Background Quality Report

Pay in the Northern Ireland Civil Service

1.   Introduction and Context

This document constitutes a background quality report for the publication of annual statistical data on pay in the Northern Ireland Civil Service (NICS).

2.   Background to this Publication

Statistics on pay in the NICS are produced annually by statisticians in Human Resources Consultancy Services (HRCS), which is part of the Northern Ireland Statistics and Research Agency (NISRA), an Agency within the Department of Finance (DoF).

Data have been published annually since 2011/12, but data are available for earlier years.

The publication contains details of the median pay for NICS staff, and separate tables are provided detailing median pay by grade, gender, disability status, community background, and age. A table is also provided detailing comparisons between median pay of civil servants in NI and the rest of the UK, and between the NICS and the wider public and private sectors in NI.

The source of most of the information used is HRConnect, which is an off-the-shelf HR administration system which has been extensively tailored to meet the needs of the NICS. This is managed on a day-to-day basis by private sector companies.

Some data are obtained from non-HRConnect sources (e.g. COMPASS) as the data systems used by these bodies are not yet integrated into the HRConnect system.

Information is collected for all staff (c. 23,000), including both Industrial and Non-Industrial staff. Figures in the annual bulletin refer to a snapshot of the number of staff in post (headcount) at the end of March in the relevant year.

Data extracts from HRConnect and Compass are taken on a monthly basis and are transferred in an agreed format to secure servers within HRCS. The details of the variables included in the data extract from both systems have been developed and amended over the years in liaison with the respective policy and IT experts for both systems.

3.   Purpose of this Document

This paper aims to provide users with an evidence-based assessment of the quality of the data underpinning the NICS pay statistics bulletin, by reporting against those of the nine European Statistical System (ESS) quality dimensions and principles appropriate to this output.

In doing so, this meets our obligation to comply with the UK Statistics Authority Code of Practice for Statistics, particularly Principle Q3 (Assured Quality).

For each dimension, this paper describes how this applies to the publication.

4.   Relevance – the degree to which the statistical product meets user need in both coverage and content

Prior to the first publication of the product in 2011, HRCS consulted with the Statistics Advisory Committee, the Economic and Labour Market Statistics User Group, and the Equality Commission.

Subsequently, in April 2018 HRCS carried out a user survey of all its statistical products (https://www.nisra.gov.uk/statistics/official-statistics/hrcs-customer-survey-report) which has provided valuable feedback on the pay statistics publication. User views on the paybill publication were overwhelmingly positive, the vast majority of respondents being either satisfied or very satisfied with all aspects of the publication. Useful suggestions were received in respect of the provision of comparative statistics for the UK and other jurisdictions, and the timeliness of the publication. Where feasible, these suggestions will be acted on.

5.   Accuracy and Reliability – the proximity between an estimate and the unknown true value

Both HRConnect and Compass provide individual-level data at a high level of detail. The data cover all staff in the NICS and other non-NICS public bodies. Both systems are managed on a day-to-day basis by private sector companies which run regular data quality checks, input paper returns where required, and correct errors on the system if necessary.

In addition to the quality checks carried out by the data supplier, pay data are also subject to extensive quality assurance procedures when the data are received by HRCS.

Any anomalies or errors identified as a result of these checks are referred back to HRConnect or Compass (via appropriate channels) to be corrected at source by the data supplier on their IT systems, or for HRCS look-up tables (e.g. for Branch codes) to be updated and amended appropriately.

As the data are obtained from an administrative data system, no estimates are produced, and issues of sampling error and/or confidence intervals are therefore not relevant.

Given the importance of pay to employees and the fact that employees are very likely to quickly flag up problems with the data (for example if they don't receive their pay or if they don't receive their correct level of pay) the pay data are considered to be as complete and accurate as possible.

For these reasons, the data on NICS pay have been assessed by NISRA statisticians as being accurate and of good quality.

6. **Timeliness and Punctuality – timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.**

The annual pay statistics publication is usually produced in December in each year, and refers to the data as at the end of March in the same year. There is therefore a gap of around 9 months between the reference date and the date of publication. The main reason for this is the requirement to wait for data from the Annual Survey of Hours and Earnings (ASHE), which HRCS uses to provide a comparison between the pay in the NICS and pay in the wider public and private sectors in NI. There is no other source for these data.

The delay between the reference data and date of publication has been mentioned by respondents to the HRCS users survey as being of concern, and HRCS are exploring options to address this issue.

The planned publication date is published in advance on gov.uk, and to date there have been no gaps or delays between planned and actual publication dates.

7. **Accessibility and Clarity - accessibility refers to the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.**

The annual pay statistics bulletin is available as a PDF document on the Northern Ireland Statistics and Research Agency (NISRA) website, along with the tables and metadata in the form of OpenDocument spreadsheets.

A user guide to the statistics is currently in development (at December 2018) and will be published on the NISRA website alongside the bulletin and spreadsheets, in due course.

All documents are available in a range of alternative formats, on request.

8. **Coherence and Comparability - coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain.**

Coherence
HRConnect and Compass are the only sources for the pay data that HRCS publish, and data are collected on the same basis on both systems. Coherence is therefore not an issue.

Comparability
Where changes have been made to the domains to which the data refer (for example, changes in the number and responsibilities of Government Departments in NI) these have been taken into account when publishing data, by ensuring that discontinuities are highlighted. Users are made aware when data series are discontinuous and not comparable across time periods.

We are able to provide pay comparisons between the NICS, the Scottish Government, and some GB Departments. This is because pay statistics for the NICS are analysed on the same basis as those

published by the Office for National Statistics (ONS), although it should be noted that ONS assigns a 'responsibility level' (analogous grade) to Industrial staff, and HRCS are required to modify our data (by re-coding certain values) to allow valid comparisons to be made.

We cannot compare our data with those GB Departments which have amalgamated grades, as the grade structures are so different between the jurisdictions that it prevents any re-coding or grouping of grades to allow us to make valid comparisons. The annual publication contains a list of those GB departments with which we <u>can</u> provide comparable data.

Information on Civil Service pay is not published by the devolved administration in Wales or by the government of the Republic of Ireland. We are therefore unable to provide comparisons between NICS pay and the pay of civil servants at Departmental level in those two countries. However, data for Wales are available at regional level.

We are able to modify our data (by grouping certain grades of staff) to enable us to compare it with data obtained from the ASHE survey. This allows us to compare pay of staff in the NICS with those in the wider NI public sector, and also with the NI private sector. This also permits us to compare pay of staff in the NICS with the rest of the UK public and private sectors, if necessary.

With reference to the data obtained from ASHE, it should be noted that, since these data are survey based, they are subject to various sources of error. One of the main possible errors is sampling error, which occurs because estimates are based on a sample rather than a census. ASHE estimates this error by computing a coefficient of variation (cv) which is the ratio of the standard error of an estimate to the estimate itself. The ASHE data used in the Pay Statistics publication has been calculated as having a cv <=5%, which means that the estimates are considered precise.

9. Trade-offs between Output Quality Components - the extent to which different aspects of quality are balanced against each other.

There is a trade-off between user needs, completeness of data and timeliness in publishing annual pay statistics.

In order to provide comparisons with the wider NI public and private sectors, with GB Civil Service departments, and the UK public and private sectors, HRCS publish pay statistics approximately 9 months after their reference date. It would be possible to publish NICS pay statistics closer to the reference date, but HRCS would then be unable to include these comparisons.

10. Assessment of User Needs and Perceptions - the processes for finding out about users and uses, and their views on the statistical products.

Prior to first publication in 2011, HRCS consulted with the Statistics Advisory Committee, the Economic and Labour Market Statistics User Group, and the Equality Commission. The views gathered as a result of these consultations led to the current structure and layout of the bulletin and the data contained therein.

Subsequently, in April 2018 HRCS carried out a user survey of all its statistical products which has provided valuable feedback on the publication (https://www.nisra.gov.uk/statistics/official-statistics/hrcs-customer-survey-report) .
Overall satisfaction among users of the pay statistics bulletin was 93% - most users stated that the statistics they used fully or mostly met their needs.

The main reasons given for using the pay statistics bulletin were policy making/monitoring, and to aid decisions on resource allocation.

In more detailed responses to the survey, users pinpointed a number of issues, including a request for an earlier publication date, a request for comparative figures for the Irish Civil Service, a request for more balanced commentary to reduce the risk of misinterpretation by the media, and more information about how comparators from the GB Civil Service are selected.

These issues, and suggestions for improvement to the bulletin, will be investigated and acted on where feasible.

It is anticipated that the user survey will be repeated at regular intervals.

11.   Performance, Cost and Respondent Burden - the effectiveness, efficiency and economy of the statistical output.

HRConnect is an administrative dataset which, because it already exists, does not incur additional cost for data collection nor does it impose any burden on respondents.

12.   Confidentiality, Transparency and Security - the procedures and policy used to ensure sound confidentiality, security and transparent practices.

HRCS act as data processors for NICS HR. Data control and data sharing arrangements are stipulated within the Service Level Agreement (SLA) between NICS HR and HRCS.

NI Prison Service (NIPS) is part of the Department of Justice within NICS. As some of their HR records are stored on Compass, a separate data sharing agreement is in place between NIPS and HRCS outlining the arrangements in place for the secure transfer of the data.

The HRCS Head of Branch acts as the Information Asset Owner for the branch and is required to ensure that branch procedures are in place and staff are adequately trained in data protection requirements. All HRCS staff must complete mandatory on-line data protection and information security training on joining the branch and complete further annual refresher training.

HRCS ensures that procedures are updated and reviewed on a six-monthly basis and has Local Systems Operating Procedures in place to protect the confidentiality, integrity and availability of data by outlining the data handling and security procedures with which HRCS staff must comply.

Data sharing arrangements for the handling of HRConnect data are in place, and transfer of the data is via secure electronic links between Fujitsu, Enterprise Shared Services and HRCS. Once received,

data files are stored on a secure HRCS server within HRCS with access restricted solely to those staff within the branch who need it.

A data sharing agreement is in place between NIPS and HRCS so that data files of HR related information can be merged with the HRConnect data to provide statistical data that covers the whole of the NICS.

HRCS staff apply statistical disclosure control to all data sourced from HRConnect and Compass to ensure that no one is identifiable from the data nor any sensitive information relating to them. The only exception being where NICS HR staff need more detailed information for operational reasons. In this instance, the data is protectively marked as 'official sensitive' and the recipient is reminded that the information cannot be shared outside of their unit.

HRCS adheres to the principles and protocols laid out on the Code of Practice for Statistics, and complies with pre-release access arrangements.

HRCS also maintains good links with policy colleagues to ensure that the statistics are understood and not misused.