# 2021 Census

# Northern Ireland Proposals Document

**April 2019** 



# Contents

Fo	Foreword4				
1.	Introduction				
	1.1.	Background	6		
	1.2.	The purpose of the census	6		
	1.3.	The decision on the census	8		
	1.4.	The date for the census	8		
	1.5.	Recommendations from the 2011 Census	9		
	1.6.	Key strategic objectives	9		
	1.7.	Key design elements and innovations	10		
	1.8.	Censuses in England & Wales, Scotland and the Republic of Ireland	12		
2.	Consultation, Research and Testing				
	2.1.	Introduction	14		
	2.2.	Consultation process	14		
	2.3.	Testing and Research	15		
	2.4.	2017 Census Test	16		
	2.5.	2017 Address check	17		
	2.6.	Topic expert meetings	17		
3.	Population base and topics to be covered in the census				
	3.1.	Introduction	18		
	3.2.	The population base	19		
	3.3.	Definitions	19		
	3.4.	Summary of selected topics	20		
	3.5.	Impact Assessments	22		
	3.6.	Proposed new topics	22		
	3.7.	Questions proposed to be asked at all addresses	25		
	3.8.	Questions proposed to be asked of each household	26		
	3.9.	Questions proposed to be asked of individuals	27		
	3.10	. Questions proposed to be asked about visitors	33		
	3.11	. Arrangements for communal establishments	33		
	3.12	. Questions not included	34		
	3.13	. 2011 Census topics not included	36		

4.	Collecting the Information	37	
	4.1. Introduction	37	
	4.2. Public support and publicity	38	
	4.3. Developing an Address Register	39	
	4.4. Initial contact with householders	39	
	4.5. Communal establishments / Special enumeration	39	
	4.6. Non-response follow-up	40	
	4.7. Enforcing the legal requirement to complete a census questionnaire	40	
	4.8. Outsourcing parts of the census operation	40	
	4.9. Questionnaire completion	41	
5.	Statistical data processing and Output production		
	5.1. Introduction	42	
	5.2. Data capture and coding	42	
	5.3. Statistical data processing	42	
	5.4. Enhanced Census Output variables	44	
	5.5. Output geography	44	
	5.6. Quality Assurance processes	45	
	5.7. Output production processes	45	
6.	Confidentiality, Privacy and Security		
	6.1. Introduction	47	
	6.2. Legal obligations	48	
	6.3. System security	48	
	6.4. Statistical Disclosure Control (SDC)	49	
7.	The Legislative Process	51	
	7.1. Primary census legislation	51	
	7.2 Secondary legislation	51	

#### **Foreword**



This document sets out my proposals for the 2021 Census in Northern Ireland. Once every ten years the census provides an opportunity to build a detailed and comprehensive picture of the population, reflecting everyone in our society. The results are invaluable for policy formation, planning services and the effective targeting of resources. Only the census provides consistent statistics for small areas and population groups across Northern Ireland and it is used as a reference base for many statistical series such as population estimates and social surveys.

Officials have consulted widely with census users and other stakeholders in planning the design of the 2021 Census. Lessons have been learned both from the 2011 Census and international census experience. This has helped shape these detailed proposals for the conduct of the 2021 Census.

For the first time it is proposed that the census will be primarily online and consequently more convenient to complete for the majority of the population. However, paper questionnaires will be provided for those unable or unwilling to complete the census online. To ensure that this census will be as inclusive as possible, Census Office will offer a full range of support services including face-to-face assistance, a contact centre that will provide guidance and help via telephone and broadcast advice including social media. Census materials will be available in Braille and translations of the questionnaire and supporting materials will be available in a large number of languages. As in 2011, administrative data will be used to supplement census data in line with international best practice.

All standard outputs will be publicly accessible online from the Northern Ireland Statistics and Research Agency website – www.nisra.gov.uk. Census Office aim to release census findings more quickly and provide the data in a more flexible way.

Protecting the confidentiality of personal information is and will continue to be of paramount importance. Every person's identity will be protected, not only through secure handling and storage of their data, but also by ensuring that our statistical publications do not identify individuals. Strong sanctions are in place to deter the disclosing of personal information.

These proposals relate to the census in Northern Ireland only. They would normally have been considered and approved by the Minister of Finance, the Northern Ireland Executive and the Northern Ireland Assembly. The census is subject to separate legislative processes and arrangements in Great Britain. There, Ministers have presented proposals to the Westminster Parliament and the National Assembly for Wales in respect of England and

Wales, and to the Scottish Parliament in respect of Scotland. It is planned that the necessary legislation to conduct a census will be taken through the Northern Ireland Assembly. In the event that a Northern Ireland Executive has not been formed when this legislation needs to be introduced, the Department will write to the Secretary of State for Northern Ireland requesting that she sponsor this legislation at Westminster.

These proposals are aimed at delivering a high quality census in a cost-effective manner. The success of the census is dependent on the support, co-operation and participation of the public on whose behalf the information is collected. I invite everyone in Northern Ireland to help shape our future through participating in the 2021 Census.

Ms Siobhan Carey CBE,

**Registrar General for Northern Ireland** 

# 1. Introduction

#### 1.1. Background

Subject to legislative approval, it is proposed that the next census in Northern Ireland should be taken on 21 March 2021. For the first time, it is proposed that the 2021 Census should be primarily online with most households receiving an invitation to fill out their questionnaire through a secure website. For the majority of householders this move will make the census easier to complete. That said, given the importance of ensuring that everyone takes part, those who want to can still complete their census questionnaire on paper.

This document sets out the Registrar General's proposals for the conduct of the 2021 Census and also describes plans leading to a full-scale census rehearsal in October 2019. Census Office, situated within the Northern Ireland Statistics and Research Agency (NISRA), will lead on the development and implementation of all elements of the 2021 Census.

These proposals would normally have been considered and approved by the Minister of Finance, the Northern Ireland Executive and the Northern Ireland Assembly. Given the current political situation this has not been possible. However, an exercise of the scale and nature of a census covering the whole population must be planned for well in advance. A full-scale census rehearsal in October 2019 is required to ensure that the systems and services used in the census are fully prepared. Therefore, in line with the position in Great Britain, the Registrar General's proposals are set out in this document to ensure the public is fully aware that a 2021 Census will take place and the broad picture of how it will be run.

In setting out these proposals, a large number of factors have been taken into account. These include how the 2011 Census was carried out, plans for the 2021 Census in the rest of the United Kingdom and Ireland, the public consultations already held, a series of test exercises run by NISRA and the need for the UK to provide statistical information to meet its international obligations.

This document sets out a number of chapters – this chapter is an introduction. There follows chapters on the consultation, research and testing that NISRA has carried out (chapter 2), proposals on the topics to be included on the questionnaire (chapter 3), proposals on how the census data will be collected (chapter 4) and a final series of technical chapters on statistical data processing (chapter 5), how the information will be held securely (chapter 6) and on legislation (chapter 7).

# 1.2. The purpose of the census

The data collected through the census provide an unparalleled source of consistent and comparable information on our population. Census information is used to inform

policy development, plan services and distribute resources. A number of key examples are given below:

- The census underpins annual population statistics which are used to allocate public funds. Examples include:
  - the UK Government uses these population statistics to allocate funding to Northern Ireland based on the Barnett formula; and
  - the Department of Health uses population statistics to allocate around £5bn each year to ensure that health services here reflect local needs.
- The census is used to inform the delivery of services. Examples include:
  - census data on age, sex, ethnicity, religion and other equality characteristics are used to measure the impact of new or existing policies; and
  - o census demography data (e.g. age and religion) are used to inform the future shape of the school estate.
- Demographic statistics are fundamental to the development of government policy. Examples include:
  - the measures in the outcomes-based draft Programme for Government rely on census statistics; and
  - area-based measures of social deprivation are underpinned by census population statistics.
- The private sector use census statistics to inform investment decisions and better understand demand for their services.
- Censuses are a rich source for genealogy and social research. Census statistics are a valuable source for those researching the social history of Northern Ireland.

More detail on the use of census data are available in a Benefits Realisation Report for the 2011 Census<sup>1</sup>. This report identified a wide variety of benefits from the statistics made available after the last census. Across the UK it is estimated that the census provides an identifiable benefit-to-cost ratio of more than four to one, with other unquantified benefits also available. In short, the census is a unique and valuable resource and, to ensure this applies after the next census, NISRA will work to maximise the promotion and use of census data.

<sup>&</sup>lt;sup>1</sup> https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2011-census-benefits-realisation-report.pdf

#### 1.3. The decision on the census

Carrying out a census is a large and complex task and planning for a census takes a long time. Following on from the 2011 Census, NISRA, along with other UK Census Offices, looked at other ways to collect and use such information. In 2014, NISRA recommended to the Finance Minister that a modernised census was the best way to meet this need.

This was accepted and NISRA published 'The Future Provision of Census of Population Information for Northern Ireland' in October 2014. The 2014 paper notes that, while significant research has been carried out:

"there was not sufficient evidence that using administrative data and surveys provides a methodologically sound basis for replacing the census."

As part of the work to deliver the 2021 Census, NISRA will consider the potential to use alternative approaches for any future census beyond 2021.

#### 1.4. The date for the census

The choice of a date for the census is important for planning and affects the quality of the data collected. The date for a census needs to be determined well in advance. Although the census does not have to relate to a specific day of the week, a Sunday has traditionally been chosen as the most likely time that people will be at home. In selecting the date a number of factors were taken into consideration:

- maximising the number of people present at their usual residence;
- maximising the number of students present at their term-time address;
- avoiding elections (when the publicity messages may get confused);
- harmonising the date of censuses across the UK;
- allowing sufficient hours of daylight for field work; and
- managing anticipated volumes of online traffic.

The proposed date for the next census in Northern Ireland is Sunday 21 March 2021. However, in order to manage demand for the online service and to help with planning, the census will be carried out over a three month period (March to May). The public will be able to make their census return prior to Census Day and indeed will be encouraged to respond as soon as they are notified.

 $<sup>^{2} \ \</sup>underline{\text{https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/the-future-provision-of-census-of-population-information-for-northern-ireland.pdf}$ 

#### 1.5. Recommendations from the 2011 Census

After every census a review is carried out to evaluate the key processes and identify improvements for the future. In Northern Ireland the outcome of that process was the 2011 Census General Report3 published in March 2015. The proposals for the 2021 Census take account of the lessons learned from the 2011 Census, these include the need to:

- create a central team to collect returns from Communal Establishments (e.g. nursing homes) and secure accommodation addresses;
- consider preparing different field strategies to maximise response rates for 'hard to reach' population groups;
- ensure that the development of post-collection data processing systems are undertaken earlier, so that a full end-to-end test can be undertaken; and
- develop a Community Liaison Strategy earlier in the census cycle.

Alongside this, NISRA will take cognisance of work being undertaken in the rest of the UK, Ireland and further afield.

# 1.6. Key strategic objectives

It is proposed that the key strategic objectives for the 2021 Census are:

- to provide high quality, value-for-money, fit-for-purpose statistics that meet user needs, and which are consistent, comparable and accessible across the UK;
- to protect, and be seen to protect, confidential personal census information;
- to deliver a high quality 2021 online census data collection operation;
- to maximise overall response rates and minimise differences in response rates in specific areas and among particular population groups;
- to secure public and user confidence in the final results and deliver them in a timely manner; and
- to encourage wider use and exploration of census results to facilitate greater benefits from census outputs.

<sup>3</sup> https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2011-census-general-report.pdf

# 1.7. Key design elements and innovations

In 2014 NISRA published 'The Future Provision of Census of Population Information for Northern Ireland'<sup>4</sup>. This document made initial proposals on the format and design of the 2021 Census. These included:

- a predominantly online census should be held in 2021 as a natural development to the traditional, paper-based census;
- where an online response is not received, field staff should follow up such households fully though doorstep contact and provision of paper questionnaires; and
- NISRA should make further use of administrative data to supplement the information from a census.

NISRA is committed to working jointly with the Office for National Statistics (ONS) on the procurement and delivery of key census systems and services. In addition, it is proposed that NISRA will process all the local census data collected and be responsible for designing systems to disseminate outputs.

NISRA has undertaken user engagement and detailed research – this has led to the proposed main elements of the 2021 Census design which are outlined below:

- the 2021 Census will cover everyone usually resident in Northern Ireland on census night, with a subset of information collected on visitors;
- information will be collected from households and residents in communal establishments;
- information will also be collected on vacant dwellings with no usual residents;
- the public will be encouraged to complete the census online and around 90% of households will receive an initial invitation to do so;
- paper questionnaires will be delivered to the remaining 10% of households (e.g. in areas of limited broadband connection);
- paper questionnaires will also be available on request;
- help will be available to anyone who has difficulty in completing the census questionnaire (whether completed online or on paper);

<sup>4</sup> https://www.nisra.gov.uk/publications/future-provision-census-population-information-northern-ireland

- reminder letters will be issued and field staff will follow-up when no response has been received:
- the 2021 Census questionnaire will be no longer, in terms of questions, than the 2011 Census questionnaire;
- some changes from the 2011 Census questions are currently proposed; These include:
  - a new household question on renewable energy systems;
  - a new individual question on sexual orientation;
  - a new individual question on apprenticeships;
  - an extended question on Irish and Ulster-Scots to gather frequency of use of these languages;
  - an extended question on the nature of long-term health conditions, to include Autism and Asperger syndrome;
  - amendments to a number of 2011 Census questions to ensure that they reflect current user need;
  - the removal of a household question on self-contained accommodation:
  - the removal of a household question on number of rooms;
  - the removal of three individual questions on short-term migration; and
  - the removal of an individual question on voluntary work.
- census-type statistics will also be produced on former members of the UK armed forces – using veterans data held by the Ministry of Defence and/or via a new question on the questionnaire;
- stringent confidentiality and security procedures will be used to protect the information gathered in the census;
- initiatives will be put in place to measure the quality of the information collected;
  and
- the statistical outputs from the census will be designed to meet user requirements, and dissemination will be to a pre-arranged timetable.

#### 1.8. Censuses in England & Wales, Scotland and the Republic of Ireland

The UK National Statistician and the Registrars General for Scotland and Northern Ireland released a Statement of Agreement<sup>5</sup> in October 2015 on the conduct of the 2021 Census, with an intention to conduct the next census simultaneously across the UK. These officials work together on the UK Census Committee to ensure that the UK can produce census-type statistics to meet international obligations.

The Cabinet Office published a White Paper<sup>6</sup> setting out proposals for the 2021 Census in England and Wales in December 2018, to be taken forward by ONS. The Scottish Government published 'Plans for Scotland's Census 2021'<sup>7</sup> in September 2018 which set out proposals for a 2021 Census in Scotland to be taken forward by the National Records for Scotland (NRS). Both documents set out plans for a predominantly online census similar to that proposed for Northern Ireland. The detailed planning and preparations across the UK will support harmonisation of 2021 Census results and thus ensure that a key user need is met around harmonised population estimates for the UK.

A census is also planned to be held in the Republic of Ireland in Spring 2021<sup>8</sup>. NISRA officials work closely and meet regularly with Central Statistics Office (CSO), Ireland officials to ensure a compatible approach and to learn from each other's experience. NISRA have also signed an agreement<sup>9</sup> with the CSO to formalise this and to support the production of a joint 2021 Census statistics report for Ireland and Northern Ireland. This report would be similar to the report published after the 2011 Census<sup>10</sup>.

# 1.9 International perspective

Historically, the European Union has required Member States to provide population information<sup>11</sup> and aggregate statistics to Eurostat, for use by the European Commission. As a result of the United Kingdom's planned departure from the European Union, NISRA through ONS may no longer be required to provide census statistics to Eurostat. The level of co-ordination with Eurostat on the census will be determined in due course.

More widely, the need for internationally comparable information means that the census in Northern Ireland must align with international standards to ensure the production of UK-wide and regional statistics. The United Nations (UN) reviews and sets standards for censuses. These international standards aim to ensure

<sup>&</sup>lt;sup>5</sup> https://www.nisra.gov.uk/statistics/2021-census/planning/legislation

<sup>&</sup>lt;sup>6</sup> https://www.gov.uk/government/publications/the-2021-census-of-population-and-housing-in-england-and-wales

<sup>&</sup>lt;sup>7</sup> https://www.gov.scot/news/digital-first-census-for-2021/

<sup>&</sup>lt;sup>8</sup> A consultation on the 2021 Census in the Republic of Ireland was held in 2017 see <a href="https://www.cso.ie/en/census/census/2021consultation/">https://www.cso.ie/en/census/census/2021consultation/</a>

<sup>&</sup>lt;sup>9</sup> https://www.nisra.gov.uk/publications/2021-census-consultative-arrangements

<sup>&</sup>lt;sup>10</sup> https://www.nisra.gov.uk/statistics/2011-census/results/ireland-and-northern-ireland

<sup>11</sup> https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:218:0014:0020:EN:PDF

consistency. The UK has committed to providing statistics from the 2021 Census to the UN for international comparisons.

# 1.10 Next steps – Census rehearsal in 2019

A rehearsal for the 2021 Census is planned for the Autumn of 2019. This will be an end-to-end test of systems and processes in specific locations with the aim of ensuring readiness for the census in 2021. The rehearsal will help ensure that all elements of the field operation and supporting public interface services (e.g. online self-help system and contact centre) are fit-for-purpose, and the collected information will be used to assure the performance of key parts of the data processing system developed by NISRA.

The proposals contained in this document for the conduct and content of the census will be tested in the census rehearsal. This includes rehearsing all the potential questions outlined in chapter 3. After the rehearsal, there will be an opportunity to finalise these proposals based on lessons learned from the rehearsal with a view to finalising plans by the end of 2019.

# 2. Consultation, Research and Testing

#### 2.1. Introduction

The proposed design and content of the 2021 Census has been shaped by:

- successes and lessons learned from the 2011 Census:
- developments and lessons learned in international census taking;
- requirements from the user community about the types, quality, frequency and detail of outputs required;
- changes in technology, in particular the opportunities offered by the internet;
- changes in the propensity for the public to interact with government digitally, enabling a move away from a traditional paper-based census;
- improvements in administrative data sources, giving potential for their increased use in the production of official statistics;
- the continued and ongoing need to make the most effective use of public money; and
- the completion of equality impact assessments.

NISRA has consulted widely on the questionnaire content with formal advisory committees, topic-related working groups and via a formal public consultation. NISRA has also considered national and international good practice in census design and content.

# 2.2. Consultation process

In order to understand the needs of census data users, NISRA carried out a consultation on topics to be asked in the 2021 Census. The paper '2021 Census: Topic Consultation for Northern Ireland' was consulted on between 25 September 2015 and 17 December 2015. The paper presented NISRA's initial view on the topic content of the 2021 Census questionnaire and included some new topics for consideration by users. The aim of the consultation was to promote discussion and encourage the development of strong cases for topics to be included.

The consultation was issued to over 1,400 key users who were identified by NISRA with the support of the Equality Commission for Northern Ireland, the Northern Ireland Council for Voluntary Action (NICVA) and Machinery of Government Branch within

 $<sup>\</sup>frac{12}{https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2021-census-topic-consultation-for-northern-ireland-document.pdf}$ 

the Northern Ireland Civil Service (NICS). The consultation document was also passed to a wide range of NISRA online users.

The list of consultees included:

- leaders of the main political parties in Northern Ireland, MLAs, MPs and MEPs;
- key advisory groups such as the Demographic Statistics Advisory Group, the Statistics Advisory Committee and the Statistics Co-ordination Group;
- bodies such as the Education Authority, Health & Social Care Board, local Councils and Local Strategy Partnerships;
- key officials within Government Departments; and
- other census users known to NISRA.

To ensure that the general public were aware of the consultation it was promoted on the NISRA website and through official social media channels. Public Information events were held in Omagh and Belfast in October 2015. A total of 46 responses were received.

Feedback was received from the consultation on topics such as income, knowledge and proficiency in languages other than English, vacant properties, use of sign language and past membership of the UK armed forces.

A common approach across the UK was used to assess the responses to the Northern Ireland consultation exercise and NISRA published the findings of the Topic Consultation in a report entitled '2021 Census: Topic Consultation for Northern Ireland – Assessment of the responses received' in August 2016.

# 2.3. Testing and Research

Following on from the census content consultation in 2015, NISRA has carried out a programme of testing and research. This was carried out to better understand the public's perception of the census, question wording, questionnaire design and response channels (online and on paper).

The census only takes place every ten years and therefore must be right first time. Therefore developments in the wording of the questions, operational procedures, the impact of societal changes on acceptability and public engagement must be tested and understood well before 2021.

 $<sup>\</sup>frac{13}{of-the-responses-received.pdf} \underline{https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2021-census-topic-consultation-assessment-of-the-responses-received.pdf}$ 

Comprehensive planning, testing and evaluation are essential processes for the success of the 2021 Census. The programme of testing and research prior to a census is designed to:

- ensure that all questions included meet user requirements and are publicly acceptable;
- trial new technology;
- test procedures and processes;
- plan dissemination; and
- test different facets of the whole census operation.

A substantial amount of testing has already taken place including public acceptability testing, cognitive testing of question wording and response categories and testing of questionnaire design.

Public acceptability testing seeks to understand the acceptability of asking a particular question, including the acceptability of answering the question on behalf of others in the household. It is important to understand if the inclusion of a question might impact on the overall response rate for the census. Questions need to be acceptable and understandable to the general population.

In addition, NISRA conducted qualitative testing in 2017 to develop knowledge of the best local terminology around various census topics. As the questionnaire was developed, later versions of specific questions were tested with members of the public.

#### 2.4. 2017 Census Test

As part of this round of testing NISRA conducted a large-scale, voluntary Census Test in Northern Ireland in Autumn 2017. The test involved sending a census-type questionnaire to a sample of 15,000 households, who were invited to respond online or on paper. The main objective of the Census Test was to inform decisions about the possible inclusion of a sexual orientation question in the 2021 Census. This included an understanding of how such a change in the questionnaire might affect the distribution of responses to the two established questions on religion. A secondary objective was to test the structure of the knowledge of Irish and Ulster-Scots questions. The test was also used to trial other potentially new questions and test operational procedures.

In relation to the main objective, findings from the analysis of the data collected suggest that the response to the religion questions has not been affected by the location of a potential question on sexual orientation. The analysis of responses to

questions on frequency of use of Irish and Ulster-Scots showed that the questions performed well and that valid and reliable outputs could be produced. 61% of all responses were made online in the Census Test. The Evaluation Report<sup>14</sup> from the 2017 Census Test is available on the NISRA website.

#### 2.5. 2017 Address check

The development of a robust census address register is essential to delivering the census. The existing address register built on the POINTER database<sup>15</sup> has been enhanced using a number of different administrative sources (see section 4.3 for more detail). An 'on-the-ground' address check was carried out across 16,000 addresses in September 2017 to test the existing address register. An analysis of the results indicated that the address register, at that point, did not meet the required quality measures for accuracy or coverage and, consequently, NISRA plan to carry out an address check in advance of the census rehearsal and 2021 Census.

# 2.6. Topic expert meetings

NISRA established a range of topic expert groups throughout 2016 and 2017. A total of six groups were set up to cover the themes of:

- Housing;
- Demography and Migration;
- Ethnic group, Identity, Language and Religion;
- Health;
- Education; and
- Labour market and Travel to place of work/study.

Topic expert groups were comprised of customers for census information from a range of Government Departments (including NISRA statisticians and policy colleagues) together with representatives from public bodies such as the Northern Ireland Housing Executive, Equality Commission and the Public Health Agency, together with leading academics. These meetings have been helpful in finalising the proposals in this document.

<sup>&</sup>lt;sup>14</sup> https://www.nisra.gov.uk/publications/2017-census-test-documents

<sup>15</sup> https://www.nidirect.gov.uk/articles/pointer

# 3. Population base and topics to be covered in the census

#### 3.1. Introduction

Topics proposed for the census are those that have a strong and clearly defined user need and can be expected to produce reliable and accurate data without undue burden on the public.

NISRA has carried out a public consultation which asked users for their views and evidence on the population base and topics which they felt needed to be covered in the 2021 Census (see chapter 2). This consultation resulted in demands for many more questions than it would be possible to accommodate on the census questionnaire or would be reasonable to expect any household to complete.

Users indicated an ongoing need for the vast majority of topics covered in the 2011 Census as well as a range of requirements for additional topics. In coming to a set of proposed questions it was important to balance the need for change against continuity and the burden on the public. Three broad sets of evaluation criteria (covering user requirements, operational requirements and other considerations) were used to assess the evidence put forward by users and are broadly comparable to those used during the development of the 2011 Census questionnaire.

The user requirement criteria covered a number of interrelated factors including:

- the purpose of user need;
- the need for reliable information at small area level or for small groups of the population;
- the suitability of alternative sources;
- the requirement for multivariate analysis;
- the need for comparability beyond Northern Ireland; and
- the need for continuity with previous censuses.

A number of operational factors also informed decisions on the proposed content of the 2021 Census. The most important of these was their effect on improving coverage<sup>16</sup>, as the primary aim of the census is to provide a robust estimate of the size of the whole population. Further details on the evaluation of topics are contained in '2021 Census: Topic Consultation for Northern Ireland – Assessment of the

 $<sup>^{16}</sup>$  Improving coverage means maximising the overall response rate and ensuring minimal variance in response across different populations and areas

responses received'<sup>17</sup>. Ultimately, the questionnaire proposed for the 2021 Census will require legislative approval.

In addition other considerations needed to be taken into account, such as: data quality, public acceptability, respondent burden, financial considerations and questionnaire design.

#### 3.2. The population base

The 2021 Census will cover all the people in Northern Ireland. The census will count persons at their place of usual residence whether or not they were actually present there on census night.

Each household will be required to complete a census questionnaire. Households where no one is present on census night will still need to complete a questionnaire. Where dwellings contain two or more households, each household will be required to complete a separate questionnaire. Householders will be asked to record the number of visitors on census night along with information on their Name, Sex, Date of birth and Usual address (or country of usual address if a non-UK resident).

The census will also count all persons resident in communal establishments such as hospitals, nursing and residential homes, and hotels. Special arrangements will be made to enumerate residents in prison service establishments and in military camps.

Students<sup>18</sup> will be regarded as being resident at their term-time address irrespective of where they may be staying on census night. This will ensure that the census is consistent with estimates of the size of the population produced between censuses known as mid-year population estimates.

#### 3.3. Definitions

3.3.1. Definition of a 'household'

For the 2021 Census it is proposed that the definition of a household will be "one person living alone; or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room, sitting room or dining area". It will include some hotels, guest houses, B&Bs, inns and public houses with residential accommodation for less than ten guests. The definition will also include all sheltered accommodation and serviced apartments.

<sup>&</sup>lt;sup>17</sup> https://www.nisra.gov.uk/statistics/2021-census/planning/consultation/topic-consultation

<sup>&</sup>lt;sup>18</sup> Students and children at boarding schools will only be regarded as being resident at their term-time address if they are there for four nights or more per week.

#### 3.3.2. Definition of a 'communal establishment'

For the 2021 Census it is proposed that a communal establishment will be defined as "an establishment providing managed residential accommodation - 'Managed' in this context means full-time or part-time supervision of the accommodation". This will include hotels, guest houses, B&Bs, inns and public houses with residential accommodation for seven or more guests as well as all accommodation provided solely for students.

#### 3.3.3. Definition of a 'usual resident'

In 2021 it is proposed that a usual resident will be defined as "anyone who, on Census Day, has stayed or intends to stay in the UK for a period of three months or more".

# 3.4. Summary of selected topics

It is proposed that the 2021 Census will collect information on:

- the address, including the postcode, of all properties occupied by households, of all unoccupied household accommodation and of all communal establishments; and
- the names of all usual residents, whether present or temporarily absent on Census Day.

These details will be complemented by information on specific topics, subject to legislative approval. In some cases one topic will be covered by several questions. While some questions will need to be answered by everyone resident in a household or a communal establishment (e.g. age and sex), other questions will only be relevant to specific groups of the population (e.g. questions relating to qualifications, economic activity, occupation and sexual orientation would only be asked of those aged 16 years and over). A summary of the type of information that is proposed to be collected is set out in the table below.

# Proposed topics and questions

#### For households:

- Number of usual residents:
- Number of visitors staying overnight;
- Relationship to other residents within the household;
- Type of accommodation;
- Household adaptations;
- Type of central heating;
- Renewable energy systems\*;
- Tenure and Type of landlord; and
- Vehicle ownership.

#### For residents in households:

- Name, Sex and Date of birth;
- Marital or same-sex civil partnership status;
- Student status and their term-time address;
- Country of birth;
- Date of arrival for individuals born outside Northern Ireland#;
- Usual address one year ago;
- Citizenship (asked via passports held);
- National identity;
- Ethnic group#;
- Religion and religion brought up in;
- Main language;
- Ability in English;
- Knowledge of Irish and Knowledge of Ulster-Scots (ability and frequency of use)#;
- General health;
- Limitations due to a long-term health problem or disability#;
- Nature of long-term health conditions;
- Provision of unpaid care;
- Sexual orientation\*;
- Apprenticeships\*;
- Qualifications<sup>#</sup>;
- UK armed forces veterans\*;
- Economic activity;
- Employment status;
- Name of employer;
- Job title and description of occupation;
- Nature of employer's business;
- Oversight of other employees;
- Hours worked;
- Name and address of main place of work or study; and
- Means of travel to main place of work or study.

#### For visitors in households:

- Name, Sex and Date of birth; and
- Usual address (or country of usual residence if a non-UK resident).

#### For residents in communal establishments:

- As for residents in households except for the relationship to others within the household; and
- Status of persons within the establishment.

# For properties from which a census return is not received (information collected by enumerator):

- Type of accommodation; and
- Estimated number of usual residents.

Questions on all topics listed in the table above will be included in the census rehearsal. New topics and questions that are being continued from the 2011 Census are described in the sections below. The topics to be included in the 2021 Census will be set out in due course in the Census Order (see chapter 7).

# 3.5. Impact Assessments

An Equality Impact Assessment (EQIA) is currently being developed for the 2021 Census. It will cover all aspects of the census and include the potential impact of the questions asked as well as operational issues such as the emphasis on online collection. The EQIA will seek to identify both positive and adverse impacts. Where an adverse impact is identified, potential mitigations will be proposed to address the issues. The EQIA will be published in advance of the census rehearsal.

A Data Protection Impact Assessment will also be completed for the 2021 Census (see section 6.2). This will include consideration of the proposed questions to ensure that asking people to disclose information does not breach their privacy rights contained in the Human Rights Act 1998. The Data Protection Impact Assessment will be completed prior to the census rehearsal.

#### 3.6. Proposed new topics

It is proposed to add some new topics to the 2021 Census questionnaire. In the household section a new question relating to renewable energy systems is proposed. Within the individual section of the questionnaire there will be a new question relating to sexual orientation. It is also proposed to produce census-type statistics on UK armed forces veterans either using historical administrative data or via a question on the questionnaire. A detailed rationale is presented below on why these new topics should be included.

<sup>\*</sup> Proposed for inclusion in the census for the first time

<sup>#</sup> Question changed significantly from the 2011 Census.

#### 3.6.1. Renewable energy systems

#### User need

Work which was carried out on refining the central heating question was further developed to look at the need for information on renewable energy systems, given their increasing use across Northern Ireland. Information on renewable energy systems will help inform progress toward achieving government targets on renewable energy and establish a detailed benchmark for the number of domestic properties in Northern Ireland with renewable energy systems.

#### **Consideration Process**

Whilst the proposed response categories include terms widely used in the industry it is possible that older people or those who speak English as a second language may not fully understand the terminology surrounding renewable energy system categories. Also, those living in rented accommodation may not be aware of renewable energy systems used within their accommodation. This could affect data quality. To help address these issues guidance will explain, in plain English, the terminology and how to answer the question.

#### 3.6.2. Sexual orientation

#### User need

There is an identified need to gather data on sexual orientation to inform policy development and enable organisations to meet and monitor their statutory obligations stemming from Section 75 of the Northern Ireland Act 1998<sup>19</sup> and other relevant legislation.

#### **Consideration Process**

Although the user need is accepted, concerns regarding privacy, public acceptability, data quality and the effect on the overall response rate for the census need to be considered. NISRA has researched the public acceptability of including a sexual orientation question in the 2021 Census, and the potential for impact on the distribution of responses to the religion questions. Additionally, joint research has been taken forward with ONS and NRS to inform a decision on whether a question on sexual orientation should be included in the 2021 Census.

The research included an independent UK-wide public acceptability survey in 2017 which showed that respondents in Northern Ireland, who were aged 16 and over, felt the inclusion of a sexual orientation question was generally acceptable. This view

https://www.legislation.gov.uk/ukpga/1998/47/section/75

was also reflected through NISRA public acceptability focus groups on the sexual orientation question.

Findings from the 2017 Census Test suggest that the response to the religion questions was not affected by the inclusion of a sexual orientation question. This finding is in line with 'Developing survey questions on sexual identity: Report on the General Lifestyle split – sample pilot'<sup>20</sup> published by ONS in 2009. Therefore, given this research, it is proposed that a question on sexual orientation will be included in the 2021 Census for those aged 16 and over. It is proposed that, in Northern Ireland, the sexual orientation question will include a 'prefer not to say' option, to facilitate those who view sexual orientation as a private matter. Additional mechanisms to support this optional approach are also being considered. More detail is available in the Sexual Orientation topic report<sup>21</sup> published alongside this document.

#### 3.6.3. UK armed forces veterans

#### User need

The provision of statistics on UK armed forces veterans living in Northern Ireland would help to better meet the needs of this group. This was suggested by the Royal British Legion in the 2021 Census Topic Consultation and was further reinforced by representations received from other groups and individuals. It is therefore recognised that there is a user need for this information in Northern Ireland.

In Great Britain, ONS and NRS identified a high user need for these statistics and plan to include a question on UK armed forces veterans in their 2021 Census questionnaire. The need there came from government and charities that work with veterans and their families to meet commitments under the Armed Forces Covenant<sup>22</sup>.

#### **Consideration Process**

In Northern Ireland there are a number of ways that this user need can be met. This could be through using historical administrative data on UK armed forces veterans held by the Ministry of Defence and/or via a question on the 2021 Census questionnaire. Each approach is outlined below.

NISRA are working with the Ministry of Defence to gain access to the UK Armed Forces Veteran Leaver's Database<sup>23</sup>. This information may be of a high enough

20

https://www.ons.gov.uk/file?uri=/methodology/classificationsandstandards/sexualidentityguidanceandprojectd ocumentation/gsltrialreport\_tcm77-181191.pdf

<sup>21</sup> https://www.nisra.gov.uk/publications/2021-census-proposals-document

<sup>&</sup>lt;sup>22</sup> https://www.gov.uk/government/publications/armed-forces-covenant-2015-to-2020/armed-forces-covenant

<sup>&</sup>lt;sup>23</sup> The Ministry of Defence maintains a Veteran Leaver's Database (VLD), which includes service personnel who have left the UK Armed Forces since circa 1975. This information could be used alongside the census to quality assure the information collected.

quality in Northern Ireland to be used instead of a question on the census questionnaire. Alternatively this information could help to assess and validate the information obtained through the census.

As part of the work to develop a census question NISRA commissioned public acceptability testing of including a UK armed forces veterans question in the 2021 Census questionnaire. The proposed question was found to be generally acceptable. However, the research also indicated that some veterans may be unwilling to disclose this information. This could be mitigated for respondents by providing assurances about privacy and through additional guidance.

It is planned to undertake further research before making a final recommendation for the 2021 Census. However census-type statistics will be produced on former members of the UK armed forces – either using administrative data linked to the census (see section 5.4 for a description of the proposed Enhanced Census Outputs process) and/or via the questionnaire (a UK armed forces veterans question will be included in the 2019 census rehearsal). More detail on this is available in a UK Armed Forces Veterans topic report<sup>24</sup> published alongside this document.

# 3.7. Questions proposed to be asked at all addresses

This section outlines all the questions proposed to be asked for households and communal establishments.

#### 3.7.1. Address of usual residence

There is an operational requirement to collect and/or confirm address data for all properties occupied by households; for all unoccupied household accommodation and for all communal establishments. The householder (or manager of the communal establishment) will be asked to check that the pre-populated address information printed on their invite letter, or on the paper questionnaire sent to them, is correct and to amend it if necessary.

Address information will enable all properties and communal establishments to be assigned to small geographical areas to produce small area census statistics.

#### 3.7.2. Names of all residents

The person who completes the census questionnaire will enter the name of each household member or communal establishment resident at that address. This helps to ensure that the enumeration is complete.

<sup>&</sup>lt;sup>24</sup> https://www.nisra.gov.uk/publications/2021-census-proposals-document

#### 3.8. Questions proposed to be asked of each household

Some questions will refer to the household as a whole rather than to individuals. Information will be collected on both occupied and unoccupied accommodation. Where no return has been received from accommodation which is considered habitable, the enumerator will record a few basic facts about the property.

Information on the number of households is used in the planning, funding and management of services supplied to households generally. In addition, a wider range of census statistics about people and information on households and housing will aid decisions on rural and urban development policies. Statistics derived from the census will also help inform the production of measures of deprivation and enable policies and resources to be directed to areas with particular needs. Questions relating to the following topics will be asked:

#### 3.8.1. Relationship to other residents within the household

In households of two or more people, a question will ask about the relationship between each person in the household. The household and family relationships information derived from this relationship matrix is fundamental for planning purposes, such as future housing need and service planning for particular family types.

# 3.8.2. Type of accommodation

Information on the type of accommodation is a key output to inform decision making and resource allocation including assessing current and future requirements as the number and type of households change. The planned 2021 question will distinguish between households accommodated in whole houses or bungalows, flats, maisonettes or apartments and those in mobile or temporary structures.

# 3.8.3. Household adaptations

Responses to the Topic Consultation confirmed an ongoing need for information on the number of households where the property has been adapted for a range of health conditions or disabilities.

#### 3.8.4. Type of central heating

The question on type of central heating supports the monitoring of energy efficiency and fuel poverty. While some administrative information on central heating is available, it was deemed not to be a viable alternative source of the information required.

#### 3.8.5. Tenure and Type of landlord

A question on tenure and type of landlord (where the accommodation is rented) will be included in the 2021 Census. The questions will include increased detail on private rental properties.

#### 3.8.6. Vehicle ownership

A question on vehicle ownership has been included in the census since 1971. The question for the 2021 Census will ask how many cars or vans are owned or available for use by the household. This information is widely used to support work on transport policy and planning and the need for new or improved roads.

# 3.9. Questions proposed to be asked of individuals

It is proposed that around half of the questions addressed to residents in households will apply to everyone. A further set of questions will only be asked of adults (those aged 16 and over) – this relates to economic activity, occupation, industry, qualifications, UK armed forces veterans and sexual orientation.

#### 3.9.1. Basic population characteristics

The primary purpose of the census is to provide an estimate of the number of people resident in Northern Ireland and where they usually live. This data will provide a new and up-to-date benchmark for annual mid-year population estimates for local areas. Population estimates are central to every national system of official statistics and are used to inform the allocation of large sums of public money.

In the years between censuses, the annual population estimates are updated (from the previous census base) by using data from registrations of births and deaths, and estimates of migration based on sources such as patient registrations with doctors and information from other survey sources. Without the periodic corrective effect of taking a census these estimates, particularly at the local area level, would become progressively less reliable.

Long-term policies need to take account of the changing population. Population estimates revised in the light of the census will be the basis for making projections of the number of people and households in future years, and will be used to assess likely demand for goods and services in both the public and private sectors.

#### Sex, Date of birth and Marital or same-sex civil partnership status

Basic demographic information such as sex, age and marital or same-sex civil partnership status are essential for the majority of census outputs and a key requirement of census users. Analyses of persons in households by combinations of these characteristics will provide information on different types of household, such

as those comprising lone-parent families or two persons of pensionable age, and will enable outputs to be produced on the different types of family units.

Information on sex, age and marital or same-sex civil partnership status is key for estimating the demand for local services, such as facilities for the young and elderly. The data are fundamental to the major statistical series, allowing age and sex-specific rates for morbidity, mortality, fertility, marriage and divorce to be calculated. They will also be used to cross-analyse all other census variables by sex and age.

On this basis, the 2021 questions relating to sex, date of birth and marital or samesex civil partnership status are little changed from the corresponding questions in the 2011 Census.

#### Student status and their term-time address

Two short questions to identify students, and in particular their term-time address, are included to clarify the address where they should be enumerated. This ensures that census outputs support both planning and resource allocation at a local level.

#### Country of birth and Citizenship (Passports held)

Responses to the Topic Consultation confirmed a continued strong user need for information on country of birth. The question on country of birth will provide information on people resident in Northern Ireland but born in Great Britain, the Republic of Ireland or elsewhere.

A question on passports held was first asked in 2011 as a proxy for citizenship and it is proposed to ask this again in 2021. The proposed questions on passports held and country of birth will provide information on the numbers and characteristics of immigrant communities in order to support policy development.

#### Date of arrival for individuals born outside Northern Ireland

A question on year of arrival will be asked for those born outside Northern Ireland. This question is used in order to better understand migration patterns and the characteristics of different groups of migrants.

#### Usual address one year ago

A question, included in the census since 1961, will ask for the usual address of each person one year before the census. Data from the question are used to identify migration to and within Northern Ireland. The data are also used to rebase official migration estimates. The other UK Census Offices will be able to provide information on those who moved from Northern Ireland to Great Britain in the year before the census.

International and internal migration are important components of the population estimates and projections that underpin planning and resource allocation across central and local government. They also contribute to the understanding of population change at a local level, facilitating the planning and delivery of services including education, housing and health care.

#### 3.9.2. Socio-cultural characteristics

# **Ethnic group and National identity**

Information on ethnic group from previous censuses has enabled central and local government and health authorities to allocate resources and plan programmes taking account of the needs of the various ethnic groups. Response to the question has also provided figures against which government can monitor ethnic group differences. It is proposed to include an ethnic group question in the 2021 Census to meet a wide range of uses.

The tick-box categories proposed for the 2021 Census question on ethnic group will be updated from the 2011 Census questionnaire to take account of our changing population. It is proposed to add tick-box categories for Roma and Filipino and remove Pakistani, Bangladeshi and Black Caribbean categories (these responses can still be written-in by respondents). These changes are evidenced from data from the 2011 Census and the latest School Census data, as well as engagement with the Equality Commission for Northern Ireland.

It is proposed to continue with the question on national identity, first introduced in the 2011 Census. This question enables respondents to identify themselves as being British, Irish, Northern Irish, English, Scottish, Welsh or write in any other national identity or any combination of these.

Although different forms of the ethnic group and national identity questions are being proposed in the rest of the UK (to reflect different information requirements and population characteristics), the variants will still allow outputs to be produced which will be broadly comparable both with statistics from the 2011 Census and throughout the UK.

# Religion (including Religious denomination or body)

Information on religion is a key requirement of census users and is used by a range of bodies and organisations, including central government, local Councils and religious organisations.

Public bodies use information on religion to monitor the equality of outcomes and provision of services to support them in meeting their duties under Section 75 of the Northern Ireland Act 1998.

The 2011 Census included two religion questions, one on 'religion, religious denomination or religious body you belong to' and one on 'religion, religious denomination or religious body you were brought up in' (asked only of those with no current religion). It is proposed to include the same questions in the 2021 Census to ensure direct comparability with the 2011 Census outputs. Both questions will again allow respondents to record themselves as having "No Religion". Given sensitivity, these questions have been asked in the Census with no penalty for non-response and it is proposed to maintain this in 2021.

As with ethnic group and national identity, the formats of the religion questions proposed in the rest of the UK are different, reflecting local requirements. However, they are sufficiently comparable for the purposes of providing broad UK outputs.

#### Language

Questions were asked on main language used (including sign languages) and ability in speaking English for the first time in the 2011 Census. Information on main language used helps to identify areas where specific languages are used and, in conjunction with information collected about spoken English language proficiency, helps plan and improve access to services. It also helps to plan provision of appropriate interpretation and translation facilities and target interventions aimed at improving integration and community cohesion. Evidence from the Topic Consultation shows that there continues to be a strong user need for this information and it is proposed to continue with these questions.

A question on the ability to understand, speak, read or write Irish or Ulster-Scots was included in the 2011 Census. A similar question was asked in Wales and Scotland (for Welsh, Scottish Gaelic and Scots). Evidence from the Topic Consultation shows there continues to be a user need for this information and it is proposed to continue with these questions. It is also proposed to extend this question to collect information on the frequency with which Irish or Ulster-Scots is spoken.

#### 3.9.3. Health characteristics

#### **General health**

In addition to the long-term health or disability questions, a general health question which asks respondents to assess their own health on a five-point scale ranging from 'Very good' to 'Very bad' is proposed for the 2021 Census. This question was included in the 2011 Census and the information has been demonstrated to be a good predictor of future demands on health services, particularly for the elderly.

#### Limitations due to a long-term health problem or disability

This question asks whether a person's day-to-day activities are limited because of a health problem or disability which has lasted, or is expected to last, at least 12

months. Problems which are related to old age will be included. The information will be used as a measure of the need for health and personal social services at all levels of geography and for particular local facilities, either existing or planned.

#### Nature of long-term health conditions

A question that examines the nature of respondents' long-term health conditions was first asked in the 2011 Census and it is proposed to retain this question for the 2021 Census. The response categories have been updated to take account of changing user needs and to streamline with international definitions to promote standardisation. In particular, a new separate category has been included for Autism or Asperger syndrome to develop a baseline on the prevalence of these conditions.

#### Provision of unpaid care

A question on the provision of unpaid care given to people with long-term health problems or disability or because of problems related to old age was asked in the 2011 Census. A continuing user requirement for this information has been clearly identified, and it is proposed to include the question for 2021 with slight changes to the response categories.

#### 3.9.4. Economic characteristics

#### Qualifications

The information from a question on educational and vocational qualifications will be used to assess educational achievement and labour market participation across the population, looking at demographic groups at a local and regional level and the particular barriers faced in obtaining qualifications. This will help providers to understand and respond to equality and diversity issues, in order to widen participation and fair access.

Research<sup>25</sup> has shown some respondents had difficulty with the 2011 qualifications question. It is proposed to re-structure the question for the 2021 Census by dividing it into three separate questions: a question asking for details of degree level qualifications, a question asking for details of other qualifications and a question dealing with apprenticeships.

#### **Economic activity**

Economic activity data from the census are used extensively across government. As a key dimension of local economic performance, economic activity is used to develop economic strategies and plans, and to support major programmes of public investment. The ability to focus in on specific subgroups of the population, including

<sup>&</sup>lt;sup>25</sup> https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2011-census-quality-survey.pdf

those with protected characteristics, provides key data for monitoring and policy development. Information on economic activity is collected via a suite of questions. The questions are designed to determine whether a person is in employment or is:

- retired;
- studying;
- looking after the home or family;
- long-term sick or disabled;
- looking for work;
- available for work; or
- waiting to start a job.

The initial labour market question focuses on activity over the last seven days. Some changes have been made to this question to ensure continued harmonisation of outputs across the UK.

# Occupation

For those in paid work or who have ever worked, information on occupation of their current or last main job will be collected. This information will be gathered through questions on an individual's full job title and the main activities done in their job. This data will provide a basis for analysing local labour markets, identifying exclusion from particular types of work and supporting local economic development plans.

#### **Employment status and Supervisory status**

The questions on occupation together with related information on employment status and supervisory status form the basis for the derivation of the National Statistics Socio-economic Classification (NS-SEC) – the official socio-economic classification in the UK.

#### **Industry**

Information about industry complements the data collected by the occupation questions and provides specific detail about local labour markets. In addition, the data can be used to identify areas where there are concentrations of workers employed in a specific sector, to underpin local economic development plans. Industry will be determined primarily by asking people the nature of the business or activity of the organisation that employs them. Supplementary details will be obtained from questions on the name of the organisation and, for those currently working, the address of their workplace.

#### Hours worked

A question on the number of hours usually worked in the person's main job enables those in full-time and part-time employment to be distinguished. The information helps to provide a better understanding of changes in working patterns and how these affect particular occupations and industries.

#### Name and address of main place of work or study

This question was asked in the 2011 Census and it is proposed that it is retained for 2021, with slight modifications. The data will provide information on journeys to work or study and the numbers travelling between specific origins and destinations. This information is the basis for measuring commuting patterns and defining self-contained labour markets known as 'Travel to Work Areas'.

# Means of travel to main place of work or study

This question asks respondents for information on the methods of transport used to get to their place of work or study and, in particular, for details relating to the longest part, by distance, of their usual journey to work or study. Together with information from the question on name and address of work or place of study, the data will help to identify commuter routes that are subject to higher loads of public and private transport. The analyses will also be used in the planning for public transport provision and of facilities for private transport.

# 3.10. Questions proposed to be asked about visitors

In line with the 2011 Census it is proposed to collect limited information on visitors in the 2021 Census. In addition to the number of visitors at an address, information will be collected on the Name, Sex and Date of birth of the visitor and their usual address (or country of usual address if a non-UK resident).

The household questionnaire will have space for information on up to three visitors together with a count of the total number of visitors. This information will enable a more accurate estimate of the numbers of visitors and usual residents to be made at the local area level. Linking information provided by respondents as visitors to information provided by residents at their usual address will provide additional information to inform estimates of census coverage.

# 3.11. Arrangements for communal establishments

It is proposed that questionnaires for communal establishments (e.g. hospitals, nursing/residential homes, hotels etc..) will record the nature of the establishment, the type and age groups of residents catered for and management responsibilities.

This information will be collected separately for the manager or the person in charge of the establishment. Full particulars will be required of all residents in such establishments (defined as those resident for 6 months or more). Statistical outputs on these residents, separately identifying any resident staff, will be prepared.

Special arrangements will be made to enumerate residents in prison service establishments and asylum refuges, on ships (inside or outside UK waters) and on military bases. Special arrangements will also be made to enumerate other population sub-groups not resident in private households, such as persons sleeping rough.

#### 3.12. Questions not included

As might be expected, a range of other topics have been put forward for inclusion. All topics were considered but some have not been included in these proposals. In part, this is to ensure that the time taken to complete the questionnaire does not place undue burden on the public. An overall aim is to develop a 2021 Census questionnaire that will take no longer to complete than the 2011 Census. Therefore, some topics proposed have not been included in these proposals. This is because:

- there is not sufficient user need for this information; or
- the case for them was not considered strong enough to displace one or more of the proposed topics; or
- the quality of the information likely to be obtained may not be fit for purpose;
  or
- the questions would place too great a burden on the public; or
- there are alternative administrative data sources; or
- a combination of these reasons.

A full list of topics not included is provided in the '2021 Census: Topic Consultation for Northern Ireland – Assessment of the responses received'. These include questions on:

- second residence address;
- obesity;
- use of technology;
- income;
- well-being;

- immigration status: Asylum seekers and Refugees;
- Programme for Government indicators; and
- gender identity/transgender status.

The rationale for not including some of these topics is described below.

# 3.12.1. Non-inclusion of income question

Respondents to previous census consultations have cited many potential uses for personal or household income data, for example as an indicator of relative advantage and disadvantage and economic wellbeing, especially for low geographic levels and small population groups. Key users of income data would include central government, private organisations and researchers.

However, testing prior to the 2011 Census identified a number of concerns. It showed that the inclusion of an income question would reduce overall response rates. Additionally, there were concerns about the quality of income data collected and whether respondents understood, and were content to answer, income questions. Given these concerns, it is not proposed to collect information on income in the 2021 Census. As an alternative, NISRA will explore the potential to source information on income from administrative sources.

#### 3.12.2. Non-inclusion of wellbeing question

Wellbeing was suggested as an additional topic for inclusion. Following an assessment of the user's response and research into the feasibility of including this topic, it is not intended to collect information on wellbeing due to the space required to derive an appropriate measure of wellbeing and its current availability in other social surveys, including the Northern Ireland Health Survey<sup>26</sup>.

# 3.12.3. Non-inclusion of gender identity/transgender status

In the 2015 Topic Consultation there was some limited user demand for information on gender identity/transgender status. Alongside this there was a continuing strong user need for a sex (female or male) question. NISRA have assessed options around amending the census sex question to gather this information but consider that to do so would risk the quality of data collected on a person's sex. Therefore it is not proposed to amend the 2011 census sex question for this purpose.

In addition, there has only been limited research and testing of a separate gender identity/transgender question in population surveys. However, recognising the more limited user need and as a first step, NISRA have included a separate gender

<sup>&</sup>lt;sup>26</sup> https://www.health-ni.gov.uk/topics/doh-statistics-and-research/health-survey-northern-ireland

identity/transgender question in the Continuous Household Survey<sup>27</sup> from April 2019. In this environment all responses would be provided by the respondent voluntarily and statistics would be available annually to provide regular future monitoring of the size of the transgender population.

# 3.13. 2011 Census topics not included

There are some topics asked in the 2011 Census for which there is now an insufficient case for inclusion. These are outlined below.

# 3.13.1. Self-contained accommodation

Information on whether accommodation is self-contained will not be collected in 2021 – each separate household within any dwelling will be required to complete their own, unique, household questionnaire.

#### 3.13.2. Number of rooms

Information on the number of rooms available for use by each household is used to understand overcrowding, and inform housing needs assessments. After the 2011 Census, NISRA compared information on the number of rooms collected in the 2011 Census with administrative data maintained by Land & Property Services. This administrative information was found to be of a high quality and can be attached to census information on a household by household basis.

#### 3.13.3. Short-term migration

In 2011, in order to distinguish short-term migrants from usual residents, those respondents who were not born in the UK and had arrived to live in the UK in the year prior to Census Day were asked about their intended length of stay in the UK. Given concerns around data quality, short-term migrants will not be separately identified in the 2021 Census.

# 3.13.4. Voluntary work

In 2011, the question on voluntary work required a yes or no answer; the question did not ask about the type or frequency of the voluntary work. This limited the usefulness of the question. It is planned that the Continuous Household Survey will contain a question about voluntary work which can be used as an alternative data source for this information if required, therefore it is proposed to drop this question for the 2021 Census.

<sup>&</sup>lt;sup>27</sup> https://www.nisra.gov.uk/statistics/central-survey-unit/continuous-household-survey

# 4. Collecting the Information

#### 4.1. Introduction

The main operational elements of the census cover a range of activities designed to obtain data for the whole population. Amongst other things, the steps include publicising the census, recruiting field staff, developing an address register and delivering a series of data collection activities.

The challenge for the data collection phase will be to secure data on a population which is less tolerant than ever of official surveys. Indeed experience from the 2011 Census and in official surveys since then has indicated that it is getting more difficult to make contact and engage householders across Northern Ireland. These challenges are related to changes in society – some of the more notable include:

- the changing working patterns of the population and the associated difficulty getting messages to the public;
- the increasing number of households and the associated increase in the volume of work in covering everyone in Northern Ireland;
- an increasing number of access controlled or "gated" communities, which are difficult for field staff to gain access to;
- the challenges of surveying a demographically more disparate population (e.g. an ageing and more ethnically diverse population); and
- the feeling within certain sections of society of being disconnected from government.

To help manage some of these issues NISRA plan to make greater use of digital technology to improve the quality and efficiency of the census data collection operation. The primary innovation for the 2021 Census is that most households will initially be sent a letter containing a Unique Code rather than a paper questionnaire. This letter will direct householders to a website to enable respondents to fill out their census questionnaire online. However, those who are unable or unwilling to complete online will be able to request a paper questionnaire via a dedicated telephone number. In addition, around 10% of all households (e.g. in areas with limited broadband coverage) will be issued a paper questionnaire instead of a letter. The paper questionnaire, once completed, can be returned in a pre-paid envelope by post. Alongside this, NISRA will run a large-scale publicity campaign and work with local Councils and community groups to help people to engage with the census and complete their questionnaire.

After Census Day, reminder letters will be issued to householders - an approach used successfully in recent tests. Householders who have not filled out their questionnaire

(either online or paper) will be followed up by field staff who remain the essential component of the data collection operation. Field staff will be trained to assist and encourage the public to complete their census questionnaire. There will be a focus on sections of the population who are identified as 'hard to reach' to ensure that they are encouraged to participate in the census.

# 4.2. Public support and publicity

It would be impossible to carry out a census without the co-operation of the public. However, the census is being conducted against a backdrop of reducing public engagement in official surveys. Therefore a large scale communications campaign will be needed to explain the purpose and value of the census. The campaign will aim to:

- ensure all householders know that the census is happening;
- encourage all householders to complete their questionnaire, ensuring that they are aware of their legal obligation to make a return;
- provide assurances to the public about the confidentiality and security of the census; and
- inform the public about how they can get more information.

The goal of the publicity campaign is to allay any concerns and motivate householders to take part, whilst also giving the public access to information on all options for support. NISRA will develop a community liaison plan for the 2021 Census. The objective of this plan will be to improve awareness and coverage amongst communities which are traditionally 'hard to reach'. Links are being established with key organisations (e.g. Age NI, the Royal National Institute for the Blind and the Simon Community) representing minority populations and special interest groups.

Accessibility will be further enhanced by the provision of the census questions and explanatory material in Braille and large print. Guidance booklets and a translation of the questionnaire will also be available in a number of additional languages (up to sixteen languages other than English). A facility will be available for those who wish to speak via telephone to someone in an alternative language. In line with the position in Scotland, NISRA propose that the online questionnaire will also be available in Irish and Ulster-Scots.

The overall aim is to ensure that the census offers a variety of services to provide all respondents with the help and assistance they require. Assistance will be available online, via a contact centre with a dedicated telephone number, via social media and through field staff calling door-to-door.

# 4.3. Developing an Address Register

The need to count every household and communal establishment is essential for the accurate delivery of the 2021 Census. The census address register provides a central spine for managing this. NISRA will use the POINTER<sup>28</sup> address register as a core dataset but will also utilise various other address level datasets (e.g. the Royal Mail Postal Address File, the Land and Property Service (LPS) Domestic Valuation list and the Northern Ireland Housing Executive social housing address list) to develop a comprehensive address register covering all household addresses in Northern Ireland. Finally, field staff will undertake a full on-the-ground address check to confirm that the address register is complete and accurate in advance of the census.

Alongside this, a full list of communal establishments will be developed. This will involve working with public bodies and other organisations (e.g. working with the Regulation and Quality Improvement Authority to access and use a list of registered care facilities). Officials will also work to generate a list of "special addresses" (e.g. gated apartment complexes) which will require additional consideration in the collection phase.

#### 4.4. Initial contact with householders

Initial direct contact with the public will be made prior to Census Day in the form of an advance leaflet providing information about the census. This will be followed by the main contact element which will either be via a letter addressed to the householder with a Unique Code and website link or a paper questionnaire (e.g. in areas with limited broadband coverage). A further leaflet will be issued prior to Census Day to all householders reminding them of the need to complete their census questionnaire.

#### 4.5. Communal establishments / Special enumeration

As well as private households the census needs to capture the characteristics of the population living in over 1,000 communal establishments (e.g. hotels, hospitals, boarding schools or prisons). It is proposed to establish a dedicated team, based in Census Office, to manage this. This team will work with managers of communal establishments to ensure that a response is made. Customised procedures will be developed and online/paper questionnaires will be available for all communal establishments.

It is recognised that additional procedures will have to be adopted for some special populations. These will include people with no settled place of residence and persons sleeping rough. A number of such groups, which have been identified as 'hard to reach', will be subject to special enumeration measures. Consultation with

<sup>&</sup>lt;sup>28</sup> POINTER is the address database for Northern Ireland and is maintained by LPS, with input from local Councils and Royal Mail. It is the common standard address for every property in Northern Ireland

representative organisations will inform the development of effective strategies to accommodate these groups.

# 4.6. Non-response follow-up

Whilst every effort will be made to encourage completion, it is clear that significant effort will also be required after Census Day to encourage some members of the public to complete their questionnaire. For some, this will initially take the form of a targeted reminder letter; for others, field staff will first follow-up those who have not responded by calling door-to-door. Ultimately every household which has not responded will receive one or more visits from field staff. The role of field staff will include making contact with non-responding households, encouraging participation, highlighting the benefits of the census to households and individuals and providing assistance for completion as required. If field staff make no contact at follow-up, a card will be left explaining why they have visited. Subsequent visits will be made at different times of the day or different days of the week in order to improve the chance of contact. Finally, towards the end of the field work period all non-responding householders will be issued with a paper questionnaire to ensure they have full opportunity to fulfil their statutory duty.

Importantly, all census staff, including field staff, have a statutory obligation to adhere to strict confidentiality undertakings (see chapter 6 for more details) – this will help to ensure that the field work phase is carried out confidentially and securely.

## 4.7. Enforcing the legal requirement to complete a census questionnaire

To emphasise the importance of obtaining a response from all households it is necessary to adopt a policy of prosecuting those householders who refuse to make a census return. Persons refusing to comply with the statutory requirement will be liable to prosecution and a fine, the maximum level of which is currently £1,000. NISRA will use specially trained field staff to conduct formal interviews where there is a clear indication of a householder's refusal to make a return. In this way, evidence may be gathered to take further legal action should this be necessary.

## 4.8. Outsourcing parts of the census operation

A range of systems and services will be developed to support and deliver the 2021 Census. Some of these will be developed by NISRA and some will be outsourced. This builds on the approach taken in recent censuses, where external suppliers brought considerable technical expertise. In addition, NISRA will work in partnership with the ONS to procure and use shared suppliers for the main contracts. Working with the larger scale that is required for the census in England and Wales ensures that the census systems and services are developed in a way that delivers economies of scale and value for money.

# 4.9. Questionnaire completion

It is estimated that at least 60% of those who respond to the 2021 Census will use the online questionnaire. This is a significant rise from the 15% of households who responded to the 2011 Census online. The higher 2021 estimate is based on the evidence from the 2017 Census Test (60% online) and the international census experience in Canada (2016 Census – 68% online), Australia (2016 Census – 59% online) and New Zealand (2018 Census – 82% online)<sup>29</sup>.

The 2021 Census online questionnaire will be designed to allow for completion on all common web browsers and mobile devices such as phones and tablets. Functionality will be designed to minimise burden and improve data quality.

Where necessary, a paper questionnaire will be provided to the public. The paper questionnaire will be designed to be easy to fill out. All paper questionnaires will be provided to respondents with a pre-addressed, pre-paid return envelope. The paper questionnaire will have space for up to six persons in each household and will be provided to the public in the following circumstances:

- for around 10% of householders a paper questionnaire will be part of the initial contact (e.g. in areas where online access is difficult);
- when requested by members of the public, via the public support channels;
- when handed out to householders on the doorstep by field staff; and
- finally, towards the end of the enumeration, all non-responding householders will be sent a paper questionnaire to ensure they have a full opportunity to fulfil their statutory duty.

Alongside this, anyone may ask for a separate (individual) online or paper questionnaire. This will help in households where individuals desire privacy. In larger households (of more than six residents) householders will be able to complete their return online but, if completing on paper, will need to request a continuation paper questionnaire for the seventh and further residents.

http://www.abs.gov.au/websitedbs/d3310114.nsf/home/Independent+Assurance+Panel/%24File/CIAP+Report +on+the+quality+of+2016+Census+data.pdf

New Zealand https://www.stats.govt.nz/news/2018-census-update

41

<sup>&</sup>lt;sup>29</sup> Canada <a href="https://www12.statcan.gc.ca/census-recensement/2016/ref/response-rates-eng.cfm">https://www12.statcan.gc.ca/census-recensement/2016/ref/response-rates-eng.cfm</a> Australia

# 5. Statistical data processing and Output production

#### 5.1. Introduction

Census returns will be processed to obtain a fully complete database of the whole population of Northern Ireland. NISRA is committed to ensuring that the statistical outputs from the census will be of high quality and easily accessed. Importantly, NISRA is planning to produce and publish results from the 2021 Census more quickly than was the case for the last census. To do this will require the processing of the data collected to be undertaken as efficiently and effectively as possible. This chapter sets out proposals for the planned data processing operation.

#### 5.2. Data capture and coding

It is anticipated that most respondents will wish to complete their census questionnaire online, although those respondents preferring to complete a paper questionnaire will be able to do so. Completed paper questionnaires will be scanned and the data captured, coded and amalgamated with the online questionnaires into a single dataset. As with the 2001 and 2011 Censuses, the capture and coding of data from paper questionnaires will be outsourced. Suppliers will be required to meet specified data security protocols and standards – this outsourcing element of the census is in line with similar activities across the rest of the UK and Ireland.

## 5.3. Statistical data processing

For the 2021 Census, it is planned that NISRA will conduct all subsequent data processing of Northern Ireland census returns. This will be a new step as previously such work was undertaken by the ONS. NISRA will, as far as possible, maintain a harmonised approach to the treatment of data with other UK offices. This will allow greater flexibility in respect of the methods used to process the data. As an example, it is planned that data from a number of external administrative sources will be used to assess the quality of the completed questionnaires.

In some cases the data captured from completed questionnaires will be inaccurate or incomplete. In such cases modification will be required (e.g. to correct data entered in error). NISRA will put in place IT systems and processes that will be able to securely handle large volumes of complex data and allow it to be processed in a timely manner. This work can be split into a number of separate elements that are described below.

#### 5.3.1. Data load and front-end process

This process will involve taking the combined online and paper questionnaire data file and carrying out a series of validation and quality checks. These checks will ensure that the structural integrity of the data meets expectations and that no systematic error has been introduced during the capture and coding stage (e.g. fixing

multiple responses that have been made (online and paper)). In this phase external administrative data may be used to support the quality assurance of census returns (e.g. to help resolve cases where multiple census responses have been made).

#### 5.3.2. Edit and Imputation process

The Edit and Imputation process addresses inconsistent or partially completed census questionnaires. Edit uses pre-set statistical rules to find inaccurate returns (e.g. where a person aged under 16 has erroneously answered questions on economic activity). Impute uses standard statistical methods to correct these returns. This is undertaken in a number of ways (e.g. inaccurate responses are made consistent using other responses on the questionnaire). This Edit and Imputation process ensures that the results of the census are complete and consistent. Similar methods are used in most census-taking countries and NISRA currently plan to use the Canada Census Edit and Imputation System<sup>30</sup> to undertake this work. The overall aim is to ensure that statistical tables are complete, with no gaps.

#### 5.3.3. Coverage assessment and adjustment process

Ultimately, the success of the census will be measured on how well it estimates the size of the whole population. It is recognised that, while every effort is made, no census will enumerate every single household and individual in the data collection phase.

In most census-taking countries a post-collection coverage assessment and adjustment process ensures that the final census results are as accurate as possible. For the 2021 Census NISRA plan an independent post-collection Census Coverage Survey<sup>31</sup>. This will be used alongside information from field staff and administrative data to estimate the total number of households and people in Northern Ireland. The census database will be adjusted using coverage adjustment statistical processes similar to those used in 2011 to ensure that the final dataset is complete.

For the 2021 Census, NISRA plan to develop further the Census Under Enumeration (CUE) project implemented in the 2011 Census<sup>32</sup>. The method uses high quality administrative data to supply demographic information on households/addresses that field staff have indicated did not take part in the census. The 2011 CUE process developed in Northern Ireland is now seen as international best practice in coverage assessment and adjustment.

<sup>&</sup>lt;sup>30</sup> See <a href="https://www.istat.it/en/methods-and-tools/methods-and-it-tools/process/processing-tools/canceis">https://www.istat.it/en/methods-and-tools/methods-and-it-tools/process/processing-tools/canceis</a> for a full description. This process will be assisted by using administrative data sources and, where relevant, data from the 2011 Census.

<sup>&</sup>lt;sup>31</sup> The Census Coverage Survey provides information on the extent and distribution of census undercount. It will be drawn independently of the census and conducted 6 weeks after Census Day.

<sup>32</sup> http://www.tara.tcd.ie/bitstream/handle/2262/72780/8%20green.pdf?sequence=1&isAllowed=y

#### 5.4. Enhanced Census Output variables

NISRA must balance the need for detailed census statistics with the burden on the public of answering census questions. Based on the experience from the 2011 Census, NISRA believe that the balance of under 45 questions per person is the limit of this respondent burden. Indeed there are a number of topics where there is a user need for census-type statistics but where space on the questionnaire is limited. In addition, in some cases there are good quality administrative data (e.g. data on property floor space from Land and Property Services is more accurate than asking householders about the floor space of their property).

NISRA plan to link together administrative data with the 2021 Census data to create a sequence of Enhanced Census Outputs (i.e. data linked to the collected census data to create an enhanced census database and allow new outputs to be created). This greater use of administrative data will enhance societal benefit from the census. NISRA propose to add a small number of variables to enhance the scope of census outputs. It is proposed that a list of planned Enhanced Census Output variables will be published by NISRA as part of the 2021 Census outputs schedule.

## 5.5. Output geography

There is a recognised user need for the results from the census to be published at varying geographic levels. The Census Act (Northern Ireland) 1969 places a power on the Registrar General to produce results for Local Government Districts and other geographies. Typically, census results are published using geographies based on the electoral boundaries (e.g. Districts and Wards) and from 2001 NISRA have also produced census statistics for a range of other geographies (e.g. in 2011 results were published for around 4,500 Small Areas and 890 Super Output Areas).

Statistics for 2021 Census will be produced for similar sized geographies. However, a new set of Local Government Districts, District Electoral Areas and Electoral Wards were introduced in 2015. Due to the risk of disclosure, only a small number of 2011 Census outputs have been produced for these geographical areas. NISRA have consulted on options for releasing data at different geographic levels. Further details on these options can be found in the 2021 Census: Outputs Strategy for Northern Ireland consultation document<sup>33</sup>. Following an analysis of the consultation responses, NISRA will publish proposals on output geography.

In addition, NISRA will produce 2021 Census statistics for grid-squares (100m & 1km) to allow users to compare data for every census since 1971. Allied to this, due to the high demand for statistics on Towns and Villages, NISRA will use Settlement

\_

 $<sup>\</sup>frac{33}{\text{https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2021-census-outputs-strategy-consultation-for-northern-ireland-document.pdf}$ 

Development Limits provided by the Department for Infrastructure to produce 2021 Census Key Statistics for Towns and Villages.

## 5.6. Quality Assurance processes

Before publishing any results, detailed final statistical quality assurance processes will be undertaken. Such processes will audit, at both the macro and micro level, the results to ensure that the final statistics are accurate, coherent and that no systematic error has been created. In doing this, a range of aggregated and individual level administrative data will be used to quality assure the census data (e.g. comparing the results with previous census information on age, population size, country of birth etc.). Separately, a Census Quality Survey will be undertaken after the 2021 Census to measure the accuracy of responses to individual questions.

#### 5.7. Output production processes

For 2021, NISRA aim to maintain or, if possible, improve on the quality of outputs produced from the 2011 Census. The proposed design, content and dissemination of 2021 Census outputs is set out in the 2021 Census: Outputs Strategy for Northern Ireland consultation document.

# 5.7.1. Statistical Disclosure Control methodology

NISRA intend to use Statistical Disclosure Control (SDC) methods to ensure that 2021 Census outputs provide value and utility to users whilst also protecting against the identification of individuals, households or organisations. This is described in detail in section 6.4.

#### 5.7.2. Disseminating the results

It is important that users of census outputs have access to high quality census statistics to inform decision making, resource allocation, service planning and delivery. NISRA will ensure that the results will be disseminated in a timely manner which will meet users' requirements on content, format and means of access. In undertaking this NISRA intend to address the recommendations made by the UK Statistics Authority in their assessment of the 2011 Census<sup>34</sup>.

A number of key points are outlined here. Firstly, it is planned that results will be published as soon as possible after data processing; with initial results published by Summer 2022 and all remaining pre-planned outputs by Summer 2023. It is thus intended that results will be published to a faster timetable than for the 2011 Census. Secondly, NISRA will produce outputs using recognised international classifications which will aid understanding. Thirdly, NISRA will use the internet as the primary

<sup>34</sup> https://www.nisra.gov.uk/statistics/2011-<u>census/background/special-assessment-2011-censuses-uk</u>

dissemination facility. Finally, comprehensive metadata, in the form of definitions, classifications and quality indicators, will be supplied.

Given the need to provide UK outputs, the Registrars General for Northern Ireland and Scotland and the National Statistician have signed an agreement on the conduct of the 2021 Census. This includes the production and dissemination of key harmonised statistics. In addition, NISRA will work with CSO Ireland to produce an Ireland – Northern Ireland 2021 Census report, similar to the published report on the 2011 Census.

#### 5.7.3. Research access

NISRA will make census data available for the purposes of research and statistical analysis only. This will give accredited researchers access to microdata, including samples of anonymised records (SARS) of both individuals and households. NISRA also propose to incorporate the 2021 Census data into the Northern Ireland Longitudinal Study<sup>35</sup> to further enhance the potential value of the census. Such access will conform with relevant confidentially requirements.

<sup>35</sup> https://www.nisra.gov.uk/support/research-support

# 6. Confidentiality, Privacy and Security

#### 6.1. Introduction

The public need to be confident that their personal census records will be held securely. There is a well-established reputation of maintaining confidentiality in the census and it is intended to uphold this reputation in the 2021 Census.

The following principles will govern the treatment of the information provided in the census returns:

- only persons working under the control of the Registrar General for Northern Ireland will have access to relevant personal census information. Staff will only be granted access to personal census data on a 'need-to-see' basis;
- all persons working on the census will be security checked and required to sign undertakings binding in law, to ensure awareness of their statutory confidentiality obligations. They will also be given strict instructions and be liable to prosecution for any breaches of the law;
- the online data collection, storage and processing systems will be tested in accordance with the strictest of government standards;
- in most cases one questionnaire will cover all members of the household but individuals can, if they wish, provide personal information on a separate individual questionnaire;
- the computer systems handling census data will have strict technical and process safeguards to prevent unauthorised access;
- the security of personal census information will be strictly managed. All sites processing census data will have appropriate security arrangements in place, including perimeter and access controls;
- the preparation and dissemination of census statistical outputs will be subject to statistical modification to preserve confidentiality; and
- all services and systems will comply with the government Security Policy Framework<sup>36</sup>, including relevant technical and data transfer standards.

This chapter outlines the main elements of the 2021 Census confidentiality, privacy and security infra-structure.

<sup>&</sup>lt;sup>36</sup> <a href="https://www.gov.uk/government/publications/security-policy-framework">https://www.gov.uk/government/publications/security-policy-framework</a>

# 6.2. Legal obligations

The information collected in the census will be used solely for the production of statistics and for statistical research. Personal census information will not be made available or used for other purposes - to do so breaks the law. Usage will comply fully with the Census Act (Northern Ireland) 1969<sup>37</sup>, as well as the standards set out in the Code of Practice for Official Statistics<sup>38</sup>. There are legal penalties for unlawful disclosure of census personal information.

All staff employed by or providing services to the Registrar General for the purposes of the census are bound by the confidentiality provisions of the Census (Confidentiality) (Northern Ireland) Order 1991<sup>39</sup>. They will be required to sign a Census Confidentiality Undertaking stating that they will not, without lawful authority, divulge or make use of any information acquired in the course of their duties. They will be liable on conviction, under the terms of the Census (Confidentiality) (Northern Ireland) Order 1991, to imprisonment or a fine, or both. All staff processing any personal census data will be security cleared to the UK baseline standard, as a minimum. This requirement has been extended to all employees of suppliers and sub-contractors handling any personal census data.

All census staff will be trained in the secure handling of data and temporary field staff will be trained to have the skills to deal with the public and handle personal information they collect confidentially.

Finally the Data Protection Act 2018<sup>40</sup> and the European Union General Data Protection Regulation<sup>41</sup> (GDPR) regulate the collection, storage, and use of personal data. Census data will be managed in line with all data protection requirements. NISRA will publish a Privacy Notice and Data Protection Impact Assessment in advance of the 2021 Census.

#### 6.3. System security

Census data are held under a set of official standards and safeguards which have been put in place to ensure that the data remains secure. This includes control of physical access to any site or room where the data are kept and secure control of access to IT hardware and IT systems. Data are held on fully accredited systems promoting privacy by design. NISRA will engage with key stakeholders such as the Information Commissioner's Office, the ONS and Government Communications Headquarters (GCHQ) regarding census security. All of the electronic communications links over which personal census information will be routed will be

<sup>&</sup>lt;sup>37</sup> http://www.legislation.gov.uk/apni/1969/8/contents

<sup>38</sup> https://www.statisticsauthority.gov.uk/wp-content/uploads/2018/02/Code-of-Practice-for-Statistics.pdf

<sup>39</sup> http://www.legislation.gov.uk/nisi/1991/760

http://www.legislation.gov.uk/ukpga/2018/12/pdfs/ukpga\_20180012\_en.pdf

<sup>41</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679

encrypted (scrambled) to recommended levels. An independent review of systems and procedures, covering both internal systems and those of all contractors, will also be commissioned.

Secure systems in which to hold data, with stringent controls and procedures, are in place. No financial details are stored, and names and addresses are removed from the data sources used for the production of statistical tables. The information in questionnaires is used only for census related publications, further analyses and secondary research undertaken by or under the control of NISRA. These outputs do not attribute any of the statistics back to specific individuals. All handling and storage of data will comply with the Data Protection Act 2018 and GDPR. Contractual and operational arrangements, to enable the security of Northern Ireland census data, will include the following:

- all census data will be owned by the Department of Finance;
- all data will remain and be processed in the UK;
- only Census Office staff will have access to the full census data set; and
- physical security procedures will be in place, such that it will not be possible for unauthorised copying of data to take place.

# 6.4. Statistical Disclosure Control (SDC)

In releasing aggregate statistics from the 2021 Census, precautions will be taken to ensure that published tabulations and abstracts of statistical data do not reveal any information about identifiable individuals or households. Special precautions may apply particularly to statistical outputs for small geographic areas or small population groups. These methods are termed Statistical Disclosure Control.

The UK National Statistician and the Registrars General for Northern Ireland and Scotland have published a joint agreement to adopt a common statistical disclosure control policy across the UK<sup>42</sup>. The policy position includes the guarantee that personal census information shall be kept safe and secure and appropriate disclosure control methods shall be applied before releasing statistics.

Publicly disseminated census aggregate statistics will have a small degree of uncertainty attached so that, for example, a specific count may not be a true value but may have been systematically distorted. In doing this, NISRA will ensure that the uncertainty does not significantly alter the representativeness of the data. As an example, disclosure control procedures may include:

49

 $<sup>\</sup>frac{42}{\text{https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/statistical-disclosure-control-methodology-for-}{2021\text{-census.pdf}}$ 

- modifying data prior to the production of statistics through targeted record swapping, over-imputation etc.;
- grouping the number of output categories for a variable (e.g. aggregated age groups); and/or,
- where necessary, thresholding or not releasing statistics, when the number of people/households with a characteristic falls below a minimum threshold.

The handling of information collected in the 2021 Census will conform to the principles of fair and lawful processing under the Data Protection Act 2018. This will include possible future statistical uses of census data (e.g. linking census data with future mortality events to undertake statistical research). This processing of census data to create de-identified linked research datasets will also adhere to the data protection principles and strict procedures and security measures.

# 7. The Legislative Process

# 7.1. Primary census legislation

The taking of a census in Northern Ireland is enabled by the Census Act (Northern Ireland) 1969. The responsibility for making the necessary arrangements for planning, conducting and reporting on the census rests with the Registrar General for Northern Ireland.

The Act allows for information to be collected on certain particulars which are listed in the Schedule to the Census Act (Northern Ireland) 1969. This includes:

- (1) Names, sex, age.
- (2) Occupation, profession, trade or employment.
- (3) Nationality, birthplace, race, language.
- (4) Place of abode and character of dwelling.
- (5) Condition as to marriage or civil partnership, relation to head of family, issue.
- (6) Education, professional and technical qualifications.
- (7) Religion.
- (8) Any other matters with respect to which it is desirable to obtain statistical information with a view to ascertaining the social condition of the population.

## 7.2. Secondary legislation

To run a census, the Census Act (Northern Ireland) 1969 requires secondary legislation in the name of a Census Order and Regulations. The Order prescribes:

- the date on which the census is to be taken;
- the persons by whom and with respect to whom, the census returns are to be made; and,
- the particulars to be stated in the returns.

Following the approval of the Census Order, Census Regulations make detailed provision for the conduct of the census and contain specimens of the questionnaires to be used. The Regulations also cover the field activities such as:

• the appointment of field staff, including completion of form of undertaking;

- the geography of the census the Registrar General shall divide Northern Ireland into enumeration districts;
- the arrangements for the delivery of census questionnaires to households and communal establishments;
- the collection of completed questionnaires either by post or doorstep collection, or by online return;
- 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 persons sleeping rough;
- follow-up procedures;
- the management of field materials and documentation; and,
- security and confidentiality procedures.

The census is subject to separate legislative processes and arrangements in Great Britain. There, Ministers have presented proposals to the Westminster Parliament and the National Assembly for Wales in respect of England and Wales, and to the Scottish Parliament in respect of Scotland. It is planned that the necessary legislation to conduct a census will be taken through the Northern Ireland Assembly. In the event that a NI Executive has not been formed when this legislation needs to be introduced, the Department will write to the Secretary of State for Northern Ireland requesting that she sponsor this legislation at Westminster.

It is considered that the statutory authority to require information to be provided on each of the questions proposed for the 2021 Census is fully compliant with both the European Convention on Human Rights and the Human Rights Act 1998 in respect of the individual's right to privacy.