

Assessment of compliance with the Code of
Practice for Statistics

2021 Census in Northern Ireland

(produced by the Northern Ireland Statistics and
Research Agency)

Office for Statistics Regulation

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Executive Summary

Why this assessment is needed

- ES.1 The Census is one of the most important sources of data and statistics, informing decisions about almost every aspect of life within the UK. It allows users – including government, local authorities, academics, and commercial businesses – access to important information on the people and households of the UK and helps people get a better understanding of the places in which they live and work.
- ES.2 The Office for Statistics Regulation (OSR) is carrying out assessments of the UK Censuses produced by the Office for National Statistics (ONS), the National Records of Scotland (NRS) and the Northern Ireland Statistics and Research Agency (NISRA). The assessments will allow OSR to recommend whether the Census outputs should be designated as National Statistics, in accordance with the requirements of the Statistics and Registration Service Act 2007, when they are first released.
- ES.3 It is essential that the data and statistics from the Censuses are reliable and provide valuable insights, meeting the rigorous standards of trustworthiness, quality and value outlined in the [Code of Practice for Statistics](#). This assessment report focuses on the 2021 Census in Northern Ireland, produced by NISRA, and aims to identify areas of strength, good practice and innovation in NISRA's Census planning and development as well as identifying some areas where improvements need to be made.

What we found

- ES.4 NISRA has successfully delivered Census operations for Northern Ireland during the COVID-19 pandemic, overcoming many challenges to its systems and service delivery. Census return rates in Northern Ireland reflected a high level of participation, with 97 percent of occupied households returning Census questionnaires. The Census team in NISRA has worked flexibly to effectively reprioritise resources and modify its plans for the Census collection period, ensuring live operations were undertaken safely for both the public and NISRA staff. This has been a significant achievement for the core Census team and all involved in operational delivery.
- ES.5 The data from Census 2021 will provide a snapshot of life in Northern Ireland at this unprecedented time. Data collected during this time may well be unusual or changed from what might have been expected, particularly on topics such as employment and economic activity. NISRA now has an important role in understanding and explaining the impacts on the data to users, supporting the appropriate use of Census data, and seeking to address any unmet user needs as a result.
- ES.6 NISRA launched its outputs consultation in October 2021, to gather views from data users and stakeholders on its plans for Census outputs. Consultation events have been arranged to promote and explain its current plans, with both general interest and targeted audience groups. This will be an extremely important exercise to

understand the needs of a wide and varied group of users, as NISRA finalises its plans to deliver high quality and valuable Census data and statistics. In its work to improve how Census data will be disseminated to users, NISRA has worked collaboratively with ONS and the Central Statistics Office (CSO) in the Republic of Ireland to utilise new tools which will increase the accessibility and flexibility of Census data. The real value of the 2021 Census in Northern Ireland will be realised when Census data and statistics are released. NISRA is committed to successfully achieving that aim.

- ES.7 As NISRA works to process and produce Census data and statistics for Northern Ireland, it must also continue to prepare its supporting information on quality, data sources, and methods. During the earlier stages in Census planning, limited detailed information was published on NISRA's research, developments or judgements on quality and methods while these were still being finalised. NISRA should continue its work to ensure that Census outputs are accompanied by finalised information on quality to support users and assure them on the data sources and methods used in their preparation.

Requirements

- ES.8 We have identified several ways NISRA needs to implement improvements to support appropriate use of the data and meet users' needs to comply with the highest standards of the Code.
- ES.9 NISRA has made little information widely available on the steps it is taking to investigate, or otherwise meet, user needs for data affected by COVID-19. This is a significant gap in the assurances offered by NISRA on its plans to address impacts on data. **In order to support society's need for information, NISRA needs to clearly communicate how 2021 Census data may be impacted by COVID-19 and how it plans to address any unmet user needs. NISRA should ensure this information is communicated in an accessible and timely way, being open on plans, developments and progress even where definitive answers or solutions are still being sought.**
- ES.10 Further steps need to be taken by NISRA to communicate plans and provide more-detailed information, when available, to users of UK population estimates, UK Census data and Ireland-Northern Ireland outputs. As the provision of UK data and statistics is the responsibility of ONS, NISRA should signpost users to related ONS materials on the UK population estimates and UK Census data as this becomes available. **To assure Northern Ireland users of how their data needs will be addressed, NISRA needs to provide users with transparent, accessible and timely information on how UK population estimates for 2021, UK Census data and Ireland-Northern Ireland data will be provided. NISRA should continue to work with, and align communications with, ONS, NRS and CSO to explain any impacts on data quality and describe where user needs may or may not be met as a result.**
- ES.11 To assure users of the value and quality of Census data, NISRA should ensure its plans to provide information on quality – including information on data collection and processing, quality assurance activities and quality measures, methods and use of administrative data, and NISRA's judgement on appropriate use of Census data –

are delivered as planned. **NISRA should ensure finalised documentation on quality, information and judgements on suitable data sources, and methods and their application are complete. All supporting information should be sufficiently open and easily available to Census data users alongside its range of Census outputs.**

- ES.12 With such a wide and varied set of users of Census data, NISRA needs to engage with user groups with different requirements and interests. This includes special interest groups or those from a topic-focussed perspective or when, for example, considering the needs of users with different levels of expertise or accessibility requirements. **In order to ensure the relevance of data and statistics to users, NISRA needs to continue to develop and enhance its user engagement activities, connecting with a broad range of users and embracing challenge. NISRA should continually review and seek to implement improvements in its engagement strategies and should ensure its decision making is open and transparent, being clear where users' needs can or cannot be met.**
- ES.13 NISRA aims for a first release of Census Population and Household estimates by summer 2022, with all other planned Census releases being published by summer 2023. NISRA is also committed to producing Census outputs that meet users' needs and that are timely, accessible and flexible. Producing timely and accurate data from the Census is vital to ensuring high public value. **NISRA needs to deliver its aims in relation to timely, accessible and flexible Census outputs – while ensuring sufficient data quality and supporting appropriate use of the data. It should clearly communicate its plans and timelines for outputs at the earliest opportunity, updating and revising these as soon as more detail is available or to reflect any changes to its plans.**
- ES.14 Having accessible and easily findable information supports the appropriate use of data and statistics. **To best support Census data users, NISRA needs to continue to improve its webpage navigation for current materials. NISRA's plans for a separate website or webpages for Census outputs themselves will require sufficient consideration of its navigation and accessibility. NISRA should keep webpages and content refreshed and current.**

Judgement on National Statistics Status

- ES.15 We have identified six requirements for NISRA to address in order to ensure the high standards of public value, quality and trustworthiness associated with National Statistics designation are met.
- ES.16 Once NISRA has demonstrated that the improvements covered by these requirements have been made or provided sufficient assurance that our expectation for the data and statistics will be met, OSR will recommend to the UK Statistics Authority that National Statistics status for these statistics be confirmed. NISRA is aiming to meet the requirements of this report by spring 2022 so a designation decision can be made ahead of first Census outputs in summer 2022.

Findings

Introduction

- 1.1 The Census is one of the most important sources of data and statistics, informing decisions about almost every aspect of life within the UK. It is of fundamental importance in allocating billions of pounds to local areas by the UK government and devolved administrations, as well as grants to voluntary sector organisations for example. The Census helps every person in the UK get a better understanding of the places in which they live and work.
- 1.2 The real value of the Census will be realised on the release of Census outputs. The Northern Ireland Statistics and Research Agency (NISRA) will have to deliver high quality data and statistics in a variety of forms to support the wide range of different uses required. It is essential that the data and statistics from the 2021 Census in Northern Ireland are reliable and provide valuable insights, meeting the rigorous standards of trustworthiness, quality and value outlined in the [Code of Practice for Statistics](#). The 2021 Census was taken during a national COVID-19 lockdown in Northern Ireland and, as such, captured data on individuals and households at a very unique period of time. Consideration and understanding of the quality and value of Census data and how users' needs may or may not be met will be especially important in these circumstances.
- 1.3 This is the second assessment report and many of our considerations and judgements build on the preliminary findings as reported in our [earlier assessment report](#) published in October 2019. Our preliminary findings, and the last published update of progress – from September 2020 – can be found in . Since then, we have worked closely with NISRA to understand how it has taken forward actions based on our earlier findings and progressed its plans to deliver high quality, valuable Census outputs. This report identifies areas of strength, good practice and innovation in NISRA's Census planning and development as well as identifying some areas where improvements need to be made.
- 1.4 As with the earlier phase of this assessment, NISRA published a [report](#) providing an update on its progress and how its plans and developments align with the standards of the Code. The approach of sharing and explaining this publicly echoes the key aspects of the Code, such as transparency and accountability, and the assessment team recognises this positive communication with stakeholders.

Understanding the context for Census 2021

Communicating the impacts of COVID-19

- 1.5 The 2021 Census in Northern Ireland was undertaken during the COVID-19 pandemic and NISRA had to respond to various unexpected challenges to successfully, and safely, deliver live Census collection operations at this unprecedented time. To manage and mitigate risks to Census data, NISRA adapted its systems and provided additional support to respondents to best capture accurate data. For example it adapted the development of its address register, using online tools and utilising administrative data, to enhance the accuracy and coverage of

data on the status of addresses to best inform field operations. NISRA also took steps to support data collection for respondents. For example, for students in Northern Ireland, NISRA modified the Census electronic questionnaires and, in conjunction with the two main universities in Northern Ireland, provided additional support on how those individuals should complete their Census returns.

- 1.6 Undertaking Census during COVID-19, however, meant that data on topics such as employment, economic activity, travel, and household status may well be unusual or changed. Census data will reflect the population of Northern Ireland at this rather unique point in time and data users' needs, such as those of local service planners, may no longer be met from the data collected in 2021. NISRA is currently processing and assuring the quality of data collected during Census and will assess how data have been affected and consider what steps it may have to take to address any unmet user needs.
- 1.7 NISRA launched its [Census outputs consultation](#) on 1 October 2021 and, as part of the consultation materials, NISRA highlighted where Census data will likely be affected. Through the consultation it will collect users' views on their information needs on affected Census topics and NISRA should respond to these within its decision making on Census outputs when it publishes its consultation response in January 2022. Information on where Census data will likely be affected, albeit at a high-level, is not available to users outwith the consultation materials and therefore is not easily accessible.
- 1.8 There is much interest from users and stakeholders on data impacts from COVID-19 – or on other factors such as the UK leaving the European Union. Clearer communication and more easily accessible information of the impact on Census data and NISRA's plans to address any unmet user needs – even where specific solutions or commitments to deliver cannot yet be made – would aid transparency and assure users on the quality and value of forthcoming Census outputs.
- 1.9 To date, NISRA has made little information widely available on the steps it is taking to investigate, or otherwise meet, user needs for data affected by COVID-19. This is a significant gap in the assurances offered by NISRA on its plans to address impacts on data. **In order to support society's need for information, NISRA needs to clearly communicate how 2021 Census data may be impacted by COVID-19 and how it plans to address any unmet user needs. NISRA should ensure this information is communicated in an accessible and timely way, being open on plans, developments and progress even where definitive answers or solutions are still being sought.**

Census and population estimates for the rest of the UK

- 1.10 In July 2020, National Records of Scotland (NRS) announced that Scotland's Census would be moved by a year to March 2022 due to the impact of COVID-19. This difference of Census dates across the UK will have further impacts on population data, in particular for UK Census data and for plans about how UK population estimates for 2021 will be provided.
- 1.11 The three Census offices have made commitments to work collaboratively to understand and address the needs of users of UK data, most recently in the progress update on the [Conduct of the censuses across the UK](#). NISRA already

works closely through a variety of networks and is engaging with data users through a Census UK data user working group. NISRA has made efforts to promote and encourage involvement on this working group from UK data users in Northern Ireland.

- 1.12 While the production of UK population estimates is the responsibility of ONS, the user base for these data, and population statistics for Northern Ireland produced by NISRA, may well overlap and future analysis may be affected – for example in NISRA's latest mid-year population estimates for 2020, comparisons with estimates for the rest of the UK were included. NISRA has a responsibility to inform or signpost its users to relevant information on changes or impacts on data and statistics they use.
- 1.13 Users of statistics in Northern Ireland told us they also have a keen interest in the previously produced [Ireland and Northern Ireland](#) publication which pulled together Census 2011 data on the two populations. [NISRA and Central Statistics Office \(CSO\) agreed](#) to work together to produce this again for 2021. However, this output will also be affected as the Government of Ireland decided to postpone the Census of Population of Ireland to 2022. NISRA, along with CSO, continues to plan to produce this output. However, no information on any likely impacts on data quality, given the change in Census date, has been shared with users.
- 1.14 Further steps need to be taken by NISRA to communicate plans and provide more-detailed information, when available, to users of UK population estimates, UK Census data and Ireland-Northern Ireland outputs. As the provision of UK data and statistics is the responsibility of ONS, NISRA should signpost users to related ONS materials on the UK population estimates and UK Census data as this becomes available. **To assure Northern Ireland users of how their data needs will be addressed, NISRA needs to provide users with transparent, accessible and timely information on how UK population estimates for 2021, UK Census data and Ireland-Northern Ireland data will be provided. NISRA should continue to work with, and align communications with, ONS, NRS and CSO to explain any impacts on data quality and describe where user needs may or may not be met as a result.**

Enhancing confidence in the data and processes

Census data collection

- 1.15 NISRA has worked hard and shown a real commitment in its efforts to run live Census collection operations smoothly. The Census team in NISRA is quite small, in comparison to ONS, and it had to reallocate people and manage resources effectively. It had to modify various systems and services for Census, from address checking to the production of adverts and videos for its marketing and advertising campaign.
- 1.16 The recruitment, training and activities of its field staff were greatly impacted during this time and NISRA had to adapt its processes to respond to this, for example moving to online recruitment and training. NISRA engaged with the Chief Medical Officer in Northern Ireland on its plans for Census field operations and took steps to ensure restrictions and social distancing measures were adhered to, including

providing appropriate equipment and adapting doorstep routines for the safety of Census field staff and the general public.

- 1.17 NISRA has successfully carried out live operations for the 2021 Census in Northern Ireland and, as stated in this [press release](#) on 25 May 2021, a return rate from occupied households in Northern Ireland of over 97 percent was achieved, higher than the 2011 equivalent Census return rate of 94 percent. NISRA told us, around 80 percent of people chose to use the online form to fill in their Census rather than use a paper questionnaire. This was higher than was predicted and NISRA considers that this reflects a successful exercise to promote the Census in Northern Ireland.
- 1.18 NISRA has completed its Census Coverage Survey (CCS) – an independent survey carried out after main Census collection to identify over and under-coverage. NISRA told us its CCS was successfully completed, achieving return rates higher than achieved for the 2011 Census CCS. NISRA will also complete a Census Quality Survey (CQS). The CQS is a separate survey which asks the same questions asked in Census to assess how accurately Census questionnaires have been completed.

Assuring data quality and use of administrative data

- 1.19 With the majority of its collection phase completed, NISRA's attention now focuses on the processing and estimation of Census data. This will include data cleansing, edit and imputation, and coverage estimation and adjustment. Quality assurance will be part of each stage of NISRA's data processing and NISRA published its [Quality Assurance Strategy](#) in January 2021. This strategy document describes the end-to-end journey of assuring the quality of data through question development, data processing and outputs production. This strategy document should provide users with assurance of NISRA's commitment to quality and quality management.
- 1.20 NISRA is using a variety of administrative data as part of the 2021 Census. For example, it plans to use an enhanced version of the Census Under Enumeration (CUE) project that was successfully implemented in Census 2011. The method uses administrative data to supply demographic information on households that field staff have indicated did not take part in the Census. The dual approach of the CCS and the ability to scale up the extent of CUE was originally developed as a contingency in the event of a lower than expected response rate.
- 1.21 NISRA has clearly explained its reasoning behind removing the Veterans Question, with the intention to use Ministry of Defence (MoD) data to collect information on veterans. NISRA has worked well with MoD to secure access to the Service Leavers Database and is working towards providing "census-type" information on veterans through secure data linkage. The [topic report](#) on the Veterans question explores the research that NISRA undertook to investigate the feasibility of asking a question on veterans in the Census. In this report, NISRA explores the strengths and limitations of the Service Leavers Database and states that it is committed to work with MoD to improve the quality and robustness of these data.
- 1.22 However, information on the range of NISRA's use of administrative data in the public domain is limited. More information on data sources used in the Census, and NISRA's judgement of the quality and appropriateness of use of these sources,

should be made available alongside Census outputs in order to assure users about the quality of the data.

Developing Census methods

- 1.23 How NISRA takes forward the processing of Census data is determined by the decisions it has made on various different methods. NISRA has told us that while it has modified some of its methods given online data collection, the majority of methods remained largely unchanged from 2011. NISRA has conducted a full rehearsal of the data processing system developed for Census 2021 to assure itself of the appropriate application of methods throughout.
- 1.24 As part of its outputs consultation, NISRA has published some information on its thinking on some Census methods, including an [overview of its data processing methods](#). A [Statistical Disclosure Control \(SDC\) methodology document](#) was published which describes the two SDC methods – the techniques applied to prevent the identification of individuals and households, and their attributes, in published outputs – that NISRA has been considering for the 2021 Census. NISRA has also published an information paper on [Statistical output geography](#) which explains why Census output geographies have had to be revised, largely due to the 2015 revision of local government boundaries where a new set of Local Government Districts and Electoral Wards was introduced.
- 1.25 While these papers are available to users as supporting documents for the outputs consultation, these are not easily accessible on the main NISRA Census webpages. There is no methods section on the Census webpages and no detailed information available to users on how methods have been developed or NISRA's decisions on what methods are being applied.
- 1.26 NISRA has set up a dedicated team to oversee and gain a fuller understanding of Census data as it progresses its work to process and assure the quality of the data. The insights gained will help inform users about quality, strengths and limitations and what they can and cannot do with the data, all of which supports the appropriate use of the statistics. This will be particularly important for 2021 Census data when it comes to areas of change, for example on data particularly impacted by COVID-19 or for new Census questions. NISRA has a responsibility to support and assure users of the quality of Census data and its plans to deliver this alongside Census outputs.
- 1.27 To assure data users of the value and quality of Census data, NISRA should ensure its plans to provide information on quality – including information on data collection and processing, quality assurance activities and quality measures, methods and use of administrative data, and NISRA's judgement on appropriate use of Census data – are delivered. **NISRA should ensure finalised documentation on quality, information and judgements on suitable data sources, and methods and their application are complete. All supporting information should be sufficiently open and easily available to Census data users alongside its range of Census outputs.**

Responding to user needs

User engagement opportunities

- 1.28 NISRA engages with users through a couple of key routes. As part of the development of its Census planning, NISRA has held formal user consultations, such as its [Outputs strategy consultation](#) in 2018 and [Topic consultation](#) in 2015. NISRA also has an expert user group, its [Demographic Statistics Advisory Group](#) that it consults regularly. The papers and minutes of the meetings are made available in the public domain although NISRA could publish them on its webpages in a more timely manner. NISRA has also held user events at various points over recent years. During our user engagement as part of this assessment, users told us that the NISRA Census team has been knowledgeable, open and helpful.
- 1.29 We have found, however, that NISRA's approach to public engagement, when it comes to data and statistics, is not as apparent or well reflected on its webpages. Being transparent about how NISRA approaches public engagement gives users confidence in its processes and in how it is open to dialogue and engagement with users. For example, engagement activities – both past and present – and routes for users to engage are not visible on NISRA's Census webpages.
- 1.30 NISRA's use of social media around Census day and live collection operations was strong and, more recently, NISRA has made greater use of social media to promote and alert users of its plans for Census data and statistics. This should hopefully allow broader engagement from Census data users.
- 1.31 NISRA's public engagement strategy during the Census collection period involved communications with stakeholders – including public bodies and community and voluntary sector organisations – through email networks to share, and encourage onward sharing, of key information and messaging to raise awareness and promote the importance of Census. At this time NISRA also held around 80 virtual information sessions with stakeholders. These stakeholder networks, established to support Census collection operations, will now be used to promote its outputs consultation and to communicate important information on Census in the future.
- 1.32 NISRA's outputs consultation will run until 26 November 2021 and will be an extremely important exercise in understanding user views and their data needs. NISRA ran a consultation event on 3 November 2021 to accompany and encourage responses to the consultation exercise. NISRA has also told us of its plans for events tailored for different user groups, for example a joint event with MoD is planned to engage with users with an interest in veteran data.
- 1.33 With such a wide and varied set of users of Census data, NISRA needs to engage with user groups with different requirements and interests. This includes special interest groups or those from a topic focussed perspective or when, for example, considering the needs of users with different levels of expertise or accessibility requirements. **In order to ensure the relevance of data and statistics to users, NISRA needs to continue to develop and enhance its user engagement activities, connecting with a broad range of users and embracing challenge. NISRA should continually review and seek to implement improvements in its engagement strategies and should ensure its decision making is open and transparent, being clear where users' needs can or cannot be met.**

Communicating plans for census outputs

- 1.34 Throughout our user engagement in both phases of the assessment, there has been strong interest from users to understand what and when Census data will be available to them. Users told us that they need clarity and transparency on the release schedule, as well as the outputs catalogue, so that they can plan their own outputs or broader work accordingly. While we understand that some of this information will be dependent on the outcomes of its outputs consultations, we recognise the demand for this information to support those who intend to use Census data. NISRA intends to publish its outputs prospectus and more detail on the planned release schedule by the end of January 2022.
- 1.35 Up until the launch of its outputs consultation, NISRA had been vague about when its first outputs will be delivered, stating only that it aims for these to be produced by summer 2022. It has been helpful that a clearer proposal on the release schedule has been made available to users – with the aim of a first release of Census Population and Household estimates by July 2022, and all other planned releases being published by summer 2023.
- 1.36 NISRA is committed to producing Census outputs that meet users’ needs and that are timely, accessible and flexible. Producing timely and accurate data from the Census is vital to ensuring high public value. **NISRA needs to deliver its aims in relation to timely, accessible and flexible Census outputs – while ensuring sufficient data quality and supporting appropriate use of the data. It should clearly communicate its plans and timelines for outputs at the earliest opportunity, updating and revising these as soon as more detail is available or to reflect any changes to its plans.**

Keeping the general public and users informed

- 1.37 During the operational phase of Census 2021, NISRA delivered a wide-reaching marketing and advertising campaign, utilising traditional and social media routes to promote and encourage public engagement with Census. In a recent report published by NISRA, [Public Awareness of and Trust in Official Statistics, Northern Ireland 2020](#), it was encouraging to note that many respondents, whether they had heard of NISRA previously or not, were aware of Northern Ireland Census statistics.
- 1.38 Since the main Census collection period, NISRA has continued to use social media to engage with the broader public and users of Census data and statistics. Recognising and thanking the general public for their important contribution in providing personal data to NISRA for Census and assuring them how their data is being securely handled and how it will be used, should be an ongoing feature of NISRA planned communications. NISRA has made significant investment in its communication and engagement and plans to continue these efforts with the focus now moving to Census outputs.
- 1.39 Over the course of this assessment NISRA has made improvements to its Census webpages and while these webpages are relatively easy to navigate, the content for users of Census data is limited. In addition, some of the tools used to communicate progress and future plans through the website, such as the Census Milestones webpages, have not been consistently kept up to date, although we recognise these have been recently refreshed.

- 1.40 Having accessible and easily findable information supports the appropriate use of data and statistics. **To best support Census data users, NISRA needs to continue to improve its webpage navigation for current materials. NISRA’s plans for a separate website or webpages for Census outputs themselves will require sufficient consideration of its navigation and accessibility. NISRA should keep webpages and content refreshed and current.**

A continuous improvement approach to Census

Innovation and improvement in Census outputs

- 1.41 NISRA plans to disseminate its Census outputs through two main routes, pre-defined tables – which will be similar to the [key statistics](#) and [quick statistics](#) tables produced for the 2011 Census – and through the use of an interactive flexible table builder. For both of these dissemination routes, NISRA has worked collaboratively to introduce new, more flexible solutions to benefit its Census data users. The pre-defined tables will be available through a new data dissemination system, PxStat, which was [developed by CSO](#) and used as its open data portal. It will allow users to filter using variables in the tables or by geographic area to tailor the data and statistics to their needs. This new system is planned to be used across NISRA’s statistical outputs, with Census as the first data to be made available through this route.
- 1.42 NISRA will produce fewer pre-defined tables for 2021 as users will have the additional facility to create their own tables using the proposed flexible table builder. This tool should allow multivariate tables to be created and include all standard topics at Local Government District level. Developed by ONS, the table builder will automatically apply statistical disclosure control to the tailored user outputs using cell key perturbation methodology. Using a tool developed by ONS brings benefits and efficiencies, including that users accessing data through these routes will have a common user experience and should gain familiarity with the new table builder system.
- 1.43 Both these developments should increase the accessibility and flexibility of Census data for users and, while these new tools are still in development, NISRA has shown its commitment to implement new technologies to enhance the presentation and disseminations of Census outputs. At the outputs consultation event in November, it was positive to see NISRA demonstrate its new flexible dissemination tools which will be available for users of Census 2021 data.

Annex 1: Preliminary findings from the first phase of this assessment

Finding 1

A1.1 Some users have reported difficulties in locating certain documents on the Census offices' websites. The design and navigation through these websites vary notably between Census offices and may provide a barrier to the easy access of information for users. **Census offices should consider the accessibility of research and other Census information on their websites and consider aligning website design and content where possible to provide a common user experience.**

A1.2 **Actions taken by NISRA to address findings** NISRA has reviewed its Census webpages and implemented a similar structure, with menu headings, in line with the National Records of Scotland (NRS) webpages. NISRA has added content to these webpages, some in response to other assessment findings such as information on assurance mechanisms and a UK Census data page. NISRA does this in compliance with the Web Content Accessibility Guidelines.

Much of the new content was developed in consultation with the other UK Census offices, with the aim of using consistent layout and wording where possible to provide a common experience for UK-level users who access Census 2021 information from the NISRA, Scotland's Census and the Office for National Statistics (ONS) websites.

The Census webpages continue to be easily accessible from the main NISRA homepage.

The team told us about the development of an outputs dissemination platform which will be accessed through the NISRA website. This is in its early stages and NISRA told us that it has consulted with users on how they would prefer to access this platform. The platform will be developed more widely for users of other NISRA statistics and data.

A1.3 **OSR's evaluation of evidence** NISRA has sought to meet the aims of the recommendation and should continue to consider coherence and user experience as more content is published on its website. The steps the team has taken to implement a clearer structure have been successful and the structure now lends itself to accommodate new and future published content.

It is clear the team are working with colleagues in NRS and ONS to consider common user experience and share good practice. The team has helpfully used common language for menu headings with NRS and ONS, which should make navigation to relevant materials for users more straightforward.

NISRA is still considering the development of the outputs dissemination platform and has sought user feedback on this. We encourage the team to continue this engagement as it develops this platform.

Finding 2

A1.4 There has been much public debate relating to proposals for Census questions and the question development process across Census offices. Census offices must

ensure their actions and decisions are visibly taken with the honesty, integrity and independence necessary to deliver data and statistics that are of high quality and serve the public good. **Census offices should be open and transparent on their decision-making processes and in their decisions on Census questions and guidance, particularly in relation to any areas of contention.**

A1.5 **Actions taken by NISRA to address findings** NISRA has provided a summary of topic reports and consultations which were taken account of in its question development. This includes the recent publication of an update on UK Armed Forces Veterans topic report.

The assessment team understands that NISRA has also held meetings with user groups interested in topics including the sex question, main language question and health conditions question as part of its development process. We understand that NISRA continues to engage with users and stakeholders on certain topic areas.

Alongside this, committee hearings are available for viewing online after NISRA appeared before the Northern Ireland Assembly Committee for Finance on 18 March 2020 to discuss the presentation of evidence in relation to the Census Order (Northern Ireland) 2020.

A1.6 **OSR's evaluation of evidence** NISRA continues to publish materials to evidence its decision-making processes on Census questions.

We note the update on the UK Armed Forces Veteran topic report which outlines the research leading to the decision to not include a veteran question in the 2021 Census in Northern Ireland. However, the assessment team considers that NISRA should do more to alert users and interested parties of the any new Census materials when they are released.

NISRA should continue to engage with stakeholders particularly in relation to areas of contention, meet any commitments it has made, and seek to provide answers or explanations on areas of concern, in a transparent and open way

Finding 3i

A1.7 Census offices could benefit from working together more closely to better engage with users and stakeholders of UK Census data and statistics who have views and insights that are relevant across Census offices. UK Census users and stakeholders may be unnecessarily overburdened if they are required to submit multiple feedback or consultation responses on similar topic areas across Census offices. **Census offices should consider how best to engage with users and stakeholders of UK Census data and statistics users and coordinate activities as appropriate.**

A1.8 **Actions taken by NISRA to address findings** Since the publication of the assessment report, NISRA, working with the other Census offices, has:

- i. established a UK Census Data working group. The working group is specifically looking at the assessment finding on UK Census data users. The group has been considering options such as UK wide events.
- ii. added a new UK Census data webpage, inviting UK Census data users to contact the Census team. The webpage should serve as a clear route to publish materials of particular interest to UK users.

- iii. attended cross-office user events. While this already happened, steps have been taken to be more visible at these events through ensuring people from other offices are introduced to attendees.

A1.9 **OSR's evaluation of evidence** We consider the UK Census data working group to be an extremely positive initiative put in place to address this finding. We are encouraged by NISRA's engagement with this group and the steps taken so far.

The new UK Census data webpage is a positive step and having tailored content for the specific group of users is a valuable addition. This should hopefully encourage engagement with UK Census data users so NISRA and the other Census offices can better understand their data needs.

We recognise the barriers that Census offices may face in identifying and engaging with this group of users. The assessment team is hopeful that the continuing efforts of the working group will help with this. The working group should look to increase the visibility of its activities and communications and draw on the expertise across the wider GSS in exploring new and creative ways to reach users groups that are harder to engage with.

Finding 3ii

A1.10 Published plans, research and topic reports from the individual Census offices are not always sufficiently clear on how country-specific proposals then relate to UK users' needs and about the impact of these decisions on the availability of on harmonised UK data. **Census offices should be clear about the impact of country-specific decision making for UK Census data and statistics and work together to provide greater transparency around their plans and decision making in meeting the needs of users interested in UK Census outputs.**

A1.11 **Actions taken by NISRA to address findings** NISRA, with the other Census offices, released a progress update on the Conduct of the 2021 Censuses in the UK in January 2020, reflecting the position as of November 2019. The statement of agreement on the conduct of the Censuses sets out the principles that the three Census offices will work together on to make sure the 2021 Censuses are successful. NISRA told us that there are plans to release a further updated position at the end of this year.

The UK Census Data working group, which NISRA is part of, is compiling a descriptive list of all the harmonisation working groups and activities contributed to by the UK Census offices to capture the variety of work that goes into UK harmonisation. The UK Census data working group plans to publish this information and the Census offices are considering whether the most appropriate vehicle to do so is alongside the planned update on the conduct of the Censuses.

Some high-level summary information on UK harmonisation is included on the new UK Census Data webpage.

A1.12 **OSR's evaluation of evidence** There is an array of groups in place which consider harmonisation as part of Census plans and development. Putting information about these groups in the public domain will offer greater transparency to users and stakeholders.

When collating this information, if feasible, examples of how decision making has taken account of the needs of UK Census users should be included.

NISRA should be transparent in how it meets the needs of users interested in UK Census outputs in future publications on harmonised questions, outputs and methods.

Due to the decision by Scottish Ministers to delay the Census in Scotland, it is even more important NISRA must work with the other Census offices to explain the impacts of this to UK Census data users.

Finding 3iii

A1.13 Proposals from Census offices on Census questions will be subject to relevant legislative processes in finalising arrangements for Census in 2021. **Census offices should provide users, stakeholders and decision makers with information on harmonisation of Census questions and the impact on outputs at UK level to help inform users and support decision making.**

A1.14 **Actions taken by NISRA to address findings** In response to this finding NISRA has described the collaborative approach to question development between the three Census offices.

NISRA has shared the plans to review and produce information on harmonisation of Census questions when legislative processes are finalised and will likely publish this in 2021.

A1.15 **OSR's evaluation of evidence** The assessment team recognises the commitment of NISRA and the other Census offices to publish information on harmonisation for users.

Finding 4

A1.16 Census offices have a work programme scheduled to establish and evaluate the data sources that will be used to support Census activities. In some cases, we are not fully assured that the necessary conversations with all the various data suppliers are taking place to inform the understanding of the nature, operational context and overall quality of the sources to be used. **Census offices should build their awareness of the relative strengths and limitations of any administrative, commercial or other data sources used in the production of Census outputs, by regular engagement with suppliers. This should be undertaken on an ongoing basis and as part of a normal way of working.**

A1.17 **Actions taken by NISRA to address findings** NISRA has shared information and examples of how it assures the quality of administrative data used in Census in its evidence report. It describes how NISRA records data quality issues internally and feeds back to data supplier to improve data, how it assesses quality through comparing with other sources, how it engages with data suppliers, and how NISRA builds its knowledge and awareness of data quality issues through engaging with the wider statistical network – for example involvement in the National Statistician's Quality Review on data linkage and at the International Census Forum.

The assessment team held a data sources session with the Census team in March 2020 to hear more about the administrative data and how the team assures the quality these data.

OSR also ran a Quality Assurance of Administrative Data (QAAD) session with the three Census offices in May 2020, to respond to queries raised on our expectations on for quality assurance of administrative data as part of Census. NISRA attended and engaged positively in that session.

NISRA has told the assessment team that it has been hampered in publishing information on its use of administrative data by the impact of the COVID-19 pandemic. The administrative data team's focus has been on maintaining support for Census 2021 data processing, mainly through further development and refinement of the administrative data-based person spine.

A1.18 OSR's evaluation of evidence The assessment team welcomes the openness of the Census team in NISRA to discuss and seek advice regarding its use of administrative data.

At the data sources session, the assessment team held with the Census team in March, NISRA demonstrated awareness of the strengths and limitations of each of its data sources, and of the quality assurance processes for each source. NISRA told us how it regularly engages with suppliers and seeks to understand the quality of their data.

The assessment team recognises the work of NISRA on appropriate use of administrative data and recognises the resource challenges that NISRA has faced over the period of the pandemic.

Being transparent and providing users and stakeholders with assurances on its judgements is a key aspect of the Code of Practice for Statistics. We consider that information on data sources used in the Census and NISRA's judgement on quality and appropriateness for use should be made available in the public domain. The level of detail should be proportionate to level of assurance required, and NISRA should consider publishing provisional information and building on this as its research and understanding continues to develop.

Finding 5

A1.19 Census offices are developing their quality management approaches and developing various methods to support Census operations, data processing and outputs. This includes addressing potential biases between online and paper collection modes. However, the timing for publication of methodology documentation and quality assurance arrangements is unclear. **Census offices should make information on the methodology and quality assurance arrangements available to users at the earliest opportunity.**

A1.20 Actions taken by NISRA to address findings There is currently limited information on NISRA's data collection operations, methodology, and quality assurance arrangements publicly available. However, high-level descriptions of the data collection processes and quality assurance can be found in the 2021 Census Proposals document, published in April 2019. Furthermore, in August 2020 NISRA published its Population Definitions for Northern Ireland Census 2021.

NISRA states in its evidence report that it is currently developing its quality assurance and data collection approaches for Census 2021 and that intelligence gained during the 2019 rehearsal will be a key element in refining the methods. NISRA recognises the importance of developing its quality assurance approach for Census 2021 and additional resource has been assigned to progress work on its overall quality assurance strategy.

NISRA told the assessment team that it expected to hold public information events during winter 2020/21, at which Census users, stakeholders and the general public will be able to learn about the planned data collection operation.

A1.21 **OSR's evaluation of evidence** The assessment team recognises that NISRA is still refining and developing methods following its Census rehearsal. However, there remains very limited information on methods or quality assurance arrangements in the public domain.

We encourage NISRA to publish more information on their data collection, methodology and quality assurance arrangements at the earliest opportunity. In the interim, NISRA should consider what materials could be made public to inform and assure users of the plans and processes to ensure Northern Ireland's Census data will be of sufficient quality.

The assessment team would like to explore methods being employed by NISRA for Census in more detail to cover how methods have been developed, what methods have been selected and why NISRA consider these suitable for use. We are hoping to hold workshops on areas such as census coverage adjustment and statistical disclosure control in the coming months

Finding 6

A1.22 Users told us that they were unclear at what points certain decisions will be made or when certain information will be made available. While planning documents are published, there is no easily accessible high-level plan of key Census milestones. **Census offices should provide users with an indication of future Census milestones – including future user engagement opportunities, publication of further research or reporting, and legislative milestones – to provide an added level of transparency and support trustworthiness and public confidence.**

A1.23 **Actions taken by NISRA to address findings** NISRA has now added information on census milestones to its website. This covers areas such as legislative process, operational aspects, outputs, and this assessment process. The status is provided for each milestone and there are links to supporting information.

A1.24 **OSR's evaluation of evidence** The assessment team is pleased to see that this overview information is now available to users and interested parties.

NISRA should maintain this information providing further detail or updates on timings as appropriate.

Finding 7

A1.25 Use of internal review, audit and other independent measures to evaluate the effectiveness of processes is important across all three Census offices and provides additional safeguards. **Census offices should be clear to users what assurance mechanisms are in place and be open about identified areas for improvement in a way that is a proportionate and accessible to users.**

A1.26 **Actions taken by NISRA to address findings** NISRA has published information on its webpage on the assurance mechanisms in place to underpin Census delivery. Information provided describes internal oversight through Census Office Senior Management Team and the Census Oversight Board, and external assurance via Census Assurance Panel and Demographic Statistics Advisory Group.

The minutes from the last Demographic Statistics Advisory Group held in January 2020 have yet to be published. After speaking with us, NISRA has confirmed that the minutes from the last two DSAG meetings have been approved for publication

on the relevant section of the NISRA website and that this is expected to happen soon.

On 14 August 2020, NISRA published its 2019 Census Rehearsal Evaluation Report which summarised how its tests of processes and systems performed in areas such as stakeholder engagement, address register and field operation.

A1.27 **OSR's evaluation of evidence** NISRA has published the information required which allows users to better understand the broader assurance and audit activity in place to evaluate processes.

It is important that minutes and papers from meetings like that of the Demographic Statistics Advisory Group are uploaded in a timely manner to ensure they are relevant, and users can access them when needed. NISRA should publish the January 2020 Demographic Statistics Advisory Group minutes as soon as possible. We note the recently published rehearsal evaluation report. It highlights areas of operational success as well as areas which will require improvement for Census 2021.

We would be particularly keen to engage further with NISRA on its plans to address low student response rates which were evident in the rehearsal.

