

Plans for Scotland's Census 2021 September 2018

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Summary

This document sets out the current plans for Scotland's Census 2021 which is planned to take place on 21 March 2021.

<u>Chapter 1 – Introduction</u>

This chapter describes the wide range of uses of census information. It sets Scotland's Census in the context of the censuses planned in the rest of the United Kingdom for the same date, and its place internationally. It describes the lessons learned from the last census in 2011, and the strategic aims for the 2021 Census – to provide complete, accurate and accessible population statistics which meet user requirements; to build public confidence and encourage participation in the census; to protect confidential personal census information; and to provide value for money. It summarises the key design features of the census.

Chapter 2 – Population and topics in the census

The census will count people at their place of usual residence but will also record visitors present on census night. It describes the extensive consultation and testing with users and with representatives of groups with special interests that has been carried out. The criteria for question selection are described and a full list is given of proposed topics and questions, together with details of questions which were considered but have had to be excluded at this stage.

Chapter 3 - Collecting the information

The census will be carried out across Scotland detailing approaches in different living arrangements. Scotland's Census 2021 will be a Digital First census where each household will be encouraged to complete their questionnaire online, or if not possible by completing a paper questionnaire. A census coverage survey will follow the census itself to collect information on the number and distribution of people who did not complete a census questionnaire.

Chapter 4 – Processing the data and publishing the results

The completed questionnaires will be translated into statistical outputs, which will be available principally through the internet but also through a variety of media such as paper reports and electronic media. As in the 2011 Census, information will be available for Output Areas, and (by aggregating information about Output Areas) for a wide range of geographical areas including electoral wards, Scottish parliamentary constituencies, local authority and NHS board areas, data zones, as well as the whole of Scotland.

Chapter 5 – Confidentiality, privacy, and computer security

This chapter describes the arrangements to ensure that the personal information collected by the census remains confidential for 100 years. That involves careful training of the people involved in the census operation, including enumerators and the employees of contractors. These measures are backed by the Census (Confidentiality) Act 1991, which makes it an offence to disclose personal census information. Great care will also be taken to ensure that the published statistics do not accidentally reveal personal information and that researchers working on census data cannot disclose personal census information.

Chapter 6 - Legislative process

Legislation required and the arrangements for the Scottish Parliament to approve the census is described in this chapter.

1. Introduction

Plans for the next census

- 1.1 Subject to consideration by the Scottish Parliament, Scotland's Census 2021 will be taken on Sunday 21 March. The 2021 Census will be the 22nd census to take place and the 17th to be managed independently in Scotland. The last census was carried out on 27 March 2011¹ and this next one will build on its success. In line with the Scottish Government's digital plans, the 2021 Census will be primarily online. This will deliver benefits in terms of ease of completion and the timeliness and quality of data. It is, however, essential that all households are able to complete their census return so it will still be possible to complete the census in other ways.
- 1.2 These plans set out the current proposals for Scotland's Census 2021. Given the importance of consultation, and the fact that the census is two and a half years away, it is inevitable that some of what is outlined here will change between today and census day. The plans are being published now to allow sufficient time for discussion of proposed questions and how the census, which will affect everyone in Scotland, will be carried out.
- 1.3 It is particularly important for the Scottish Parliament and the public to be assured that the planning of the 2021 Census, and the uses to which the information collected will be put, are totally independent and are seen to be independent from any other initiatives involving the collection of information about the general public. For that reason, the census is carried out by the Registrar General for Scotland, who heads a separate non-ministerial government department called National Records of Scotland (NRS); formally General Register Office for Scotland (GROS).
- 1.4 As part of the preparations for Scotland Census 2021, there will be a large scale rehearsal which is planned for October 2019. All of the elements outlined in these plans will be tested as part of that rehearsal

¹ Scotland's Census 2011 General Report http://www.scotlandscensus.gov.uk/documents/censusresults/Scotland's_Census_2011_General_Report.pdf

to ensure that approaches and questions are fit for purpose and that all of the systems and processes work as planned.

Why do we need a census?

- 1.5 For over 200 years, the country has relied on the census to underpin national and local decision making. Some 200 countries worldwide now carry a regular census under the auspices of the United Nations (UN) census programme.
- 1.6 The census is the only survey of its kind to ask everyone in Scotland the same questions at the same time. No other survey provides the richness and range of information that the census does. It is widely acknowledged as playing a fundamental and unique role in the provision of comprehensive and robust population statistics.
- 1.7 Government, local authorities, the health service, the education and academic community, commercial businesses, professional organisations and the public at large all need reliable information on the number and characteristics of people and households if they are to conduct many of their activities effectively.
- 1.8 Government, in particular, needs this kind of information to form policy, to plan services for specific groups of people and to distribute resources effectively to local authorities and NHS Boards, in a way which matches needs. The information must be authoritative, accurate and comparable for all parts of Scotland down to very small levels of geography. Currently, only a census can provide the range of such information on a consistent basis.
- 1.9 Basic information on the population size, age, sex, and location is fundamental to the work of government, especially concerning:
 - ageing and pensions;
 - migration, both into and out of the country, and internally;
 - economic growth (and thus government revenues); and
 - labour supply.

NRS

- 1.10 Information on housing, household size and family make-up is fundamental to government policies in areas such as :
 - local housing demand and planning; and
 - inadequate accommodation and overcrowding.

Other information collected by the census enables government to:

- understand pressures on transport systems and the planning of roads and public transport, using information collected on travel to and from work or study and on car ownership;
- identify areas of deprivation so that effort can be targeted on improving their circumstances;
- gather evidence on equality groups in order to identify and appropriately tackle discrimination; and
- show how many people work in different occupations and industries throughout the country, helping government and businesses to plan jobs and training policies and to make informed investment decisions.
- 1.11 Census information is used for many social and economic indicators such as:
 - estimates of the population;
 - employment and unemployment rates;
 - birth, death, mortality, and fertility rates;
 - equalities monitoring in particular by providing information on age, sex, ethnicity, religion, disability, gender identity, and sexual orientation in order to identify the extent and nature of disadvantage and to measure the success of equal opportunities policies; and
 - enhancing sample survey data (including socio-economic surveys carried out by government and the private sector), without which the surveys would be less reliable or would need to be larger and more costly.
- 1.12 Census benchmarks underpin democratic engagement. For example, the Boundary Commission for Scotland takes account of

population change to reshape the boundaries of Scottish and UK parliamentary constituencies.

- 1.13 The Scottish Government needs an effective means of allocating and targeting resources. The census results are used to benchmark the mid-year population estimates, which in turn are a key input to the planning and allocation of over £23 billion by the Scottish Government to local authorities and health boards each year.²
- 1.14 NRS carried out some work to look at the effect of misallocation of funds if the census was not to be carried out. Looking at the National Resource Allocation Formula (NRAC) for Health Board funding allocations, if no census had been carried out in 2011, and the population estimates used had been extrapolated only from the 2001 Census figures, it is estimated that there could have been misallocations between NHS Boards in 2014/15 of between £30 million and £40 million in that year alone, with some Boards receiving more, and others less, than their appropriate share. It is reasonable to assume that there would also be misallocations across local authorities funding as well.
- 1.15 In addition to the work of the national government, census data drives targeting of local services such as:
 - health services, for which census questions on illness are good predictors of demand;
 - education, for which the census is useful in the siting of new schools;
 - transport planning and traffic modelling;
 - development plans to ensure that development happens at the right locations; and
 - community support services, including home help and home care.
- 1.16 The census is an excellent source of data for research. The Scottish Longitudinal Study (SLS) contains an anonymised representative 5% sample of the Scottish population linking information

² https://news.gov.scot/news/budget-local-government-funding-settlement; https://news.gov.scot/news/increased-funding-for-health-boards

from the 1991, 2001, and 2011 censuses with birth, marriage, death and migration information, cancer registration and hospital admissions and discharges.³ This provides an unrivalled source for the examination of how Scotland's population has changed over time. Research based on the SLS, and directly on the data from the census, increases understanding of social conditions and can shed light on the impact of past policies. One example is the use of longitudinal data to construct new measures of population ageing based on years of remaining life expectancy rather than years since birth.⁴

Alternative ways of collecting the information

- 1.17 Carrying out a census of the entire population at one point in time is a very large, expensive and complex undertaking. The planning for such an exercise is extensive and it takes some time for all of the information to be processed and published. Furthermore, it is often felt that the information being collected as part of the census is already held by government in some way.
- 1.18 Following on from the 2011 Census, NRS, in conjunction with other UK Census Offices, explored whether there were alternative ways to produce statistics on the size and characteristics of the population. NRS had an open mind in identifying potential options and examined and compared various approaches to counting the population, both here and overseas, engaged with a diverse group of users, commentators and public bodies, and undertook qualitative and quantitative research into attitudes to the census and population statistics.
- 1.19 Having considered all of the evidence, NRS recommended in March 2014 that a modernised 'traditional' census was the best way to meet users' needs at this point in time. As part of the work to deliver the 2021 Census, NRS continues to investigate the use of administrative data both to improve the current census and also as a way to deliver population statistics in the future.

³ https://sls.lscs.ac.uk/

⁴ Longitudinal Studies Centre Scotland (2015). Flexible ageing: new ways to measure the diverse experience of population ageing in Scotland, using the Scottish Longitudinal Study.

Date of the census

1.20 The chosen date of the 2021 Census – Sunday 21 March – is the earliest since 1801. Although the census does not have to take place on a specific day of the week, Sunday has traditionally been chosen as the most likely time that people will be at home. The date is chosen to maximise the number of people who are present at their normal address (by, for example, avoiding holiday periods and university vacations). In 2021, Easter Sunday falls relatively early, on 4 April, and the chosen date of 21 March avoids the Easter holiday period, and gives added distance before the Scottish Parliamentary elections on 6 May 2021.

Census across the UK

1.21 Scotland's Census is conducted under the Census Act 1920. The Act makes the Registrar General for Scotland, under the direction of Scottish Ministers, responsible for arrangements for the census in Scotland. The Registrar General heads NRS which carries out the work. In England and Wales, that responsibility lies with the UK Statistics Authority (and is conducted by the Office for National Statistics). In Northern Ireland, census-taking is the responsibility of the Registrar General for Northern Ireland (and is conducted by the Northern Ireland Statistics and Research Agency). These three 'census offices' cooperate closely in planning and preparing for the census, which allows for the harmonisation of 2021 Census results across the UK, meeting the needs of many users. It also provides the basis for the censuses to be carried out efficiently while remaining sensitive to the different circumstances and user needs of each country. That close co-operation is formalised in the statement of agreement between the National Statistician and the Registrars General for Scotland and Northern Ireland.

International perspective and EU regulations

1.22 Historically, the need for information has been shared by the European Union, and data was shared by member states under a Council and European Parliament Regulation with Eurostat, for use by the European Commission. As a result of the United Kingdom's planned departure from the European Union in March 2019, the Scottish

Government may no longer be legally required to provide the European Union with statistical results from the 2021 Census. However, these data will still be provided to the Office for National Statistics, so that they can supply the set of pre-specified statistical cross-tabulations to Eurostat. This will enable Scottish census data to be compared to other European census data which will be useful for benchmarking purposes.

1.23 Scotland will also comply, as far as possible, with any statistical requirements identified by the United Nations 2020 World Population and Housing Census Programme. A set of principles and recommendations for the next round of censuses throughout the world has been adopted,⁵ following a meeting of the UN Economic and Social Council on 10 June 2015. All countries have been asked to produce core outputs which will be incorporated into a UN demographic publication.

Lessons from the 2011 Census

- 1.24 Overall, Scotland's Census 2011 was conducted successfully in line with international best practice and provided a sound basis for understanding the nature and diversity of Scotland's population. In preparing for the 2021 Census, full account has been taken of the lessons learned from the 2011 Census through an internal evaluation by National Records of Scotland titled *Scotland's Census 2011 General Report*.⁶
- 1.25 There were a number of specific challenges and lessons to be learned for census operations in the future. These findings were summarised in the following themes throughout the report: programme management, legislation and the parliamentary process, stakeholder management, the census coverage survey, data collection and field operation, data processing and statistical methodology, and output content production and dissemination. The lessons from 2011 have, and continue to, influence the design for Scotland's Census 2021.

Strategic aims for the 2021 Census

⁵ United Nations (2015). Resolution adopted by the Economic and Social Council on 10 June 2015 http://www.un.org/ga/search/view_doc.asp?symbol=E/RES/2015/10

⁶ Scotland's Census 2011 General Report http://www.scotlandscensus.gov.uk/documents/censusresults/Scotland's_Census_2011_General_Report.pdf

- 1.26 The Census has the following high-level objectives:
 - to produce high-quality results;
 - to generate outputs that meet the needs of our users;
 - to maximise online response rates for the census;
 - to produce timely outputs to maximise benefits;
 - to protect, and be seen to protect, confidential information;
 - to do so in a cost effective way; and
 - to make recommendations for the approach to future censuses in Scotland.

Summary of key 2021 Census design features

- 1.27 The design principles that will guide the development and implementation of the design for 2021 include:
 - employing operational and statistical methods to deliver the highest quality population estimates by age and sex at local authority level;
 - using the elements of the 2011 Census that worked well and are still relevant;
 - embracing new technologies and methods where appropriate;
 - designing for online first, including a range of device formats, and making it as easy as possible for the public to respond;
 - seeking to minimise the respondent burden on the public;
 - testing the census design iteratively to assure us, and stakeholders, of the underlying system, processes, and security of the overall design;
 - attempting to get a response from every person and household in Scotland; and
 - maximising appropriate use of administrative data in all areas of the operation and processing;
 - estimating and adjusting the results to account for over and under enumeration as in the previous two censuses;

- producing a complete, consistent and protected dataset which has been adjusted for over and under enumeration to allow production of outputs; and
- making the first results available more quickly than results from the 2011 Census and completing the full suite of outputs (still to be defined) more quickly as well.
- 1.28 Significant changes for Scotland's Census 2021 include:
 - it will be carried out primarily online;
 - most households will receive an internet access code via the post; there will be limited hand-delivery of materials by census staff;
 - there will be targeted follow-up of non-responding households;
 and
 - outputs will be provided in a more flexible way.

2. Population and topics in the census

Who will be counted in the census?

- 2.1 In 2021, as in the past, the census will count people at their place of usual residence, whether or not they are actually present there on census night. If usual residents happen to be away on census night, whether elsewhere in the UK or abroad, the questionnaire for their household will include them. Limited information will also be collected about visitors (including overseas visitors) at each address. Separate analysis will be carried out to check that they are being included, where appropriate, in the census. Because of the importance of making these figures as accurate as possible, people in households where no-one is present on census night will be required to complete a census questionnaire on their return to their usual residence, if this is within six months of census night.
- 2.2 Each household will be required to complete a questionnaire containing questions about the household as a whole and about each person usually resident in the household. The definition proposed for the 2021 Census (throughout the UK) is: 'A household is: one person living alone; or a group of people (not necessarily related) living at the same address and sharing cooking facilities and who also share a living room or sitting room or dining area'. That definition is consistent with definitions used in 2011 Census (throughout the UK), and aligns with Conference of European Statisticians' current recommendations.
- 2.3 As in previous censuses, students and boarding school children will be counted at their term time address, irrespective of where they are on census day. This makes the census consistent with the base for the annual population estimates.
- 2.4 People who live in 'communal establishments' such as hotels, hospitals and care homes will complete individual questionnaires. Special arrangements will be made for the enumeration of other types of communal establishments, such as prisons and armed forces bases (see Chapter 3 for more details on communal establishments).

Consultation on topics and questions

- 2.5 Given the size of the census operation, and the fact that it is mandatory to complete the questionnaire, it is important that the questions which are asked provide the information that is really needed. The topics proposed for the census questionnaire are those most in demand by the main users of census information notably central and local government, the health service, the commercial and academic sectors, local community groups and voluntary bodies.
- 2.6 In order to understand the needs of users, NRS ran a consultation on the topics to be asked in the 2021 Census between 8 October 2015 and 15 January 2016. To ensure that the consultation reached a wide range of users it was conducted using Citizen Space and was published on the Scotland's Census website and on the Scotlish Government website as well as being widely promoted through other channels.
- 2.7 As part of the consultation, the Registrar General wrote to all of Scotland's local authorities and Health Board Chief Executives, Members of the Scottish Parliament, Scottish Parliamentary Committees, Scotland's Members of the UK Parliament and Scotland's Members of the European Parliament, asking for their help and support both in responding to the consultation and in encouraging others to do so.
- 2.8 Three stakeholder events in Glasgow, Aberdeen, and Edinburgh were held in November 2015 to support the consultation, attended by approximately 70 delegates. In total, 113 responses were received to the consultation; 91 of these were from organisations and 22 were from individuals.
- 2.9 The consultation presented the initial views from NRS on the topics under consideration for collection in the census in 2021, with the aim of encouraging discussion and to help build strong cases to justify the inclusion of topics. The focus of the consultation was on information required at topic-level, not the detail of the questions that should be asked on the questionnaire.

- 2.10 Particular attention was given to establishing the views and priorities of government departments, local authorities, the health service and other main users of census statistics. Also of importance are the views of the Population and Migration Statistics Committee of the ScotStat network of users and providers of Scottish official statistics.
- 2.11 During the consultation period, users proposed a much larger number of questions than could be fitted on a census questionnaire that households could reasonably be expected to complete. That included all the topics covered in the 2011 Census, as well as additional topics such as income, second address, intended length of stay, reason for migration, citizenship, British Sign Language, voluntary and unpaid work, veteran/ex-service community, gender identity, and technology and digital. In coming to a final selection of questions, some difficult decisions need to be made between the benefits of different questions, balancing the need for change against continuity. A number of criteria were used to evaluate the strength of the case for each topic.
- 2.12 Following the consultation, NRS worked closely with stakeholders through follow-up events, meetings, focus groups and online surveys to gather more detailed information about data requirements to ensure user needs were fully understood. Information about these events can be found on the Events and workshops page of Scotland's Census website.

Criteria for inclusion of topics and question

- 2.13 In April 2018, NRS published the evaluation framework setting out the criteria used to assess potential questions for inclusion <u>Scotland's Census 2021</u>: <u>Question Design and Inclusion Evaluation Criteria Questions, new questions and significantly changed questions</u>. A separate evaluation framework for assessing changes to existing questions was also published: <u>Scotland's Census 2021</u>: <u>Question Design and Inclusion Evaluation Criteria Existing questions</u>: <u>Changes to response options</u>.
- 2.14 In order to be considered for inclusion, topics must meet a significant and clearly-demonstrated user need. This might involve the

allocation of significant resources, improved service provision, the development of new policies or monitoring of established policies.

- 2.15 The information must be of major national importance. One of the strengths of the census is that it collects detailed information for a large number of small geographic areas and small population of subgroups, that cannot be sufficiently identified by other means. Information required only for larger areas (such as local authority areas), or information which is needed only about a few specific small areas, would be more cost effectively collected by other means such as sample surveys or focussed local surveys.
- 2.16 The second important attribute of census data is the ability to analyse particular variables against one other (for instance, the state of health of different ethnic groups at different ages). The need for such multivariate analysis will help justify a census question particularly if they are mutually supporting (each providing information that will make others more useful).
- 2.17 Comparison with previous censuses (and with other countries) is a further important aspect of census analysis and therefore a consideration for inclusion. Questionnaire content should not vary from one census to the next without good reason and close attention has been given to comparability with the content of the 2011 Census questionnaire. Similarly, user demand for the ability to compare Scottish census results with other parts of the UK has been taken into account, along with the need to provide outputs to meet international statistical requirements.
- 2.18 The inclusion of particular questions should be shown, in tests, to have had no significantly adverse effect on the census as a whole particularly the level of public response. It is also necessary to be sure that practical questions can be devised to collect data of sufficient and measurable quality to meet users' requirements.
- 2.19 The census is compulsory, and most questionnaires are completed by the householder without assistance. So the census should not, in general:

- ask for information which is unreasonably burdensome to provide;
- ask questions which are not publically acceptable;
- ask questions that require a long explanation to ensure an accurate answer (because research has shown that people often do not read detailed instructions); and
- ask about opinions or attitudes.
- 2.20 The cost of collecting and processing the data is an important consideration. A question which is very difficult to code, requires extensive processing or otherwise significantly adds to the total cost of the census, will generally not be included.
- 2.21 The census should generally only seek to collect information for which there is no other viable source. Similar data may, for example, be collected by another government department or organisation, or by existing or planned surveys, or the data may be available from administrative records. Surveys may be a better way of collecting data, because interviewers can probe into more detail and resolve uncertainties and their outputs may be available more quickly. Technological and legal changes make it easier to link data from administrative sources, reinforcing or substituting for census data.
- 2.22 The census is a statistical exercise and must not be used to collect data in order to deliberately promote political or sectarian groups, or sponsor particular causes. The burden on the respondent must be considered so the availability of space on the questionnaire, and the design and size of a question, is an important factor in deciding whether or not particular information can be collected by the census.
- 2.23 Finally, and very importantly, the Census Act 1920 limits the topics which may be included in a census: each topic must be comply with the Act. Proposals for questions also need to consider the desirability of asking the same or comparable questions throughout the UK, so that users can compare circumstances in Scotland with those in the rest of the UK.

Question testing

- 2.24 Following on from the consultation work, there has been an ongoing programme of research and testing aimed at understanding people's perception of the census and the effectiveness of census question wording, questionnaire design and delivery methods. The census must be 'right first time' there is little margin for error. So innovations in the wording of the questionnaire and the operational procedures, and the effect which changes in society have on public acceptability of the census, must be thoroughly tested before 2021.
- 2.25 As Scotland's Census 2021 will be Digital First⁷, development and testing of questions for inclusion has also focused on how best to present questions on an online platform to ensure digital collection improves data quality and maximises efficiencies in collection and processing of the information.
- 2.26 An extensive programme of public acceptability testing, cognitive testing of question wording and questionnaire design, and quantitative testing exploring data quality has been carried out. This ensures people's understanding of the question, that it does not have a negative impact on Census completion, and that the questions deliver good quality data that meets user needs.
- 2.27 Public acceptability testing is undertaken primarily to ascertain the acceptability of asking a question, whether respondents would answer the question for themselves, or on behalf of others in their household, and the impact on overall response to the Census of inclusion of sensitive questions. Public acceptability testing has specifically been undertaken on sensitive questions of sex, gender identity and sexual orientation. Joint public acceptability testing was conducted across the UK, with Office of National Statistics (ONS) and Northern Ireland Statistics and Research Agency (NISRA) in January and February 2017. Acceptability of questions was further explored during cognitive and quantitative testing undertaken by NRS in Scotland. Question acceptability has been explored at all stages of development of the

⁷ Digital First is a term used across government as a means of focusing transformational projects towards online service provisions. The services are designed to be so straight forward and convenient that all those who can use them will choose to do.

sensitive questions to ensure the final questions are acceptable to the communities of interest, and understandable to the general public.

- 2.28 Cognitive testing is a form of in-depth interviewing with a small number of respondents which provides an insight into the mental processes respondents use when answering questions. This helps to identify if there are any problems with a question or question design and gain an insight into the source of any difficulty respondents are having. An iterative process of cognitive testing was undertaken during August and September 2017 with a focus on understanding acceptability of potential new questions and changes in format for a Digital First census in 2021. Acceptability of potential questions on gender identity, trans status, sexual orientation, income, passports held, and ex-service personnel was explored. Changes to existing questions were tested to understand whether they improve respondent understanding and therefore data quality. The changes tested were to questions on central heating, tenure and landlord, travel to work or study, religion, national identity, ethnic group, languages including a new question on British Sign Language, long term health conditions, and qualifications held.
- 2.29 Quantitative testing was undertaken on all of these questions to explore the data quality of new or changed questions. This testing also included a further exploration of public acceptability and gathered feedback from respondents on any difficulties faced in responding. Fieldwork was conducted over November December 2017. The questions taken into quantitative testing were informed by the results of the public acceptability and cognitive testing. The results of all of the testing are contained in the topic reports which accompany this document.

Current proposed topics and questions

2.30 The current proposed questions for the 2021 Census are shown in the following table. As noted in the introduction, there is still further testing to be carried out on some questions and it is possible others will change as a result of feedback. In particular the Digital First approach for 2021 requires further development, user testing and feedback and this is ongoing. The final proposed questions will be set out in subordinate legislation for the approval of the Scottish Parliament.

Further information on all of the development work and testing around these questions can be found in the associated topic reports.

2.31 Current proposed topics and questions

All households, whether occupied or not

address, including the postcode.

All households

- number and names of all usual residents, whether present or temporarily absent on census night;
- name, usual address, sex and date of birth of visitors present on census night;
- type of accommodation (and whether or not it is selfcontained);
- tenure of accommodation;
- type of landlord (for households in rented accommodation);
- number of bedrooms (replaces number of rooms asked in 2011);
- type of central heating; and
- number of cars and vans owned or available.

All communal establishments (care homes, university halls of residence, etc)

- type of establishment;
- client group;
- · management; and
- status of people present on census night.

All residents

Demographic questions

- name, sex and date of birth;
- gender identity (not asked in 2011);
- sexual orientation (not asked in 2011);
- marital status;

- relationship to others in household (not to be asked of residents in communal establishments); and
- students' status.

Questions about migration

- country of birth;
- month and year of arrival in the UK;
- usual address one year ago; and
- passports held (not asked in 2011).

Questions about travel to work and study

- work/study address; and
- method of travel.

Questions about health and care

- unpaid care for others;
- general health;
- limiting long-term health condition or disability; and
- long-term health conditions.

Questions about ethnicity, language and religion

- national identity;
- ethnic group;
- language (including British Sign Language ability not asked in 2011); and
- current religion.

Questions about qualifications and employment

- qualifications;
- veteran/ex-service status (not asked in 2011);
- activity last week;
- work history;
- occupation and industry; and
- hours worked.

All visitors in households

- Name, sex and date of birth; and
- Usual address (or country of usual residence if not resident in UK).

Proposed questions about each household

- 2.32 The first set of questions in the census relate to the household. Information on the number of households is used in resource allocation, planning future housing provision, developing housing policy, identifying areas of deprivation and for a variety of other purposes.
- 2.33 Where a property is unoccupied during the follow-up process, the field worker will record a few basic facts about the property which will be used to complement the information collected from occupied accommodation.
- 2.34 The census will ask questions about the accommodation occupied by each household. It will also count all dwellings, including those which are vacant and those shared by two or more households. This will show the way the housing stock is being used and will provide a firm basis for assessing current and future demands as the number and type of households change. No other data source gives such comprehensive information on housing stock at both national and local level. At local level, the census is the only source of nationally-comparable information on housing and is used widely in calculations of local authority grant entitlements to local authorities. Measures of inadequate housing and overcrowding are used in deciding on levels of housing, investment and in targeting programmes which address social and economic needs in urban and rural areas. The following questions are proposed.
- 2.35 Questions on the **type of accommodation**⁸ occupied by the household and whether or not the accommodation is **self-contained** will be used to identify separate and shared dwellings and the

⁸ Housing and Accommodation Topic Report <u>www.scotlandscensus.gov.uk/documents/census2021/Housing_and_Accommodation_Topic_Report.</u> <u>pdf</u>

characteristics of the accommodation. Households accommodated in caravans and other temporary structures will be identified.

- 2.36 Questions on the **tenure of accommodation** and **type of landlord**⁹ (where the accommodation is rented) will show how much of the housing stock in each area is owner occupied and whether or not it is mortgaged, or is social housing (local authority or registered social landlord), privately let or held in other types of tenure. To ensure the data meet user needs, a review of tenure response options, to update types of ownership reflecting changes in housing policy, has been undertaken for 2021. For example, including the The Help to Buy (Scotland) scheme introduced in 2013 in 2021 response options.
- 2.37 For 2021, a **number of bedrooms**¹⁰ question is proposed to replace the number of rooms question asked in 2011. A question on the number of bedrooms within the accommodation will help show, together with the number and characteristics of people in each household, the degree to which accommodation may be overcrowded or under-utilised. A number of bedrooms question is recognised as providing better quality data than one on total number of rooms as testing has shown confusion among the population of what constitutes a room in this context. The number of bedrooms data will be used to inform local housing strategies which are supported by an assessment of housing need and demand, which local authorities are required by law to prepare.
- 2.38 The question on the availability and the type of **central heating**¹¹ will continue to provide a measure of housing standards. To ensure the data meets user needs, a review of response options has been undertaken for 2021. For example, options for 2021 have been revised to include wood or biomass, and other renewable energy sources to produce data to monitor Scottish Government policy.

⁹ Housing and accommodation – Tenure and Landlord Topic Report www.scotlandscensus.gov.uk/documents/census2021/Housing_and_Accommodation_Tenure_and_L andlord_Topic_Report.pdf

¹⁰ Housing and Accommodation – Rooms and Bedrooms Topic Report www.scotlandscensus.gov.uk/documents/census2021/Housing_and_Accommodation_Rooms_and_B edrooms_Topic_Report.pdf

¹¹ Housing and Accommodation – Central Heating Topic Report www.scotlandscensus.gov.uk/documents/census2021/Housing_and_Accommodation_Central_Heating_Topic_Report.pdf

2.39 A question, included in the census since 1971, will ask how many cars or vans are owned or available for use by the household. It will help to identify areas where private transport makes the most demand on road space and areas where people are likely to be more dependent on public transport. The statistics will also be used in making projections of future levels of car ownership, studies of road use and appraisals of the need for future investment in public transport.

Proposed questions to be asked about each household resident

2.40 About half of the questions intended to be asked of residents in households will apply to everyone; the questions relating to qualifications, economic activity, veteran/ex-service status, occupation and industry will only be asked of people aged 16 and over. Consideration is on-going as to whether age limits should be applied to the gender identity (trans status/history) and sexual orientation questions.

Basic population characteristics

- 2.41 The most important task of the census is to give an accurate and authoritative count of the number of people in Scotland and to show where they usually live and so provide a new and up-to-date benchmark for the annual population estimates for local areas.
- 2.42 Questions about sex¹², date of birth and marital status are fundamental to major statistical information about the population allowing age and sex-specific rates on morbidity, mortality, fertility, marriage and divorce to be calculated. The information provides a basis for actuarial tables, which allow trends and life expectancy to be monitored and which are used for a variety of purposes such as planning state pensions and life assurance. Analyses of the make-up of households by combinations of age, sex, marital status and relationship will give information on different types of household (such as lone-parent families or two elderly people) and will enable statistics to be produced on separate family units. The information also provides the key to estimating the demand for local authority services, such as facilities for young and elderly people. Together with other census information, the information is used to estimate (for example) the numbers and ages of people who are working and who are employed in particular occupations or industries.
- 2.43 Age and sex are protected characteristics as set out in the Equality Act 2010 and the data are widely used to inform equality impact

¹² Sex and Gender Identity Topic Report www.scotlandscensus.gov.uk/documents/census2021/Sex_and_Gender_Identity_Topic_Report.pdf

assessments. They are also essential for analysis and research conducted by a wide range of users, including public bodies and third and private sector organisations.

- 2.44 A change to the response options for the sex question is being considered for 2021. Reflecting Scottish Government policy on ensuring Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) equality, and feedback from the 2011 census, testing is continuing on a non-binary question which would allow people to record their sex as female, male or other.
- 2.45 Marital status is also a protected characteristic as set out in the Equality Act 2010 and the data are widely used by central government and other public authorities in equality impact assessments, which in turn inform policies and practices. As a result of the Marriage and Civil Partnership (Scotland) Act 2014, the question was reviewed to consider whether information on same sex marriage was required to be asked in Scotland's Census 2021. A low user need was identified for the inclusion of same sex marriage, and alternative data sources are available. Based on this, no changes to the data collected by the marital status question are proposed for 2021.
- 2.46 Considerable user demand has been identified for the collection of information on **sexual orientation**¹³ in 2021. Sexual orientation is a protected characteristic as set out in the Equality Act 2010, and the main requirement identified is in relation to the monitoring and reporting duties for public bodies. The information is also required to inform equality impact assessments, which in turn inform policies and practices. The Equalities and Human Rights Commission requires this information to use in a statutory review of equality and human rights, which is carried out every five years.
- 2.47 Sexual orientation is included as a core question in the Scottish Household Survey, Scottish Health Survey and Crime and Justice Survey. However these sources do not provide data below local authority level, and do not allow for disaggregation of the information by other

¹³ Sexual Orientation Topic Report www.scotlandscensus.gov.uk/documents/census2021/Sexual_Orientation_Topic_Report.pdf

characteristics. The census will provide data at small geographies for use in service planning and monitoring.

- 2.48 A new question on **gender identity** is proposed for 2021. A reliable data source on the size and locality of the transgender population in Scotland is required for policy development that will reduce inequalities experienced by trans people, and for designing and enhancing public services to meet specific needs, particularly in relation to the provision of health services. Because Scotland's transgender population is small and distributed widely across the country, the census is the only source which would be comprehensive enough to provide accurate information on that population.
- 2.49 Testing indicates a high level of public acceptance for questions on sexual orientation and gender identity and there are no data quality issues identified in the testing to date. Testing will continue to ensure these sensitive questions can be asked in an acceptable way and gather good quality data which meets user needs. Further development is required on whether age limits will be applied, ensuring questions asked in Scotland's Census 2021 take account of any changes in legislation or policy in place by 2021, such as any which may follow the review of the Gender Recognition Act 2004.
- 2.50 Some concerns have been expressed about confidentiality in relation to both of these questions, particularly for young people who may feel unable to answer the question if they still lived at home with their families. Missing this group would be an issue as young trans people have specific service needs. To provide complete privacy and confidentiality for any person responding to Census 2021, the facility to request and receive an internet access code for completion in confidence will be available. Any individual will be able to complete an individual form without other members of the household being aware.
- 2.51 Due to the small size of the population, it is unlikely information on gender identity will be included in standard outputs due to the risk of disclosure for some small groups. Stakeholders have indicated that a stand-alone report on the trans community would meet their needs.

2.52 In households of two or more people, a question will ask about the **relationship between each person in the household**. This information will provide statistics of households analysed by family composition and will be used, for example, by authorities and organisations providing services to families who need to know how many families there are and what changes in family size have been taking place. Combining this information with that on sex will provide statistics on the number of same-sex couple households. Applications include planning, accommodation and services for elderly people and the assessment of the potential demand for housing from young families and multi-family households.

Migration

2.53 A question about migration¹⁴, included in the census since 1961, will ask for each person's **usual address one year before the census**. Where this is different from the current usual address, this will allow calculation of the numbers and characteristics of people in households who have moved from one area to another. The number of moves by type of person and household between areas and regions of the country will also be calculated. The figures will show arrivals from outside the UK, but not of course those who have left the UK, in the year before the census. **Month and year of entry to the UK** for everybody born outside the UK will continue to be asked in 2021. This information is used to improve information about migrant profiles, including assessment of the social and economic assimilation of different migrant cohorts over time.

2.54 Migration information is particularly important since it accounts for much of the change in the population between censuses. The information collected in the census will allow inferences to be made about the level and pattern of migration in the intervening years. So it is necessary to have a complete count, and a better understanding, of the number of people and households which move in the year before the census. The census is the only current source of reliable migration data for small areas, and provides more information than any other source about migrants' demographic characteristics and type of moves.

www.scotlandscensus.gov.uk/documents/census2021/Migration_Topic_Report.pdf

¹⁴ Migration Topic Report

NRS

- 2.55 Information from the traditional question on **country of birth** will provide further information on migrants and their characteristics. The information will provide estimates of the numbers and circumstances of (sometimes small) communities of people from various countries.
- 2.56 A new question on **passports held** is proposed for 2021. This question has previously been asked in England and Wales, and in Northern Ireland, but not in Scotland's Census. Data on passports held can be used to provide a proxy for citizenship which is a key dimension for considering the stock and flow of migrants, both within Scotland and more widely. This is key for an informed understanding of migration given the different rights each group has, the differential impact of immigration policies on them, and the potential impacts these differences have on wider society.

Travel to work and study

2.57 Questions on address of place of work or study and method of transport to work or study¹⁵, are designed to show where people live and work or study. This information is the basis for measuring commuting patterns and assessing the balance of housing and jobs. The census also adds to the value and usefulness of many routine employment statistics which are generally based on area of workplace, by providing analysis by area of residence. Information on where employed people live and work is used by government departments in defining 'Travel to Work Areas'. These are approximations of selfcontained labour markets and are the smallest areas for which unemployment rates are published. The government uses unemployment information for small areas, such as wards, in identifying for example areas in major cities to which additional resources should be directed. The address of place of work will show the destination of individual journeys to work in relation to the usual address (which will normally be the origin of the journey) and will provide information on the numbers travelling to work from particular origins to particular destinations. Together with information from the question on method of transport to work, the data will help to identify commuter routes and demand for public and private transport. Information on address of study

www.scotlandscensus.gov.uk/documents/census2021/Travel_Topic_Report.pdf

¹⁵ Travel Topic Report

also allows an understanding of differences in travel habits of those who study compared with those who work.

- 2.58 The question on **transport used for journey to work or study**, will ask for the mode of transport normally used for the longest part of the journey by distance. The detailed analyses of specific commuting flows by the main means of travel are used in the planning of public transport and facilities for private transport. Method of transport data is similarly widely used by local government and public bodies for transport planning. It is used to inform transport and active travel strategies which feed into policy and investment decisions.
- 2.59 Feedback from 2011 Census and the 2021 Topic Consultation highlighted the need to improve the data quality of the responses to these questions. A Digital First census for 2021 provides a clear opportunity to use routing from the employment and student status questions to improve data quality.

Ethnic group and national identity

- 2.60 A question on **ethnic group**¹⁶ was first included in the 1991 Census. The information has enabled national and local government, health authorities and others to take account of the special needs of ethnic minority groups. The information is used for resource allocation, to inform policy development and make service planning decisions. It also helps organisations meet and monitor their statutory obligations now arising from the Equalities Act 2010. Collecting this information in the census is particularly important because many minority ethnic groups in Scotland are too small to be effectively captured by sample surveys, and the census gives the only robust information on size of groups at small area level.
- 2.61 In advance of the 2011 Census process, Scottish Government published a revised official ethnicity classification for use in Scottish official statistics. The consultation for 2021 highlighted a need for continuity with 2011 and/or earlier censuses, particularly to enable

¹⁶ Ethnic Group Topic Report www.scotlandscensus.gov.uk/documents/census2021/Ethnic_Group_Topic_Report.pdf

monitoring of equality related policy and service delivery. However, stakeholders did demonstrate the need for change, while maintaining consistency across time.

- 2.62 The main changes being considered and taken forward for further testing are:
 - the inclusion of response options for Scottish Showpeople;
 Roma; Sikh; Jewish; and
 - a write-in response option for the African category.
- 2.63 A question on **national identity**¹⁷ was added in 2011, and is proposed to be retained in 2021. Information on national identity complements that on ethnic group. This data has contributed to developing the Race Equality Framework and has proved useful in helping to understand the links between national identity and ethnic identity to develop a fuller understanding of cultural identity.
- 2.64 Ethnicity is a complicated concept, where people hold strong (and sometimes polarised) views. Moreover, people's concept of their ethnicity, and the way that they prefer to express it, changes over the years. The question proposed for 2021 is designed to meet changing user requirements and use acceptable terminology, while retaining the important ability to compare 2021 statistics with those from the 2011 Census and statistics relating to the rest of the UK.

Religion

2.65 A question will be asked about **current religion**¹⁸. Religion is a protected characteristic as set out in the Equality Act 2010, and the data gathered in the census are used by a range of users, including central government, local government, public bodies and religious organisations, to plan and deliver services. It is widely used by local government in equalities monitoring, area profiling and to identify

¹⁷ National Identity Topic Report

www.scotlandscensus.gov.uk/documents/census2021/National_Identity_Topic_Report.pdf

¹⁸ Religion Topic Report

www.scotlandscensus.gov.uk/documents/census2021/Religion_Topic_Report.pdf

demand for denominational schools. The data are also used for planning a range of services and for research and analysis.

2.66 It is important to ask a question in 2021 which is similar to that asked in previous censuses in order to be able to track changes over time and for monitoring purposes. However, stakeholders did demonstrate the need for change, while maintaining consistency across time. The main change being considered and taken forward for further testing is the inclusion of a Pagan response option.

Language

- 2.67 Question development for 2021 has identified a clear demand for information about English language skills and proficiency and use of other languages¹⁹. Information about English language skills and proficiency is used by local government and public bodies to inform resource allocation and to target services for groups where support may be required. It is also used by third sector and equality organisations in research and related policy development and to inform community cohesion work. Data on proficiency in the use of English is particularly important in relation to planning educational and translation services for migrant groups and ethnic minorities.
- 2.68 Information about **Gaelic language** skills is used extensively by local government and public bodies to produce Gaelic Language Plans, to meet legislative requirements under the Gaelic Language Scotland Act 2005. It is also used by local government to assess the likely demand for Gaelic education from pre-school to tertiary level and in the production of other local area plans, profiles and assessments. Therefore it is proposed to continue to collect information about Gaelic language skills in the 2021 Census.
- 2.69 Information on the **Scots language** has served a number of important purposes. Data from Census 2011 were used by Education Scotland to allocate development resources across the Scots-speaking communities of Scotland, and, for the first time, to provide training and materials in Scots for schools and local authorities. Scots language organisations use the data for information and educational provision, and to support cultural and linguistic tourism initiatives. Data is required for monitoring the effect of policy initiatives and longer-term trends.
- 2.70 For 2021, a need for information on use of **British Sign Language** (BSL), in addition to use 'at home' has been highlighted for policy development and monitoring and legislative work, specifically for monitoring under the BSL (Scotland) Act 2015. To meet user need in 2021, a new question on British Sign Language use is proposed.

¹⁹ Language Topic Report www.scotlandscensus.gov.uk/documents/census2021/Language_Topic_Report.pdf

NRS

2.71 Having information about use of **main language**, where this is not English, is important for planning services where additional support may be required and to help understand diverse communities. It is used by local government in area profiles and equalities monitoring.

Health

2.72 The 2011 Census asked two questions on health: **health over the last 12 months** and **long-term illness**, **health problem or disability** which limits daily activities or work. The former question was included in the census in 2001 for the first time, helping health policy development and the planning and provision of services at local level, particularly for elderly people. It is proposed that this will be retained for 2021²⁰. Similarly, the question about long-term health problems and disabilities (including problems which arise from old age) provided useful information on the need for health and personal social services at national and local level. It is proposed that this will also be retained for 2021.

2.73 A question about **long-term health conditions**, first included in 2011, is intended to be retained for 2021. There was strong support from a wide variety of users for information about long-term health conditions. The information is used by local government and public bodies for service planning and provision, the development of social care policies and strategies, and equality monitoring. It has also been extensively used in multivariate analysis undertaken by a range of users, including academics and research institutes. Engagement with stakeholders in 2017 and 2018 highlighted the importance of retaining a question which provides evidence on health conditions rather than an impairment based model. Development for 2021 has therefore focused on improving respondent burden, and therefore data quality, particularly with the opportunities a Digital First census presents in how questions and guidance can be presented for an online census. The conditions presented as response options are unchanged from 2011 as the need for continuity with 2011 data was noted as important for stakeholders. This question will meet user demand, to help improve the planning and provision of services for people with a specific long-term health

www.scotlandscensus.gov.uk/documents/census2021/Health_Topic_Report.pdf

²⁰ Health Topic Report

condition. The wording of the question carefully avoids the use of the word "disability", since many people affected by these health conditions may not consider themselves disabled.

2.74 Unpaid carers play an important role in delivering health and social care in Scotland and so there is a need for reliable data to plan for changing needs and demands, and to allow understanding of the characteristics of the caring population. In view of this, it is intended to repeat the 2011 Census question about **unpaid personal care**²¹ provided for a friend or relative with a long-term illness, health problem or disability, and the time spent each week providing such care. The question provides information which will help to improve the understanding of variations in the need for care and the pressure on social services, in an attempt to target resources more effectively. The Scotland Act 2016 devolved new social security powers to Scotland, including responsibility Carer's Allowance and introducing a Young Carer Grant. Stakeholders have highlighted that data on unpaid carers is important in the planning and monitoring social security payments under the Social Security (Scotland) Act 2018.

Qualifications

- 2.75 Information from a question on **educational and vocational qualifications held**²² is widely used by local authorities to inform service delivery; for example, directing resources for community / adult education, and for policy development. It is extensively used in local area profiling, to understand the labour market and in the development of economic strategies. The census is the only source of this information for small areas and the only one which allows cross-tabulation of qualifications with other factors such as employment.
- 2.76 Continuity with 2011 and/or earlier censuses to enable trend-based analysis, longitudinal research and the ability to monitor the effectiveness of educational policy were noted as important. The

²¹ Unpaid Care Topic Report

www.scotlandscensus.gov.uk/documents/census2021/Unpaid_Care_Topic_Report.pdf

²² Education Topic Report

www.scotlandscensus.gov.uk/documents/census2021/Education_Topic_Report.pdf

response options will reflect changes in qualifications such as the introduction of National 4 and 5 qualifications, and apprenticeships.

2.77 This has always been a complicated question and a Digital First census for 2021 provides opportunities to improve the ease with which respondents can accurately answer this question, and therefore improve the data quality. Development for an online platform is on-going.

Employment and labour force²³

- 2.78 The census is a primary source of information about the socio-economic characteristics of the population and is the most comprehensive source of local information. The data informs policy and underpins service planning and delivery and is important factor in exploring inequalities and differences in social conditions for particular population sub-groups at local area level. These questions provide statistics about the ages and occupations of workers in different industries which can be presented both by place of residence and (for those in work) by place of work.
- 2.79 The census provides information about economically inactive groups such as full-time students, people looking after the home and family, and retired people. It also an important source of labour market information for example providing detailed statistics for small areas on employment and unemployment among different ethnic and socioeconomic groups. Information on working patterns is frequently used in conjunction with the other key labour market sub-topics, to contribute to analysis of economic activity at local area level.
- 2.80 Most questions refer to a person's main employment in the week before the census or, for those not currently employed, to their most recent job. Replies are sought only from people aged 16 or over and cover:
 - whether the person was in paid work (as an employee or selfemployed or any other kind of paid work), away from work temporarily (ill, on maternity or paternity leave, on holiday or

²³ Labour Market Topic Report www.scotlandscensus.gov.uk/documents/census2021/Labour_Market_Topic_Report.pdf

temporarily laid off), **looking for work, available for work or waiting to start a job, or not looking for work** (retired, student, looking after home or family, long term sick or disabled, or for another reason). These categories will provide the basic classification for analysis of economic activity, designed to be as consistent as possible with definitions recommended by the International Labour Organisation²⁴ and the Conference of European Statisticians.²⁵

- time since last employment for people who were not working in the week before the census gathers information on long term unemployment, and will help determine local differences in periods of unemployment and the extent of long-term unemployment. This will help assess and monitor disadvantage and exclusion, plan education and training, allocate resources, analyse the labour market and study mortality and morbidity.
 - occupation of current main job (or last main job) to provide detailed and important information about the very wide range of work both nationally and locally. Any revision to the Standard Occupational Classification (SOC) will be applied to the coding of 2021 census data, allowing up to date comparable statistics. The statistics will be used in analyses of the labour forces of various industries and occupations, in studies of occupational mortality, and as the basis for the classification of people and households according to the National Statistics Socio-Economic Classification (NS-SEC).²⁶
 - employment and supervisor status asking if the person works, or worked, as an employee or as self-employed with (or without) employees and whether the person has or had any supervisory responsibilities in their job. Responses to this question will help in assigning the person more accurately to the NS-SEC.
 - the industry of employment, primarily determined by asking people the nature of the business of the organisation that

²⁴ International Labour Organisation (2003). *Sources and Methods Labour Statistics.* Vol 5: *total and economically active population, employment and unemployment (population censuses).* Third edition. ILO, Geneva.

²⁵ UN Economic Commission for Europe (2006). *Conference of European Statisticians' Recommendations for the 2010 Censuses of Population and Housing.*

²⁶ Office for National Statistics (2005). *The National Statistics Socio-economic Classification: User manual.* ISBN 1-4039-9647-4. Palgrave Macmillan.

employs them. The information will be used, for example, in labour market analyses and in the production of regional accounts and economic indicators. Industry will be coded to the current version of the Standard Industrial Classification (SIC 2007).²⁷

- the name of the organisation at which a person is currently working – as a further aid to the accurate coding of the type of industry by reference to the Inter-Departmental Business Register, which has a list of large employers already classified by type of industry. It should be stressed that responses to the question will not be used to produce information on named individual employers.
- number of hours usually worked in the person's main job (or previous job for those not currently employed), to distinguish those in full and part-time work. The information will help to understand changes in the labour market and in working patterns in particular occupations and industries and to assess disadvantage and socio-economic classifications.
- a new question on veteran/ex-service status²⁸ is proposed for 2021, which will provide statistics on the ex-service community. The Scottish Government and all local authorities in Scotland are signatories to the Armed Forces Covenant, and place a high priority on fulfilling the agreement to ensure that the ex-service community Armed forces veterans, spouse, partners and dependents in Scotland receive appropriate support. The statistics will provide the only robust evidence source for policy development and monitoring, and will be used in the allocation of resources at local level, particularly in relation to the recommendations contained in the Armed Forces Covenant. Alternative sources available for this information are currently insufficient to meet user need.

www.scotlandscensus.gov.uk/documents/census2021/Ex-Service_Topic_Report.pdf

²⁷ Office for National Statistics (2007). *UK Standard Industrial Classification of Economic Activities* (SIC 2007): Structure and explanatory notes.

²⁸ Ex-Service Topic Report

Questions about visitors

2.81 The 2011 Census gathered information about people who, on census night, were visiting an address where they were not usually resident. The 2021 Census will continue to do collect information on visitors to ensure a robust population count²⁹.

2.82 The information to be collected about visitors will be:

- name and usual address (or country of residence if not a UK resident);
- sex; and
- date of birth.

2.83 The questionnaire will have space to record such information for up to three visitors, together with a count of the total number of visitors. The collection of this information will enable more accurate counts of visitors (and, hence, usual residence) to be made for local areas. Linking counts of visitors to those of residence at their usual address will provide additional information on which estimates of census undercount and/or over count can be made.

Questions considered but not included

2.84 Space on the census questionnaire is limited – and demands from users exceed that limit. Many suggested questions have had to be excluded, because:

- demand was not strong enough to displace one or more of the proposed topics;
- tests showed that the quality of the information obtained from a census question would not be fit for purpose;
- there are more appropriate sources of the information;
- the questions would place too great a burden on the public; or

²⁹ Demographics and Household Composition Topic Report www.scotlandscensus.gov.uk/documents/census2021/Demographics_and_Household_Composition_ Topic_Report.pdf

- a combination of these reasons.
- 2.85 It is not proposed to have questions on **household income**. A challenge to measuring income is that people often do not like to divulge how much they earn and asking questions on income can be considered intrusive for a respondent, and are often associated with high non-response.³⁰ However, considerable user need was identified in the consultation, particularly for data at small geographies, which is not available from existing data sources.
- 2.86 Developing a question which is acceptable to the public, and which gathers good quality data is complex. Additionally, alternative data sources have become available, or are under development for the future. Scottish Government published Statistics on Local Level Household Income Estimates.
- 2.87 Cognitive testing of an income question highlighted concerns about acceptability of asking income in the census, and of respondents ability to answer accurately, particularly where households do not share finances. In terms of the household income question views on acceptability were mixed. Some participants found the inclusion of banded household income questions in Scotland's Census 2021 acceptable, and were comfortable providing an answer. In contrast, some participants were less comfortable with the household income questions. Some participants who did answer the question queried the purpose of the inclusion of an income question in Scotland's Census 2021. In particular, it was pointed out that HM Revenue and Customs (HMRC) and Department for Work and Pensions (DWP) already collect information on the income of the population.
- 2.88 A household income question was taken into quantitative testing. Demands for space in the census are high. Based on this and the strong user need identified across other potential questions, it was considered more likely that if an income question were to be included in Scotland's Census 2021, there was a higher potential to be included in the household question set, rather than the individual question set.

³⁰ Moore, J., Stinson, L. L., Welniak, E. J. Jr (2000) 'Income Measurement Error in Surveys', *Journal of Official Statistics*, 16(4), pp. 331-61

- 2.89 In total, 90% of participants provided a valid response to the question on household income. An invalid response was given by 10% of participants. Comparison of the test data with the Family Resources Survey data indicates significant under reporting of income for those with annual household income between £15,600 and £36,399. These tend to be groups with more than one adult in the household, and therefore multiple sources of income. These are also the groups more likely to have a mix of earnings and benefit income.
- 2.90 Overall, 35 participants dropped out of the survey. Of these 43% dropped out at the income question indicating lower acceptability of the income question. Of those that did complete, nearly 10% of respondents chose not to answer the income question (item non-response). Seventy two respondents provided feedback to the income question. Feedback from the income question shows respondents had difficulty in answering the question accurately, or found the question to be less acceptable for inclusion in the census. Over half of respondents who provided feedback noted that income is personal and private, so were not accepting of inclusion in the census. Nearly half noted difficulties in reporting income accurately.
- 2.91 These findings are consistent with international evidence on the use of surveys to collect income information. Therefore, it is proposed not to ask a household income question. Further information on all of the work and testing that was done around income can be found in the Income Topic Report³¹.
- 2.92 Other questions considered but not at present included in the proposals are:
 - **Number of rooms** this has been replaced with number of bedrooms, as this is accepted as providing better quality data for the identified user needs.
 - **Volunteering**³² evaluation shows a volunteering question has a low to medium criteria for inclusion in Scotland's Census 2021. The consultation identified a user need for information on

www.scotlandscensus.gov.uk/documents/census2021/Income_Topic_Report.pdf

www.scotlandscensus.gov.uk/documents/census2021/Volunteering_Topic_Report.pdf

³¹ Income Topic Report

³² Voluntary and Unpaid Work Topic Report

volunteering, but that the census would not be the most appropriate method of collecting this information. There are data quality concerns with collecting this information in the census, and the Scottish Household Survey currently includes questions on the frequency, number of hours and nature of volunteering.

- Multilingualism there have been requests for the collection of data on all languages spoken. However, there is higher user demand for the inclusion of questions on main language other than English for service planning and provision.
- Second address relatively limited Scottish user need was
 expressed for this information, particularly as a single question
 does not go far enough to meet need. There are also reservations
 about the quality of the data that would be collected, and there are
 alternative sources of information on second homes such as
 council tax registers.
- Intended length of stay may identify people in the country for short periods of time (short term migrants). However, the question is subjective (questions of this type are not generally thought appropriate for the census) and complex for non-UK born respondents to answer, raising concerns about the quality of data it would yield.
- Reason for Migration may identify international and internal
 migration. However, the census is not the appropriate vehicle for
 collecting this type of information as the question is subjective
 (questions of this type are not generally thought appropriate for the
 census). Multiple questions would be required to meet a moderate
 user need and some alternative data sources are available.
- Technology / digital some requests were made for collection of information related to technology and digital issues access to the internet and digital skills (including use of devices) and issues related to digital exclusion, due to the increasing importance of digital connectivity to the delivery of public services and lifestyle. However, given the rate at which technology and issues related to digital change, any information collected by the census would quickly be out of date and it is therefore not an appropriate to collect in Scotland's Census 2021.

2.93 Further details on the work around all of these questions can be found in the relevant topic report(s).

3. Collecting the information

3.1 Extensive efforts will be made to collect information from everyone in the country; however it is recognised that changes in society mean that it is becoming increasingly difficult to make contact with people and households, especially in cities. These changes include: an increasingly ageing population; a more mobile population with more complex living arrangements; changing work patterns; and greater numbers of single-person households. All these factors make it challenging to identify and gather information about the population in the right place. Ensuring that every household and communal establishment resident has the means to respond to the census (and is motivated to complete it) is central to the design and planning of all operations.

Enumerating households

- 3.2 Census day is planned for 21 March 2021 and households will be instructed to complete the census on or around that date. Current plans have census enumeration activities taking place from approximately four weeks before census day to approximately six weeks after census day.
- 3.3 Scotland's Census 2021 will be primarily online. As part of the change for the online focus, a paper Census questionnaire will no longer be hand delivered by census staff to every household. Initial information will be sent to households around three weeks in advance census day to the majority of addresses. These materials will include information about the census and will contain a unique internet access code to enable completion of the census online.
- 3.4 The information will be sent to all residential addresses in Scotland. The address list used for Scotland's Census 2021 will be created by NRS and is mainly based on the One Scotland Gazetteer and other sources which are used to produce the Scotlish Address Directory.
- 3.5 All households will be encouraged to self-respond online. However not everyone will be able to complete their census online without additional help. Therefore there will be extensive help available through public assistance channels (e.g. telephone and online) and there will be help available through local support hubs. Consideration is also on-going

as to whether there are a small number of areas which will receive paper questionnaires along with the initial contact materials.

- 3.6 It will also be possible to request a paper questionnaire to complete a census return. Each paper census questionnaire pack will contain a pre-paid envelope for the return of the completed questionnaire by post. The paper questionnaire can be posted back by the respondent or can be collected by a field worker at a non-response follow up visit.
- 3.7 NRS are working to make the census as easy to complete as possible and will be carrying on testing online and paper questionnaires over the forthcoming months. There will be a range of help available to all households via the website with guidance and further information on:
 - 'how to complete' instructions along with the questionnaire;
 - field worker assistance on the doorstep;
 - the telephone helpline; and
 - support hubs.

The web address will be on all letters and publicity materials.

3.8 Both the paper and internet versions of the questionnaire will comply with accessibility guidelines. Large print questionnaires will be available.

People for who are unable to complete either online or on paper will be able to complete their questionnaire over the telephone.

3.9 Every effort will also be made to provide help through voluntary and community groups, particularly for people who do not understand English well or who have difficulty reading. A Scottish Gaelic version of the census questionnaire will be available on the internet. The current proposal is the paper questionnaire will be available only in English but language support leaflets will be available in Gaelic and the most common community languages. We will be testing our approach and consulting with key stakeholders.

Field follow up for households

- 3.10 Completion of a census return is a legal requirement. NRS will therefore follow up on all households who do not complete online or on paper, to ensure that a complete and valid return is made. There will be two forms of follow up: reminders, and then visits. The type and amount of non-response follow up will be flexible and will depend on a number of factors, including area characteristics and overall area return rates, previous follow up activity and time since census day.
- 3.11 For the majority of households who do not provide a census response by a specified date, the initial follow up will be through reminder letter(s). The letter people receive will be designed to be easily understood and accessible. If reminder letters do not lead to a completed return, households will be visited by field workers to encourage completion of the questionnaire. At a certain point after census date, paper questionnaires may be posted to non-responding households to encourage late submissions.
- 3.12 It is an offence under the Census Act, liable to prosecution and a fine, to refuse to complete and return the census questionnaire. The census aims to cover the whole population and has particular value to its users because of this. Given this, it is necessary to adopt a clear policy of prosecuting offenders. That is however the last resort: the aim will be to get a completed questionnaire, not a successful prosecution.

Field organisation

- 3.13 The organisation and management of the field operation is being modernised for 2021 to ensure efficient and effective use of resources.
- 3.14 Scotland will be divided into a number of census field work areas (approximately 160) which are geographic areas to be used during the census to plan and operate field work. Within each field work area there will be a number of planning areas which will be used to plan and operate field work, and they will also be used for census data processing. There will be around 8,500 planning areas in Scotland. Each

field work area will have a number of field workers and team leads assigned to them.

- 3.15 Field workers will be the main contact with the general public. They will be responsible for supporting and encouraging members of the public to complete census responses by visiting residential addresses which have not returned a completed census response.
- 3.16 Field workers will be equipped with an electronic mobile device and a work schedule of addresses to visit each day. They will carry a stock of paper questionnaires for the households who wish to complete their census on paper and will be able to order new internet access codes and paper questionnaires at the householder's request.
- 3.17 The selection of addresses to visit will be created daily and will be based on the list of outstanding census returns. The allocation will ensure the most efficient deployment of field workers. At the end of follow up all non-responding addresses will have received at least one visit and there will be a maximum number of follow up visits for each address.

Arrangements for communal establishments

- 3.18 Communal establishments include health and care establishments, access restricted establishments such as prisons, educational establishments, student halls of residence and other managed locations such as holiday camps and hotels. As in previous censuses, there will be different arrangements for enumeration of communal establishments.
- 3.19 To ensure efficient and effective enumeration during the 2021 Census, specific enumeration strategies are being developed for each communal establishment 'type' based on similarity of enumeration approach rather than any similarity of residents. It is currently planned that:
 - care homes, staff/worker accommodation and religious establishments will be enumerated in one day with the help of our field workers. Field workers will arrange a suitable day to visit the

establishment and collect on their mobile devices the residents' census responses. Paper questionnaires will also be available;

- hospitals, prisons and detention centres, hotels, guest houses, B&Bs, youth hostels (those establishments with 30 and over bed spaces) and other establishments, will be provided with paper questionnaires to complete. With the exception of prisons, the paper questionnaires for all these establishments will have an internet access code on them so respondents are able to complete online if they choose;
- halls of residence and armed forces bases and other armed forces establishments will be enumerated in a similar way to households in that they will be sent an internet access code to allow online completion. They will be sent their initial materials earlier than households in an attempt to avoid the effect of the Easter holidays. Armed forces are unique in the way that they are controlled by the UK government and therefore the approach is co-ordinated with the Office of National Statistics. Engagement with the Ministry of Defence is on-going and will determine the specific details for the enumeration of this group;
- arrangements for the enumeration of educational establishments and residential children's homes are still under consideration.
- 3.20 Homeless people in homeless shelters and hostels as well as those sleeping rough will be provided with paper questionnaires, but they will also be offered the option of completing online. Homeless people sleeping rough will be enumerated at locations which provide services to visit the homeless on a daily basis. NRS will be pre-arranging which services to go to and will be working with staff from the organisations who run these services and relevant third sector charities.
- 3.21 People living in communal establishments will not be asked about the accommodation, nor will information on relationship to any other person within the establishment be collected. Data about the type of communal establishment will be collected separately, from the manager or other person in charge of the establishment. Information such as

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number of bed rooms, bed spaces and usual residents, is expected to be obtained from the communal establishment management in advance of the census operation.

Populations who have alternative living arrangements

3.22 A number of population groups, with specific characteristics, or corresponding lifestyles which do not allow enumeration to take place using standard design models (household or communal establishment) require a bespoke approach to maximise census returns. The main difference in approach for these population groups will be in the initial contact. Instead of posting their initial pack out to them, they will all receive a visit from a field worker. In some cases the field worker will be accompanied by someone who is frequently involved with the population group of interest and therefore likely to already have built a relationship with them. The purpose of these visits will vary depending on the group, however one of the main objectives will be to determine whether there are any 'usual residents' at the addresses, according to the census definition. These visits will take place at the same time as the initial materials are sent out to households. Follow up for these groups will be similar to households.

Community involvement

- 3.23 Full enumeration depends on ensuring that the people of Scotland know about the importance of the census to them personally, are motivated and are provided with the support they need to complete their questionnaires. To foster this we have been engaging with various groups around their needs and refining our public assistance offers to suit this.
- 3.24 The aim will be to provide support at a local and community level through a network of locally based support hubs, in key locations across Scotland such as libraries, churches, public and third sector buildings, schools, leisure centres, community hubs, shopping centres.

- 3.25 The support hubs will be accessible to all groups in the community or area that it serves and will provide a range of drop in services to meet public needs including internet and PC access.
- 3.26 An extensive programme of community engagement will seek to build local knowledge, relationships and engagement strategies with local authorities, Third Sector and community organisations across the whole of Scotland, with a particular emphasis on those groups who are considered to be most at risk of non-participation in the census, whether that be due to physical, circumstantial or motivational barriers.

Publicity and public relations

- 3.37 It would be impossible to carry out a census without the willing cooperation of the public. NRS will, in close co-operation with the census offices in the rest of the UK, arrange publicity to:
 - explain the purpose and value of the census;
 - encourage householders to return completed questionnaires;
 - ensure that they know when and how to do so;
 - · provide assurances about confidentiality; and
 - deal with other matters of public concern as they arise.
- 3.38 There will be a wide publicity programme to provide information and education about the census to stakeholders, the media, the public and users of the statistical results. There will be comprehensive information on the websites, social media and other channels and there will be events and meetings and direct engagement with members of the public and key stakeholders. Publicity will feature national and local advertising across a wide range of media and will increase as census day approaches to provide the most effective messaging at the right times. Public relations activities will complement publicity work seeking to maximise the public profile of the census using innovative and imaginative techniques.
- 3.39 The most appropriate branding for Scotland's Census 2021 is being considered to ensure a strong, user-tested brand is used

consistently across all of the creative themes, publicity and contact materials, to promote trust and public awareness of the census.

Post-census follow up

- 3.40 Despite the best efforts of the field force, it is inevitable that responses will not be received from all households. In 2011, it was estimated that 6% of the population were missing in Scotland as a whole that figure varied across subgroups and different parts of the country. Since census statistics are used for many purposes which require complete and accurate information, it is important to correct for that undercount.
- 3.41 One of the aims of Scotland's Census 2021 is to provide complete and accurate statistics on a consistent and comparable basis nationally for small areas and small population groups. To help achieve this the census data will be compared against information from other sources, both during the census and before the results are released.
- 3.42 A post Census Coverage Survey (CCS) will be carried out, which is the key source of information on the extent and distribution of coverage both under and over-count. It will be an independent and more concentrated sample survey carried out approximately six weeks after the census and involves a short interview of households and people within households to collect basic demographic characteristics such as age, sex, marital status, ethnic group and economic activity. The information obtained from the survey will be used, in conjunction with the census data itself, to correct for undercount and over-count and will help produce a consistent set of statistics. This approach will develop and improve the methodology adopted for the 2001 and 2011 censuses which was widely welcomed by users. NRS will work closely with the other UK census offices to ensure that a consistent approach to post census adjustment is applied across the UK to guarantee comparable population counts.
- 3.43 There will also be a small and separate Census Quality Survey (CQS) after the census to measure the accuracy of responses to individual questions.

4. Processing the data and publishing the results

- 4.1 The investment of time and resources in a national census is only justified if the results are made available quickly and in a clear and usable form for all users. The aim is to harness current technology to improve the quality, timeliness, accessibility and user-friendliness of published outputs. The outputs will be available for the whole of Scotland down to very small levels of geography. In co-operation with the other UK census offices, NRS will also contribute to UK-wide statistics for all questions which are the same or similar across the UK.
- 4.2 There is a vast amount of information to be processed once the completed census questionnaires have been returned. The work needs to be done quickly, to avoid delay in publishing the results. There are a number of data processing steps which need to be undertaken to obtain a complete and accurate dataset ready for output purposes.

Data capture

- 4.3 The aim is for the majority of 2021 Census returns to be received online so the data for these responses will already be in electronic format. For paper returns, the questionnaires will need to be scanned and the information turned into an electronic format.
- 4.4 The progress and quality of both the online and paper data capture processes will be monitored during live operation to ensure quality. The paper data capture system will be required to provide data in electronic format as well as digital images of the questionnaires. Once these have been checked and securely archived the paper questionnaires will be destroyed (as was done in the 2011 Census) in line with government security guidelines, protecting the privacy of census information while allowing paper questionnaires to be recycled. All systems and storage media will be securely erased, in accordance with government security standards.

Coding

4.5 All captured values need to be assigned a code value to produce a statistical dataset. It is intended that as much coding as possible will be completed automatically through the online collection process and through the coding software available to the paper capture facility. A manual operation will be required for cases where automatic coding is not possible. Automatic coding will be easier for some questions than others. For example, questions requiring a numeric or tick box response will be very straightforward to code, but free-text responses can be complex due to the infinite number of possible responses.

Downstream processing

- 4.6 Once coded the data need to go through various steps to ensure they will produce reliable outputs which meet users' needs. As a first step, all online and paper returns have to be amalgamated and reconciled to remove duplicate questionnaires or people and ensure all people are linked to a household or communal establishment. This will include checks to confirm a minimum amount of information is available to determine a true response. The data itself is then modified to complete any missing responses, correct data captured by mistake, remove inconsistencies, adjust for those missed by the census and prepare the data for dissemination to users.
- 4.7 The systems developed to clean and adjust the data are known as 'downstream processing', since they are carried out 'downstream' of data capture and coding operations. These processes will be mainly automatic and will be based on complex statistical algorithms supported by occasional manual intervention. Downstream processing will be carried out by NRS staff and will begin as soon as data is ready.
- 4.8 Inconsistent or partially-completed responses will be edited according to pre-defined rules if the answer is incompatible with the rest of the responses on the questionnaire. For example, a person recorded as being aged under 16 should not answer questions about economic activity. Where some questions have not been completed, a response will be imputed in such a way that it will be consistent with other answers in the questionnaire based on responses from those living in similar

households or with similar demographic profiles. This edit and imputation process ensures that the results of the census are complete and consistent. It is a standard statistical process, used successfully since the 1981 Census.

- 4.9 Complete and consistent results mean that the final statistical tables will have no gaps arising from 'not known' or 'not stated' responses (other than for any voluntary questions). This avoids users having to make their own estimates for missing values, since NRS is in a better position than the user to correct for incomplete or invalid responses or to estimate accurately the values of derived variables that were based on more than one item.
- 4.10 To adjust for under coverage the information from the CCS will be matched, for each household, to the corresponding census return from that household. That will allow the number and characteristics of those missed by the census to be estimated. The people and households estimated to have been missed will then be added to the database and any missing information imputed as before. This technique, called the 'One Number Census', was used in both 2001 and 2011. NRS are investigating whether the use of more timely field work outcomes and use of administrative data will improve this approach.

Quality assurance

- 4.11 Quality assurance will be carried out to make corrections designed to improve the quality of census data and to ensure that the totals are plausible. The strategy for improving quality will be a balance between the improvement gained and the time and resource required. Quality assurance of the results of the census will be carried out throughout the process to ensure:
 - that changes made within each of the processes are robust and do not introduce systematic error; and
 - that the national and sub-national (in particular council area) estimates are plausible when compared with data from administrative sources and demographic comparators.

Output production

- 4.12 As required by the Census Act, reports on the results from Scotland Census 2021 will be laid before the Scottish Parliament and published. At the same time all of these reports and associated tables will be made available for free public dissemination, primarily online, in formats which meet the needs of users. As far as possible, national and local outputs will be provided free of charge online.
- 4.13 The plans for the 2021 Census build further on the dissemination approach used in 2011. In addition to users being able to select from a set of pre-created tables, the plan is to enable users to create their own tables online (subject to a series of controls to protect confidentiality). In co-operation with the other UK census offices, fully-comparable UK statistics will be made available online.
- 4.14 Demand for hard copy publications has substantially reduced, however hard copies of selected summary publications will still be produced and print-outs of electronic publications will be available on request, to meet users' particular needs. NRS will continue to offer a customer service to allow users a simple, cost-effective and rapid way of requesting non-standard statistical abstracts.
- 4.15 The main national and local results will be released according to a pre-announced timetable, as speedily as possible over a short period of time once processing is completed and the total population of the country has been determined.
- 4.16 Products will be developed to allow statistical and geographical information to be delivered together, for use with geographical information systems, giving as much flexibility as possible commensurate with the confidentiality of personal information. Metadata, in the form of definitions, classifications and quality indicators, will also be produced for use with the statistical outputs. These will include, confidence intervals and other quality measures and information from post-census coverage and quality surveys such as local coverage rates, item non-response and imputation rates.

- 4.17 Samples of Anonymised Records (SARs) of people and households will continue to be made available to approved researchers so that they may carry out their own analyses that are not possible using aggregate data. Such access will be subject to the overriding need to ensure complete confidentiality of personal data. SARs constitute small proportions (one, five or ten per cent) of randomly selected census records. The data are completely anonymised so that no individuals from the census can be identified. No names or addresses are included in the SARs, variables are combined and classified in wider ranges, and only very limited geographical details are provided.
- 4.18 Data from the 2021 Census will be added to the Scottish Longitudinal Study (SLS) which already links the 1991, 2001 and 2011 Census records for a 5% sample of the population of Scotland. The SLS is covered by the same rigorous confidentiality conditions as the census itself and records are only made available to researchers in an anonymised form.
- 4.19 As a result of the United Kingdom's planned departure from the European Union in March 2019, the Scottish Government may no longer be legally required to provide the European Union with statistical results from Scotland's Census 2021. However, data will still be providing to the Office for National Statistics (ONS) so that they can supply the set of pre-specified statistical cross-tabulations to Eurostat. This will enable Scottish census data to be compared to other European census data which will be useful for benchmarking purposes.
- 4.20 Outputs from the census are therefore being geared to the needs of different user communities the general public, local authorities and other major users, academic researchers, the European Union and others. NRS has already begun engaging with users around the content, format, timing and method for the release of 2021 census outputs and will continue to engage with users over the next few years to ensure that the outputs produced meet a wide range of user needs. The overriding principle, applying to all outputs, is avoiding disclosure of information about identifiable individuals through the statistical results of the census.

Output geography

4.21 Statistical results will be made available at varying levels of detail, for different geographical areas, subject to the overriding requirement to protect the confidentiality of personal information. The geographical aggregations will be created essentially from the same building bricks as in the 2011 Census - Output Areas. Output Areas are created using information from census returns and have a minimum size of 20 households and 50 individuals. Output Areas were first used to disseminate statistics from the 1991 Census and are the smallest area for which the census statistics are produced, while preserving the confidentiality of individuals. Any area for which census output is produced is the aggregation of Output Areas that exactly fit, or approximate best fit to, that area. Output Areas can therefore be aggregated to give information for a wide range of geographical areas including electoral wards, Scottish parliamentary constituencies, local authority and NHS board areas - and data zones, which are the stable statistical areas used on the Scottish open data platform.

4.22 For 2021, as with previous years, each Output Area will be a group of neighbouring postcodes nesting into the local authority area. As far as possible, the boundaries of 2011 Output Areas will be kept constant for 2021, to allow comparison between the two censuses. Where there are areas with significant population change or housing development, it will be necessary to create revised boundaries to ensure that the key criteria of size and homogeneity are followed. The number of such changes will be minimised and will normally involve splitting or merging existing Output Areas to minimise the effect on larger geographical areas.

5. Confidentiality, privacy and computer security

5.1 The census aims to cover the whole population and has enormous value to its users because of this. It is particularly important that we ensure the information respondents provide is treated with the strictest confidentiality. As well as the legal obligations under data protection legislation, section eight of the Census Act 1920 (as amended by the Census (Confidentiality) Act 1991) makes it a specific offence for anyone involved in running the census to disclose any personal census information. Indeed it is an explicit top-level objective of the census to "protect, and be seen to protect, confidential information."

Confidentiality principles

- 5.2 The Registrar General for Scotland is responsible for taking Scotland's Census. As in previous censuses, they will give a personal promise, on the front of the census questionnaire, that the information which people provide will be used only for statistical purposes and will be treated in strict confidence. The Registrar General and their staff in NRS have a well-established reputation of maintaining census confidentiality, which they are determined to maintain. That confidentiality promise will be reinforced by publicity in the run up to the census.
- 5.3 The personal information collected in the 2021 Census will be accessible only by the necessary minimum number of people, who will be under strict instructions to keep it entirely confidential, in accordance with the relevant legislation. No personal census information will be published until 100 years later, and statistical outputs will be carefully anonymised to preserve confidentiality. Census data is specifically excluded from release under the Freedom of Information (Scotland) Act 2002, until the 100 year point.
- 5.4 The Registrar General, their staff and all contractors will be required to abide by Data Protection legislation, specifically the EU General Data Protection Regulation and the UK Data Protection Act 2018. This will include controls regarding employment of data processors and any transfers of personal data outside of the EEA.

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- 5.5 The security and confidentiality arrangements for the collection and processing of census questionnaires will be subject to independent review. The Registrar General will ensure that the Scottish Parliament is informed, before the census, of the outcome of that review.
- 5.6 An initial Census Data Protection Impact Assessment (previously known as a Privacy Impact Assessment) has been published on Scotland's Census website. Census staff are engaged with the Information Commissioner's Office to ensure that this is as comprehensive and informative as practical. Throughout the period of the census programme, this will be updated and the new versions published.
- 5.7 All sites where census data is processed will have appropriate and continuous physical security.

Confidentiality: households and individuals

- 5.8 The householder will normally be responsible for providing the information on the questionnaire for the whole household.
- 5.9 People who do not wish to reveal their personal details to other members of their household will be able, in confidence, to request an individual questionnaire online. The individual can then complete an individual return maintaining their privacy. Neither the householder nor any other member of the household will be aware others in their household have requested an individual questionnaire, so allowing individuals to provide their data in a confidential way. Individuals will also be able to complete the census on a range of devices, including by mobile phone, so that they will have the opportunity to complete an individual return in complete privacy.
- 5.10 Similar arrangements will be made for people in 'communal establishments' such as hotels and care homes, and for those who may have difficulty in completing a questionnaire unaided. This is especially important, given the sensitive nature of some questions in the census.

Confidentiality: staff in the census organisation

- 5.11 During the census, personal census information will be accessible only to the staff of the Registrar General (including, of course, the staff recruited temporarily as field workers). A strictly limited number of staff working for firms under contract to the Registrar General will also have access to personal census information where it is necessary for them to process the completed questionnaires.
- 5.12 All staff working on the census, regardless of their employer and their level of access, with be required to undertake training and will be given strict instructions on the importance of safeguarding the confidentiality of personal census information, including avoiding accidental disclosure. They will be required to sign a declaration that they will not, without lawful authority, divulge or make use of any information acquired in the course of their duties and that they are aware that they will be liable to prosecution for any breaches of Section Eight of the Census Act 1920. Before appointment, they will be subject to formal vetting, including a Disclosure Scotland check, and cleared to handle census information.

Confidentiality: contractors

- 5.13 These safeguards apply equally to staff employed by any contractors supporting the census. Access to data in partial or completed census questionnaires will be strictly limited to a 'need to know' basis with controls in place to prevent access by IT administrative and other support staff.
- 5.14 The contracts under which contractors are appointed include specific details of the security arrangements which must be applied to census information, contravention of which can lead to the termination of the contract.
- 5.15 Processing of census questionnaire information will be restricted to locations within the UK. Where other census information will be processed in other jurisdictions, this will be explicitly stated in the Data Protection Impact Assessment.

- 5.16 Where data is processed in jurisdictions or by organisations where it might be subject to lawful seizure by a non-UK authority, contractors are required to provide explicit safeguards against such activity. Where this is not possible, the Registrar General will refuse to consider an organisation as an appropriate contractor and will terminate existing contracts.
- 5.17 As the Data Controller, the Registrar General is satisfied that these safeguards ensure that the security of personal census information will not be prejudiced during collection and subsequent processing. The Registrar General will continue to provide public assurances on that matter in the run up to the census itself.

Confidentiality: IT systems

- 5.18 Census will strictly observe standard government security requirements for IT systems, including independent verification of organisational and technical security measures. All census systems will be subject to penetration testing, through the National Cyber Security Centre (NCSC) "CHECK" scheme, before being approved for use, and ongoing vulnerability monitoring will be in place throughout the census period.
- 5.19 As this census is intended to be completed online by the majority of respondents, in line with the Scottish Government digital strategy and the "Digital First Service Standards", special care will be taken with those systems directly processing census responses.
- 5.20 All systems supporting census activities will be subject to comprehensive monitoring of their security status. Staff from both National Records of Scotland and the Scottish Government Information and Technology Services division will be involved in conducting the security monitoring.

Statistical confidentiality and disclosure control

- 5.21 To ensure that published tabulations and abstracts of statistical data do not accidentally reveal personal information, special arrangements ('statistical disclosure control') will be put in place, especially for statistical outputs for small areas. They will include some or all of the following procedures:
 - restricting the number of output categories into which a variable may be classified, for example by aggregating age groups;
 - where the number of people or households in an area falls below a minimum threshold, amalgamating the statistical output – except for basic head counts – with a sufficiently large neighbouring area; and
 - modifying some of the data before the statistics are released through one or more of a variety of means such as record swapping, over-imputation and cell perturbation.
- 5.22 The Registrar General for Scotland, together with the Registrar General for Northern Ireland and the National Statistician, published a joint agreement to adopt a common statistical disclosure control policy for the 2021 Census, similar to the one published for the 2011 Census. The agreement for the 2021 Census is based on the data governance principle set out in the Code of Practice for Statistics Edition 2.0, which includes the practice statement that 'Appropriate disclosure control methods should be applied before releasing statistics and data'.
- 5.23 The statistical disclosure control methods that will be applied to the 2021 Census data are still being developed but are similar to those applied in Scotland in 2011. The Registrars General and the National Statistician will make the judgement on whether the proposed statistical disclosure control methods are appropriate, in consultation with the users and other experts based on the results from research into the balance of protection afforded, and damage to data utility. Details of the statistical disclosure control methods that will be used for the 2021 Census will be published once they have been agreed by the Registrars General and the National Statistician.

Wider use of census data

- 5.24 Personal census data are invaluable for statistical research in the public interest. Ensuring researchers and analysts have trustworthy, secure, timely and efficient access to data, enables research and innovation that addresses societal challenges. Data linkage allows for a wealth of information to be brought together to answer a research question or produce statistics, that could not be done using a single data set, harnessing the power of linked de-identified data to bring demonstrable improvements to people's lives through research, evaluation, planning and policy making.
- 5.25 The Registrar General will allow access to census data linked to other data but only for approved researchers for whom the census data is the only suitable source of information. They will only be given access to the census data in a secure environment to prepare statistics, having signed the same statutory confidentiality statement as the Registrar General's own staff. They will not be able to remove from the secure environment any data disclosing personal census information, and their reports will be vetted by the Registrar General's staff to ensure that they do not breach the confidentiality of personal census information.
- 5.26 For example the SLS contains linked census, vital events and education data for a five per cent sample of the population of Scotland. Access is strictly controlled and only approved researchers have controlled access to the data for approved projects. This and other linkage projects are helping to improve the evidence base to address issues such as inequalities in public health in Scotland.
- 5.27 Personal census data will also be invaluable for making recommendations on our future approach to censuses in Scotland. Information collected in 2021 will be used to assess the quality of potential alternatives to a census and may be used to help develop alternatives. The data may also be used in linkage projects to produce additional outputs combining census and administrative data to offer additional insights to the evidence base.

5.28 During the census faults will inevitably be discovered in the address list. The correct information may be supplied to the Royal Mail (to improve the Postal Address File) and to Scottish local authorities (to improve the One Scotland Gazetteer). No information about persons living at these addresses will, however, be shared.

Privacy and the Human Rights Act

5.29 The Registrar General is satisfied that statutory authority to require information to be provided on each of the questions proposed for Scotland's Census 2021 is fully compliant with the European Convention on Human Rights, the Human Rights Act 1998 and Scotland Act 1998 in respect to the individual's right to privacy. The Registrar General recognises that some of the proposed questions raise especial privacy concerns and, where lawful and practical, it is intended that these questions will be made voluntary.

6. Legislative process

Primary Census legislation

- 6.1 The primary legislation that allows a census to be taken in Scotland is the Census Act 1920 as amended by the Census (Amendment) (Scotland) Act 2000, which paved the way for the (voluntary) question on religion in the 2001 Census.
- 6.2 The Schedule to the Census Act 1920 authorises the following topics for inclusion in the census:
 - name, sex, age;
 - occupation, profession, trade or employment;
 - nationality, birth place, race and language;
 - place of abode and character of dwelling;
 - condition as to marriage or civil partnership, relation to head of family, issue born in marriage;
 - religion; and
 - any other matters where statistical information can help to establish the social or civil condition of the population.
- 6.3 On 4 September 2018, as part of the Scottish Government's Programme for 2018-19, the First Minister announced that the Scottish Government will introduce a Bill to permit National Records of Scotland to ask voluntary questions on sexual orientation and transgender status/history in the 2021 census and future censuses. Current legislation dictates that people who are required to complete census returns are obliged to answer all the census questions (apart from questions on religion), as refusing or neglecting to do so is an offence under the 1920 Act. The proposed Bill will allow these questions to be placed on a voluntary basis by amending the penalty provisions in the 1920 Act. This approach was taken in relation to the question on religion when it was included for the first time in the 2001 Census.

Secondary legislation

- 6.4 Scottish Ministers will seek the approval of the Scottish Parliament to a draft Order in Council to authorise the taking of the 2021 Census in Scotland. Under the terms of Section 1 of the Act, the Order in Council will prescribe:
 - the date on which the census is to be taken; and
 - the persons by whom, and about whom, census returns are made; and the particulars to be stated in the returns.

The draft Order will be laid before Parliament in late 2019 subject to the legislative priorities.

- 6.5 Following the approval of the Census Order, Scottish Ministers will lay before Parliament (in early 2020 subject to the legislative agenda) the Census Regulations which will make detailed provision for the conduct of the census in Scotland and will contain specimens of the questionnaires to be used.
- 6.6 The Regulations principally cover the field activities such as:
 - the appointment of field staff;
 - the geography of the census the division of the country into areas for enumeration and the checking of address;
 - the arrangements for the delivery of the census questionnaire to households and communal establishments;
 - the collection of completed returns by post, telephone or via the internet;
 - the duties of field staff and, specifically, the details of any particulars to be collected by them;
 - any information relating to special arrangements for the enumeration of particular populations such as people who are sleeping rough;
 - follow-up and non-compliance procedures;
 - the management of field materials and documentation; and

- security and confidentiality procedures.
- 6.7 Similar democratic authority will be sought for the taking of the census in England, Wales and Northern Ireland. The Orders and Regulations will take account of the importance of carrying out the census on the same day throughout the UK, and other harmonisation necessary to give ready access to UK-wide statistics.