we suggest that NRS refer to the Statistics Authority's Standards for Statistical Releases⁴² for further guidance.
- 3.20 The population projections are based on assumptions about fertility, mortality and migration. The projections are not forecasts: they take no account of future government policies and do not attempt to predict future demographic trends. NRS produces variant population projections to demonstrate the effect of altering the underlying assumptions, and so show the spread of likely outcomes. On the whole, this is well-communicated within the releases but it could be made more prominent in the opening summary. In addition, the headlines in accompanying press releases, which are likely to be reported by the media, have focussed on Scotland's projected population over the next 25 years. To a lay audience, such statements are likely to be interpreted and used as forecasts, rather than projections. In 2008 the projections attracted media criticism in *The Herald*⁴³, because each successive publication revised the expected year when Scotland's population would fall below 5 million. This was not because projections were wrong, but because there were changes to the underlying assumptions each year, based on new information becoming available. As part of the designation as National Statistics, NRS should review the summary information in its population projections release to convey more prominently the nature of projections and their difference from forecasts, to aid user understanding⁴⁴ (Requirement 5).
- 3.21 There is scope for NRS to provide more information about data quality alongside the range of statistics, particularly in relation to the potential uses and

³⁹ <http://www.gro-scotland.gov.uk/files2/stats/electoral-stats/electoral-stats-background.pdf>

⁴⁰ <http://www.gro-scotland.gov.uk/statistics/theme/electoral-stats/explanatory-notes.html>

⁴¹ In relation to Principle 8, Practice 2 of the Code of Practice

⁴² <http://www.statisticsauthority.gov.uk/news/statement---standards-for-statistical-releases.pdf>

⁴³ <http://www.heraldscotland.com/let-s-get-figures-straight-before-judging-migration-1.885349>

⁴⁴ In relation to Principle 8, Practice 2 of the Code of Practice

limitations. Some of this information is in the papers from PAMS meetings, which address aspects of data methods and quality, but the information in these papers could be more accessible. We suggest that NRS include summaries of relevant PAMS papers, or links to the papers, within the published releases to enable users to identify and access information relevant to their needs. We also suggest that NRS provide links from downloadable tables of data to the relevant metadata.

- 3.22 NRS publishes reports and tables in a variety of formats to suit different users. NRS's website provides good high-level descriptions of each set of outputs, helping users to find the right information for their needs. NRS carried out a customer survey in 2007⁴⁵, which led to a reorganisation of its website. Users told us that this had improved the accessibility of the statistics.
- 3.23 NRS has no policy to ensure that official statistics are archived appropriately. We suggest that NRS collaborate with Scottish Government colleagues who are working with the National Library of Scotland to ensure that official statistics are appropriately archived.

⁴⁵ <http://www.gro-scotland.gov.uk/statistics/user-consultation-groups-seminars/customer-survey-07.html>

Protocol 1: User engagement

Effective user engagement is fundamental both to trust in statistics and securing maximum public value. This Protocol draws together the relevant practices set out elsewhere in the Code and expands on the requirements in relation to consultation.

3.24 The requirements for this Protocol are covered elsewhere in this report.

Protocol 2: Release practices

Statistical reports should be released into the public domain in an orderly manner that promotes public confidence and gives equal access to all, subject to relevant legislation.

- 3.25 NRS told us that the timetable for the release of each of the outputs is driven by availability of resources and takes account of the priorities of its users. Many of the outputs build on the mid-year estimates, which are released in April each year, ten months after the reference period. The timing of this release is constrained by the availability of the data that feed into the estimates. NRS statisticians then produce other outputs in the order that reflects the needs of the majority of users. NRS told us that in future it is hoping to publish more of the projection releases simultaneously, because it is developing more automated systems.
- 3.26 NRS' pre-release access to its statistics complies with *The Pre-release Access to Official Statistics (Scotland) Order 2008*⁴⁶. For example, NRS granted 26 individuals in Scottish Government five days pre-release access to *Mid-Year Population Estimates 2009*. A further 28 individuals from LAs and NHS Boards received 1 day pre-release access. In July 2008 there was a breach of the *Code of Practice* when results from the 2007 mid-year population estimates appeared in the media four days before release. NRS investigated and published a breach report⁴⁷ into the circumstances around the leak but found that "pre-release access arrangements could not have been improved". We suggest that NRS publish a record of those who have pre-release access to these statistics in their final form.

⁴⁶ <http://www.legislation.gov.uk/ssi/2008/399/schedule/paragraph/2/made?page=5>

⁴⁷ <http://www.gro-scotland.gov.uk/files2/stats/breaches/breach-report-2007mype.pdf>

Protocol 3: The use of administrative sources for statistical purposes

Administrative sources should be fully exploited for statistical purposes, subject to adherence to appropriate safeguards.

- 3.27 Most of these outputs rely on existing administrative data sources to build on data collected through the Census. NRS publishes details of the administrative systems it uses in its Statement of Administrative Sources⁴⁸. Through the work of its Alternative Sources Branch (see paragraph 3.17) NRS takes a proactive approach to identifying and using new administrative sources. We regard this as good practice.
- 3.28 NRS's Statement of Administrative Sources does not include much information about the arrangements for auditing the quality of the administrative systems that NRS uses. NRS told us that the use of administrative sources is discussed at user meetings and other advisory groups, to help determine which sources are most suitable and to consider quality issues. We suggest that NRS improve the availability of information about the quality of the administrative sources and in particular how it determines that each source is of sufficient quality for the intended use.

⁴⁸ <http://www.gro-scotland.gov.uk/files2/stats/about/statement-of-admin-sources.pdf>

Annex 1: Suggestions for improvement

A1.1 This annex includes some suggestions for improvement to these NRS statistical outputs, in the interest of the public good. These are not formally required for designation, but the Assessment team considers that their implementation will improve public confidence in the production, management and dissemination of official statistics.

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|---------------------|---|
| Suggestion 1 | Work with ONS, the Welsh Assembly Government and NISRA to document how the statistics compare between each of the UK countries (para 3.11). |
| Suggestion 2 | Provide more information on the use of the data from the Station Commanders return and how confidentiality will be protected, to encourage voluntary response (para 3.14). |
| Suggestion 3 | Monitor the burden of the Station Commanders return and electoral registration data collection and explore with data suppliers whether there are options to reduce the burden (para 3.15). |
| Suggestion 4 | Refer to the Statistics Authority's Standards for Statistical Releases for further guidance (para 3.19). |
| Suggestion 5 | Include summaries of relevant PAMS papers, or links to the papers, within the published releases to enable users to identify and access information relevant to their needs (para 3.21). |
| Suggestion 6 | Provide links from downloadable tables of data to the relevant metadata (para 3.21). |
| Suggestion 7 | Collaborate with Scottish Government colleagues who are working with the National Library of Scotland to ensure official statistics are appropriately archived (para 3.23). |
| Suggestion 8 | Publish a record of those who have pre-release access to these statistics in their final form (para 3.26). |
| Suggestion 9 | Improve the availability of information about the quality of the administrative sources and in particular how it determines that each source is of sufficient quality for the intended use (para 3.28). |

Annex 2: Summary of assessment process and users' views

- A2.1 This assessment was conducted from October 2010 to February 2011.
- A2.2 The Assessment team – Jacob Wilcock and David Duncan-Fraser – agreed the scope of and timetable for this assessment with representatives of NRS in October. The Written Evidence for Assessment was provided on 26 November. The Assessment team subsequently met NRS during January to review compliance with the *Code of Practice*, taking account of the written evidence provided and other relevant sources of evidence.

Summary of users contacted, and issues raised

- A2.3 Part of the assessment process involves our consideration of the views of users. We approach some known and potential users of the set of statistics, and we invite comments via an open note on the Authority's website. This process is not a statistical survey, but it enables us to gain some insights about the extent to which the statistics meet users' needs and the extent to which users feel that the producers of those statistics engage with them. We are aware that responses from users may not be representative of wider views, and we take account of this in the way that we prepare assessment reports.
- A2.4 The Assessment team received 8 responses from the user consultation. The respondents were grouped as follows:
- | | |
|-----------------------------|---|
| Local authority | 6 |
| Other Government Department | 1 |
| Academic | 1 |
- A2.5 Users were complimentary about NRS's engagement and the speed of response to queries. Users were also positive about the number of new statistics being produced at special geography levels to aid their local planning. There was also a general perception that the revised NRS statistical pages on its website were an improvement and helped users access the data they needed.
- A2.6 In January 2010, David Duncan-Fraser attended the Population and Migration Statistics Committee (Scotland) (PAMS) user group to ask users about their level of engagement and satisfaction with NRS. 16 of the 32 LAs in Scotland were represented at a separate meeting of LAs prior to the general meeting in the afternoon. The afternoon delegates were from NRS, LAs and other government department staff, and an academic. Members of the LA sub-group reiterated the positive feedback from the user consultation with regards to NRS's user engagement. The group discussed issues including available data sources for the 2011 Census QA and the forthcoming NRS statistics plan and user consultation.

Key documents/links provided

Written Evidence for Assessment document

