



UK Statistics  
Authority

# Assessment of Producer Price Indices

*produced by Office for National  
Statistics*

**Assessment Report 24**

**December 2009**

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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 of Producer Price Indices**

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## **ASSESSMENT AND DESIGNATION**

Under the provisions of the *Statistics and Registration Service Act 2007*, the UK Statistics Authority has a statutory function to assess sets of statistics against the Code of Practice for Official Statistics, with a view to determining whether it is appropriate for the statistics to be designated, or to retain their designation, as National Statistics.

Designation as National Statistics means that the statistics are deemed to be compliant with the Code of Practice. Whilst the Code is wide-ranging, designation may be broadly interpreted to mean that the statistics meet identified user needs; are produced, managed and disseminated to high standards; and are well explained.

Designation also signifies that, subject to any caveats in this report, the Statistics Authority judges that the statistics are readily accessible, produced according to sound methods and managed impartially and objectively in the public interest.

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

Designation as National Statistics will sometimes be granted in cases where some changes still need to be made to meet fully the requirements of the Code, on condition that steps are taken by the producer body, within a stated timeframe, to address the weaknesses. This is to avoid public confusion and does not reduce the obligation to comply with the Code.

Designation is granted on the basis of the information provided to the Statistics Authority, primarily by the organisation that produces the statistics. The information includes a range of factual evidence and also assurances by the producer organisation. The views of users are also sought. Should further information come to light subsequently which changes the Authority's analysis, the Assessment report may be withdrawn and revised as necessary.

Once designated as National Statistics, it is a statutory requirement on the producer organisation to ensure that the set of statistics continues to be produced, managed and disseminated in compliance with the Code of Practice.

# Contents

Section 1: Summary of findings

Section 2: Subject of the assessment

Section 3: Assessment findings

Annex 1: Suggestions for improvement

Annex 2: Summary of the assessment process and user views

# 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 2007*<sup>1</sup>. The report covers the following four monthly Producer Price Indices (PPIs) outputs, produced by the Office for National Statistics (ONS):

- Producer Prices Statistical Bulletin<sup>2</sup>;
- Producer Price Indices (MM22)<sup>3</sup>;
- Aerospace and Electronic Cost Indices - MM19 (PPI)<sup>4</sup>; and
- Price Index Numbers for Current Cost Accounting (MM17)<sup>5</sup>

1.1.2 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 confirms that the PPI outputs are designated as National Statistics, subject to the Office for National Statistics implementing the enhancements listed in section 1.5 below and reporting them to the Authority by March 2010.

## 1.3 Summary of strengths and weaknesses

1.3.1 The processes involved in the compilation, production and publication of PPI statistics follow international best practice and are well-documented on the ONS' website. The PPI team regularly consults with key users and engages with some other users in each triennial review of the statistics<sup>6</sup>. Developments, such as the production of annual chain-linked PPI statistics, are ongoing and take into account users' needs. Processes are transparent and changes to the methods are well planned and advertised.

1.3.2 The large amount of background information and metadata means that it can be difficult for users to find the detailed information they need. ONS is aware of the wide range of uses of the statistics although there is little evidence of dialogue with users outside government.

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<sup>1</sup> [http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga\\_20070018\\_en.pdf](http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga_20070018_en.pdf)

<sup>2</sup> <http://www.statistics.gov.uk/pdfdir/ppi0909.pdf>

<sup>3</sup> <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=2208>

<sup>4</sup> <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=2207>

<sup>5</sup> <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=2206>

<sup>6</sup> <http://www.statistics.gov.uk/articles/ppi/PPI-Triennial-Review-Report-2009.pdf>

## **1.4 Detailed recommendations**

1.4.1 The Assessment team identified some areas where it felt that the Office for National Statistics 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 below. 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**

<b>Requirement 1</b>	Publish more regular information on plans for the development of PPIs (para 3.2)
<b>Requirement 2</b>	Improve accessibility to metadata for PPIs (para 3.20)

## 2 Subject of the assessment

- 2.1 The Producer Price Indices (PPIs) are produced within the Prices Division of the Office for National Statistics. PPIs are based on monthly surveys measuring the price changes of goods bought and sold by UK manufacturers. They are released as a number of monthly publications, including an overall summary of inputs and outputs and a breakdown of all publishable indices.
- 2.2 ONS uses PPIs for deflating current price values in the National Accounts. HM Treasury, the Bank of England and other government departments use the data for monitoring the general level of inflation in the economy. The data therefore play an important role in the monetary policy-making process. Commercial users and Defence Analytical Services and Advice (DASA)<sup>7</sup> use price data for formulating cost adjustment contracts and evaluating movements in input and output prices. Businesses also use the data to compare their own prices with national averages. Internationally, Eurostat requires the provision of the PPI monthly price data under the Short-term business statistics (STS) Regulation<sup>8</sup>.
- 2.3 PPI data have been published for over a hundred years, and are split into two types of measurement. Input PPIs measure changes in the prices of materials and fuel bought by manufacturers for processing. Output PPIs measure changes in prices that manufacturers charge for goods when ordered and are often referred to as “factory-gate” prices to signify that they illustrate manufacturers’ prices of goods.
- 2.4 PPIs are based on the “basket of goods” concept and are structured according to the European Classification of Products by Activity (CPA)<sup>9</sup>. ONS collects data on approximately 6,750 price quotations from around 4,000 businesses each month. These are converted into around 1,000 separate price indices. Movements in prices are weighted to reflect the relative importance of each product in terms of turnover from the annual survey of products (Prodcom)<sup>10</sup>.
- 2.5 The 2009 Triennial Review noted that the estimated cost to government to produce PPIs was around £1.8 million in 2008/09. This represented a fall of 19.1 percent since the previous triennial review estimates in 2005/06.

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<sup>7</sup> <http://www.dasa.mod.uk/>

<sup>8</sup> [http://epp.eurostat.ec.europa.eu/portal/page/portal/short\\_term\\_business\\_statistics/legislation](http://epp.eurostat.ec.europa.eu/portal/page/portal/short_term_business_statistics/legislation)

<sup>9</sup> [http://ec.europa.eu/eurostat/ramon/index.cfm?TargetUrl=DSP\\_PUB\\_WELC](http://ec.europa.eu/eurostat/ramon/index.cfm?TargetUrl=DSP_PUB_WELC)

<sup>10</sup> <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15281&Pos=1&ColRank=1&Rank=224>



### 3 Assessment findings

#### Principle 1: Meeting user needs

**The production, management and dissemination of official statistics should meet the requirements of informed decision-making by government, public services, business, researchers and the public.**

- 3.1 The triennial reviews of PPIs<sup>11</sup> provide a good basis for understanding user needs and how users would like to see the statistics developed. The reviews include a questionnaire asking the opinions of users on various aspects of the PPI outputs and survey including timeliness, quality, format and ease of access of the data. However the review only canvasses primary users. The Assessment team suggests that future triennial reviews could be publicised more widely, for example in the National Statistics publication “Economic and Labour Market Review” (ELMR)<sup>12</sup> and on the ONS website, to capture additional user views.
- 3.2 ONS holds regular meetings with key users. The meetings allow these users to express their needs openly. However, the minutes of these meetings are not disseminated more widely so other users do not have access on a regular basis to information about the development needs discussed and the decisions made. As part of the designation as National Statistics, ONS should publish more regular information on plans for the development of PPIs, for example in ELMR<sup>13</sup>, on its website or in a newsletter (Requirement 1)<sup>14</sup>. We suggest that ONS could also provide the opportunity for users to give feedback about PPIs, on its website.

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<sup>11</sup> see footnote 6

<sup>12</sup> <http://www.statistics.gov.uk/elmr/>

<sup>13</sup> <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14692&Pos=&ColRank=1&Rank=208>

<sup>14</sup> In relation to Principle 1 Practices 3 and 5 of the Code of Practice

## Principle 2: Impartiality and objectivity

**Official statistics, and information about statistical processes, should be managed impartially and objectively.**

- 3.3 ONS publishes the monthly PPI figures in an orderly and timely manner (around ten days after the end of each reference period). It publishes the release dates for PPIs for the coming 12 months on the National Statistics Publication Hub.
- 3.4 ONS announces changes and revisions in the Statistical Bulletins and via articles in ELMR, such as the rebasing<sup>15</sup> of PPIs in September 2008<sup>16</sup>. The PPI team follows the relevant ONS revisions policy although this could be made clearer on the ONS website. The Assessment team suggests that ONS indicate on the website the revisions policy that is relevant to PPIs.
- 3.5 The Assessment team notes that ONS presents the statistics in an objective manner, without associated policy statements. The PPI team produces special analyses for a fee, in accordance with the ONS charging policy.

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<sup>15</sup> Rebasing involves resetting the base year. It is carried out every five years for ONS to update the weights used to aggregate the detailed PPI indices.

<sup>16</sup> <http://www.statistics.gov.uk/cci/article.asp?id=2060>

### **Principle 3: Integrity**

**At all stages in the production, management and dissemination of official statistics, the public interest should prevail over organisational, political or personal interests.**

- 3.6 No incidents of political pressure, abuses of trust or complaints relating to professional integrity, quality or standards were reported to, or identified by, the Assessment team.
- 3.7 ONS' Prices Division has procedures in place to ensure that the data are released correctly and safeguarded against any inappropriate comments or unscheduled release of statistics. Clear (unpublished) desk instructions are available which include notes about integrity and confidentiality procedures.
- 3.8 ONS publishes PPI data in a standard Statistical Bulletin, accompanied by a press release and a press conference. This allows statisticians direct contact with the public and press, providing the opportunity to comment openly on the data.

## Principle 4: Sound methods and assured quality

**Statistical methods should be consistent with scientific principles and internationally recognised best practices, and be fully documented. Quality should be monitored and assured taking account of internationally agreed practices.**

- 3.9 ONS publishes methods information as part of the GSS Methodology series<sup>17</sup>. Data production meets the standards set out in the International Monetary Fund's Special Data Dissemination Standards<sup>18</sup>. This covers quality aspects such as coverage, timeliness, access, integrity and quality. ONS delivers PPI data to Eurostat in accordance with the EU Short-term business statistics Regulation.
- 3.10 Users have highlighted some areas of priority in developing PPIs, including using annual chain-linking<sup>19</sup> instead of the current system of rebasing every five years. The PPI team plans to implement this following rebasing in 2013, subject to the development of a new computer system.
- 3.11 ONS has developed a work plan for reclassifying PPIs onto the new Standard Industrial Classification (SIC 2007)<sup>20</sup>. The triennial review notes that PPIs according to the new classification should be published in June 2010.
- 3.12 Comprehensive quality assurance procedures for PPI data are described in detailed desk instructions for staff.

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<sup>17</sup> [http://www.statistics.gov.uk/downloads/theme\\_other/GSSMethodology\\_No\\_20\\_v2.pdf](http://www.statistics.gov.uk/downloads/theme_other/GSSMethodology_No_20_v2.pdf)

<sup>18</sup> <http://www.imf.org/external/pubs/ft/sd/index.asp?decision=EBM/96/36>

<sup>19</sup> The method of annual chain-linking uses information updated every year to give each component the most relevant weight which can be estimated.

<sup>20</sup> <http://www.statistics.gov.uk/statbase/product.asp?vlnk=14012>

## **Principle 5: Confidentiality**

**Private information about individual persons (including bodies corporate) compiled in the production of official statistics is confidential, and should be used for statistical purposes only.**

- 3.13 The Assessment team notes that there are sound processes in place to protect the confidentiality of PPI data. These cover third-party data, disclosure checks, the aggregation of data before publication, and controlled access to computer servers. The methods appear robust for both aggregate and individual data.
- 3.14 The front page of the survey questionnaire includes the standard confidentiality statement for ONS business surveys, clearly stating that the confidentiality of the data will be maintained. Third-party data are covered by Data Access Agreements which clearly outline confidentiality aspects for the data being exchanged.

## Principle 6: Proportionate burden

**The cost burden on data suppliers should not be excessive and should be assessed relative to the benefits arising from the use of the statistics.**

- 3.15 ONS monitors the costs to businesses of supplying data for PPIs, and documents these in the triennial reviews. As part of the triennial reviews, ONS sends a questionnaire to a random sample of respondents to obtain respondents' views on the surveys. ONS has cut the sample size for PPIs by a quarter since 2005/6, leading to a large drop in aggregate respondent costs.
- 3.16 The Assessment team notes that ONS has made efforts to reduce the burden on data suppliers by introducing touchtone telephone data entry for some indices. This reduces the costs of supplying data and enables automatic credibility checking of data, thus reducing the need for manual intervention or follow up. For PPIs, about 60 per cent of data are provided this way.
- 3.17 Estimates of the total respondent burden for PPIs are reported annually in the *ONS Simplification Plan*<sup>21</sup>.

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<sup>21</sup> <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14683>

## Principle 7: Resources

**The resources made available for statistical activities should be sufficient to meet the requirements of this Code and should be used efficiently and effectively.**

- 3.18 There is a comprehensive business plan for PPIs, with clear deliverables, allocation of resources, monitoring and follow-up procedures.
- 3.19 ONS has developed good desk instructions for staff. We consider that the staff induction programme and training provided are very thorough and offer a good foundation for working with price indices.

## Principle 8: Frankness and accessibility

**Official statistics, accompanied by full and frank commentary, should be readily accessible to all users.**

- 3.20 ONS publishes PPIs in Statistical Bulletins via the National Statistics Publication Hub and in other fora such as ELMR. The bulletins are supported by a wide range of background documentation, available on the product pages of the ONS website. There is a helpful document detailing how users can access PPI data on the ONS website<sup>22</sup>. As part of the designation as National Statistics, ONS should make the metadata on the website more accessible to help users understand and find the information they need (Requirement 2)<sup>23</sup>. This might include the consolidation of older publications, reorganisation of documentation and better labelling and dating of documents.
- 3.21 The Assessment team considers that the Statistical Bulletins are comprehensive, including appropriate commentary and level of detail. There are some examples in the Statistical Bulletin of tables and diagrams that are not consistent with ONS guidelines. We suggest that ONS review the Statistical Bulletin to improve tables and diagrams and to ensure consistent presentation.
- 3.22 Data are available via the Internet in a variety of formats, such as Excel, for downloading by users. Some separate outputs, such as for the aerospace and electronics industries and on current cost accounting, are still published as separate outputs. In the light of the availability of the same data for downloading via the Internet, we suggest that ONS continue to examine whether these outputs are still required.

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<sup>22</sup> [http://www.statistics.gov.uk/downloads/theme\\_economy/AccessingPPIdata.pdf](http://www.statistics.gov.uk/downloads/theme_economy/AccessingPPIdata.pdf)

<sup>23</sup> In relation to Principle 8 Practice 1 of the Code of Practice



## **Protocol 1: User engagement**

**Effective user engagement is fundamental both to trust in statistics and securing maximum public value. This Protocol draws together the relevant practices set out elsewhere in the Code and expands on the requirements in relation to consultation.**

3.23 The requirements for this protocol are covered elsewhere in this report.

## Protocol 2: Release practices

**Statistical reports should be released into the public domain in an orderly manner that promotes public confidence and gives equal access to all, subject to relevant legislation.**

- 3.24 Release practices for PPIs are generally in line with the Code of Practice. The Assessment team suggests that ONS include a link from the PPI product page directly to the pre-release access list on the ONS website. The National Statistician has agreed that the Bank of England can receive the statistics 25.5 hours prior to their general release, to allow the Monetary Policy Committee to take account of the statistics. The Assessment team suggests that ONS publish this exemption directly on the PPI product page on the ONS website.

### **Protocol 3: The use of administrative sources for statistical purposes**

**Administrative sources should be fully exploited for statistical purposes, subject to adherence to appropriate safeguards.**

- 3.25 ONS collects data for PPIs largely from surveys to businesses. However some third-party or proxy data are used in calculating prices for some industries.
- 3.26 All administrative sources should be included in the ONS' Statement of Administrative Sources, the publication of which was a requirement in Assessment Report 8<sup>24</sup>.

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<sup>24</sup> Requirement 5 in Assessment Report 8: Migration Statistics  
(<http://www.statisticsauthority.gov.uk/assessment/assessment-reports/assessment-report-8---migration-statistics--27-july-2009.pdf>)

## Annex 1: Suggestions for improvement

A1.1 This annex includes some suggestions for improvement to PPIs, 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.

- |                     |  |
|---------------------|--|
| <b>Suggestion 1</b> | Investigate how the next triennial review can be publicised more widely to capture the views of more users (para 3.1)                                      |
| <b>Suggestion 2</b> | Provide the opportunity for users to give feedback via the ONS website (para 3.2)  |
| <b>Suggestion 3</b> | Link directly to the relevant revisions policy for PPIs from the product web pages (para 3.4)  |
| <b>Suggestion 4</b> | Review the Statistical Bulletin to improve tables and diagrams and ensure consistent presentation of data (para 3.21)                                      |
| <b>Suggestion 5</b> | Continue work, in consultation with users, to determine whether the separate PPI outputs, such as for the defence industry, are still required (para 3.22) |
| <b>Suggestion 6</b> | Link from the PPI product page to the pre-release access list on ONS website (para 3.24)   |
| <b>Suggestion 7</b> | Publish the exemption to the pre-release access rule of 24 hours on the PPI product page on the ONS website (para 3.24)                                    |

## **Annex 2: Summary of assessment process and users' views**

A2.1 This assessment was conducted from July to October 2009.

A2.2 The Assessment team agreed the scope of and timetable for this assessment with representatives of the Office for National Statistics at an initial meeting in July 2009. The Written Evidence for Assessment was provided on 21 September 2009. The Assessment team subsequently met with ONS during September 2009 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**

A2.3 The user/supplier consultation was carried out in conjunction with the consultation for the (forthcoming) assessment of the Services Producer Price Indices. The Assessment team received 11 responses. The respondents were grouped as follows:

Internal ONS	5
Other government department	4
International	1
Private sector	1

A2.4 The main uses for the statistics are for monitoring and measuring inflation, monitoring economic trends, research, business and financial planning, contract pricing and making investment decisions. In general users of PPI data were satisfied with the accessibility, frequency and ease of use of the data, particularly regular users. There was some dissatisfaction with the accessibility of the metadata published alongside the data.

### **Key documents/links provided**

Written Evidence for Assessment document

<http://www.statistics.gov.uk/pdfdir/ppi0909.pdf>

<http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=2208>

<http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=2207>

<http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=2206>

## List of assessment reports published to date<sup>25</sup>

1. Statistics from the National Drug Treatment Monitoring System  
*National Treatment Agency for Substance Misuse*
2. Recorded Crime in Scotland  
*Scottish Government*
3. Statistics on Enrolments at Schools and in Funded Pre-School Education in Northern Ireland  
*Department of Education, Northern Ireland*
4. Road Casualty Statistics  
*Department for Transport*
5. UK Energy Sector Indicators  
*Department of Energy and Climate Change*
6. Statistics on Road Freight  
*Department for Transport*
7. Prison Population Projections  
*Ministry of Justice*
8. Migration Statistics  
*Office for National Statistics*
9. Statistics on International Development and the ODA:GNI Ratio  
*Department for International Development*
10. The Scottish Health Survey  
*Scottish Government*
11. Scottish House Condition Survey  
*Scottish Government*
12. Scottish Crime and Justice Survey  
*Scottish Government*
13. Statistics on Children Looked After by Local Authorities in England  
*Department for Children, Schools and Families*
14. Statistics on Children Looked After by Local Authorities in Scotland  
*Scottish Government*
15. Statistics on Children Looked After by Local Authorities in Wales  
*Welsh Assembly Government*
16. Statistics on Children Looked After by Health and Social Care Trusts in Northern Ireland  
*Department of Health, Social Services and Public Safety, Northern Ireland*
17. Wealth in Great Britain  
*Office for National Statistics*
18. Statistics on the National Child Measurement Programme  
*NHS Information Centre*
19. Average Weekly Earnings  
*Office for National Statistics*
20. Energy Statistics  
*Department of Energy and Climate Change*

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<sup>25</sup> Published reports are available at: <http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html>

