

NI Labour Force Survey: Background Quality Report

Theme: Labour Market

20th August 2019

Section 1 - Introduction

This report provides users with an evidence based assessment of the quality of the statistical output from the Northern Ireland Labour Force Survey (LFS). It does this by reporting against the nine quality dimensions and principles of the European Statistical System (ESS) quality framework.

In doing so, this meets obligation to comply with the [Code of Practice for Official Statistics](#), particularly Practice Q3.1 of the Assured Quality Principle (Q3) which belongs to the Quality Pillar; this practice states that: “Statistics should be produced to a level of quality that meets users’ needs. The strengths and limitations of the statistics and data should be considered in relation to different uses, and clearly explained alongside the statistics.”

The LFS is a survey of households living at private addresses in NI, at each address, information is collected on the economic status and activity of all residents aged 16 and over during a specified week in the quarter (termed the reference week). Household size and composition is also recorded for each address. Its purpose is to provide information on the NI labour market which can then be used to develop, manage, evaluate and report on labour market policies. The survey forms part of the UK LFS, the GB component of which is managed by the Social Surveys division of the Office for National Statistics (ONS), and the NI component is managed by the Central Survey Unit (CSU) on behalf of the Economic Labour Market Statistics Branch (ELMSB) in the Northern Ireland Statistics and Research Agency (NISRA).

The CSU and subsequently ONS carry out extensive testing and quality assurance work before releasing the LFS data sets. Any new questions or changes to the LFS are tested and evaluated before being rolled out.

The analysis is completed using the statistical software package SPSS, and key headline estimates are presented along with their corresponding 95% confidence intervals.

Following the UK's accession to the European Community, the LFS was carried out for the first time in 1973, under the terms of an EC Regulation. The Statistical Office of the European

Communities (SOEC) co-ordinates information from all the Labour Force Surveys carried out by member states in order to assist in such matters as the allocation of Social Fund resources.

From 1973 to 1983, the LFS was carried out biennially in both Northern Ireland and Great Britain. Following a change in the requirements of the EC Regulation, from 1984 an annual survey was conducted and results referred to the spring months of each year. In March 1992 the GB portion of the survey moved onto a quarterly cycle and Output from the NI LFS has been quarterly since winter 1994-95. Each quarter's sample is made up of five waves. The sample is made up of approximately 2,600 responding NI households and 6,800 individuals per quarter¹. Respondents are interviewed for five successive waves at three-monthly intervals and 20% of the sample is replaced every quarter. The LFS is intended to be representative of the entire NI population.

Headline statistics are released monthly through the Labour Market Report on the Labour Market and Social Welfare section of the [NISRA website](#). Additional quarterly tables and annual publications are also available on the same area of the website. These statistics were designated as National Statistics in August 2010 following a full [assessment](#) against the [Code of Practice](#).

Results are only released where sample numbers are sufficiently large to provide reliable estimates and disclosure standards are adhered to.

Additional background information can found at:

- [LFS Background Information](#)

¹ Figures are following a large boost to the sample that was rolled out throughout 2018 and the first quarter of 2019.

Contents

Section	Title	Page
1	<u>Introduction</u>	1
2	<u>Relevance</u>	4
3	<u>Accuracy and Reliability</u>	7
4	<u>Timeliness and Punctuality</u>	9
5	<u>Accessibility and Clarity</u>	11
6	<u>Coherence and Comparability</u>	12
7	<u>Trade-offs between Output Quality Components</u>	14
8	<u>Assessment of User Needs and Perceptions</u>	15
9	<u>Performance, Cost and Respondent Burden</u>	17
10	<u>Confidentiality, Transparency and Security</u>	18
11	<u>Definitions</u>	19

2 Relevance

Relevance is the degree to which the statistical product meets user needs for both coverage and content.

The primary purpose of the LFS is provide data on the labour market to allow the development, evaluation and management of relevant policies. The 'labour market' covers all aspects of people's work, including the education and training needed to equip them for work, the jobs themselves, job-search for those out of work, and income from work and benefits.

There are a variety of users of the LFS data, including;

- The Department for the Economy (DfE) in designing and monitoring the impact of economic and labour market policy;
- Other government departments including The Executive Office (TEO). Department of Finance (DoF) and the Department of Agriculture, Environment and Rural Affairs (DAERA);
- NI City and Borough Councils;
- Bodies such as Invest NI;
- Non-governmental users including the media, banks, academics, private consultants and the general public.

Key outputs include:

- Monthly Labour Market Report
- Quarterly tables
- Young People Not in Education Employment or Training (NEET) Tables and Household tables
- Annual Summary and Annual Report
- Work Quality
- Women in NI
- Topic Reports
- User Requested data

Topics covered

Quarterly Data

- Headline labour market statistics (employment, unemployment, economic inactivity)
- Additional labour market data such as duration of unemployment (duration of unemployment is defined as the shorter of the following two periods: duration of active search for work; or length of time since employment. The short-term unemployed are those people who have been unemployed for under 1 year while the long-term unemployed are defined as those who have been unemployed for 1 year or more), reason for inactivity, sickness, part-time working and self-employment, employment by industry ([SIC](#)) and occupation ([SOC](#)), UK and International comparisons.

- Breakdowns of headline statistics (by age, gender)
- Disability and the labour market
- Education and training
- Graduates and the labour market
- Young People Not in Education, Employment or Training
- Household analysis (composition of household, economic status of household members, economic activity of females with dependents)

Annual Data

- Regional (Council, Urban/Rural, Deprivation Quintile, Parliamentary Constituency) breakdowns of headline statistics
- [Programme for Government/Outcomes Delivery Plan indicators](#) – LFS is the source for 7 of the 49 indicators used to measure progress towards achieving the desired impact of the Programme for Government
- Women/families and the labour market (working patterns, with/without dependent children)

The LFS uses standard International Labour Organisation definitions of economic status, allowing comparisons to be made on an international level and is carried out in accordance with EU Regulations. However, it should be noted that although the LFS uses ILO definitions, these definitions are not interpreted and applied in exactly the same way in different countries. For example, although 'working age' is a common term, different countries have different statutory school leaving and retirement ages. However, Eurostat collects data from Member States and adjusts them to produce comparable estimates.

More information on definitions can be found in the monthly [LMR](#).

The LFS is the largest social survey in NI and collects a wide range of information, for example economic status, working patterns, education and health, alongside personal characteristics such as gender and age. It is timely with rolling monthly data allowing unemployment, employment and activity levels to be monitored regularly. The LFS is comparable at UK and International levels since it applies ILO definitions.

The key limitation of the LFS is that it is a sample survey therefore is subject to sampling variability which can result in large confidence intervals around estimates, particularly for smaller sub-groups or areas, for example youth or geographical areas such as Local District Council area. ONS have established a working group focused on this area and there is a shared desire for NISRA and ONS to harmonise their approaches. The outcome of this group will be taken into account in any future revisions to methodology around the presentation of outputs, suppression and indicators of accuracy.

Users are always keen to obtain local area information and, of course, the headline estimates produced from the LFS are of particular interest. As such users have requested regional unemployment rates, however, due to the small numbers that fall into this category from the sample, estimates below NI level would not be considered robust. The LFS sample has recently been increased, however, unemployment numbers have been falling so the resulting regional breakdowns remain below the threshold for release.

To give the user an idea of the quality of the estimates produced from the LFS, the LMR publishes confidence intervals along with the headline statistics. Confidence intervals are calculated to the 95% level. This means that if a large number of samples were drawn, the 95% confidence intervals of the resulting estimates would contain the population value 95% of the time.

This gives the user an idea of both the accuracy of the estimate and an indication of the significance of change over time. A user paper on [estimating and reporting uncertainty](#) is also available on the NISRA website. Response rates are also published in the LMR and are updated on a quarterly basis.

3 Accuracy and Reliability

Accuracy is the closeness between an estimated result and the (unknown) true value. There are many factors which affect the accuracy of the LFS in NI. The Labour Force Survey (LFS) is a sample survey. Therefore, it provides estimates of population values (the number and rate of people who are unemployed, employed or economically inactive in NI). The difference between an estimate from a sample and the (unknown) population value is the result of “sampling errors” and “non-sampling errors”.

- Sampling errors are due to only using a sample and not the entire population, therefore estimates from samples may not equal the unknown population value. The larger the sample, the smaller the sampling error. Confidence intervals are one way of providing information on sampling error.
- Non-sampling errors are due to aspects of surveys other than the sampling, such as households being unreachable or refusing to participate in a survey, imperfections in the sampling frame, issues in the questionnaire design, inaccurate answers from respondents, processing and analysis errors. These types of errors would be present in the statistics even if the entire population was surveyed and can be difficult to quantify using the sample data alone. Steps are taken to ensure some of these errors are mitigated for the LFS, such as strict quality control measures during data processing and analysis and continuous improvement of the sampling frame such as removal of ineligible addresses, extensive testing of the questionnaire etc.

The difference between the true population value and the estimate based on a sample is called the sampling error, and its variability is measured by the standard error of the estimate. The standard error can be used to calculate the confidence interval around the estimate. Confidence intervals are a standard way of expressing the statistical accuracy of survey based estimates. Typically 90%, 95% or 99% confidence intervals are used. The Labour Market Report includes 95% confidence intervals around headline estimates. If a large number of random samples were taken, the 95% confidence intervals of the resulting estimates would contain the population value 95% of the time.

Response rates have an impact on sampling error and indicate how many interviews were achieved as a proportion of those eligible for the survey. NI LFS publish response rates in the LFS Labour Market Report and in the ONS [Labour Force Survey Performance and Quality Monitoring Reports](#) which are also published on a quarterly basis. Since June 2017 ELMS and CSU have arranged regular quality meetings to look at the NI sample in more depth.

Specific measures are implemented by ONS and ELMS in order to maximise response rates and accuracy, including:

Proxy responses

Due to tight timescales, interviewers will accept information by proxy if an adult in the sampled household is not available for interview.

Imputation

Imputation is carried out by ONS to minimise non-response bias in estimates and improve precision by boosting the sample size. Within the LFS, it is done by rolling forward responses from the previous wave if the household is unavailable for interview in the current wave, the rationale being that many of the variables will not change in one wave, which is the maximum period for imputation. It is standard ONS procedure to then wipe all household data after 2 consecutive waves of non-contact. Any subsequent interviews will then involve collecting all data from scratch.

Weighting

Sample data is weighted to allow inferences to be made for the entire population. ONS weight the LFS data by assigning a calibration weight to each case, representing the number of people in the population that case represents, therefore the weights sum to the whole population. Weights are based on old 26 LGD boundaries and age groups. More information on weighting methodology is available from the [LFS User Manuals](#) (volume 1).

Disclosure

Statistical disclosure control methodology is applied to the LFS, ensuring that individual level information is not disclosed in either publications or specific information requests. More detail on the measures taken to ensure data confidentiality is available in the ELMS [confidentiality statement](#).

4 Timeliness and Punctuality

Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the time lag between the actual and planned dates of publication. Publication takes place strictly in accordance with published release dates for Labour Market Statistics as pre-announced in the ELMS [publication schedule](#) and [GOV.UK](#) statistics release calendar, which are updated regularly in accordance with the release practices protocol of the Code of Practice for Official Statistics. To date all NI LFS publications have been released in accordance with the pre-announced dates contained within the publication schedule, with the National Statistics Protocol on Release Practices being followed at all times.

The following details the main outputs for the NI Labour Force Survey, the timeliness of which is outlined below:

- [Labour Market Report \(LMR\)](#)

Key LFS estimates for NI are produced on a monthly basis and are published by ELMS in the NI Labour Market Report (LMR). The release of NI estimates is scheduled to coincide with the release of UK wide estimates by ONS and usually takes place at 9.30am on the second or third Tuesday of each month. There is approximately a six-week time lag between the end of fieldwork to the publication of results in the LMR.

- [Quarterly Labour Market Report tables \(formerly Quarterly Supplement to the LMR\)](#)

On a quarterly basis, the Labour Market Report is supplemented with an additional series of tables. These tables provide further information on the labour market, information on the households included in the LMR, and information on individual groups profiled within the LMR, including those with/without a disability, young people Not in Education, Employment or Training (NEETs), graduates and those in education in training. The majority of the quarterly tables are published with the Labour Market Report in February, May, August and November to cover the quarters October-December, January-March, April-June and July-September (approximately 6 weeks after fieldwork completes). Tables relating to NEETs are updated 1 week after publication of the LMR and tables containing household data are updated around 2 weeks after the LMR is published (7 and 8 weeks after fieldworks completes respectively).

Prior to quarter 3 2018 this quarterly information was published in a separate report. By incorporating the majority of the tables into the LMR and having individual dates for NEETs and household updates it has been possible to increase the timeliness of the release of this information. Specifically the quarterly tables that accompany the LMR are now available around 2 weeks earlier than when released as part of the Quarterly Supplement. The NI NEETs data is released on the same day ONS publish NEETs estimates, which is around one week earlier than when NEETs were previously published as part of the Quarterly Supplement. The Quarterly Supplement also included

analysis based on household data. The household analysis was usually based on data that was a quarter behind the individual data in the Quarterly Supplement. This was due to the fact that the household datasets were produced separately to the individual level datasets, which meant later receipt of the data. However, the new release practice means that quarterly household tables are now available 3 months earlier than previously.

- [LFS Topic Papers](#)

A series of annual topic papers will bring together a range of data, primarily from the LFS, in order to provide a more detailed picture of the labour market. These papers are to be published throughout the year, with topics determined the year of publication. In 2019 a topic paper on Economic Inactivity in Northern Ireland was published in June. Further topics for following years are still to be decided.

- [LFS Annual Report – formerly Local Area Database \(LADB\)](#)

This report is published once a year and uses the annual dataset which contains more records than the quarterly datasets by selecting all wave one and wave five interviews – allowing a maximum number of respondents over a 1-year period whilst avoiding double counting. This thereby facilitates analysis by Geographical area (e.g. LGD, Urban/Rural, Deprivation Quintile, and Parliamentary Constituency) across a range of variables including employment, unemployment, occupation, industry and qualification levels. An Annual Summary Report is released on the same day ONS first publish annual data which is approximately 3 months after the end of the fieldwork period. This is followed up with a full Annual Report containing geographical breakdowns approximately 6 months after the end of the fieldwork period.

- [Work Quality Tables](#)

A series of tables relating to 'Work Quality' were first published in April 2019 with the intention of being updated annually. There is no specific report to accompany the tables. They cover aspects such as over and under employment, permanency of employment, and job satisfaction and are produced using the latest annual dataset. The tables are released approximately 4 months after the end of the fieldwork period.

Punctuality refers to the gap between the announced publication date and the actual publication - the proportion of publications released according to the publication schedule date is 100% with no delays.

5 Accessibility and Clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format(s) 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.

ONS provide UK LFS quarterly data sets to Government Departments and have made them available to approved researchers via ONS's Secure Research Service (SRS) and the UK Data Archive, Essex University. The UK Data Archive also provides non-disclosive data for public access. More information on the SRS can be found on the [ONS website](#). It is a facility that provides secure access to sensitive data to approved researchers for defined projects. The [UK Data Archive](#) at Essex University provides free access to the various LFS datasets.

The monthly Labour Market Report (LMR) is the main tool for disseminating headline NI LFS labour market statistics. Additional information is published alongside the LMR including a suite of headline tables in Excel and ODS, labour market press release and detailed Excel tables including time series data and more detailed breakdowns where possible. The LMR as well as the quarterly tables, work quality tables, Women in NI and the Annual Report all include commentary, tables, charts and technical notes which explain the data sources, procedures and definitions.

The monthly LMR and a combined briefing paper is sent directly by email to an agreed mailing list on the morning of publication. Key statistics from the report are released using Twitter at the same time, reaching a wide range of users including the media and general public.

All published information is available free of charge via the [NISRA website](#) or in hard copy on request and is also available on the [GOV.UK](#) Statistics Release Calendar. Where available, disaggregated data is available free from websites such as [NINIS](#) or [NOMIS](#).

Bespoke analysis and information requests are undertaken where possible on request and there is currently no charge for this service. The requested information can be provided in a range of formats, most commonly Excel, with the accompanying metadata. Responses are issued as soon as possible after the request is received, which is dependent on factors such as the complexity of the request and other priorities, primarily publication dates.

6 Coherence and Comparability

Coherence refers to the degree to which data that are derived from different sources or methods, but which refer to the same topic, are similar. The LFS is one of a number of sources of data about the labour market. The monthly LMR incorporates data from a number of labour market sources, with the LFS being one of the main contributors. Some of the other sources provide data which overlaps with LFS data on employment, unemployment and earnings for example, claimant count, Quarterly Employment Survey (QES), Annual Survey of Hours and Earnings (ASHE). The ELMS-NISRA website contains an explanation of each of these sources and their uses.

Claimant count is taken from the administrative systems held by the Department for Communities and refer to people who are in receipt of some sort of benefit. Claimant count estimates are published through [NOMIS](#) on the number of people claiming Job Seekers Allowance (JSA) and those out-of-work Universal Credit claimants who were claiming principally for the reason of being unemployed. However, the difference between this and the unemployment estimates from the LFS are that claimant count estimates specifically relate to only those claiming either of the benefits specified, whereas LFS estimates will include anyone who has reported as being unemployed (i.e. may include individuals who do not claim benefits). Additionally, it is possible that the claimant count total may include individuals who have reported themselves to be economically inactive on the LFS, and so would be excluded from the unemployed estimate from the LFS.

The Labour Force Survey (LFS) is a household survey carried out by interviewing individuals about their personal circumstances and work. The LFS defines employment as the number of people in work. This differs from the concept of jobs measured by QES as a person can have more than one job, and some jobs may be shared by more than one person. LFS employment figures are based on a rolling three month period whereas QES measures the number of jobs on a particular day. LFS employment figures include those who are employed, self-employed, unpaid family workers and those on government supported training programmes.

ASHE is a UK wide survey that provides information on hourly, weekly and annual earnings and covers both the private and public sector. It is a business survey so earnings data about employees is collected directly from the employers. This means there is a high level of accuracy to the data and that survey response rates are high. The LFS collects earnings data directly from individual participants who have already stated that they are employed (like ASHE this data relates only to employees). However, as some individuals may estimate earnings there isn't the same level of accuracy. There is also a high non-response/refusal rate through the LFS so coverage is not as comprehensive. For these reasons, the recommended source for earnings data in NI is the ASHE. Although ASHE does not collect the same range of characteristics and background data as LFS, it has more detail around earnings, for instance bonuses, overtime and pensions.

The LFS can provide a more complete picture of economic status since it is the only source of detailed information about the characteristics (occupations, home- working, work patterns, and

so on) of people's work and it allows international comparisons. However other sources such as claimant count and ASHE are more useful for small area level analysis (below national level).

The Labour Market Report briefly summarises the differences between the various sources included in the report. In addition, the DfE Economic Commentary draws comparisons with private sector information sources, most commonly the monthly Ulster Bank Purchasing Managers' Index (PMI) and the InterTradeIreland Quarterly Business Monitor (QBM).

The LFS uses standard International Labour Organisation definitions, allowing comparisons to be made on an international level and is carried out in accordance with EU Regulations. However, it should be noted that although the LFS uses ILO definitions, these definitions are not interpreted and applied in exactly the same way in different countries. For example, although 'working age' is a common term, different countries have different statutory school leaving and retirement ages. However, Eurostat collects data from Member States and adjusts them to produce comparable estimates.

Comparability refers to the degree to which data can be compared over time and domain. The LFS has been running in its present form with quarterly sampling since winter 1994-95, allowing comparison over time. The LFS is carried out under European Union Regulations which specify aspects of the applied methodology, quality and timetable therefore comparability across participating domains is assured to an extent.

In order to limit respondent burden and keep the LFS questionnaire at a manageable length, some LFS questions are not asked in every quarterly survey but alternatively on an annual basis or less often, which can impact on comparability over time. This information is available to users in a published list of LFS [data variables](#).

Harmonisation is essential in order to make it easier to draw clearer and more robust comparisons between data sources. Questions have been harmonised where possible in the LFS since 1996 across a range of topics for example, demographic data, housing tenure and ethnicity. More information on harmonisation and the LFS can be found in the [Labour Force Survey User Guide](#) - Volume 1: LFS Background and Methodology.

One issue when making comparisons over time is the boundary changes for different geographies. A way to deal with this is the use of postcodes to attach geographies, this makes it possible to attach and compare like for like, although postcodes are not available for all historical datasets and are not shared outside NISRA.

Another issue around time series data is the revision of indicators and ensuring the correct indicator is being used for the correct time period. The LFS user guidance provides details for all variables in the dataset including when revisions may have been made and what they were.

A common misunderstanding is that a person who is not employed must be unemployed. However, a person who is not employed could be either unemployed or economically inactive. Additionally, the employment rate and unemployment rates are calculated based on different age groups and different denominators. For data on employed, unemployed and economically inactive please see the [Labour Market Report](#).

7 Trade-offs between Output Quality Components

Trade-offs are the extent to which different aspects of quality are balanced against each other. There are two main trade-offs experienced in relation to the publication of data from the NI Labour Force Survey.

Timeliness vs Accuracy

One of the main trade-offs is timeliness, against accuracy and or/detail.

The aim has always been to publish the full range of LFS results to meet customer needs as quickly as possible, but ensuring that the quality of the product is maintained. All data to be published has to go through a rigorous quality assurance process before being released.

The rolling 3-month average data is released as early as possible to allow for these checks at present. Quarterly data has increased timeliness while retaining accuracy by releasing the majority of the data tables with the monthly LMR publication as opposed to creating a separate report on calendar quarter data. As mentioned earlier in this report the main tables are entering the public domain around 2 weeks earlier than pre November 2018, NEETs data is being released a week earlier and quarterly household data tables are being published 3 months earlier as it was often a quarter in arrears.

A compromise with the annual data, since 2019, was to release an initial NI level summary report, with a full report to follow up 3 months later. On the whole, the process is still getting the annual sub-national data into the public domain 3 months earlier than in previous years.

Accuracy vs User Needs

There is and has always been a demand for regional unemployment rates, however, the estimates at this level are not robust. Implementation of large scale boost to NI LFS sample took place in 2018. The purpose of this boost was to allow more accuracy around estimates. However, falling unemployment rates has meant an all-time low in the numbers of unemployed, below the current threshold for publishing.

8 Assessment of User Needs and Perceptions

The most common way of obtaining user feedback in relation to the LFS outputs is informally, through comments or queries addressed directly to ELMS via telephone, email and social media. ELMS regularly attend the ONS Labour Market Steering Group meetings in London in which users and producers discuss and agree changes to the survey and any other developments.

ELMS held an expert user group meeting on labour market statistics in May 2014, which was well attended by a range of users including policy makers, economists, banks and researchers. Valuable feedback was received from the users in relation to a variety of labour market statistical outputs and methodologies. The meeting was followed by a more formal user feedback exercise in July 2014, in which users were asked for their views in the form of a detailed feedback questionnaire. All feedback, including a peer review of the Labour Market Report by the NISRA peer review group, was used to inform a subsequent review of labour market publications. The reviewed Labour Market Report and new special topic papers were presented to users at a follow-up user group meeting in June 2015 and feedback obtained.

There have been subsequent user group meetings since with the most recent taking place in September 2018. It, again, was well attended with useful discussions around current and planned Labour Force outputs. Papers relating to recent User Groups meetings can be accessed on the [NISRA website](#).

A Labour Market user group meeting is scheduled for September 2019, in advance of this a user consultation was launched – the general public were invited to participate with the consultation publicised on the NISRA and DoF websites as well as via Twitter and the addition of the link to staff signatures on emails. The link to the consultation was also emailed along with the invitation to attend the user group meeting to existing mailing lists for Labour Market publications. The results of the consultation will be discussed at the user group meeting in September.

In addition, changes to specific outputs are subject to user consultations. A consultation was carried out on the Women in Northern Ireland publication. Users were invited to submit their comments through an online survey or via email with a word document survey. Everyone from the mailing list for the report were invited to participate along with an open invitation on the NISRA website and through twitter. The request for feedback and subsequent response to the consultation are available [here](#).

Key users of Northern Ireland LFS data include government departments, in particular the Department for the Economy (DfE) and the Department for Communities (DfC), to design and monitor the impact of economic and labour market policy. DfE use LFS data to monitor progress against Public Sector Agreement (PSA) targets in relation to qualification and

employment levels. Both departments are interested in a variety of indicators of the state of the labour market, including the number of people in employment, the number of unemployed people and the number economically inactive (as defined according to the International Labour Organisation - ILO), often requiring more detailed analysis of these series by age groups, sex, changes over time etc.

Other Government departments such as TEO, DoF and DEARA, as well as bodies such as Invest NI and Belfast City Council, regularly require specific ad hoc analysis from the LFS in order to monitor policies for example, equality and employment. In addition, significant 'non-governmental' users of LFS data include the media, banks, academics, private consultants and the general public, primarily for reporting or researching the performance of the economy in general. Employers may use LFS to inform staff recruitment and retention strategies. The LFS attracts widespread media coverage, with a number of broadcasters publishing articles on the labour market on a monthly basis, generally on the day of publication of the Labour Market Report.

The LFS is also the main data source for the population measure linked to 7 Programme for Government indicators. This means ELMS is responsible for updating the annual data that informs how the departments are performing. NISRA publishes Measurement Annexes for each of the indicators here: <https://www.nisra.gov.uk/statistics/programme-government>

9 Performance, Cost and Respondent Burden

The Annual Operation cost of the NI LFS is around £750,000 and includes:

- Fieldwork costs to Central Survey Unit;
- ONS processing and weighting the data; and
- Staff costs for analysis and production of outputs.

The Annual Burden to Business, Households and Individuals of Completing Statistical Surveys is published on the NISRA website. The latest (2017/18) report was published on 28th June 2019

<https://www.nisra.gov.uk/statistics/government/ni-statistical-surveys-assessment-burden>

The report includes information on burden to respondents in relation to time taken to participate in the survey. The NI LFS had the second highest respondent burden.

10 Confidentiality, Transparency and Security

All data is handled, stored and accessed in a manner which complies with Government and Departmental standards regarding security and confidentiality, and fully meets the requirements of the Data Protection Act. Access to this data is controlled by a system of strict business need access control.

A summary of NISRA ELMS' confidentiality policy can be accessed [here](#).

Data collection is carried out by the Central Survey Unit (CSU), the leading survey organisation in NI and a business area within NISRA. The sample of addresses for the LFS is obtained from the Land and Property Service (LPS) list of domestic properties in Northern Ireland and the quarterly survey has been designed to give reliable estimates of level for each quarter, as well as change over consecutive quarters. LFS data is collected on tablet computers by survey interviewers in the field. Each tablet computer is encrypted to meet 256 bit AES standards as approved by our IT security team. The encryption software also meets FIPS 140-2 standards.

The data is transferred from interviewers' machines via Secure File Transfer Protocol (SFTP) to secure server managed by IT Assist (the IT professional group in the NICS). From there the data is finally transferred to the secure network drives that are used by the data team in CSU. These servers are hosted in the DataCentre in Belfast which is again maintained by It Assist. Access restrictions are in place on the data and only necessary CSU staff have access to the data. When sending to ONS, data is zipped and password protected.

The NI LFS data is then processed by ONS before being supplied to ELMS. ELMS have in place a number of Early Access Agreements and businesses cases with ONS for names staff to get access to the final datasets (including weights). These agreements are revised to reflect any changes in staffing and any data supplied is transferred using a managed file transfer software which uses secure file transfer protocols to transfer data (Moveit), whereby only approved personnel are given accounts to access the data.

ELMS receive anonymised microdata and aggregate tables, no personal data is ever retained. The data are held on a network that is accredited to the security level of the data and is accessible only to staff involved in the production process. During the publication process all hard copies of interim results are locked away or shredded.

Disclosure rules are applied to any outputs to ensure anonymity of participants. Also quality thresholds are applied to published outputs to ensure robustness of estimates.

Microdata is available through the [UK Data Service](#) or applications can made through the [Secure Research Service](#) within ONS.

To ensure transparency of data release, any revisions to our publications are handled in accordance with ELMS' revisions policy, which is published on the ELMS/NISRA website [here](#).

These statistics also comply with the UK Statistics Authority Code of Practice on release protocols.

11 Definitions

Unemployment

The definition of unemployment used in the Labour Force Survey (LFS) is in accordance with that of the International Labour Organisation (ILO). The ILO unemployed includes those without a job who were able to start work in the two weeks following their LFS interview and had either looked for work in the four weeks prior to interview or were waiting to start a job they had already obtained.

The definition of unemployment rate is the percentage of economically active people who are unemployed.

Please note that it is possible for the number of unemployed to increase and the unemployment rate to fall during the same period, as the latter measure is a ratio e.g. if the number of economically active has increased at a faster rate than the number unemployed, the unemployment rate will fall.

Employment

The definition of ILO employed applies to anyone (aged 16 or over) who has carried out at least one hour's paid work in the week prior to interview, or has a job they are temporarily away from (e.g. on holiday). Also included are people who do unpaid work in a family business and people on Government-supported employment training schemes.

The definition of employment rate is the percentage of all working age (16-64) people who are employed.

The ILO measures are particularly useful for examining short term and long term trends over time and key LFS time series data are available both seasonally adjusted and unadjusted.

Economic inactivity

Economic inactivity is defined as those individuals who are neither in employment nor unemployed as determined by the ILO measure. This economic status includes all those who are looking after a home, are long term sick or disabled, are students or are retired.