

# 2021 Census: Outputs Strategy Consultation for Northern Ireland

# **CONSULTATION DOCUMENT**

**CENSUS OFFICE FOR NORTHERN IRELAND** 

Consultation will close midnight on Wednesday 9 January 2019

# October 2018

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#### 1. Introduction

The Northern Ireland Statistics and Research Agency (NISRA) is responsible for the census in Northern Ireland. This consultation will allow NISRA to gather the views of users on the proposed strategy for producing and disseminating 2021 Census results, including specialist products and census microdata. NISRA want to build on the success of the 2011 Census and ensure that the 2021 Census reflects the information needs of users. NISRA aims to improve the quality of outputs, provide comparability where users say it is important and deliver information that is relevant in 2021 and beyond.

This document outlines our proposed design of 2021 Census outputs and the way statistics will be made available to census users. We'd like to gather your views on our initial design to ensure our proposal will meet your needs. Your response to this consultation is important and feedback will help us prioritise future research and development of 2021 Census outputs. It will also inform the order in which we release our products.

Our initial proposal is based on:

- the evaluation of the design and delivery of 2011 Census output content;
- our current knowledge and understanding of potential technological and methodological solutions;
- our current understanding of affordability; and
- our aspirations for linking administrative data with the 2021 Census data to produce enhanced census outputs.

It is important to note this is a proposal at present. The final design of output content will be subject to further research, cost, feasibility, availability of administrative data, testing and feedback from users.

The information presented in this document specifically refers to the design of the census in Northern Ireland, unless otherwise stated. We are working closely with the Office for National Statistics (ONS) and the National Records of Scotland (NRS) to ensure UK comparability of results, where possible and appropriate.

# 1.1. Consultation – how we'd like you to respond

NISRA's preferred method for you to respond to this consultation is <u>online</u>. If you wish to respond by email or paper, please download and complete the 2021 Census Outputs Strategy Consultation Questionnaire from the NISRA website (<u>PDF</u> or <u>Microsoft Word</u> version).

If you wish to respond to this consultation using a paper questionnaire, responses can be returned to the email or postal addresses cited below:

Email: 2021census.consultation@nisra.gov.uk

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Post: Census Office

Northern Ireland Statistics and Research Agency

Colby House Stranmillis Court

Belfast BT9 5RR

We would ask that you consider responding to all questions in this consultation questionnaire, rather than only those that are relevant to you, as this will help us form a more inclusive and robust strategy.

Please note that comments relating to questions in the 2021 Census should not be included in the responses to this consultation. A consultation on 2021 Census topics was undertaken and completed in 2016. If you require further information regarding 2021 Census topics please contact Census Office using the information provided above.

Responses to this consultation are invited until midnight on 9 January 2019.

# 1.2. Moderation policy

In the interests of transparency, NISRA will publish all responses to the 2021 Census Outputs Strategy consultation. This will include the name of the responding organisation or individual, but only if you have provided consent for your name or organisation name to be published. We won't publish personal contact details.

Responses to this consultation will remain publicly available, therefore, NISRA will implement a moderation policy to ensure that responses are appropriate and not harmful to others. Moderation will occur in accordance with the terms below.

Responses which include any of the following may be deleted:

- threats or incitements to violence
- use of obscenity
- sectarian language
- duplicative or substantially duplicative postings by the same person or entity
- postings seeking employment or containing advertisements for a commercial product or service
- information posted in violation of law, including libel, condoning or encouraging illegal activity, revealing classified information, or infringing on a copyright or trademark

Moderators reserve the right to remove responses which do not address some aspect of the purpose of this consultation. We deeply value your time and input, and our desire is to

remove as few responses as possible while ensuring that a focused, constructive consultation takes place.

This moderation policy is subject to change to address additional matters as may be warranted. If you have a complaint about an item of user-generated content on this site, or feel that your own content was removed in error, please contact us at 2021census.consultation@nisra.gov.uk or call 028 9025 5156.

## 1.3. Future user engagement

We'll actively engage with users on all aspects of census output content and dissemination mechanisms throughout the design phases until the publication of outputs following the 2021 Census. We'll also ask users to reflect on the utility of 2021 Census data after its release.

We recognise there are many census data users, with different interests and needs. Due to the large number of uses, it won't be feasible for us to consult with all census data users to the same extent. However, we'll invite all potential users to participate in our public consultations. We'll also use the existing Census Advisory Groups to update stakeholders on our progress and invite feedback on our plans. We'll test the functionality of our proposed dissemination mechanism and make decisions informed by extensive user research. We'll also create working groups to ensure the design of specific output meets user needs. If you're interested in being involved in any of these working groups, please let us know in your response to this consultation.

We'll consider views from all users. However, it should be recognised that delivering 2021 Census outputs and dissemination systems which meet the full expectations of such a large and wide user community won't be practical or financially viable. We'll seek to deliver outputs which meet the majority of user needs, whilst working with a range of stakeholders to ensure the design of specialist products meets the needs of specific groups. We'll consider the design of output content based on the following criteria:

- accessibility
- flexibility
- timeliness
- feasibility
- disclosure risk
- relative costs
- user acceptability
- public confidence

#### 2. Background

This strategy document outlines Census Office's initial design on the production and dissemination of the statistical outputs from the 2021 Census.

The strategy seeks to produce statistical outputs from the next census which will meet user requirements and will be both timely and flexible. It will result in statistical outputs that:

- are disseminated to a pre-arranged timetable;
- are safe, and are seen to be safe, in terms of maintaining confidentiality of census information held in relation to individuals and households;
- are trusted by users and the public;
- are produced through robust processes and to a high quality; and
- provide value for money in terms of ease of access and use.

More specifically, Census Office are considering statistical outputs that:

- include the development of a flexible dissemination system, which will allow users to access data to build tables that meet their specific needs;
- provide for a number of headline pre-planned tables;
- include a Commentary and Analysis section in Statistical Bulletins and Press Releases;
- include short stories and infographics that focus on particular population characteristics or subgroups; and
- include metadata in all outputs to inform users.

The content of the strategy has been developed through consultation work undertaken after the release of 2011 Census statistical outputs and with users from 2016 to 2018. As such, the strategy reflects the current thinking in terms of optimising the 2021 Census statistical outputs to maximise the benefits to users.

The consultation process will provide a framework for planning and development and this will help Census Office prioritise future work.

#### 2.1. Conduct of the 2021 Census in the UK

The Registrar General for Northern Ireland, the UK National Statistician and the Registrar General for Scotland released a Statement of Agreement<sup>1</sup> in October 2015 on the conduct of the 2021 Censuses. In this document they indicated an intention to conduct the next census

<sup>&</sup>lt;sup>1</sup> The 'Agreement between the National Statistician and the Registrars General for Scotland and Northern Ireland' is available from: <a href="https://www.nisra.gov.uk/publications/conduct-2011-censuses-uk-statement-agreement-national-statistician-and-registrars">https://www.nisra.gov.uk/publications/conduct-2011-censuses-uk-statement-agreement-national-statistician-and-registrars</a>

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simultaneously across the UK. A similar agreement was developed for the 2011 Censuses that has enhanced the extent of harmonisation across the UK.

A census is taken under the Census Act (Northern Ireland) 1969<sup>2</sup>. The necessary subordinate legislation, relating to the specific requirements for the census in Northern Ireland requires legislative approval.

Each census within the UK is autonomous, however, the three Census Offices will aim to work in unison to ensure that the 2021 Censuses are successful in providing high quality population and housing statistics for the UK, meeting the needs of users and reflecting United Nations – Economic Commission for Europe, Eurostat and other international requirements.

#### 2.2. Harmonisation

The 2021 Census outputs will constitute consistent, coherent and accessible statistics for the UK, individual countries and geographic areas where it is possible and appropriate to do so.

For questions and topics that are comparable across the UK, NISRA will liaise with the other Census Offices to agree a set of common definitions and classifications to be used, with the intention of publishing consistent census outputs across the UK. Where possible, these will be based on international standards. This will ensure that the United Kingdom meets its international obligations in terms of the production of census statistics.

NISRA will also work with the Central Statistics Office (CSO), Ireland, to provide, where possible, key statistics for the island of Ireland. Specifically, CSO and NISRA plan to produce an Ireland and Northern Ireland 2021 Census report, similar to the published report on the 2011 Census<sup>3</sup>. An agreement<sup>4</sup> has been signed by both the CSO Director General and the Registrar General for Northern Ireland on consultative arrangements for the 2021 Census. This continues the long working relationship that exists between the two Census Offices on the island of Ireland.

#### 2.3. User Consultation

In 2015, Census Office began consulting with users on the conduct of the 2021 Census in Northern Ireland and delivered a number of public events to discuss topics for the next census. A report on the Topic Consultation was published in August 2016<sup>5</sup>.

<sup>&</sup>lt;sup>2</sup> The 'Census Act (Northern Ireland) 1969' is available from: http://www.legislation.gov.uk/apni/1969/8

<sup>&</sup>lt;sup>3</sup> The Census 2011 Ireland and Northern report is available from: https://www.cso.ie/en/media/csoie/census/documents/north-south-spreadsheets/Census2011IrelandandNorthernIrelandwebversion1.pdf

<sup>&</sup>lt;sup>4</sup> The '2021 Census – Consultative arrangements' are available at: <a href="https://www.nisra.gov.uk/publications/2021-census-consultative-arrangements">https://www.nisra.gov.uk/publications/2021-census-consultative-arrangements</a>

<sup>&</sup>lt;sup>5</sup> More information on the 2021 Topic Consultation is available from: https://www.nisra.gov.uk/statistics/2021-census/planning/consultation/topic-consultation

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Census Office will continue its engagement with users on an ongoing basis through a formal consultation on this 2021 Census Outputs Strategy and the continued work with the Demographic Statistics Advisory Group (DSAG)<sup>6</sup>.

The information gained through these activities will be carefully considered to further develop the Outputs Strategy. In particular, the strategy seeks to make the best use of the dissemination resources available to NISRA whilst making full use of the knowledge available through our joint work with the ONS, NRS and the CSO.

#### 3. Vision for 2021 Census outputs

Our key challenge is to get the greatest value possible from the census data, ensuring that it is easily accessible and provides the right content to meet the user requirements, whilst being mindful of the need to protect confidentiality and achieve value for money.

Census Office intends to build on the success of the 2011 Census in Northern Ireland.

Consequently, the key strategic objectives from 2011 which have been retained for 2021 are:

- to provide high quality, value for money and fit for purpose statistics that meet user needs. They will also be consistent in format and content, and comparable across the UK as far as is possible in accordance with published timetables;
- to maximise overall response rates and minimise differences in response rates in specific areas and among particular population sub-groups;
- to protect, and be seen to protect, confidential personal census information; and
- to secure public and user confidence in the final results and deliver them in a timely manner.

The high level strategic aims outlined above, coupled with the undertakings given in the Statement of Agreement (between the Registrars General for both Northern Ireland and Scotland and the National Statistician), play an integral part in shaping NISRA's vision for the 2021 Census outputs in Northern Ireland. Importantly, the vision builds on the key lessons learnt from the 2011 Census and demonstrates that Census Office has worked closely with its key users both within Northern Ireland and from further afield. Census Office aims to:

- produce the 2021 Census outputs using recognised international and, in the absence of these, UK based classifications such as Standard Industrial Classification of Economic Activities, Standard Occupational Classification and National Statistics Socio-Economic Classification;
- implement a Statistical Disclosure Control policy that is, as far as possible, common across the UK;

<sup>&</sup>lt;sup>6</sup> More information on the Demographic Statistics Advisory Group is available from: https://www.nisra.gov.uk/statistics/2021-census/planning/consultation/demographic-statistics-advisory-group

- ensure that census outputs are widely accessible;
- provide a single point of access to 2021 Census results through a dedicated website, meeting the common needs of users and incorporating the flexibility for users to create their own products that have been appropriately protected from a statistical disclosure control perspective;
- optimise e-dissemination by making a core set of tables containing Key Statistics, to be specified in 2020/21, freely available on-line. This will involve working collaboratively with the other UK Census Offices in order to harmonise the outputs where possible;
- provide Population and Household estimates by Summer 2022 for the first phase of 2021 Census outputs;
- provide access to comprehensive metadata that is released along with the corresponding output products and facilitates understanding of the information;
- publish Commentary and Analysis of Key Statistics in accordance with the UK Statistics Authority Code of Practice;
- produce a limited number of Statistical Bulletins and Press Releases where there is a requirement or a clear user need to do so:
- create short stories and infographics to highlight the key findings of census outputs;
- actively respond to user requirements for specialist products, such as origin and destination, alternative populations and bulk downloads in a variety of formats using open data standards;
- deliver an efficient customer service function, to respond to user queries and produce bespoke tables as and when required; and
- continue to support specialised services such as the Samples of Anonymised Records (microdata including Secure, Safeguarded and teaching files) and the Northern Ireland Longitudinal Study (NILS), all of which play a pivotal role in the vital research that the census supports.

# 3.1. Data Confidentiality

As stated above in the key strategic objectives, there is a requirement to protect individuals, households and businesses from being identified in any 2021 Census published table using Statistical Disclosure Control (SDC) methods. Targeted record swapping was the primary method of disclosure control in 2011 and Census Office propose to use this same method again in 2021. The technique involves assessing individuals or households with rare or unique characteristics and swapping those at risk of identification with a similar individual or household from another area.

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NISRA are also currently considering the development of a flexible dissemination system which will allow users to create their own tables. It is crucial that SDC methodology is incorporated into this product to protect against disclosure, especially disclosure that occurs when tables containing similar information are compared (differencing). To facilitate the introduction of a flexible dissemination system Census Office propose to introduce a further, post-tabular SDC method known as 'cell key perturbation' which is based on a variant of the Australian Bureau of Statistics (ABS) methodology.

Census Office are currently considering the release of 2021 Census data at higher levels of geography without the use of cell key perturbation. However, cell key perturbation would be applied at lower geographical levels and this may lead to slight inconsistencies in the population totals between different tables. However, the advantage of applying this additional level of statistical disclosure control is the more timely release of 2021 outputs. Users are invited to consider this proposal as part of the consultation and provide their views in the consultation questionnaire.

For more information please refer to <u>'Statistical Disclosure Control Methodology for 2021 Census'</u>.

## 4. Meeting user needs

# 4.1. 2021 Census Outputs Geography

Historically, NISRA have published census results using geographies based on electoral boundaries in place at that time.

In 2001 NISRA released census outputs for a range of administrative and statistical geographies. This included small levels of geography known as Census Output Areas and Super Output Areas which, due to their hierarchical nature, were used to create larger geographies such as Wards and Local Government Districts.

By and large<sup>7</sup> the same geographies were used again in 2011, allowing users to directly compare data from both censuses. In 2015, following the revision of local government boundaries, a new set of Local Government Districts, District Electoral Areas and Electoral Wards were introduced. To date a number of 2001 and 2011 Census outputs have been produced using these new geographical areas. However, outputs could not be produced for the new lower level Electoral Wards due to increased risk of disclosure.

<sup>&</sup>lt;sup>7</sup> Super output areas were marginally redrawn to take account of the new Parliamentary Constituencies – the number of Super Output Areas remained at 890 between the two Censuses. The 2001 Census Output Areas – the smallest geographies were also amended. This time the 5022 Output Areas from the 2001 Census were reworked into the new 4,537 2011 Census Small Areas. This was necessary to ensure that the Small Areas met minimum population counts. In all cases the new Small Areas were formed as a direct lookup from the Output Areas or by merging two or more Output Areas into one new Small Area. Thus the two geographies remained "consistent" over time.

In 2021, Census Office are considering two alternative options for releasing data at different geographic levels.

Option 1: Census Office are considering the production of 2021 Census statistics for the administrative and statistical geographies used in both the 2001 and 2011 Censuses. This will allow comparability of census information at consistent geographies across 2001, 2011 and 2021. However, due to the risk of disclosure, 2021 Census statistics would not be made available for the new Electoral Wards.

Option 2: An alternative option is the production of results for a new small area statistical geography. This would allow the production of 2021 Census results for a new set of statistical geographies consistent with the 2015 revision of local government boundaries. This new geography would nest within the new Electoral Wards. However, 2021 Census data would therefore not be made available for the old local government boundaries or electoral wards, therefore users would be unable to compare 2001-2011-2021 census results for these geographies.

Please refer to Annex 2 which highlights the differences in the 2021 Census outputs which would be produced by each of the options detailed above.

In either option Census Office will continue to produce a 2021 Census Grid Square product. The geographic base for these outputs is the Irish Grid, and census statistics would be produced for 100m and 1km grids. This would allow users to compare data for every census since 1971. Also, due to the high demand for statistics about towns and villages, Census Office will use Settlement Development Limits (SDLs) provided by the Department for Infrastructure to produce 2021 Census Key Statistics at settlement level. This would be based on an approximation from the grid square statistics.

Users are invited to consider these options as part of the consultation and provide their views in the consultation questionnaire.

#### 4.2. Comparability over time

It is important to many users that census outputs are comparable over time. This was further reinforced by the findings of the 2021 Census Topic Consultation for Northern Ireland<sup>8</sup>. To meet this user need, NISRA endeavour to ensure that questions and supporting information being developed for the 2021 questionnaire will be consistent with previous censuses where possible to allow comparisons over time.

## 4.3. Quality assurance

In keeping with its high level strategic aims, NISRA's Census Office will develop and implement a Quality Assurance Strategy to ensure that the 2021 Census outputs are fit for

<sup>&</sup>lt;sup>8</sup> More information on the '2021 Census Topic Consultation for Northern Ireland' is available: <a href="https://www.nisra.gov.uk/publications/2021-census-topic-consultation-documents">https://www.nisra.gov.uk/publications/2021-census-topic-consultation-documents</a>

purpose and released in a timely manner. NISRA will also adhere to wider quality standards as defined in the UK Statistics Authority Code of Practice.

#### 4.4. Dissemination

In disseminating the 2021 Census results, emphasis will be placed on responsiveness to users' requirements on content, format and means of access, and on high standards in the production of statistics whilst meeting the requirements of the Code of Practice.

As with the 2011 Census, users will be able to access all of the standard tables directly through the NISRA website.

Part of the 2021 Census plan is to introduce a flexible dissemination system. To achieve this Census Office are considering developing an interactive table builder, and where possible, embrace new technologies such as Application Programming Interfaces (APIs).

Users who require more specialist products such as microdata (including Secure, Safeguarded and teaching files) may be able to access these via secure mechanisms such as the NISRA Research Support Unit (RSU), dependent on user requirements.

NISRA propose to publish the first outputs by summer 2022 and the majority of all other standard releases by summer 2023.

#### 5. Conclusion

This strategy seeks to build on the positive initiatives introduced through the 2011 Census. The questionnaire content has been informed through the consultation work undertaken in conjunction with users and through collaborative work with the other UK Census Offices.

Importantly, the strategy seeks to deliver on the aims that are implicit in both the Registrar General's agreement and the high level strategic aims for the 2021 Census.

Whilst challenging, the strategy seeks to improve the user experience by providing a single point of access to all census outputs and developing a flexible dissemination system that meet the needs of users.

The strategy also recognises the importance of (a) implementing robust and authoritative quality assurance procedures in order to ensure that the outputs are fit for purpose, (b) informing users in advance of exactly what outputs will be delivered and to what timetable, and (c) incorporating flexibility for users to create their own products.

This strategy therefore provides a framework for planning and development that enables Census Office to move forward with a need to review this document as the project progresses.

The overall design of 2021 Census output content will be evaluated against the following criteria:

Criteria	Description
Accessibility and Flexibility	This covers the users' ability to easily locate and access 2021 Census data, including access to commissioned tables, safeguarded and secure products, metadata and a commentary to help users understand and interpret any published data.  This criterion also includes access to the proposed flexible dissemination system that will allow users to develop tables to meet their specific needs as soon as the data is available.
Timeliness of Release	This is a measure of the punctuality of the release of census outputs and includes the release of specialist products (e.g. microdata and origin and destination). Census outputs should be produced as soon as possible after census day.
Public Confidence	This covers ensuring that data is seen to be anonymised and appropriate statistical disclosure controls have been implemented. This includes ensuring that the methods used to produce outputs are transparent and fully communicated to users.
User Acceptability	This covers testing the functionality of output solutions against user requirements. This can be assessed through this consultation process and from any other feedback provided.

The responses you provide to this consultation will be used to understand the impact (positive, negative or none) of our intended design on the outputs for users. This impact will be measured against the criteria above and used to identify the most important concerns for users and prioritise research on these aspects.

We'll only evaluate the evidence provided in responses to this consultation. Please provide as much detail as possible in your responses, including reference to specific policies, projects or research, if applicable.

We value your input and thank you for your contribution.

## **Annex 1: 2021 Census Outputs Strategy Consultation Questionnaire**

NISRA's preferred method for you to respond to this consultation is <u>online</u>. If you wish to respond by email or paper, please download and complete the 2021 Census Outputs Strategy Consultation Questionnaire from the NISRA website (<u>PDF</u> or <u>Microsoft Word</u> version).

Please note, for your response to be included in the analysis, you must answer questions marked with a star (\*) in <u>Section 1: About you</u>.

We would ask that you consider responding to all questions in this consultation questionnaire, rather than only those that are relevant to you, as this will help us form a more inclusive and robust strategy.

Please note that comments relating to questions in the 2021 Census should not be included in the responses to this consultation. A consultation on 2021 Census topics was undertaken and completed in 2016. If you require further information regarding 2021 Census topics please contact Census Office using the information provided below.

If you wish to respond to this consultation using a paper questionnaire, responses can be returned to the email or postal addresses cited below;

Email: 2021census.consultation@nisra.gov.uk

Post: Census Office

Northern Ireland Statistics and Research Agency

Colby House Stranmillis Court

Belfast BT9 5RR

# Section 1: About you

*Are you answering this questionnaire on behalf of an organisation or as an individual?
☐ Individual
Organisation – please specify:
Please provide your contact details.
*Your name
*Email address
Telephone number
* Which of the following best describes the sector you work in?
Please select one.
This will assist us in monitoring the range of users the consultation has reached.
☐ Central government
☐ Local government
Statutory body (for example, health, education, transport, housing, etc.)
☐ Private sector
☐ Social / Academic research
Market research / Data analytics
☐ Charity / Community / Voluntary
Utility provider
☐ Press / Media
Genealogist / Family historian
Other – please specify:
*May we contact you to discuss your response to this consultation?
This may be to follow up any specific points we need to clarify.
☐ Yes
□ No

*May we contact you in future about the 2021 Census?
For example, to provide you with a link to the results of this consultation, to inform you of further consultations or provide updated information on the 2021 Census.
☐ Yes
□ No
Consent
* To support transparency in our decision making process, all responses to this consultation will be made public (subject to our Moderation Policy). This will include the name of the responding organisation (if applicable). However, names of individuals will only be published if you give consent below. Please note that we will not publish your contact details.
☐ Yes, I consent to my name being published with my response
☐ No, please remove my name before publishing my response
All responses will be treated in line with the <u>NISRA privacy notice</u> . Please be aware that any information provided in response to this consultation could be made publicly

Please read through our <u>consultation document</u>, which outlines our initial proposal for the 2021 Census output content and dissemination. The following questions are related to the topics discussed in the consultation document. Please provide as much detail as you can to support your answers. If you refer to a specific policy or scheme, please provide a direct reference to this.

available if requested under a Freedom of Information request.

We'll only evaluate the evidence provided in your responses. In 2015/16<sup>9</sup>, Census Office conducted a consultation on the topics to be included in the 2021 Census, therefore we will be unable to accept comments related to questions asked in the 2021 Census during this consultation. However, if you require further information regarding the 2021 Census topics, please contact Census Office.

We have asked questions based on your experience with 2011 Census data. If you haven't used 2011 Census data, we'd still be interested to hear your thoughts about your needs for 2021 Census data.

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<sup>&</sup>lt;sup>9</sup> More information on the '2021 Census Topic Consultation for Northern Ireland' is available: <a href="https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2021-census-topic-consultation-for-northern-ireland-document.pdf">https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2021-census-topic-consultation-for-northern-ireland-document.pdf</a>

# **Section 2: Background**

We'd like to know which topics and geographies you used the most from the 2011 Census outputs. If you didn't use 2011 Census results, we would still be interested to hear your views about the outputs you are interested in from the 2021 Census.

1	What are your main topics of interest?
	Tick all that apply.
	☐ Age
	☐ Car or Van Availability
	☐ Central Heating
	☐ Country of Birth
	☐ Ethnic Group
	☐ Economic Activity
	General Health
	☐ Household and Family Relationships
	Long-term health problem or disability
	☐ Main Language
	Marital and Civil Partnership Status
	☐ Migration
	☐ Number of Rooms
	Occupation
	☐ Passports Held
	☐ Provision of Unpaid Care
	Qualifications Held
	Religion
	☐ Sex
	☐ Tenure and landlord
	☐ Travel to Work or Place of Study
	Type of Accommodation
	Type of Long-Term Condition
	Other – please specify:

2	Which geographies from the 2011 Census results did you use?					
	Tick all that apply.					
	Assembly Area					
	☐ Education and Library Board					
	☐ Health and Social Care Trust					
	☐ Neighbourhood Renewal Area					
	□ Nomenclature of Territorial Units for Statistics					
	☐ Small Area					
	☐ Super Output Area					
	☐ Postcode					
	Settlement 2015					
	☐ Electoral Ward					
	26 Local Government Districts					
	11 Local Government Districts					
	District Electoral Area 2014					
	Travel to Work Area					
	☐ Grid Square					
	U Other – please specify:					
3	What did you use the 2011 Census results for?					
	Tick all that apply.					
	☐ Commercial purposes					
	Resource allocation					
	Service planning and delivery					
	Policy development and monitoring					
	Academic research					
	☐ Personal interest					
	Other purposes – please specify:					

# **Section 3: Accessibility and Flexibility**

# **Flexible Dissemination System**

For 2021, NISRA are considering providing census data through a flexible dissemination system which will allow users to access data to build customised tables that meet their specific needs. This approach will facilitate a quicker turnaround of standard outputs than was seen in 2011 and will enable users to have access to data as soon as it becomes available.

	•	g questions assess your need to on your work. <i>Please circle the</i>		,	pact it
4	I would prefer earlier access to data after census day via an online flexible dissemination system rather than waiting for tables to be developed by NISRA.				
	Please circle	e the response most relevant to	you.		
	Agree	Neither Agree nor Disagree	Disagree	Not Sure	
5	Being able to define my own tables is more useful to me than using predefined tables.				
	Please circle	e the response most relevant to	you.		
	Agree	Neither Agree nor Disagree	Disagree	Not Sure	
6	I would find it useful to be provided with a small number of univariate tables, similar to the Key Statistics and Quick Statistics tables produced for the 2011 Census outputs, alongside those I can generate through the flexible dissemination system.				
	Please circle the response most relevant to you.				
	Agree	Neither Agree nor Disagree	Disagree	Not Sure	
7	Currently, NISRA are considering releasing 2021 Census data using the flexible dissemination system, but we'll also aim to provide an application programming interface (API). Would an API to access 2021 Census data be useful to you?				
	∐ Yes				
	∐ No				
8	Any other comments?				

# **Supporting Information**

Following the 2011 Census, NISRA provided a range of documentation about the information contained within the data tables, and supporting documentation, for example, about the quality of outputs and definitions used. This information provides context to the data, for example, how they were collected and the coverage of the data, publication dates, descriptions and search keywords. We want to make sure the information we provide is useful and easy for you to understand.

9	Which supporting information did you use in 2011?
	Tick all that apply.
	☐ Definitions and output classifications
	☐ Methodology overview
	Quality assurance reports
	☐ Guidance notes
	Comparability of 2001 and 2011
	Other – please specify:
10	Where would you expect to access supporting information?
	In the data tables
	In a link next to the data table
	Accessed via another part of the NISRA website
11	In 2011, did you read the accompanying analysis and commentary?
	☐ Yes
	☐ No (I didn't need to)
	☐ No (I didn't know it was available)
12	What format of accompanying commentary do you find most useful?
	Tick all that apply.
	Statistical bulletin describing key outputs
	☐ Interactive data visualisations
	☐ Infographics
	☐ Short stories
	None
	Other – please specify:

Octob	er 2018	
13	Any other comments?	
Section	on 4: Timeliness of Release	
	We recognise the importance of the timely release of 2021 Census data. Census Officurrently considering the publication of Population and Household estimates in the first release by Summer 2022, with all other standard releases being published by Summer 2023. Census Office are also considering the coordination of release dates with the Control of National Statistics (ONS) and National Records of Scotland (NRS), where possible	st er Office
14	Are you content with the proposed release schedule?	
	Yes	
	□ No	
15	If you have selected no, please explain why.	
16	Any other comments?	

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#### **Section 5: Public Confidence**

Statistical Disclosure Control (SDC) refers to a range of methods that aim to protect individuals, households and businesses from being identified whilst minimising impact on the quality and utility of results. For the 2021 Census, NISRA is considering two strategies of SDC – targeted record swapping and cell key perturbation. The SDC methodologies will be co-ordinated across the UK Census Offices, where it is practicable to do so, as set out in the Statement of Agreement between the National Statistician and the Registrars General<sup>10</sup>.

For more information on these methods please refer to <u>'Statistical Disclosure Control Methodology for 2021 Census'</u>.

# **Targeted Record Swapping**

Targeted record swapping was applied to the 2011 Census data and NISRA propose to use it again in 2021. This method involves assessing individuals or households with rare or unique characteristics and swapping those at risk of identification with a similar household from another area.

17	Do you support the use of targeted record swapping as a form of Statistical Disclosure Control?	
	☐ Yes	
	□ No	
18	If you have selected no, please explain why.	

# **Cell Key Perturbation**

NISRA are considering an additional form of SDC known as "cell key perturbation" to facilitate the development of a flexible dissemination system. This method involves making small changes to some cells in a table with low counts to add more uncertainty (noise), with the goal of protecting against disclosure, especially disclosure which occurs when one table is compared to other tables with similar information (differencing). Although adding noise disrupts the differencing process and allows for a more timely release of census data, it may lead to inconsistent table totals. However, in these instances the proportions would remain the same. This approach is consistent with the proposed SDC methods intended for use by both the ONS and NRS.

<sup>&</sup>lt;sup>10</sup> More information on the 'Statement of Agreement between the National Statistician and the Registrars General' is available from: <a href="https://www.nisra.gov.uk/statistics/2021-census/planning/legislation">https://www.nisra.gov.uk/statistics/2021-census/planning/legislation</a>

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19	Do you support the use of cell key perturbation as an additional form of Statistical Disclosure Control?		
	Yes		
	□ No		
20	If you have selected no, please explain why.		
21	In 2021, would you be content with slightly inconsistent table totals in order to rethe results in a more timely manner?	eceive	
	☐ Yes		
	□ No		
22	If you have selected no, please explain why.		
23	Any other comments?		

# **Section 6: User Acceptability**

#### **UK Harmonisation and Statistics**

NISRA, ONS and NRS have been working together to facilitate the harmonisation of output content, where possible. The statistical disclosure control methodology, for example, will be a major focus of harmonisation across the UK with focus given to adopting common population bases, geography, metadata and output formats.

NISRA, ONS and NRS are also considering the provision of easy and co-ordinated access to census data or statistics, through the use of an API, which would allow access to UK wide data through the flexible dissemination system provided on each organisations website. As such, we're interested in establishing the value of UK-level statistics and the detail required.

24	Did you use UK data from the 2011 Census?
	☐ Yes
	□ No
25	How important is being able to access and compare data for England, Scotland, Wales and Northern Ireland for your work?
	☐ Important
	□ Not important
	☐ Not sure
26	In 2021, which of the following would you be interested in?
	Tick all that apply.
	☐ UK statistics totals
	<ul> <li>Small area statistics for different geographies across England, Scotland, Wales and Northern Ireland</li> </ul>
27	How would you expect to access UK data?
	Access data about each UK country through a single website for example, select data about Scottish local authorities through the NISRA website
	☐ Visit each UK country website to access data about that country

3	
	Any other comments?
an	d and Northern Ireland Harmonisation and Statistics
	As has been the case for the last two censuses, NISRA will continue to work closely with the Central Statistics Office (CSO), Ireland, to ensure where possible consistency and comparability of 2021 Census Key Statistics across the island of Ireland and are considering the production of an Ireland and Northern Ireland 2021 Census report, similar to the published report on the 2011 Census <sup>11</sup> .
9	Did you use the Ireland and Northern Ireland joint report from the 2011 Census?
	☐ Yes
	□ No
	How important is it to you that you are able to access and compare data for Ireland and Northern Ireland for your work?
	☐ Important
	☐ Not important
	☐ Not sure
I	Any other comments?

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<sup>&</sup>lt;sup>11</sup> More information on the 'Ireland and Northern Ireland' report is available from: <a href="https://www.nisra.gov.uk/statistics/2011-census/results/ireland-and-northern-ireland">https://www.nisra.gov.uk/statistics/2011-census/results/ireland-and-northern-ireland</a>

# Geography

Historically, NISRA have published census results using geographies based on electoral boundaries in place at that time.

In 2001, NISRA released census outputs for a range of administrative and statistical geographies. This included small levels of geography known as Census Output Areas and Super Output Areas which, due to their hierarchical nature, were used to create larger geographies such as Wards and Local Government Districts.

These same geographies were used again in 2011, allowing users to directly compare data from both censuses. In 2015, following the revision of local government boundaries, a new set of Local Government Districts, District Electoral Areas and Electoral Wards were introduced. To date a number of 2001 and 2011 Census outputs have been produced using these new geographical areas. However, outputs could not be produced for the new lower level Electoral Wards due to increased risk of disclosure.

32

In 2021, Census Office are considering two alternative options for releasing data at different geographic levels. It should be noted that due to the risk of disclosure Census Office can only provide one of these. Annex 2 of our consultation document highlights the differences in the 2021 Census outputs which would be produced by each of the options detailed below. Please select which option you would prefer.

Census Office are considering the production of 2021 Census statistics for the administrative and statistical geographies used in both the 2001 and 2011 Censuses. This will allow comparability of census information at consistent geographies across 2001, 2011 and 2021. However, due to the risk of disclosure, 2021 Census statistics would not be made available for the new Electoral Wards.
An alternative option is the production of results for a new small area statistical geography. This would allow the production of 2021 Census results for a new set of statistical geographies consistent with the 2015 revision of local government

geography. This would allow the production of 2021 Census results for a new set of statistical geographies consistent with the 2015 revision of local government boundaries. This new geography would nest within the new Electoral Wards. However, 2021 Census data would therefore not be made available for the old local government boundaries or electoral wards, therefore users would be unable to compare 2001-2011-2021 census results for these geographies.

33

As previously stated, NISRA will not be able to provide 2021 Census results for both options above. In deciding the overall design of 2021 Census outputs geographies, NISRA will take the following into consideration:

- Legislative requirements
- National and international obligations
- The needs of key stakeholders
- Allocation of public money
- Statistical geographies identified as the most appropriate at that time
- Efficiency in conducting the 2021 Census
- Any other factors that users believe are necessary

Please	e use the box below	to detail any other	suggestions or com	ments you have.

## **Grid Square Product**

Historically, census outputs have been presented as statistical aggregates for given geographic areas, which themselves are based on local government boundaries. This can lead to difficulties when considering trends over time as these boundaries are reviewed and revised.

In order to permit the examination of trends over time for consistent spatial units, NISRA has made available grid square statistics for every census since 1971. The geographic base for these outputs is the Irish Grid, and Census statistics are produced for 100m and 1km grids. It is the intention of NISRA to continue this time series and produce a 2021 grid square product.

34	Did you use the 2011 Census grid square product?
	☐ Yes
	☐ No

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35	Would you use a 2021 Census grid square product if it were made available?
	☐ Yes
	□ No
36	How important is it to your work to have a 2021 Census grid square product?
	☐ Important
	□ Not important
	☐ Not sure
2021	Census Specialist Products
Origii	n and Destination Data
	Origin and destination (flow) data produced following the 2011 Census shows the flows of people from one place to another. A large number of the origin and destination outputs were produced at the UK level, providing flows for usual residents within and between England, Scotland, Wales and Northern Ireland.
37	Did you use 2011 Census origin and destination data?
	☐ Yes
	□ No
38	Would you use 2021 Census origin and destination data if it were made available?
	☐ Yes

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☐ No

# **Alternative Populations**

In 2011, statistics were made available for three alternative populations: short-term residents, daytime population and workplace population. NISRA are currently reviewing whether these data should be produced as part of the 2021 Census outputs.

39	In 2011, which alternative population statistics did you use?
	Please tick all that apply.
	☐ Short-term residents
	☐ Daytime population
	☐ Workplace population
	None
40	Would you use 2021 Census alternative population data if they were made available?
	Yes
	□ No
Bulk l	Download
	In 2001 and 2011 NISRA provided a facility to download all released tables through a bulk download. It is the intention of NISRA to continue the provision of this bulk download facility.
41	Did you use the 2011 Census bulk download facility?
	☐ Yes
	□ No
42	Would you use a 2021 Census bulk download facility if it were made available?
	Yes
	□ No

#### Microdata

Microdata products are small samples of data for whole households and individuals, which include some associated census characteristics but no information that could identify a household or individual. Microdata products enable researchers to look at combinations of characteristics that are not generally available from the standard census tables, and to perform different types of analyses not possible from standard tabulations.

In 2011, NISRA produced three microdata products: microdata teaching file, secure microdata and safeguarded microdata.

40		
43	In 2011, which microdata products did you use?	
	Please tick all that apply.	
	☐ Microdata teaching file	
	☐ Secure microdata	
	☐ Safeguarded microdata	
	☐ None	
44	Would you use 2021 microdata if it were made available?	
	☐ Yes	
	□ No	
45	Do you have any other requirements for specialist products? If so, please list requirements below?	your

# **Section 7: Final Comments**

46	Do you have any final comments about the areas covered in the 2021 Census
	Outputs Strategy Consultation document?

THIS IS THE END OF THE QUESTIONNAIRE

Thank you for taking the time to complete this questionnaire.

**Annex 2: Table comparing options for 2021 Census outputs geographies** 

	Option 1	Option 2
	Produce statistics at	Commission new
	same geographies as 2001 and 2011	sub-ward geographies
	as 2001 and 2011	geographies
Geographies based on electoral boundaries available in 2001 & 2011		
Small Area (SA)	$\checkmark$	×
Super Output Area (SOA)	$\checkmark$	×
Ward (WARD1992)	$\checkmark$	×
26 Local Government Districts (LGD1992)	$\checkmark$	×
Geographies based on electoral boundaries available in 2015		
New SA (not yet available)	×	$\checkmark$
New SOA (not yet available)	×	$\checkmark$
Ward (WARD2014)	×	$\checkmark$
District Electoral Area (DEA2014)	$\checkmark$	$\checkmark$
11 Local Government Districts (LGD2014)	$\checkmark$	$\checkmark$
Other geographies available		
Assembly Area (AA)	$\checkmark$	$\checkmark$
Education and Library Board (ELB)	$\checkmark$	$\checkmark$
Health and Social Care Trust (HSCT)	$\checkmark$	$\checkmark$
NUTS3	$\checkmark$	$\checkmark$

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#### **Annex 3: References**

The Census Act (Northern Ireland) 1969:

http://www.legislation.gov.uk/apni/1969/8

The Conduct of the 2011 Censuses in the UK Statement of Agreement of the National Statistician and the Registrars General for Scotland and Northern Ireland:

https://www.nisra.gov.uk/publications/conduct-2011-censuses-uk-statement-agreement-national-statistician-and-registrars

The 2021 Census - Consultation arrangements:

https://www.nisra.gov.uk/publications/2021-census-consultative-arrangements

Demographic Statistics Advisory Group:

https://www.nisra.gov.uk/statistics/2021-census/planning/consultation/demographic-statistics-advisory-group

2021 Census page:

https://www.nisra.gov.uk/statistics/census/2021-census

Initial design of the 2021 Census in Northern Ireland:

https://www.nisra.gov.uk/statistics/2021-census/planning/initial-design

Key elements of the 2021 census design:

https://www.nisra.gov.uk/statistics/2021-census/planning/initial-design/key-elements-2021-census-design

2021 Census Consultation main page:

https://www.nisra.gov.uk/statistics/2021-census/planning/consultation

**Topic Consultation:** 

https://www.nisra.gov.uk/statistics/2021-census/planning/consultation/topic-consultation

**Question Development:** 

https://www.nisra.gov.uk/statistics/2021-census/planning/consultation/guestion-development

2021 Census news and events:

https://www.nisra.gov.uk/statistics/2021-census/news-and-events

2021 Census reports and publications:

https://www.nisra.gov.uk/statistics/2021-census/planning/reports-and-publications

The Future Provision of Census of Population Information for Northern Ireland:

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

Census test:

https://www.nisra.gov.uk/censustest

Census 2011 – Ireland and Northern Ireland:

https://www.cso.ie/en/media/csoie/census/documents/north-south-spreadsheets/Census2011IrelandandNorthernIrelandwebversion1.pdf

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Comparisons of census outputs from the 2001 and 2011 censuses for geographic areas within Northern Ireland:

https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/comparison-census-outputs-from-2001-and-2011-for-geographic-areas.pdf

#### 2011 Census General Report:

https://www.nisra.gov.uk/publications/2011-census-general-report

# **NISRA Privacy Notice:**

https://www.nisra.gov.uk/nisra-privacy-notice

## DOF confidentiality statement:

https://www.nisra.gov.uk/publications/dof-confidentiality-statement

#### Statistical protocols and compliance:

https://www.nisra.gov.uk/statistics/nisra-economic-and-labour-market-statistics-elms/statistical-protocols-and-compliance

#### NILS QUB page:

https://www.qub.ac.uk/research-centres/NILSResearchSupportUnit/

# Citizen space information page:

http://nics.intranet.nigov.net/nics/news/citizen-space-nics-recommended-online-consultation-and-survey-tool

#### NICS online survey and consultation policy:

http://nics.intranet.nigov.net/staff-services/gdpr/nics-online-survey-and-consultation-policy

## Guidance on Distribution of Departmental Publications and Consultation:

http://nics.intranet.nigov.net/nics/documents/guidance-distribution-departmental-publications-and-consultation