

Assessment of compliance with the Code of Practice for Official Statistics

Statistics on National Insurance Contributions and Qualifying Years, and Second Tier Pension Provision

(produced by the Department for Work and Pensions)

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About the UK Statistics Authority

The UK Statistics Authority is an independent body operating at arm's length from government as a non-ministerial department, directly accountable to Parliament. It was established on 1 April 2008 by the *Statistics and Registration Service Act 2007*.

The Authority's overall objective is to promote and safeguard the production and publication of official statistics that serve the public good. It is also required to promote and safeguard the quality and comprehensiveness of official statistics, and good practice in relation to official statistics.

The Statistics Authority has two main functions:

- 1. oversight of the Office for National Statistics (ONS) the executive office of the Authority;
- 2. independent scrutiny (monitoring and assessment) of all official statistics produced in the UK.

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ASSESSMENT AND DESIGNATION

The Statistics and Registration Service Act 2007 gives the UK Statistics Authority a statutory power to assess sets of statistics against the Code of Practice for Official Statistics.

Assessment will determine whether it is appropriate for the statistics to be designated as National Statistics.

Designation as National Statistics means that the statistics comply with the *Code of Practice*. The *Code* is wide-ranging. Designation can be interpreted to mean that the statistics: meet identified user needs; are produced, managed and disseminated to high standards; and are explained well.

Designation as National Statistics should not be interpreted to mean that the statistics are always correct. For example, whilst the *Code* requires statistics to be produced to a level of accuracy that meets users' needs, it also recognises that errors can occur – in which case it requires them to be corrected and publicised.

Assessment reports will not normally comment further on a set of statistics, for example on their validity as social or economic measures. However, reports may point to such questions if the Authority believes that further research would be desirable.

Assessment reports typically provide an overview of any noteworthy features of the methods used to produce the statistics, and will highlight substantial concerns about quality. Assessment reports also describe aspects of the ways in which the producer addresses the 'sound methods and assured quality' principle of the *Code*, but do not themselves constitute a review of the methods used to produce the statistics. However the *Code* requires producers to "seek to achieve continuous improvement in statistical processes by, for example, undertaking regular reviews".

The Authority may grant designation on condition that the producer body takes steps, within a stated timeframe, to fully meet the *Code's* requirements. This is to avoid public confusion and does not reduce the obligation to comply with the *Code*.

The Authority grants designation on the basis of three main sources of information:

- i. factual evidence and assurances by senior statisticians in the producer body;
- ii. the views of users who we contact, or who contact us, and;
- iii. our own review activity.

Should further information come to light subsequently which changes the Authority's analysis, it may withdraw the Assessment report and revise it as necessary.

It is a statutory requirement on the producer body to ensure that it continues to produce the set of statistics designated as National Statistics in compliance with the *Code of Practice*.

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1 **Summary of findings**

1.1 Introduction

- 1.1.1 This is one of a series of reports prepared under the provisions of the Statistics and Registration Service Act 2007². The Act requires all statistics currently designated as National Statistics to be assessed against the Code of Practice for Official Statistics³. The report covers the set of statistics reported in National Insurance Contributions & Qualifying Years and Second Tier Pension Provision⁴ (CQYSTP), produced by the Department for Work and Pensions (DWP).
- 1.1.2 Section 3 of this report adopts an 'exception reporting' approach it includes text only to support the Requirements made to strengthen compliance with the Code and Suggestions made to improve confidence in the production, management and dissemination of these statistics. This abbreviated style of report reflects the Head of Assessment's consideration of aspects of risk and materiality⁵. The Assessment team nonetheless assessed compliance with all parts of the Code of Practice and has commented on all those in respect of which some remedial action is recommended.
- 1.1.3 This report was prepared by the Authority's Assessment team, and approved by the Board of the Statistics Authority on the advice of the Head of Assessment.

1.2 **Decision concerning designation as National Statistics**

- 1.2.1 The Statistics Authority judges that the statistics covered by this report are readily accessible, produced according to sound methods and managed impartially and objectively in the public interest, subject to any points for action in this report. The Statistics Authority confirms that the statistics published in CQYSTP are designated as National Statistics, subject to DWP implementing the enhancements listed in section 1.5 and reporting them to the Authority by May 2012.
- 1.2.2 DWP has informed the Assessment team that it has started to implement the Requirements listed in section 1.5. The Statistics Authority welcomes this.

http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html

² http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga_20070018_en.pdf

³ http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html

⁴ http://statistics.dwp.gov.uk/asd/index.php?page=stpp_cq

⁵ http://www.statisticsauthority.gov.uk/assessment/assessment/guidance-about-assessment/criteria-fordeciding-upon-the-format-of-an-assessment-report.pdf

1.3 **Summary of strengths and weaknesses**

- 1.3.1 DWP makes available a range of summary statistics through CQYSTP and provides access to a wide range of additional statistics via its online tabulation tool⁶. The statistical First Release presents the main trends in the statistics, supported by commentary and summary charts. It provides some contextual information about the Second State Pension but gives limited explanations of the findings. DWP has published a range of documents that support the release, including statements about the quality of the statistics and the methods used to produce them.
- 1.3.2 The statistics team works with a few key users within DWP and in other government departments, but has a limited view of the scale of the existing and potential user base and the wider uses made of the statistics. The releases do not sufficiently explain technical terminology, the impact of legislation on the trends presented, or provide an estimate of the reliability of the statistics.

1.4 **Detailed recommendations**

1.4.1 The Assessment team identified some areas where it felt that DWP could strengthen its compliance with the Code. Those which the Assessment team considers essential to enable designation as National Statistics are listed in section 1.5. Other suggestions, which would improve the statistics and the service provided to users but which are not formally required for their designation, are listed at annex 1.

1.5 **Requirements for designation as National Statistics**

Requirement 1	Take steps to develop a greater understanding of
	the use made of the statistics, the needs of current
	and potential users, and user views on the service

provided (para 3.1).

Requirement 2 Explain the extent of revisions alongside the release

of the latest statistics (para 3.2).

Requirement 3 Provide information about the quality and reliability

of the CQYSTP statistics, with additional

explanation of the confidence intervals (para 3.5).

Requirement 4 Improve the commentary and background notes in

the release to aid user interpretation of the statistics

(para 3.6).

⁶ http://statistics.dwp.gov.uk/asd/index.php?page=tabtool

2 Subject of the assessment

- 2.1 DWP publishes National Insurance Contributions & Qualifying Years and Second Tier Pension Provision (CQYSTP)⁷ annually, alongside detailed tables released via the online data tabulation tool⁸. The release presents statistics on National Insurance Contributions and Qualifying Years (CQY), and Second Tier Pension Provision (STP).
- 2.2 The data used to produce CQY and STP statistics are drawn from DWP's Lifetime Labour Market Database (the L2 database), which consists of a 1 per cent sample extract from HM Revenue & Custom's (HMRC) National Insurance Recording System/Pay As You Earn (PAYE) System (NIRS2)9. The sample is extracted 14 months after the end of each tax year to which the statistics relate. The NIRS2 system is used in the administration of National Insurance, PAYE Income Tax, benefits and pensions. It is based upon the submission of records on employment, National Insurance contributions, and credits for individuals. Published statistics are classed by DWP as provisional for the last two tax years as the supply of this contribution information onto the system can occur over a number of years following the related tax year. DWP also makes some updates to earlier periods so the whole time series is revised on publication. Longitudinal data are available in NIRS2 from 1975 with some aggregate information held from 1948 onwards. The previous system, NIRS, was introduced in 1975 following the computerisation of clerical records, and replaced by NIRS2 in 1997.
- 2.3 Statistics on CQY are produced from the L2 database for each tax year on the types of contribution paid. They show the number of people accruing a qualifying year for the State Pension through these contributions. Analysis is included by gender, age and earnings.
- 2.4 STP tables contain estimates of membership of the range of schemes that are collectively referred to as Second Tier Pensions, such as Contracted Out Salary Related schemes and the State Second Pension (S2P), offered from 5 April 2002. Membership trends for each type of scheme are shown since 1997/98, with a summary table including data back to 1978/79.
- 2.5 DWP has made some changes to its production process to improve the timeliness of the release. The latest release was published 17 months after the end of the tax year to which the statistics relate; the previous two releases were published after 19 and 21 months respectively. DWP told us that the 2012 release will use an extract drawn from NIRS2 nine months after the end of the tax year, compared to 14 months previously, reducing the final publication date to around 13 months after the end of the tax year reference period. The timing of a given data extract will alter the balance between timeliness and accuracy based on the number of completed updates to records within the system at that time.

⁷ http://statistics.dwp.gov.uk/asd/index.php?page=stpp_cq

http://statistics.dwp.gov.uk/asd/index.php?page=tabtool

⁹ See Annex A: http://statistics.dwp.gov.uk/asd/l2_methodology.pdf

- 2.6 DWP's tabulation tool presents a pre-designed range of tables for users to download. As well as CQYSTP, it also makes available National Statistics on DWP Benefit Caseloads, DWP Benefit on and off flows, Employment Programmes, and National Insurance Number Allocations to Adult Overseas Nationals entering the UK. Statistics on Benefits, Employment Programmes, Sanctions and Vacancies were assessed in Assessment Report 66¹⁰. Statistics on National Insurance Number Allocations to Adult Overseas Nationals Entering the UK were assessed in Assessment Report 85¹¹.
- 2.7 DWP defines the coverage of the CQYSTP statistics as 'United Kingdom +' as the L2 database includes all people paying National Insurance in the relevant tax year – it includes, along with UK residents, those living in other countries who were resident in the UK and paid National Insurance for a part of the year.
- 2.8 Uses of the CQYSTP statistics include monitoring and evaluating pension policy, monitoring the effect of economic conditions on the pension system, and forecasting pension expenditure. ONS has identified a potential use for the L2 database in supporting the development of improved migration estimates. This would require an increase in the proportion sampled from 1 per cent to between 5 and 6 per cent. This proposal was discussed at a user meeting in November 2011.
- 2.9 DWP told us that two full-time equivalents work on producing these statistics.

http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/index.html
http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/index.html

3 Assessment findings

- 3.1 DWP engages with users in other government departments including the Government Actuary's Department, HMRC and the Office for National Statistics (ONS). Since October 2011, DWP has published an ongoing online user questionnaire alongside the latest release. The statistics team has also tried to identify other users by tracking the internet protocol addresses of visitors to the website. The team has identified some users outside central government, for example in academia and local authorities, but the majority (around 90 per cent) of web visitors could not be identified. Limited success with these measures means little is understood of the use of these statistics outside government departments. As part of the designation as National Statistics, DWP should take steps to develop a greater understanding of the use made of the statistics, the needs of current and potential users, and user views on the service provided 12 (Requirement 1). We suggest that DWP refer to the types of use put forward in the Statistics Authority's Monitoring Brief, The Use Made of Official Statistics 13.
- 3.2 National Insurance Contributions can be paid and recorded on the NIRS2 system for some time after the end of the relevant tax year, so published estimates are classed as provisional for the two most recent tax years and subject to revision depending on the timing of the data extraction. The background notes to CQYSTP highlight data issues and corrections, and the reasons for revisions to the statistics, but do not indicate the scale of the revisions. Each year's statistical release – the latest year's estimate, and the time series - is based on a newly drawn sample of the NIRS2 system, and hence a new version of the L2 database. Previous datasets from the L2 database are not archived, so it is not possible for users to make comparisons between the latest estimates and those previously published. As part of the designation as National Statistics, DWP should explain the extent of revisions alongside the release of the latest statistics¹⁴ (Requirement 2). We suggest that DWP make previous statistical releases available on its website through the CQYSTP page.
- 3.3 Future changes are announced through the statistics releases, with further updates posted on the statistics web page in advance of the next release. DWP invites comments about the proposed changes, although no specific method of contact or contact details are given. We suggest that DWP include further contact details to enable users to provide their comments on planned changes.
- 3.4 DWP told us that the size of the sample extract is not large enough to support local-level statistics but may be able to support regional and county-level statistics. Analysis at local authority level would be limited as the most reliable addresses provided are those of the employer, with employee addresses provided by employers on a voluntary basis. Employee addresses are often incomplete or based on out-of-date records. Further analysis may be possible if the proportion sampled is increased to between 5 and 6 per cent as described

¹² In relation to Principle 1, Practices 2 and 5 of the Code of Practice

http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-briefs/index.html

¹⁴ In relation to Principle 2, Practice 6 of the *Code of Practice*

- at paragraph 2.8. We suggest DWP evaluate the level of demand from users for local authority level statistics and the reliability of statistics this would provide, if the change goes ahead.
- DWP has published methodology 15 and quality 16 statements covering the 3.5 reports and L2 database 17 that set out information about the background and quality of the statistics. These include estimates of indicative sampling errors for different estimated values drawn from the NIRS2 extract. CQYSTP has a link to these reports but doesn't give an estimate of sampling errors within the statistical releases or outline the strengths and limitations of the statistics in relation to their likely uses. As part of the designation as National Statistics, DWP should provide information about the quality and reliability of the CQYSTP statistics, with additional explanation of the confidence intervals 18 (Requirement 3).
- 3.6 CQYSTP includes notes about the L2 database, Code of Practice compliance, planned changes to the release, and links to other information about pensions. DWP intends the release to be accessible by a wide user community but has not drawn on input from users outside of central government to guide its content. The release contains some technical information and terminology that would benefit from further explanation, along with clearer commentary on the meaning of the findings presented. Comparisons with statistics for other countries are not drawn due to differences in tax and pension systems. As part of the designation as National Statistics, DWP should improve the commentary and background notes in the release to aid user interpretation of the statistics 19 (Requirement 4). We suggest that in meeting this requirement DWP should consider the points detailed in annex 2.
- 3.7 DWP has published a list of 15 people who are granted pre-release access to these statistics. This includes four Ministers and groups within the DWP press office and private office. We suggest that DWP list specific job titles so that it is made clear how many individuals within these groups have been granted prerelease access.

http://research.dwp.gov.uk/asd/l2_methodology.pdf
 http://research.dwp.gov.uk/asd/l2_quality.pdf

http://statistics.dwp.gov.uk/asd/index.php?page=stpp_cq

18 In relation to Principle 8, Practice 1 of the Code of Practice

¹⁹ In relation to Principle 8, Practice 2 of the *Code of Practice*

Annex 1: Suggestions for improvement

A1.1 This annex includes some suggestions for improvement to DWP's CQYSTP statistics, in the interest of the public good. These are not formally required for designation, but the Assessment team considers that their implementation will improve public confidence in the production, management and dissemination of official statistics.

Suggestion 1 Refer to the types of use put forward in the Statistics

Authority's Monitoring Brief, *The Use Made of Official Statistics*²⁰, when documenting use (para

3.1).

Suggestion 2 Make previous statistical releases available on

DWP's website through the CQYSTP page (para

3.2).

Suggestion 3 Include further contact details to enable users to

provide their comments on planned changes (para

3.3).

Suggestion 4 Evaluate the level of demand from users for local

authority level statistics and the reliability of

statistics this would provide, if the extract was based

on a larger sample (para 3.4).

Suggestion 5 Consider the points detailed in annex 2, in seeking

to improve the statistical releases (para 3.6).

Suggestion 6 List specific job titles so that it is made clear how

many individuals within the press office and private office groups have been granted pre-release access

(para 3.7).

²⁰ http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-briefs/index.html

Annex 2: Compliance with Standards for Statistical Releases

- In October 2010, the Statistics Authority issued a statement on Standards for Statistical Releases²¹. Whilst this is not part of the Code of Practice for Official Statistics, the Authority regards it as advice that will promote both understanding and compliance with the Code. In relation to the statistical releases associated with CQYSTP, this annex comments on compliance with the statement on standards.
- A2.2 In implementing any Requirements of this report (at paragraph 1.5) which relate to the content of statistical releases, we encourage the producer body to apply the standards as fully as possible.

Appropriate identification of the statistics being released

- A2.3 CQYSTP gives the coverage of the release on the cover page, together with the appropriate logos and contact details for the responsible statistician. The cover page doesn't make clear the frequency of release. The latest reference period is also not clearly set out.
- A2.4 The release includes an outline of its content.

Include commentary that is helpful to the non-expert and presents the main messages in plain English

- The release gives a summary of contributions and qualifying years (CQY) and of the second tier pension provision (STP) which are illustrated using summary charts. The descriptions of the trends are largely straightforward but don't clearly explain their relevance. The release warns users about 'the amount of retrospection used' but this term and the associated explanation are not clear in describing the nature and extent of the revisions to the data. The release refers to the '2010 changes' but doesn't explain these.
- A2.6 The headings to some of the charts are not clear. The chart labels and commentary on the distribution of women accruing qualifying years are unclear in referring to the categories 'Credits only' and 'Home Responsibilities Protection' in the chart but 'HRP credits' in the text. The charts do not indicate which data are provisional.

Use language that is impartial, objective and professionally sound

A2.7 The release is impartial, objective and evidence-based. The descriptions are consistent with the statistics.

Include information about the context and likely uses

A2.8 The CQY commentary refers to the *Pension Reform Act* 2007²² as impacting upon the trend in people under state pension age with at least one qualifying year for Basic State Pension. However this description doesn't explain or signpost users to the nature of the legislative changes or how they have affected the statistics.

http://www.statisticsauthority.gov.uk/news/standards-for-statistical-releases.html http://www.dwp.gov.uk/policy/pensions-reform/the-pensions-act-2007/

- A2.9 The STP key findings set the statistics in the context of the introduction of the State Second Pension but the release doesn't provide sufficient explanation of the importance of the findings for example the fall in membership of contracted-out schemes following the introduction of State Second Pension. The release describes the trends over time by gender and by type of provision.
- A2.10 The annex provides links to further information about the pension system, as well as to a document explaining the ways that the statistics are used.

Include, or link to, appropriate metadata

- A2.11 The release provides links to documents about the quality of the statistics and the methods used to produce them. It also describes the changes that have been made to the statistics and the plans for further changes.
- A2.12 The revisions section refers to a trade-off between quality and timeliness but doesn't provide an estimate of the reliability of the statistics. The release highlights that the figures for the last two years are considered provisional and expected to change, for example because the numbers of people making NI Contributions is likely to rise as additional returns are incorporated.

Annex 3: Summary of assessment process and users' views

- A3.1 This assessment was conducted from July 2011 to February 2012.
- A3.2 The Assessment team Penny Babb, Celia MacIntyre and Neil Wilson agreed the scope of and timetable for this assessment with representatives of DWP in July 2011. The Written Evidence for Assessment was provided on 21 September 2011. The Assessment team subsequently met DWP during November 2011 to review compliance with the Code of Practice, taking account of the written evidence provided and other relevant sources of evidence.

Summary of users contacted, and issues raised

- A3.3 Part of the assessment process involves our consideration of the views of users. We approach some known and potential users of the set of statistics. and we invite comments via an open note on the Authority's website. This process is not a statistical survey, but it enables us to gain some insights about the extent to which the statistics meet users' needs and the extent to which users feel that the producers of those statistics engage with them. We are aware that responses from users may not be representative of wider views, and we take account of this in the way that we prepare assessment reports.
- A3.4 The Assessment team received 10 responses from the user/supplier consultation. The respondents were grouped as follows:

DWP 3 Other government departments

- A3.5 Most respondents work within DWP and used the tabulation tool as a means of cross-checking more detailed analysis that they had run from the L2 database. Users said they had good contact with the producer team, although three users noted that the support available for detailed analysis beyond the checking of the tabulation tool was limited. Some users had been referred on to other, more experienced, users, outside the production team, for support.
- A3.6 Half of the users said they would like to see additional metadata provided; several were keen to be able to access the code underlying the variables in the tabulation tool. Two users were highly critical of the presentation of information, based on dissatisfaction with the labelling and notes, and the limited range of tables available compared to the breadth of data available in the L2 database.
- A3.7 Three users described the tabulation tool as accessible and said that they would recommend it to other users. Users were happy with the timeliness of data but were keen to have access to the most recent, provisional data.

Key documents/links provided

Written Evidence for Assessment document

