

Assessment of compliance with the Code of Practice for Official Statistics

Statistics on UK Trade

(produced by the Office for National Statistics)

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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.

Contact us

Tel: 0845 604 1857

Email: authority.enquiries@statistics.gsi.gov.uk

Website: www.statisticsauthority.gov.uk

UK Statistics Authority
1 Drummond Gate
London
SW1V 2QQ

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NATIONAL STATISTICS STATUS

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.



All official statistics should comply with all aspects of the *Code of Practice for Official Statistics*. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is a producer's responsibility to maintain compliance with the standards expected of National Statistics, and to improve its statistics on a continuous basis. If a producer becomes concerned about whether its statistics are still meeting the appropriate standards, it should discuss its concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

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1 Summary of findings

1.1 Introduction

1.1.1 This is one of a series of reports¹ prepared under the provisions of the *Statistics and Registration Service Act 2007*². The Act gives the Statistics Authority power to re-assess whether the *Code of Practice for Official Statistics*³ continues to be complied with in relation to official statistics already designated as National Statistics. The report covers the sets of statistics produced by the Office for National Statistics (ONS) and reported in:

*UK Trade*⁴

*UK Trade in Goods by Classification of Product by Activity CPA (08)*⁵ (*UK Trade in Goods by CPA*)

1.1.2 The previous assessment of these sets of statistics was reported in Assessment report 45⁶ in May 2010. On 14 November 2014⁷, the UK Statistics Authority removed the National Statistics status from *UK Trade* after the National Statistician alerted the Authority to errors in the expenditure estimates for UK residents' visits abroad and overseas residents' visits to the UK contained in the statistical release⁸. The Director General for Regulation considered, given this error, and an error in data supply that occurred earlier in the year⁹, that a full re-assessment against the *Code* was appropriate.

1.1.3 This report was prepared by the Authority's Assessment team, and approved by the Regulation Committee on behalf of the Board of the Statistics Authority, based on the advice of the Director General for Regulation.

1.2 Decision concerning designation as National Statistics

1.2.1 The Statistics Authority judges that the statistics covered by this report do not fully comply with the *Code of Practice for Official Statistics*, in the ways summarised in section 1.5. The Authority judges that the statistics published in *UK Trade* cannot be designated as National Statistics until the Authority has confirmed that appropriate actions have been taken by ONS to meet the Requirements listed in section 1.5. The Authority also considers that, to bring it in line with *UK Trade*, *UK Trade in Goods by CPA* should be de-designated as National Statistics until it can comply fully with the *Code*. ONS is expected to report its completed actions to the Authority by February 2016.

¹ <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://www.ons.gov.uk/ons/rel/uktrade/uk-trade/index.html>

⁵ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade-in-goods-analysed-in-terms-of-industry/index.html>

⁶ <http://www.statisticsauthority.gov.uk/assessment/assessment/assessment-reports/assessment-report-45---balance-of-payments-statistics.pdf>

⁷ <http://www.statisticsauthority.gov.uk/reports---correspondence/correspondence/letter-from-sir-andrew-dilnot-to-john-pullinger-141114.pdf>

⁸ <http://www.statisticsauthority.gov.uk/reports---correspondence/correspondence/letter-from-john-pullinger-to-sir-andrew-dilnot-121114.pdf>

⁹ <http://www.statisticsauthority.gov.uk/reports---correspondence/correspondence/letter-from-sir-andrew-dilnot-to-glen-watson-18062014.pdf>

1.2.2 ONS has informed the Assessment team that it has started to implement the Requirements listed in section 1.5. The Statistics Authority welcomes this.

1.3 Summary of strengths and weaknesses

1.3.1 ONS has a strong user base for its UK trade statistics and during the course of this assessment, users were positive about the ways that ONS is seeking to broaden and strengthen its user engagement. Users commended the way that ONS managed and communicated the implementation of the updated international accounting frameworks in 2014 – BPM6 and ESA10. Users also found the UK Trade team to be helpful and professional.

1.3.2 Users were broadly content with the quality of the statistics. However, they made it clear that their confidence in the UK trade statistics has been diminished by the errors in 2014 that led to the de-designation of the statistics, and want to see evidence that ONS has learned lessons and strengthened its quality assurance arrangements. The Assessment team was particularly struck that it was sometimes users, rather than ONS, who identified the errors and that they were keen to return to a position where they could analyse the statistics with immediate confidence, rather than focusing in the first instance on the plausibility of the data.

1.3.3 During the course of this Assessment we have seen evidence of ONS and its key data suppliers working diligently together towards strengthening their quality assurance arrangements and to improve the transparency of their methods – for example, engaging more frequently and starting to map end-to-end processes. We look forward to this work coming to fruition and the outcomes being published. However, until this work is completed, and until ONS implements the Requirements of this report, concerns remain that errors could happen again due primarily to three factors: weaknesses in the quality assurance of data inputs; a lack of cohesive sense checking of UK Trade statistics; and risks around processing systems, which are inflexible and built on workarounds.

1.3.4 Finally, ONS accepts that it has not given the presentation of the narrative for *UK Trade* the focus required in recent years as it has had to prioritise the implementation of BPM6 and ESA10. A range of improvements are needed, including considering whether the separate publication of *UK Trade in Goods by CPA* is a good use of resources. The primary concern, however, is the imbalance in reporting trade in goods and trade in services in *UK Trade*. The reasons for this are twofold: in the first instance ONS could do more to optimise the presentation of the data it has; and for the medium term, users need to see that ONS is delivering a strategy for investing in the production of trade in services statistics in a way that is commensurate with their contribution to the UK economy and the weight of user concern – the planned National Statistics Quality Review is a positive step forwards.

1.4 Detailed recommendations

1.4.1 The Assessment team identified some areas where it felt that ONS should improve the production and presentation of statistics on UK Trade. Those

which are essential for the ONS to address in order to strengthen its compliance with the *Code* and to enable designation as National Statistics are listed – as Requirements – in section 1.5, alongside a short summary of the key findings that led to each Requirement being made. Other recommended changes, which the Assessment team considers would improve the statistics and the service provided to users but which are not formally required for their designation as National Statistics, are listed – as Suggestions – in section 1.6.

1.5 Requirements for designation as National Statistics

1.5.1 This section includes those improvements that ONS is required to make in respect of its statistics on UK Trade in order to fully comply with the *Code of Practice for Official Statistics*, and to enable designation as National Statistics.

Finding	Requirement	
<p>ONS has very good engagement with key users and is taking steps to broaden that engagement but it does not make clear how the statistics are used, or how it uses feedback from users to improve the statistics. ONS should:</p>	<p>1</p>	<ul style="list-style-type: none"> a) Build on its improving engagement with users to develop a thorough understanding of the range of potential uses of UK Trade statistics and publish information about the types of decisions that they inform b) Publish details of its user engagement strategy and outline clearly how it will continue to strengthen its ongoing dialogue with users of UK Trade statistics, and improve its response to ad hoc queries c) Publish the information that it has gathered about users' experiences of its UK Trade statistics and explain how it is responding to what it has learned <p>(para 3.4).</p>
<p>ONS publishes a range of information about the methods for producing UK Trade statistics but it is not easily accessible, and is not primarily written for users of <i>UK Trade</i>. ONS should:</p>	<p>2</p>	<p>Publish coherent, detailed and accessible information about the methods used to produce <i>UK Trade</i> and <i>UK Trade in Goods by CPA</i>, including:</p> <ul style="list-style-type: none"> a) Presenting the overall framework for UK Trade statistics, and the contribution of international trade to the UK economy b) Explaining how <i>UK trade</i> is used in producing the UK Balance of Payments and UK National Accounts; and outlining any reservations or derogations in relation to International Regulations c) Explaining how the monthly estimates are produced from monthly, quarterly and annual sources and how estimates by

		<p>country and product are compiled, including the rationale for choices</p> <p>We suggest that in meeting this Requirement, ONS does not seek to replicate existing methods information presented by itself, HMRC and others, but improves the signposting to that information and sets it within the context of the production of monthly UK Trade statistics</p> <p>(para 3.14).</p>
<p>The information about quality that ONS publishes in respect of <i>UK Trade</i> has not been updated for six years. ONS should:</p>	3	<p>Publish information about the quality of the UK Trade statistics that:</p> <ul style="list-style-type: none"> a) Explains the strengths and limitations of the statistics in relation to uses b) Describes potential sources of error and bias and how it mitigates for them, including investigating and explaining the different sources of volatility in the monthly estimates c) Presents appropriate measures of quality d) Presents information around all the dimensions of the European Statistical Systems definition of quality e) Appropriately references relevant quality information published by other statistical producers – for example, quality measures published by HMRC and ONS for trade in goods and trade in services, and Eurostat Quality Statements <p>(para 3.16).</p>
<p>Following the errors that arose in the UK Trade statistics supply chain in 2014, ONS has made some progress to strengthen its quality assurance arrangements but its reviews have not yet concluded, and the lack of sense checking of the statistics is a weakness. ONS remains exposed to</p>	4	<p>Publish information about its strengthened quality assurance arrangements including its assurance arrangements for administrative data and survey sources used to produce <i>UK Trade</i>, taking into consideration the Authority's <i>Administrative Data Quality Assurance Toolkit</i>. ONS should:</p> <ul style="list-style-type: none"> a) Present a comprehensive up-to-date picture of sources and how they are used in the production of UK trade estimates, including an indication of their relative contribution to the final estimates b) Outline the operational context of the sources in plain language, and what checks are carried out by the data providers in relation to those sources

<p>the risk of errors and ONS should:</p>		<p>c) Publish information about the data flows, highlighting the points of risk and how it mitigates for those risks, including information about risks in its processing systems and highlighting its own quality assurance checks</p> <p>d) Explain how it assures itself of the quality of information provided from the different sources; including any formal agreements and data supplier engagement</p> <p>e) Explain how it has learned lessons and strengthened its own quality assurance checks and in particular its sense-checking of the statistics following the errors identified by users in 2014</p> <p>f) Detail its judgement about the quality of the statistics, and the rationale for this judgement, taking account of what it has learned from reviewing its quality assurance arrangements</p> <p>(para 3.19).</p>
<p>It is incumbent on ONS to respond to the weight of user concern about the quality and coverage of estimates of UK trade in services. ONS should:</p>	<p>5</p>	<p>Publish a short summary paper that: explains its current assessment of the quality of statistics on UK trade in services in respect of meeting user needs; outlines its strategy and broad timeline for identifying and addressing weaknesses in the statistics; and explains how it will measure success in meeting user needs – ONS should submit this paper alongside the current National Statistics Quality Review (para 3.23).</p>
<p>ONS does not sense check its UK trade statistics with those published by the UK major trading partners. ONS should:</p>	<p>6</p>	<p>Increase its awareness of the statistics published by other countries in relation to trade with the UK, and use this information to sense-check the UK Trade statistics (para 3.24).</p>
<p>The inflexibilities of the processing systems used to produce trade in goods statistics and ITIS represent a continued risk to the quality of UK Trade statistics and ONS's</p>	<p>7</p>	<p>a) Review and document the weaknesses in its processing system capability, within the context of documented user needs, and set out its plans for addressing those weaknesses</p> <p>b) As part of the information that it publishes about its quality assurance arrangements, explain for users how it mitigates known system risks and ensures sufficient time for</p>

<p>ability to meet user needs. ONS should:</p>		<p>assurance and sense-checking activities (para 3.31).</p>
<p>ONS is juggling a range of continuous improvement projects in relation to <i>UK Trade</i>, and while the governance arrangements are sound, ONS would seem to be spreading its resources very thinly. ONS should:</p>	<p>8</p>	<p>Publish a development programme for UK Trade statistics that:</p> <ul style="list-style-type: none"> a) Sets out the priority projects, including the rationale for those priorities, a broad timeline, and an assessment of their likely impact b) Is appropriately resourced c) Explains how it will keep users regularly updated on progress <p>(para 3.33).</p>
<p>ONS has confirmed that due to other priorities, including implementing ESA10 and BPM6, it has not been able to commit resources to improving the narrative offered in the statistical reports, in particular, ensuring that <i>UK Trade</i> presents a rounded picture of trade in goods and services. ONS told us that it can now resource this appropriately. ONS should:</p>	<p>9</p>	<p>Improve the commentary in <i>UK Trade</i> and supporting analytical pieces so that it aids users' interpretation of the statistics by:</p> <ul style="list-style-type: none"> a) Presenting a clear narrative about UK Trade, with a balanced representation of trade in both goods and services, including considering how it can present more detail about trade in services b) Presenting prominent information about uncertainty around the estimates and cautioning users appropriately about focusing on latest monthly estimates c) Providing plain language descriptions and contextual information about <i>UK Trade</i> d) Presenting a narrative that helps users to draw meaningful conclusions from the analysis presented, including presenting the latest statistics within the context of a longer time series e) Setting <i>UK Trade</i> against the range of trade and balance of payments statistics published by ONS and other organisations, including presenting international comparisons and more prominent information about why ONS and HMRC trade in goods statistics differ <p>As part of meeting this Requirement ONS should:</p> <ul style="list-style-type: none"> a) Consider, in consultation with users, whether it would aid interpretation, and represent a better use of resources, to

		<p>include information about trade in goods by activity within <i>UK Trade</i>, rather than as a separate National Statistics output. ONS might also helpfully consider the relationship of <i>UK Trade</i> with <i>International Trade in Services</i></p> <p>b) Work with colleagues producing <i>Balance of Payments</i> and <i>International Trade in Services</i> and with HMRC to provide helpful explanatory information to support the coherent presentation and wider use of the portfolio of official statistics about UK trade</p> <p>c) Consider the points detailed in annex 1 and annex 2 (para 3.37).</p>
<p><i>UK Trade</i> and <i>UK Trade in Goods by CPA</i> form part of a wider portfolio of official trade statistics. ONS should do more to signpost related statistics, and particularly, datasets available for re-use. ONS should:</p>	10	<p>Improve the accessibility of <i>UK Trade</i> and <i>UK Trade in Goods by CPA</i> through ONS's website by:</p> <p>a) Signposting clearly to users how the statistical reports relate to each other and to other trade and economic statistics</p> <p>b) Providing users with clear information about what data on UK trade in goods and services is available, where and when, including data published as part of other ONS statistical releases or by other organisations such as HMRC</p> <p>c) Ensuring that data that ONS releases on its website as a result of ad hoc requests is clearly labelled and easy for users of <i>UK Trade</i> to find, and considering if any of this data could be published as standard as part of the statistical reports</p> <p>d) Using consistent and clear labelling and numbering of tables within the statistical report and in Excel (para 3.40).</p>
<p>ONS does not publish a calendar of releases twelve months ahead and has experienced a breach of pre-</p>	11	<p>Publish and maintain a rolling twelve month timetable of <i>UK Trade</i> and <i>UK Trade in Goods by CPA</i> release dates (para 3.42).</p>

release access. ONS should:	12	ONS should review the list of those with pre-release access, with a view to minimising the numbers of individuals included, and inform the Statistics Authority of the justification for each inclusion (para 3.44).
ONS's <i>Statement of Administrative Sources</i> does not accurately reflect the administrative data sources used to produce ONS's UK Trade statistics. ONS should:	13	Update its <i>Statement of Administrative Sources</i> to clearly and accurately list all of the administrative data sources used to produce its UK Trade statistics (para 3.46).

1.6 Suggestions for extracting maximum value from the statistics

1.6.1 This section includes some suggestions for improvement to ONS's statistics on UK Trade, 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.

We suggest that ONS:

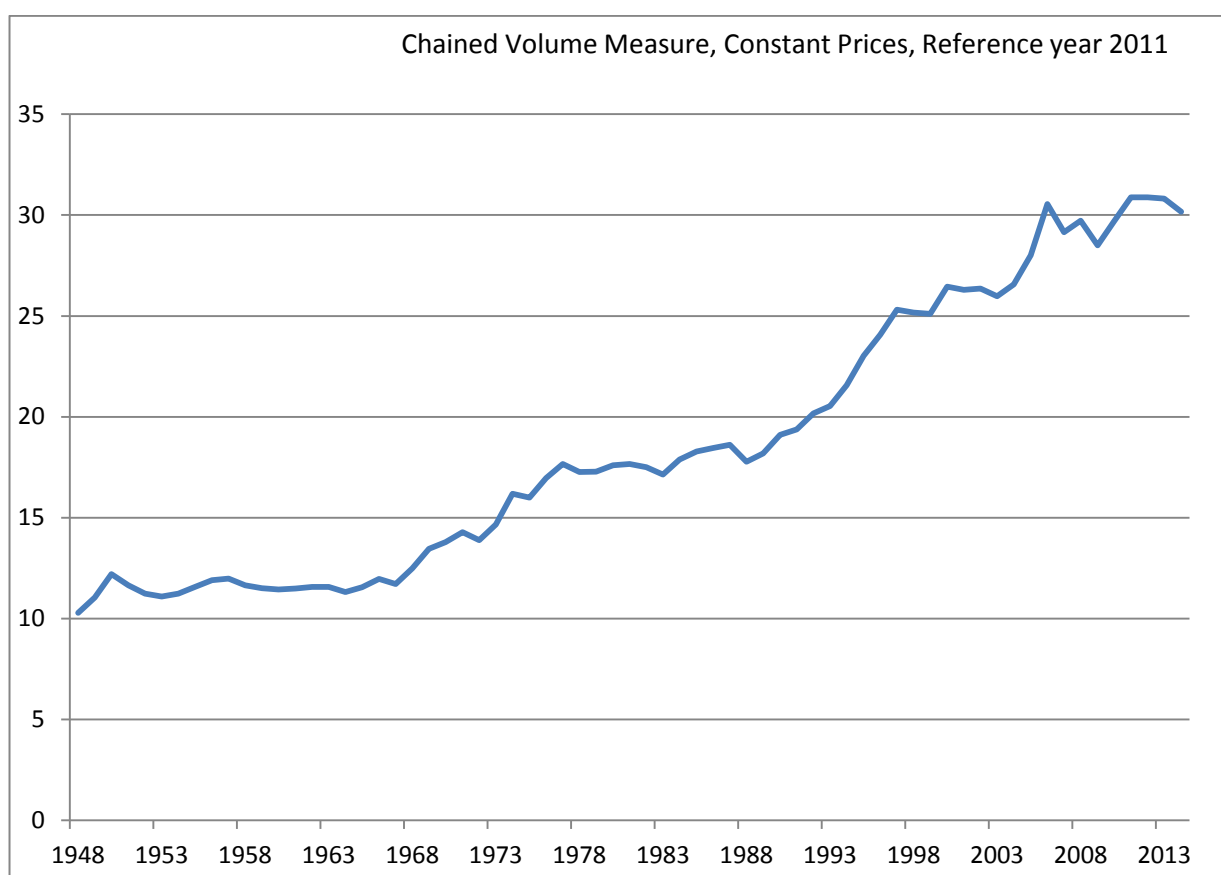
1	Consider if the 2005 revisions article still remains relevant for users, and if so, whether it should be updated (para 3.7).
2	Consider jointly with HMRC the implications of the Authority's <i>Administrative Data Quality Assurance Toolkit</i> in relation to both publishing information about the assurance arrangements for official statistics about trade in goods (para 3.19).
3	Continue to engage with those users that have been contributing to the public discussion about the quality of trade in services estimates, with a view to capturing their needs and drawing on their expertise (para 3.23).
4	Publish analyses of mirror statistics for the UK's major trading partners (para 3.24).
5	Publish clear links to its disclosure control policies alongside its UK Trade statistics (para 3.25).
6	As part of its published documentation of assurance arrangements for <i>UK Trade</i> , include information about how it minimises the risk of breaches of 9.30am release and pre-release access (para 3.43).

2 Subject of the assessment

Introduction

2.1 Trade in goods and services with the rest of the world has become increasingly important to the UK economy (see figure 1), and may only continue to increase in importance as global markets, and the mechanisms for engaging with those markets, continue to open up. It is important that internationally comparable statistics are available that help users to understand the impact of such trade on the UK economy, and to help the UK to exploit trade opportunities. UK trade impacts upon the prices consumers pay for goods and services and the sustainability of economic growth, including opportunities to create jobs and attract investment.

Figure 1: UK Trade: Total Exports of Goods and Services as a percentage of GDP, 1948 to 2014



Source: ONS, *Quarterly National Accounts, Quarter 4 2014*

2.2 These are therefore highly relevant statistics to a range of decision makers inside and outside of government. This section sets out the users and uses of the statistics, the history of their development, and decisions by the Authority in respect of their designation as National Statistics

Users and uses

2.3 At a macro-economic level, the primary uses of the UK trade in goods and services statistics presented in *UK Trade* are to estimate elements of the UK

Balance of Payments, the expenditure measure of GDP and the UK National Accounts.

- 2.4 The Bank of England analyses UK trade statistics alongside and within the context of other key macro-economic indicators such as GDP, as part of the monthly *Inflation Report*¹⁰ – for example, it examines the trade deficit as a proportion of GDP and makes judgements about likely future demand for UK exports. It also seeks to understand and forecast the impact of import prices on UK consumer prices. The Monetary Policy Committee uses the *Inflation Report* to help inform its decisions on interest rates, set to meet the UK Government's inflation target.
- 2.5 The Office for Budget Responsibility (OBR) produces independent quarterly forecasts of UK trade that in turn are used to forecast estimates of tax revenues, including excise duties. OBR's *Economic and Fiscal Outlook*¹¹ is published alongside the Budget and sets out forecasts for the UK economy and public finances over a five year horizon. OBR also uses its public finances forecasts to judge the Government's performance against fiscal targets and to scrutinise HM Treasury's costing of tax and welfare spending measures.
- 2.6 HM Treasury has a key requirement to understand the UK's economic and trade performance and it uses ONS's UK Trade statistics, together with other economic indicators, to understand and contextualise the UK's export performance. HM Treasury analysts produce a monthly internal Macroeconomic Brief for Ministers and policy makers.
- 2.7 The Department for Business Innovation and Skills (BIS) is similarly interested in the macro-economic perspective of UK trade and its contribution to economic growth, and uses this information to brief the Minister of State for Trade – Lord Livingston has spoken in the UK Parliament during 2015 about a desire for improvements to official statistics about trade in services¹². BIS, and UK Trade and Investment (UKTI), are also keen to understand the UK's bilateral trade relationships and to monitor how different markets are performing – for example, for specific goods and services – with a view to promoting export growth and inward investment. This information is used by UKTI to inform its trade and investment strategy and also indirectly informs users including the Foreign and Commonwealth Office, embassies, and businesses.
- 2.8 Other users of the statistics include:
- the devolved and local administrations of the UK and organisations performing a similar function as UKTI for the countries and regions of the UK including informing economic development strategies
 - businesses and trade associations using the statistics to monitor trade in the goods and services that they produce, use or for which they form part of the supply chain – for example, to determine their market share and inform investment and to examine the competitiveness of domestic and import prices
 - UK and foreign embassies monitoring bilateral trade relationships

¹⁰ <http://www.bankofengland.co.uk/publications/Documents/inflationreport/2015/feb.pdf>

¹¹ <http://budgetresponsibility.org.uk/category/publications/>

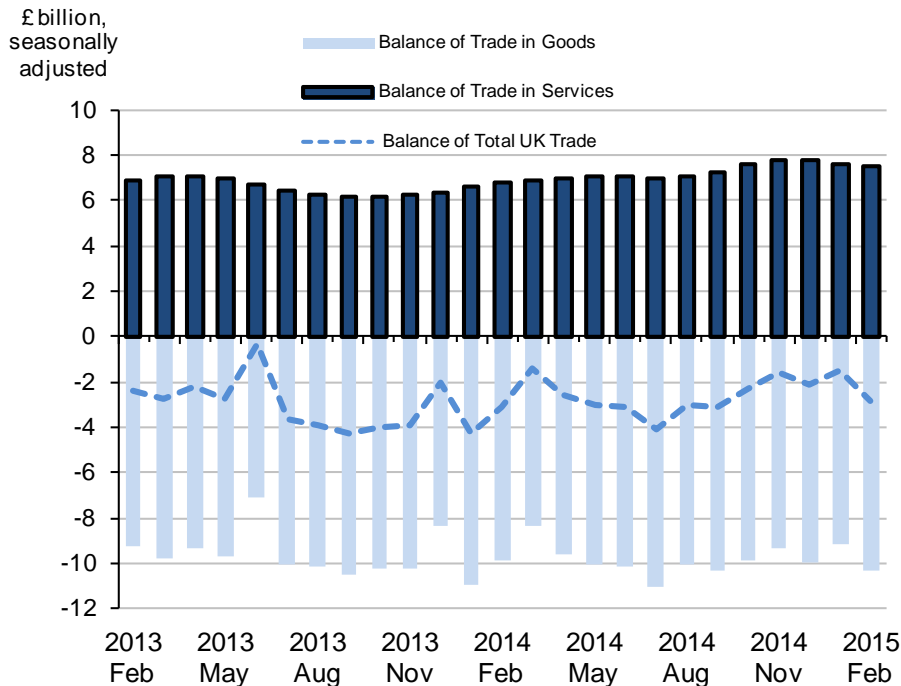
¹² <http://www.publications.parliament.uk/pa/ld201415/ldhansrd/text/150129-0001.htm#15012961000818>

- TheCityUK, which lobbies on behalf of the UK-based financial services industry, published a report by its Independent Economists Group on 1 April 2015: *The Economics of Trade in Services*¹³. That report discusses the role of services in global trade and driving economic growth – it states a need for more accurate and timely data on international trade in services.

Subject of this Assessment

2.9 The UK Annual and Quarterly National Accounts (National Accounts) and Balance of Payments (BoP) are produced using an international accounting framework that provides a systematic and detailed description of the UK economy and the UK's economic and financial transactions with the rest of the world. The subjects of this report are ONS's *UK Trade* and *UK Trade in Goods by Classification of Product by Activity CPA (08) (UK Trade in Goods by CPA)*, which are produced within this framework and provide key elements required to compile aggregate measures, such as gross domestic product (GDP) and the UK's current account balance.

Figure 2: Balance and value of UK Trade



Seasonally adjusted	Total UK Trade		UK Trade in Goods		UK Trade in Services	
	Exports	Imports	Exports	Imports	Exports	Imports
Dec-14	43.5	45.6	25.1	35.1	18.4	10.5
Jan-15	42.3	43.9	24.1	33.2	18.3	10.6
Feb-15	41.3	44.2	23.2	33.5	18.2	10.7

Source: *UK Trade, February 2015*

¹³ <http://e-thecityuk.com/J8I-3AFGF-8MT5PK-1JIIG4-1/c.aspx>

2.10 *UK Trade* presents the value and balance of UK trade in goods and services with the rest of the world (see figure 2) with breakdowns by: goods and services; EU and non-EU trade; and imports and exports. Further detail is presented for trade in goods with value and volume measures available by commodity, a geographical analysis and information about import and export prices. *UK Trade* is published every month, approximately 40 days after the end of the reference month. *UK Trade in Goods by CPA* presents a quarterly analysis of UK exports and imports of goods classified to the activity of which those goods are principal products. The statistics are published approximately 11 weeks after the end of the reference quarter, fully consistent with the figures published for the same period a week earlier as part of *UK Trade*.

De-designation of UK Trade

- 2.11 On 14 November 2014¹⁴, the UK Statistics Authority removed the National Statistics status from *UK Trade* after the National Statistician alerted the Authority to errors in the expenditure estimates for UK residents' visits abroad and overseas residents' visits to the UK contained in the statistical release¹⁵. The Director General for Regulation considered, given this error, and an error in data supply that occurred earlier in the year¹⁶, that a full re-assessment against the *Code* was appropriate and committed to undertake this as quickly as possible.
- 2.12 Subsequently, on 27 November 2014, ONS announced¹⁷ that quality assurance of the geographic breakdown of UK trade in goods data had identified a further error contained in *UK Trade* – in the UK exports of goods to the USA. This affirmed the Authority's view that, while these errors did not impact directly upon *UK Trade in Goods by CPA*, which retained its National Statistics designation, it would be sensible to re-assess these statistics alongside *UK Trade* as they are produced by the same team using shared data sources and systems.
- 2.13 The errors in the expenditure estimates for UK residents' visits abroad and overseas residents' visits to the UK were also contained in ONS's *Overseas Travel and Tourism*¹⁸, and the Authority similarly suspended designation of those expenditure series. The Director General for Regulation reinstated the National Statistics status to the statistics on overseas travel and tourism expenditure separately, in May 2015, but the outcomes of ONS's full review of the errors have been considered as part of this re-assessment. See Section 3 for more detail.

History

2.14 ONS publishes high-level time series for UK trade as far back as 1948, when the first annual BoP statistics were first published. When ONS's UK trade statistics were last assessed in 2010, as part of Assessment report 45¹⁹, they comprised three outputs: *UK Trade*; *UK Trade in Goods Analysed in Terms of*

¹⁴ See footnote 7

¹⁵ See footnote 8

¹⁶ See footnote 9

¹⁷ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade/october-2014/index.html>

¹⁸ <http://www.ons.gov.uk/ons/rel/ott/overseas-travel-and-tourism---monthly-release/index.html>

¹⁹ See footnote 6

Industries; and *Monthly Review of External Trade Statistics (MRETS)*. *UK Trade in Goods Analysed in Terms of Industries* was renamed *UK Trade in Goods by Classification of Product by Activity CPA(08)* from December 2011²⁰ when the UK's trade in goods was classified by the European Classification of Products by Activity²¹ (CPA(08)) for the first time, bringing the statistics in line with National Accounts product classification used from the UK National Accounts Blue Book 2011 onwards. ONS discontinued the publication of *MRETS* in February 2013 following a public consultation²² and instead publishes the data tables as part of *UK Trade*.

Methods and sources

- 2.15 The International Monetary Fund (IMF) Balance of Payments Manual, 6th edition²³ (BPM6) provides the conceptual basis for ONS's UK Trade statistics. The IMF developed BPM6 in close cooperation with Eurostat, the OECD, the United Nations (UN) and the Bank for International Settlements, and in parallel with the update of the UN System of National Accounts²⁴ (SNA(08)). BPM6 is fully consistent with the EU version of SNA(08), the European System of Accounts²⁵ (ESA2010) and was implemented by ONS from September 2014. Trade in goods and services are classified by product using CPA(08) – a product classification that assigns each product to a principal activity.
- 2.16 ONS uses a range of over sixty different survey and administrative data sources to produce its UK trade statistics. The major data sources are described below. See figure 3 for a simplified representation of the full range of sources used.

Trade in goods

- 2.17 Intrastat²⁶ has been the system for collecting statistics on the trade in goods between EU member states since 1993. In the UK, all VAT-registered businesses are required to complete two additional boxes on their VAT returns, showing the total value of exports of goods to customers in other member states (dispatches) and the total value of imports of goods from suppliers in other member states (arrivals). Traders whose annual arrivals and/or dispatches exceed a given threshold (reviewed annually) are required to provide a monthly Intrastat declaration detailing their arrivals and dispatches. HMRC estimates values of below-threshold trade recorded on VAT returns by applying the patterns in trade of those just above the threshold.
- 2.18 For non-EU trade, HMRC's Customs Handling of Import and Export Freight (CHIEF) system²⁷ records the declaration to Customs of goods by land, air and sea. Importers, exporters and freight forwarders (such as DHL or Parcel Force)

²⁰ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade-in-goods-analysed-in-terms-of-industry/q3-2011/index.html>

²¹ <http://ec.europa.eu/eurostat/web/cpa-2008>

²² <http://www.ons.gov.uk/ons/about-ons/get-involved/consultations-and-user-surveys/consultations/mrets/index.html>

²³ <https://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm>

²⁴ <http://unstats.un.org/unsd/nationalaccount/sna2008.asp>

²⁵ <http://ec.europa.eu/eurostat/web/esa-2010/overview/>

²⁶ <https://www.gov.uk/introduction-to-intrastat>

²⁷ <https://www.gov.uk/chief-trader-import-and-export-processing-system>

complete customs information electronically and their returns are automatically checked for errors by HMRC as they are entered on CHIEF.

Figure 3: Sources of data used to produce ONS's UK trade statistics

UK trade in goods

- Trade with other EU member states – Intrastat survey (HMRC) - Monthly
- Trade with non-EU countries – Customs declarations from CHIEF (HMRC) - Monthly
- UK trade in gas and electricity with other EU member states – Physical flows data from pipeline and grid operators (via HMRC) - Monthly

Adjustments to HMRC trade in goods data to comply with BPM6

Approximately 20 administrative and survey sources including data from the Civil Aviation Authority (CAA), Chamber of Shipping, Eurotunnel, NAAFI, HMRC, Bank of England, INSEE (National Institute for Statistic and Economics Studies – France) and National Bank of Belgium, Diamond Trading Company – Mixed periodicities

UK trade in services

- UK trade in services (excluding Transport, Travel, Financial and Government Services) - International Trade in Services (ITIS) survey – Quarterly and Annual – plus ONS's Annual Business Survey (ABS) (which feeds ITIS) and some smaller administrative data sources such as data from the Commercial Bar Association, the Law Society and the Gambling Commission
- Travel - International Passenger Survey (IPS) (ONS) – Monthly
- Transport - range of sources including: IPS (ONS); Chamber of Shipping survey; administrative data from airlines, CAA, NATS, Eurotunnel, Royal Mail Group, and Department of Energy and Climate Change
- Financial – range of sources including: Annual Insurance Surveys (ONS); Financial Services Authority regulatory data; Lloyds syndicate accounts; ITIS survey (ONS); Security Dealers Survey (ONS); Bank of England surveys; Baltic Exchange and Bank for International Settlements data
- Government – includes data from MoD; FCO; foreign embassies; OSCAR (HMT)

Source: Produced by the Assessment team

Trade in services

- 2.19 ONS issues two surveys to UK businesses about International Trade in Services²⁸ (ITIS) – annual and quarterly. ONS introduced ITIS in 1996 and updated the survey questionnaire from the first quarter of 2013 to capture changes required to comply with BPM6. ITIS collects data about the amounts spent on the imports and exports of UK businesses, classified to 52 product groups and the countries where the services have been imported from or exported to. ITIS does not cover travel, transport, banking and other financial institutions, higher education, charities or most activities of the legal professions.

²⁸ <http://www.ons.gov.uk/ons/about-ons/get-involved/taking-part-in-a-survey/information-for-businesses/a-to-z-of-business-surveys/annual-survey-of-international-trade-in-services/index.html>

- 2.20 ITIS surveys a random sample of 9000 businesses from across the UK economy plus 5000 businesses from a fixed panel of known traders. ONS addresses the quarterly ITIS survey to the 1100 largest UK businesses (measured in terms of international trade in services) and the remainder are approached annually. From 2007, ONS's Annual Business Survey²⁹, which includes questions on total imports and total exports, has also been used to boost the coverage of the ITIS survey by approximately 9000 businesses. For 2013, the combined estimates produced from ITIS and ABS contributed approximately 56 per cent to ONS's estimates of total UK exports of services and 41 per cent to its estimates of imports³⁰.
- 2.21 ONS's International Passenger Survey³¹ (IPS) is a continuous voluntary survey conducted at major ports of entry to, or exit from, the UK – principal airports, sea routes and the Channel Tunnel. IPS is based on face-to-face interviews with a stratified sample of travellers passing through passport control. The survey response rate is approximately 80 per cent³² and information is collected on the expenditure of non-resident visitors leaving the UK, and of UK visitors returning from abroad. IPS is the primary data source for estimating the import and export of travel services – services provided to UK residents during trips of less than one year abroad and to non-residents during similar trips to the UK (excluding transport to and from the UK). In 2013, travel expenditure by non-residents accounted for approximately 13 per cent of total exports of services, and expenditure by UK residents travelling abroad accounted for approximately 27 per cent of imports.
- 2.22 Whereas for UK trade in goods, ONS produces monthly estimates primarily on the basis of monthly data sources, for trade in services ONS depends upon a mixture of monthly, quarterly and annual sources. When ONS produces monthly estimates for the first time it has approximately 20 per cent of the data (from IPS) and the remainder is forecast. At the point that ONS produces the first quarterly estimates, this has increased to approximately 70 per cent data coverage (now including quarterly ITIS) and annual estimates account for all of the data sources. See figure 4.

Related trade statistics

- 2.23 In addition to *UK Trade* and *UK Trade in Goods by CPA*, ONS presents UK trade statistics in six other regular National Statistics outputs within a consistent accounting framework³³:
- *Balance of Payments*³⁴
 - *Balance of Payments – The Pink Book*³⁵

²⁹ <http://www.ons.gov.uk/ons/about-ons/get-involved/taking-part-in-a-survey/information-for-businesses/a-to-z-of-business-surveys/annual-business-survey/index.html>

³⁰ <http://www.ons.gov.uk/ons/rel/itis/international-trade-in-services/2013/index.html>

³¹ <http://www.ons.gov.uk/ons/about-ons/get-involved/taking-part-in-a-survey/information-for-households/a-to-z-of-household-and-individual-surveys/international-passenger-survey/index.html>

³² <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/travel-and-transport-methodology/international-passenger-survey-methodology/index.html>

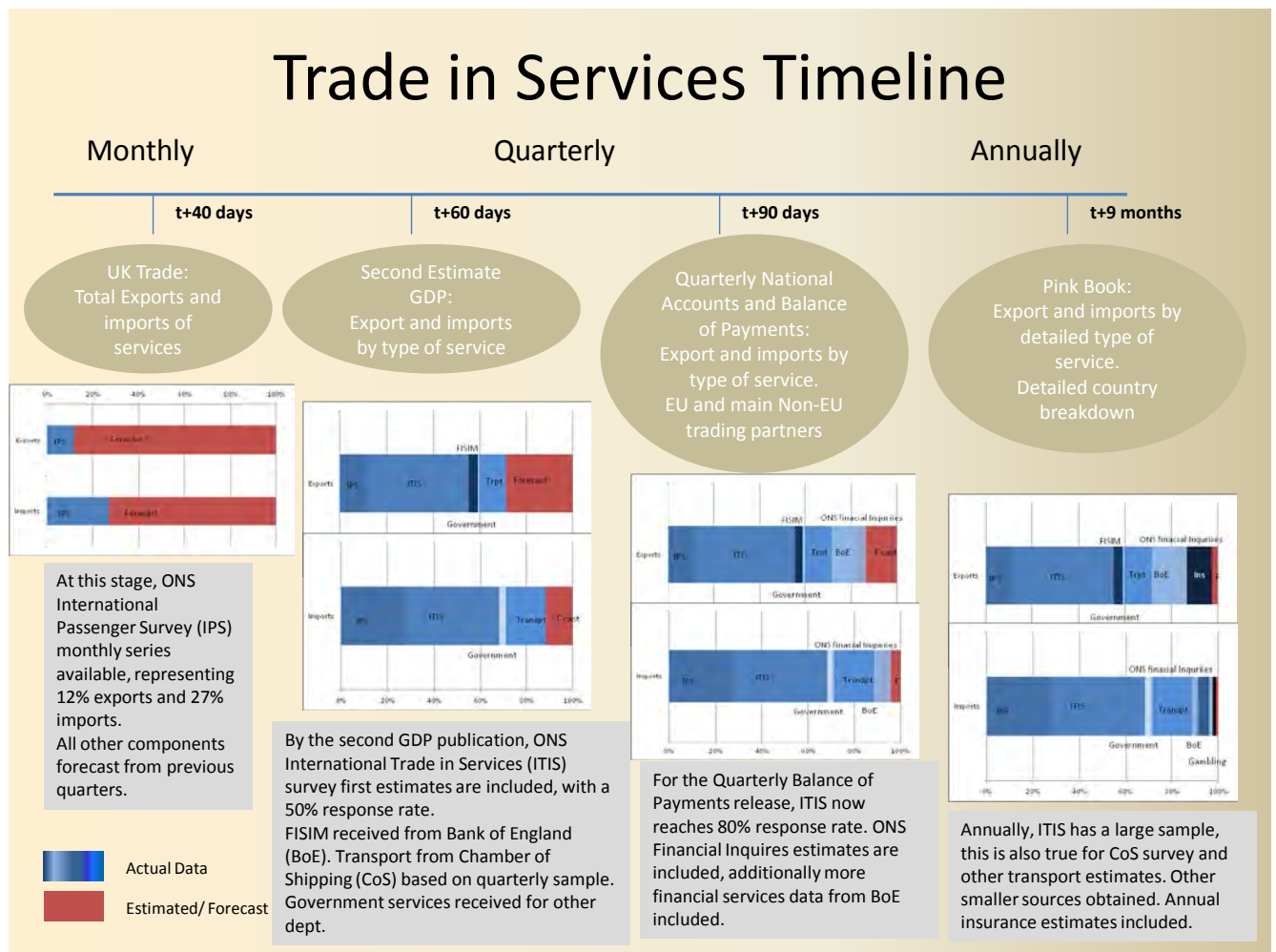
³³ <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/balance-of-payments/balance-of-payments-and-the-relationship-to-national-accounts/index.html>

³⁴ <http://www.ons.gov.uk/ons/rel/bop/balance-of-payments/index.html>

- *International Trade in Services*³⁶
- *Second Estimate of GDP*³⁷
- *Quarterly National Accounts*³⁸
- *UK National Accounts – The Blue Book*³⁹

2.24 The IMF⁴⁰ and Eurostat⁴¹ present comparable international Balance of Payments statistics on a BPM6 basis. Eurostat also publishes separately *International Trade in Services Statistics (BPM6)* which ONS delivers for the UK to meet *Regulation (EC) 184/2005*⁴².

Figure 4: Trade in services timeline



Source: ONS

³⁵ <http://www.ons.gov.uk/ons/rel/bop/united-kingdom-balance-of-payments/2014/index.html>

³⁶ <http://www.ons.gov.uk/ons/rel/itis/international-trade-in-services/index.html>

³⁷ <http://www.ons.gov.uk/ons/rel/naa2/second-estimate-of-gdp/index.html>

³⁸ <http://www.ons.gov.uk/ons/rel/naa2/quarterly-national-accounts/index.html>

³⁹ <http://www.ons.gov.uk/ons/rel/naa1-rd/united-kingdom-national-accounts/the-blue-book--2014-edition/index.html>

⁴⁰ <http://www.imf.org/external/data.htm>

⁴¹ <http://ec.europa.eu/eurostat/web/balance-of-payments>

⁴² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:035:0023:0055:EN:PDF>

2.25 HMRC publishes *Overseas Trade Statistics of the UK*⁴³ on the same day each month that ONS publishes *UK Trade*. HMRC issues two releases – one for UK trade with EU member states and one for UK trade with non-EU countries. These are trade in goods statistics and are produced predominantly from the Intrastat survey and the transactions recorded on CHIEF, both of which HMRC operate. EU Member States are required by legislation to collect data on international trade in goods – *Regulation (EC) 471/2009*⁴⁴ and *Regulation (EC) 638/2004*⁴⁵. The aggregate estimates of trade in goods produced by HMRC and delivered to Eurostat differ from those presented in *UK Trade* as different accounting frameworks apply – HMRC does not apply Balance of Payments conventions. See figure 5 for details of Balance of Payments adjustments to trade in goods estimates.

Figure 5: Balance of Payments adjustments included in the Pink Book 2014

		£ million										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Exports (Credits)												
Overseas trade statistics (f.o.b.)	HGAA	186 660	188 557	209 716	245 384	220 938	249 514	225 844	262 895	295 865	296 117	301 128
Coverage adjustments												
Second-hand ships	HBVK	139	255	252	252	252	252	252	252	252	252	252
Repairs to ships and aircraft	EPAQ	12	12	12	12	12	12	12	12	12	12	12
Goods not changing ownership	HCLJ	-2 824	-2 090	-2 870	-2 617	-2 516	-661	-569	-659	-689	-772	-3 127
Goods procured in ports	KTPB	741	876	1 233	1 020	1 318	1 925	1 632	1 732	2 121	2 130	2 085
Nonmonetary gold	DEJO	76	38	10	10	-103	-114	-126	-135	-252	-292	-81
Other	BQPO	10	7	11	-56	11	10	11	11	12	12	12
Total coverage adjustments	EHHH	-1 846	-902	-1 352	-1 379	-1 026	1 424	1 212	1 213	1 456	1 342	-847
Merchanting												
Net exports of goods	FJFT	573	549	942	327	1 140	1 148	983	3 992	7 915	3 305	2 858
Other adjustments	EPAR	4 102	3 206	3 435	515	1 410	2 879	2 707	2 716	3 948	4 378	3 671
Total	LQAD	189 489	191 410	212 741	244 848	222 462	254 965	230 746	270 816	309 184	305 142	306 810
Imports (Debits)												
Overseas trade statistics (c.i.f.)	HGAD	233 501	249 298	268 946	304 335	312 487	343 052	309 438	362 383	397 006	403 976	409 980
Coverage adjustments												
Second-hand ships	HBTY	249	224	228	228	228	228	228	228	228	228	228
Ships delivered abroad	CGER	570	303	495	300	300	300	300	300	300	300	300
Repairs to ships and aircraft	EPBA	33	51	60	60	60	60	60	60	60	60	60
Goods not changing ownership	HBYS	-2 747	-2 018	-2 762	-2 489	-2 342	-339	-230	-249	-239	-228	-870
Goods procured in ports	KTPC	2 106	2 493	3 513	2 902	3 752	5 480	4 617	4 931	6 039	6 054	5 934
Nonmonetary gold	DEJP	236	230	195	-338	191	144	-563	-812	-1 883	-1 674	-624
Smuggling - alcohol	QHCP	660	885	558	561	858	858	606	840	819	861	891
Smuggling - illegal drugs	MT5G	1 743	1 824	1 668	1 638	2 118	2 481	2 682	2 463	2 162	3 921	2 764
Smuggling - tobacco	QHCT	1 452	1 320	1 404	1 377	1 356	1 596	1 452	1 395	1 437	1 431	1 359
Other	EHHI	12	9	3	2	4	4	1	-117	-1	4	7
Total coverage adjustments	EHHJ	4 314	5 321	5 362	4 241	6 525	10 812	9 153	9 039	8 922	10 957	10 049
Valuation adjustments												
Freight	BPGF	-4 236	-4 256	-4 302	-4 313	-4 305	-4 297	-4 285	-4 271	-4 266	-4 181	-4 209
Insurance	ENAG	-660	-700	-743	-828	-856	-918	-840	-967	-1 050	-1 048	-1 088
Total valuation adjustments	HCLT	-4 896	-4 956	-5 045	-5 141	-5 161	-5 215	-5 125	-5 238	-5 316	-5 229	-5 297
Other adjustments												
Impact of MTIC fraud	BQHP	4 484	2 688	11 057	22 378	2 138	2 272	2 032	2 524	2 755	2 296	1 815
Other adjustments	EPBB	924	2 009	2 055	-3 544	-231	459	-1 161	-482	2 332	2 114	459
Total other adjustments	CLAK	5 408	4 697	13 112	18 834	1 907	2 731	871	2 042	5 087	4 410	2 274
Total	LQBL	238 327	254 360	282 375	322 269	315 758	351 380	314 337	368 226	405 699	414 114	417 006

Source: Office for National Statistics

⁴³ <https://www.uktradeinfo.com/Statistics/NonEUOverseasTrade/AboutOverseastradeStatistics/Pages/AboutOverseasTradeData.aspx>

⁴⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:152:0023:0029:EN:PDF>

⁴⁵ http://www.stat.si/doc/intrastat/Regulation_638-04.pdf

Accessibility and costs

- 2.26 ONS publishes *UK Trade* and *UK Trade in Goods by CPA* in PDF and HTML with supplementary tables and datasets in Excel and CSV formats. This equates to a level of three stars under the Five Star Scheme that forms part of the Open Standards Principles proposed in the *Open Data White Paper: Unleashing the Potential*⁴⁶ and adopted as UK government policy in November 2012⁴⁷. Five stars represents the highest star rating within the Scheme.
- 2.27 ONS told us that the annual cost of producing *UK Trade* and *UK Trade in Goods by CPA*, excluding the cost to data suppliers outside of ONS, is approximately £400,000.

⁴⁶ http://data.gov.uk/sites/default/files/Open_data_White_Paper.pdf

⁴⁷ <https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles>

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.

Requirements from previous Assessment report 45 (May 2010):

- Investigate and document the uses of these statistics and user needs; publish information about users' experiences of these statistics.
- Prepare a plan to engage more widely with users of these statistics and make this plan known

- 3.1 *UK Trade* is used by a wide range of users, from UK government and foreign embassies through to academics and independent businesses. ONS has a good understanding of its user base and has well-developed relationships with its main users. These key users told us that they have a positive interactive relationship with the UK Trade team and commented that they had been very well briefed on the recent mandatory BPM6/ESA10 changes. Users told us that they generally receive timely responses to queries or requests for data but some commented on the need to prompt ONS for urgent responses to pertinent queries. Key users meet ONS at a number of specialist user events such as the Quarterly National Accounts Review meetings⁴⁸, Quarterly Balance of Payments User Group, Quarterly BIS Trade Statistics Workshop, and the Government Statistical Service's Business and Energy Theme Group. ONS and BIS do not publish the terms of reference or minutes of all of these meetings.
- 3.2 ONS also engages more widely with users through user events including ONS's Economics Fora⁴⁹ and a Business Statistics User event in 2013 that focussed on trade and investment⁵⁰. ONS uses social media, including Twitter⁵¹ to communicate key messages to users and also updates Wikipedia⁵² every month. ONS told us that it has also started to use StatsUserNet⁵³ (SUN) to engage with users and plans to engage further with user groups on SUN in the future. The Assessment team considers that ONS's engagement with users is good, and there is clear evidence of continuous improvement, and we think that this could be further helped by ONS publishing a user engagement strategy for UK Trade statistics.
- 3.3 Section 2 of this report described a range of important uses of the UK Trade statistics. While ONS has discussed the uses of the statistics at user events,

⁴⁸ <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/national-accounts/presentations-and-meeting-papers/index.html>

⁴⁹ <http://www.ons.gov.uk/ons/about-ons/get-involved/events/events/economic-forum/index.html>

⁵⁰ <http://www.ons.gov.uk/ons/about-ons/get-involved/events/events/the-changing-shape-of-trade-and-investment-in-the-uk/index.html>

⁵¹ <https://twitter.com/ONS>

⁵² http://en.wikipedia.org/wiki/Economy_of_the_UK

⁵³ <http://www.statsusernet.org.uk/communities/alldiscussions1/digestviewerdashboard/?communitykey=36dd28ed-e10a-440e-b7fb-86650b746c43&tab=digestviewerdashboard>

some users commented that ONS does not convey its understanding of how the statistics are used, in the UK and internationally, alongside the statistics. ONS agrees that it could do more to document the users and uses of the statistics and told us that it is gathering more information about how the statistics are used, as well as about users' experiences, as part of a current on-line user survey⁵⁴. We would also encourage ONS to consider the user feedback presented in Annex 2 of this report and to consider other avenues for learning about user experiences if the survey elicits a low response.

3.4 As part of the designation as National Statistics, ONS should:

- a) Build on its improving engagement with users to develop a thorough understanding of the range of potential uses of UK Trade statistics and publish information about the types of decisions that they inform
- b) Publish details of its user engagement strategy and outline clearly how it will continue to strengthen its ongoing dialogue with users of UK Trade statistics, and improve its response to ad hoc queries
- c) Publish the information that it has gathered about users' experiences of its UK Trade statistics and explain how it is responding to what it has learned⁵⁵

(Requirement 1).

⁵⁴ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade/january-2015/stb-uk-trade--december-2014.html#tab-background-notes>

⁵⁵ In relations to Principle 1, Practices 1,2 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.

Requirements from previous Assessment report 45 (May 2010):

- Develop a resourced plan for the implementation of BPM6 including a communication strategy for consulting users and suppliers on relevant issues
- Signpost the fact that Balance of Payments revisions follow the National Accounts revisions policy

Suggestions from previous Assessment report 45 (May 2010):

- Publish a link to information on expected changes to these statistics on a new Balance of Payments home page on ONS's website
- Publish a clear pricing policy on charging for supplementary statistical services and update the guidelines for ONS staff

- 3.5 ONS publishes these statistics in an orderly and timely manner on its website, free of charge to users. The statistics are presented impartially and objectively.
- 3.6 ONS alerts users to any planned changes to methods or classifications through articles⁵⁶ and the background notes in the statistical report. ONS promotes any articles via Twitter, through user group meetings and at user events. Many of the changes in recent years have related to the implementation of ESA10 and BPM6, and users responding to this Assessment universally commended ONS for the way it managed and communicated these changes.
- 3.7 ONS told us that it follows the National Accounts revisions policy⁵⁷ in the production of UK Trade statistics, and it provides a clear link to the policy in the background notes of *UK Trade* and *UK Trade in Goods by CPA*. *UK Trade* presents a summary analysis of average revisions between the first time estimates were published and the estimates published for the same period twelve months later. It also presents revisions since the previous publication of *UK Trade* and explains the reasons for those revisions. *UK Trade in Goods by CPA* does not present any revisions analysis but explains that revisions are consistent with those in *UK Trade*. ONS also provides a link within *UK Trade* to an article analysing revisions to UK Trade statistics published in 2005. We suggest that ONS consider whether the 2005 revisions article still remains relevant for users and, if so, whether it should be updated.
- 3.8 ONS published details of three errors during 2014. The causes of these errors, and how ONS has responded to them, are discussed under Principle 4 (paragraphs 3.17 to 3.19). Principle 2 of the *Code* is concerned with how

⁵⁶ <http://www.ons.gov.uk/ons/rel/naa1-rd/national-accounts-articles/impact-of-esa2010-and-bpm6-on-trade/index.html>

⁵⁷ <http://www.ons.gov.uk/ons/guide-method/revisions/revisions-policies-by-theme/economy/national-accounts-revisions-policy.pdf>

promptly and effectively the errors were corrected and users alerted, once they are detected. See figure 6.

Figure 6: Timings of corrections to ONS errors in 2014

Error	Date first published	Date error discovered	Date Statistics Authority alerted	Date users alerted	Date error corrected
Oil exports omission	6 June 2014	3 June 2014 (pre-publication)	Not applicable	6 June 2014	18 June 2014
Expenditure estimates for UK residents' visits abroad and overseas residents' visits to the UK	14 March 2014	11 November 2014	12 November 2014 Authority responded 14 November	18 November 2014	10 December 2014
Geographic breakdown of the exports of goods	10 October 2014	24 November 2014	27 November 2014	27 November 2014	10 December 2014

Source: Produced by Assessment team

- 3.9 In June 2014, ONS published trade in goods estimates in *UK Trade* that were under-estimated by about £700 million because of an error in data supplied by HMRC. ONS alerted users to the known error in the statistics at the point that they were published. The Authority's view was that, given the timing difficulties ONS faced, its approach – to conclude that there was value in publishing the figures with appropriate caveats – was right. However, the Authority concluded that it was inappropriate for statistics based on data known to be erroneous to be designated as National Statistics. The Authority suspended designation until the error was corrected. The Authority acted similarly in respect of HMRC's *Overseas Trade Statistics of the UK*⁵⁸ and encouraged all statistical producers to bring concerns about the quality of National Statistics to the Authority's attention in advance of publication.
- 3.10 In November 2014, ONS alerted the Authority and users to the errors in the expenditure estimates for UK residents' visits abroad and overseas residents' visits to the UK and in the geographic breakdown of the exports of goods. ONS provided information about the actions that it was taking in response to the errors, and of its plans to correct the errors in *UK Trade October 2014* on 10 December. While the Authority considered it appropriate to de-designate *UK Trade* until ONS could conduct a full review and the statistics could be re-assessed, the Authority welcomes the improved understanding of the process to manage and communicate errors to users.

⁵⁸ <http://www.statisticsauthority.gov.uk/reports---correspondence/correspondence/letter-from-sir-andrew-dilnot-to-sean-whellams-20062014.pdf>

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.

- 3.11 No incidents of political pressures, abuses of trust or complaints relating to professional integrity, quality or standards were reported to or identified by the Assessment team.

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.

Suggestions from previous Assessment report 45 (May 2010):

- Research and publish reports on data quality issues relating to these statistics on a regular basis

- 3.12 *UK Trade* relies almost wholly on links to the explanatory notes published as part of *Balance of Payments – The Pink Book*⁵⁹ to describe the sources, methods and concepts underpinning the UK Trade statistics. While the information presented is helpful in understanding the conceptual framework for the UK Trade statistics and how they are compiled, it does not explain how ONS produces monthly trade estimates, or the rationale for the choice of methods. It also does not explain how *UK Trade in Goods by CPA* is compiled. ONS does not publish this information anywhere and users told us that this is an important gap in their knowledge when using the statistics. Users told us that they would also welcome more prominent information about how the trade statistics contribute to the measurement of the UK economy.
- 3.13 The UK Trade team transmits International Trade in Services data to Eurostat. ONS but is not directly responsible for all deliveries of trade data to organisations such as Eurostat and the IMF to meet the UK’s regulatory requirements⁶⁰. Responsibilities also lie with the ONS compilers of the UK National Accounts and the Balance of Payments and, for trade in goods, with HMRC. ONS does not routinely present information about any reservations or derogations in relation to these statistics, even though they might directly relate to the UK trade statistics.
- 3.14 As part of the designation as National Statistics, ONS should publish coherent, detailed and accessible information about the methods used to produce *UK Trade* and *UK Trade in Goods by CPA*, including:
- a) Presenting the overall framework for UK Trade statistics, and the contribution of international trade to the UK economy
 - b) Explaining how *UK Trade* is used in producing the UK Balance of Payments and UK National Accounts; and outlining any reservations or derogations in relation to International Regulations
 - c) Explaining how the monthly estimates are produced from monthly, quarterly and annual sources and how estimates by country and product are compiled, including the rationale for choices⁶¹
- (Requirement 2).

⁵⁹ <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/balance-of-payments/bop-methodological-notes-bpm6.pdf>

⁶⁰ See paragraph 2.4

⁶¹ In relation to Principle 4, Practice 1 of the *Code of Practice*

We suggest that in meeting this Requirement, ONS does not seek to replicate existing methods information presented by itself, HMRC and others, but improves the signposting to that information and sets it within the context of the production of monthly UK Trade statistics.

3.15 ONS has not updated the Summary Quality Report⁶² that it has published alongside UK Trade since 2009, and the information presented there is out of date and limited in its scope. During the course of this Assessment, ONS told us that it has updated the report and it is being quality assured, with a view to publishing a new version as early as possible. ONS told us that this is a simple update of the information to reflect major changes in methods such as BPM6. ONS said that it recognises that a more fundamental review will be required and that further work will be informed by the outcomes of this Assessment. We consider that, in addition to strengthening information about the assurance arrangements for these statistics (discussed in paragraphs 3.17 to 3.19) the main areas of improvement required are:

- To set the information about the quality of the statistics within the context of how they are used, and to describe their strengths and weaknesses accordingly.
- In a number of instances, ONS reports that estimates have replaced actual data sources. In some cases, these arrangements have been in place for several years. ONS does not explain how it compiles these estimates, what the impact is on the quality of the UK Trade estimates, or how it is seeking to resolve the situation – for example, by exploring alternative sources.
- In response to this Assessment, users have raised concerns about the volatility of the estimates and have raised questions about how much of that volatility is natural – for example, due to fluctuations in the trade of oil – and how much is introduced by ONS methods. ONS told us that it is confident that almost all of the volatility in the series is natural, but we consider that ONS could helpfully evidence this for users, particularly as ONS is producing monthly estimates for trade in services using mainly quarterly and annual sources
- Statistical producers including ONS⁶³, HMRC⁶⁴, and Eurostat⁶⁵ publish quality reports relating to different aspects of the UK trade statistics and the sources used to produce them. We consider that ONS could helpfully reference these and draw out any key points that users should consider

3.16 As part of the designation as National Statistics, ONS should publish information about the quality of the UK Trade statistics that:

- a) Explains the strengths and limitations of the statistics in relation to uses

⁶² <http://www.ons.gov.uk/ons/guide-method/method-quality/quality/quality-information/economy/summary-quality-report-for-uk-trade.pdf>

⁶³ <http://www.ons.gov.uk/ons/guide-method/method-quality/quality/quality-information/index.html>

⁶⁴ <https://www.uktradeinfo.com/Statistics/NonEUOverseasTrade/AboutOverseastradeStatistics/Pages/QualityAssurance.aspx>

⁶⁵ http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-TC-14-009/EN/KS-TC-14-009-EN.PDF

- b) Describes potential sources of error and bias and how it mitigates for them, including investigating and explaining the different sources of volatility in the monthly estimates
- c) Presents appropriate measures of quality
- d) Presents information around all the dimensions of the European Statistical Systems definition of quality⁶⁶
- e) Appropriately references relevant quality information published by other statistical producers – for example, quality measures published by HMRC and ONS for trade in goods and trade in services, and Eurostat Quality Statements⁶⁷

(Requirement 3)

3.17 Following the errors reported in *UK Trade* in 2014, a key focus of this assessment has been to explore how ONS has learned and applied lessons, and to determine ONS's progress in strengthening its assurance arrangements. To this end, as well as collecting evidence from the UK Trade team, we have discussed the issues raised by the errors with a range of users and data suppliers. Our key findings are as follows:

- Users' are broadly content with the quality of ONS's UK Trade statistics but their confidence in the statistics has been undermined by the errors, and they want to see evidence that ONS is prioritising the strengthening of its assurance arrangements.
- Users advised us of two instances when they had identified errors in the UK trade estimates published as part of *UK Trade*, *Second Estimate of GDP*, or the *Balance of Payments*. One internal consistency error in country-level data was spotted by an economist at the pre-release access stage and was corrected by ONS prior to publication. Another error in the calculation of the tourism deflator was identified following user sense-checking of the deflated series presented in *Second Estimate of GDP* – ONS subsequently investigated the root cause of the error and instigated a methods review. ONS told us that a conclusion of the review was that it highlighted that an error in the spreadsheet would have been immediately apparent by viewing a visual representation of the data. While this error did not impact *UK Trade*, the volume indices were produced by the UK Trade team. In both cases, users said that these were obvious errors that they would expect to be picked up through basic checks and appropriate sense-checking of the statistics – a number of users commented on the lack of sense-checking and suggested earlier involvement of economists
- HMRC has taken sensible steps to minimise the risk of recurrence of the error relating to the omission of £700 million oil exports from the trade in goods estimates – it has narrowed the boundaries for erratic series such as oil being flagged for further checks; it has surveyed oil companies to understand more about how the figures are reported; and it has built stronger relationships with those companies so that they understand the

⁶⁶ <https://gss.civilservice.gov.uk/statistics/methodology-quality/quality-2/quality-resources/ess-dimensions-quality/>

⁶⁷ In relation to Principle 4, Practice 2 and Principle 8, Practice 1 of the *Code of Practice*

impact of late reporting and will now flag any potential delays to HMRC as early as possible

- ONS has concluded a detailed review of the error in the Expenditure estimates for UK residents' visits abroad and overseas residents' visits to the UK, and has now implemented a range of detailed actions. The review identified: the need for more systematic checking of the data; better engagement between the IPS team and users of the data in ONS; and high-level sense-checking of the overall estimates including examining mirror statistics published by other countries about their residents' travel to the UK and UK residents' travel to their country. This work was concluded and the National Statistics accreditation reinstated in May 2015. The UK Trade and IPS teams told us that: they are working to establish more regular engagement; the IPS team will in future provide briefing as standard when it delivers data to the UK Trade team; and that as part of a Lean Six Sigma project, ONS is reviewing the end-to-end trade in services process, including identifying potential sources of risk and error, and putting in place appropriate assurance arrangements. We welcome these developments and look forward to reviewing the outcomes in respect of *UK Trade*
- ONS has reviewed the error in the geographic breakdown of the exports of goods and has introduced additional internal consistency checks within its processing system to ensure that this does not happen again. ONS told us that all such system changes now go through a strengthened acceptance testing process
- Suppliers of the data that contribute least to the total estimates generally considered it unlikely that ONS has a good understanding of how the data that it uses are sourced, or of the strengths and limitations of those data. Similarly, most data suppliers were not clear about how their data are used and told us that they would welcome information and training from ONS. The experiences of the data suppliers responsible for the key datasets were generally better than for the data suppliers of the smaller contributing datasets, though this was not always true – the ITIS team in ONS said that it did not understand how its data was used in other ONS products and would welcome more training on this
- While there are formal agreements in place with the data suppliers supplying the datasets with the highest weight, many of the suppliers of the smaller contributing data sources supply the data in response to regular email requests from ONS, and so ONS relies on their goodwill. Some suppliers did not know the origins of the data request and several had never spoken to ONS, even in a few cases when they had emailed ONS to say that there were quality issues with the data. We appreciate that with so many data suppliers, ONS must weight its resources towards assuring the data sources that make the greatest contribution to UK Trade estimates, and so must take a proportionate approach to supplier engagement, but we consider that ONS would benefit greatly from speaking to all data suppliers at least once a year. We learned a lot about the quality of the source data from short discussions with data suppliers carried out as part of this assessment. More importantly, the suppliers we spoke with had an appetite for a better dialogue with ONS, even if this was not every month

- Users and data suppliers raised concerns about the inflexibilities of ONS systems, and the number of workarounds needed to produce the UK Trade estimates. These impacts upon ONS's ability to interrogate the data quickly in response to user queries, and its flexibility to change the statistical reports in response to emerging areas of interest. But more importantly it introduces unnecessary risk, and limits ONS's ability to quality assure the data – ONS told us that it sometimes needs to ask HMRC to provide additional data extracts because it cannot interrogate its own systems. ONS also told us that a complete rewrite of its trade in goods system is underway, together with a re-platforming of the International Trade in Services survey systems (see Principle 7 para 3.31)
- 3.18 ONS is well aware that the errors in 2014 have exposed weaknesses in their assurance arrangements. ONS shared with us evidence that it has started to map its end-to-end processes and told us that it has commenced a round of meetings with data suppliers with a view to identifying and mitigating any risks. ONS told us that: it is committed to applying the principles of the Authority's *Administrative Data Quality Assurance Toolkit*⁶⁸ (QAAD); its team has been trained in QAAD; and that it plans to publish a report of the outcomes. The Authority welcomes ONS's early efforts and looks forward to reviewing the published report. However, until this work is completed and until ONS demonstrates greater inquisitiveness when sense-checking the statistics, we consider that there remains a sizable risk of errors.
- 3.19 As part of the designation of National Statistics, ONS should publish information about its strengthened quality assurance arrangements including its assurance arrangements for administrative data and survey sources used to produce *UK Trade*, taking into consideration the Authority's *Administrative Data Quality Assurance Toolkit*. ONS should:
- a) Present a comprehensive up-to-date picture of sources and how they are used in the production of UK trade estimates, including an indication of their relative contribution to the final estimates
 - b) Outline the operational context of the sources in plain language, and what checks are carried out by the data providers in relation to those sources
 - c) Publish information about the data flows, highlighting the points of risk and how it mitigates for those risks, including information about risks in its processing systems and highlighting its own quality assurance checks
 - d) Explain how it assures itself of the quality of information provided from the different sources; including any formal agreements and data supplier engagement
 - e) Explain how it has learned lessons and strengthened its own quality assurance checks and in particular its sense-checking of the statistics following the errors identified by users in 2014

⁶⁸ <http://www.statisticsauthority.gov.uk/assessment/monitoring/administrative-data-and-official-statistics/index.html>

- f) Detail its judgement about the quality of the statistics, and the rationale for this judgement, taking account of what it has learned from reviewing its quality assurance arrangements⁶⁹

(Requirement 4).

In meeting this Requirement, we suggest that ONS consider jointly with HMRC the implications of the Authority's *Administrative Data Quality Assurance Toolkit* in relation to both publishing information about the assurance arrangements for official statistics about trade in goods.

- 3.20 *UK Trade February 2015* advises that ONS is developing improved estimates of trade in non-monetary gold using data from a Bank of England survey. ONS says that these changes will be implemented when the data have been quality assured and also assessed to ensure that the confidentiality of the businesses within the survey is maintained. Users told us that they look forward to this being resolved as early as possible and encouraged ONS to keep them informed of progress.
- 3.21 It is widely recognised that while ONS has invested in improvements to the estimates of trade in services – for example by expanding the coverage of ITIS – the estimates remain weaker than those for trade in goods which are produced from large scale comprehensive administrative and survey sources. ONS told us that when balancing GDP – reconciling the estimates from all three approaches to measuring GDP (output, income and expenditure) – UK trade in goods estimates are not a primary consideration for any adjustments due to the comprehensive coverage and completeness of the data source. Conversely, the trade in services estimates are regularly considered as a candidate for possible adjustment because early estimates are based on only small amounts of real data: in the first instance on IPS data only. Any considerations are fed back to the UK Trade team so that potential quality limitations can be investigated but this process illustrates the relative confidence in early estimates of trade in services.
- 3.22 In the last year, a range of published papers have commented on the need for improvements to trade in services statistics. Dame Kate Barker's *National Statistics Quality Review: National Accounts and Balance of Payments*⁷⁰ commented on the UK's measurement of the services sector being leading edge, but said that estimates of international trade in services – their coverage and deflation – still require attention. The Chair of the Public Administration Select Committee, Bernard Jenkin MP, wrote to the National Statistician⁷¹ following the *Statistics for the economy and public finances* inquiry highlighting issues around: accessing time series on trade in financial services including EU/non-EU splits; and the lack of regional information about trade in services – particularly for London which has a heavily based service economy and for which there is little information (though ONS told us that it is working with the Greater London Authority to change this). The TheCityUK report *The*

⁶⁹ In relation to Principle 4, Practice 3 and Protocol 3, Practice 5 of the *Code of Practice*

⁷⁰ <http://www.ons.gov.uk/ons/rel/naa1-rd/national-statistics-quality-review/-nsqr--series--2--report-no--2-review-of-national-accounts-and-balance-of-payments/index.html>

⁷¹ <http://www.parliament.uk/documents/commons-committees/public-administration/Letter-to-National-Statistician-18-March-2015.pdf>

*Economics of Trade in Services*⁷² discusses the role of services in global trade and driving economic growth, and states a need for more accurate and timely data on international trade in services. The Minister of State for Trade has also spoken in Parliament during 2015 about a desire for improvements to official statistics about trade in services and ONS has briefed him about the current state of play and plans for development.

- 3.23 ONS told us that it recognises that international trade in services is evolving and so user needs for statistics are growing, and that it is listening to user concerns and providing advice as needed. While recognising the challenges of measuring trade in services, and appreciating that it will take time to address those challenges, it is our view ONS should respond to this weight of user concern and to publish its strategy for improving the statistics. ONS told us that the scheduled National Statistics Quality Review on Foreign Direct Investment and International Trade in Services was commissioned in response to an identified need to improve trade in services statistics. ONS has yet to confirm the detailed scope of this review but we anticipate that this review could play a key part in responding to users' concerns. As part of the designation as National Statistics, ONS should publish a short summary paper that: explains its current assessment of the quality of statistics on UK trade in services in respect of meeting user needs; outlines its strategy and broad timeline for identifying and addressing weaknesses in the statistics; and explains how it will measure success in meeting user needs – ONS should submit this paper alongside the current National Statistics Quality Review⁷³ (Requirement 5). We suggest that in meeting this Requirement, ONS continue to engage with those users that have been contributing to the public discussion about the quality of trade in services estimates, with a view to capturing their needs and drawing on their expertise.
- 3.24 ONS told us as part of this assessment that it recognises that an analysis of mirror statistics produced by other countries about trade with the UK is an avenue to be explored with respect to assuring the quality of its own UK trade statistics. For example, there would be value in comparing what Germany publishes about imports of UK goods and services to Germany with what the UK estimates as exports of its goods and services to Germany. ONS told us that its development plans include a broad commitment to support international work in this arena, though resources have not yet been committed. We consider that such analysis should represent a key part of ONS's regular assurance and sense-checking activities and would greatly enhance the credibility of UK trade statistics. It would also support international comparability of the statistics. As part of the designation as National Statistics, ONS should increase its awareness of the statistics published by other countries in relation to trade with the UK, and use this information to sense-check the UK Trade statistics⁷⁴ (Requirement 6). We suggest that in meeting this Requirement, ONS publish analyses of mirror statistics for the UK's major trading partners.

⁷² <http://e-thecityuk.com/J8I-3AFGF-8MT5PK-1JIIG4-1/c.aspx>

⁷³ In relation to Principle 4 Practices 1, 2, and 5; and Principle 7 Practice 5 of the *Code of Practice*

⁷⁴ In relation to Principle 4 Practices 3 and 6 of the *Code of Practice*

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.

- 3.25 ONS has assured us that it takes all necessary steps to protect the confidentiality of the data that it collects and to advise respondents to surveys how their confidentiality will be maintained. ONS provides some information in its Summary Quality Report but it does not provide links to the disclosure control policies that it employs – for *UK Trade* ONS follows the policies for the individual data sources including those for the ITIS⁷⁵ and HMRC’s Trade in Goods statistics⁷⁶. We suggest that ONS publish clear links to its disclosure control policies alongside its UK Trade statistics.
- 3.26 ONS told us that following a regular review of potential risks to ONS’s structural and international statistics, it is funding a strategic project to review: its arrangements for protecting sensitive data; the consistency of practices across its portfolio of statistics; and how it manages the balance between protecting confidentiality while not limiting unduly the practical utility of the statistics. ONS told us that the outcomes of this review will inform the disclosure rules applied for ITIS. We consider this review a sensible risk mitigation strategy.

⁷⁵ <http://www.ons.gov.uk/ons/guide-method/best-practice/disclosure-control-policy-for-tables/index.html>

⁷⁶

<https://www.uktradeinfo.com/Statistics/NonEUOverseasTrade/AboutOverseastradeStatistics/Pages/PoliciesandMethodologies.aspx>

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.

Suggestions from previous Assessment report 45 (May 2010):

- Include information on key recommendations from recent reviews and quality improvements for each business survey in the ONS Simplification Plan for future years

3.27 ONS told us that it uses administrative data sources wherever possible to produce UK trade statistics, and that it supplements these data with survey sources as required. All of the surveys used by ONS inform more than one set of statistics, with UK trade often a secondary user. The On-line List of Government Statistical Surveys⁷⁷ presents the latest estimated costs to businesses and local authorities of complying with surveys used to produce official statistics. The estimated costs for the four key surveys used to produce *UK Trade* are presented in figure 7. This table provides an indication of a general imbalance in the resources assigned to collecting information about trade in goods and trade in services. This imbalance is discussed further in relation to Principles 4 and 8.

Figure 7: Costs of complying with surveys used to produce *UK Trade*

Survey	Producer body	Estimated annual cost (£000)
Intrastat – EU trade in goods	HMRC	7,031.0
International Trade in Services – Annual	ONS (costs divided between ONS and BIS)	72.4
International Trade in Services – Quarterly	ONS (costs divided between ONS and BIS)	140.8
International Passenger Survey	ONS	18,500 hours (not costed)

Sources: On-line List of Government Statistical Surveys, *ONS Compliance and Quality Improvement Plan 2011/12*⁷⁸ (for IPS estimates)

⁷⁷ http://www.neighbourhood.statistics.gov.uk/HTMLDocs/OLGSS/OLGSS_interactive.html

⁷⁸ <http://www.ons.gov.uk/ons/about-ons/get-involved/taking-part-in-a-survey/information-for-businesses/compliance-and-simplification-plans/compliance-plan-2011-12.pdf>

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.

- 3.28 UK Trade statistics are produced by a team of eleven staff – this team is responsible for producing regular monthly and quarterly statistics and for providing data for users such as those compiling the UK Balance of Payments and GDP estimates. The team relies on others for the provision of data. ONS does not have any current vacancies within this team. ONS had identified a risk to its development programme, due to a Senior Research Officer vacancy that supports projects to improve its Balance of Payments and UK trade statistics, but ONS told us that this post will now be filled from May 2015.
- 3.29 The UK Trade team was formed in 2011, under the leadership of a single responsible statistician, by merging trade in goods and trade in services teams that had previously operated separately. However, ONS told us that in practice the UK Trade team still works along these separate lines, with two sub-teams and only the responsible statistician taking the overall view of UK Trade, supported by a Research Officer and advice from ONS economists. This historical structure directly impacts upon users of UK Trade statistics – for example, ONS still issues separate contact email addresses for users with queries about trade in goods and about trade in services. ONS told us that while there are clear operational benefits to having sub-teams for goods and for services – as they call on different data sources and services statistics play a minor role on a monthly basis – it can see the advantages of challenging the status quo, and that it is seeking to do so. We support this decision and consider that while some elements of processing will operate more efficiently along separate goods and services lines, the statistics, and users, will benefit from the team having a more holistic understanding of UK trade, not least to support sense-checking of the statistics.
- 3.30 ONS told us that many of the team have been in post for less than two years. Both users and data suppliers told us, in response to this Assessment, that they appreciate the professionalism and helpfulness of the UK Trade team, and the way that the team has striven to deliver on the challenges presented by implementing BPM6 and ESA10. We share this view. However, we consider that the inexperience of the team has impacted upon the quality of the UK Trade statistics and the service provided to users – for example, the sense-checking of the statistics and the speed and quality of responses to queries. ONS has made recent improvements, including ONS staff shadowing users and data suppliers and the strengthening of regular engagement to discuss the data. ONS told us that it recognises the need to focus its efforts to improve the team’s knowledge and understanding of UK trade statistics, and not just the mechanics of producing those statistics, and said that it has now tailored its training programme to reflect the newness of its staff.
- 3.31 We consider that it is of paramount importance that ONS’s processing systems and personnel are ample, robust and effective to deliver accurate monthly trade statistics. As part of this assessment ONS, and its users and data suppliers, have advised us of the inflexibility of ONS’s processing systems for trade in

goods and the ITIS system that produces survey results that are used to produce the trade in services estimates. This inflexibility has led to: a weakness in ONS's ability to interrogate data due to poor functionality; employing workarounds that demand additional staff time; and additional manual assurance of data (see Principle 4). This places additional strain on staff at different stages of the supply chain – some users told us that they work long hours to ensure publication and that time for important activities such as sense-checking is squeezed. The impact of the system constraints is evidenced throughout the Requirements of this report. As part of the designation as National Statistics, ONS should:

- a) Review and document the weaknesses in its processing system capability, within the context of documented user needs, and set out its plans for addressing those weaknesses
- b) As part of the information that it publishes about its quality assurance arrangements, explain for users how it mitigates known system risks and ensures sufficient time for assurance and sense-checking activities⁷⁹

(Requirement 7).

3.32 ONS has established a strong governance framework for the UK National Accounts and within that the Balance of Payments and Trade statistics, with all proposals for developments and requests for associated resources being scored, prioritised and considered by the National Accounts Change Board. ONS told us that this ensures that finite resources are directed to projects that will deliver the greatest benefits for the UK National Accounts. ONS told us about a range of current development projects, and some due to launch shortly (see figure 8) and said it considers that its resources are well managed and do not affect the production of the regular statistics. However, we spoke to some teams who suggested that some projects are overly stretched and that for others, resources have yet to be secured. Also, while ONS has been good at communicating major methods changes, and it has discussed its broader development plans with key users through the Balance of Payments User Group, some users told us that it has not set out the strategic development programme for UK trade statistics for all users – of particular concern was the need to understand ONS's medium-term strategy for improving the timeliness and coverage of trade in services statistics (see Principle 4).

⁷⁹ In relation to Principle 4 Practice 3 and Principle 7 Practice 1 of the *Code of Practice*

Figure 8: Examples of ONS development projects

- Continuation of the National Accounts change programme – for example, Review of Non-Monetary Gold estimates, ESA10 supply-use Requirements for Pink Book 2017
- National Accounts and Balance of Payments NSQR – Implementation of recommendations relating to UK Trade statistics
- National Statistics Quality Review - Foreign Direct Investment and International Trade in Services
- Trade in Goods system rewrite
- International Trade in Services system rewrite
- Review of assurance arrangements for UK Trade statistics – applying the principles of the Authority's *Administrative Data Quality Assurance Toolkit*
- Review of error in the estimates of overseas travel and tourism expenditure – implementation of actions
- International Passenger Survey Sample Review
- Lean Six Sigma project – Trade in Services processes
- ONS Structural and International Statistics Disclosure Control project
- Support of international programme to better measure e-commerce trade in services and asymmetries of trade

3.33 While we support ONS's ethos of prioritising developments within a National Accounts framework, many users of UK Trade statistics are not users of the National Accounts and Balance of Payments, and some of the developments that will affect the UK Trade statistics will operate at the margins of this framework – for example, changes to the International Passenger Survey. We consider that it is important that ONS clearly communicates its development plans for all aspects of UK Trade statistics, and for all users of *UK Trade*. We also consider that for transparency, it is important that ONS removes any confusion about which developments are resourced to go forward and those which ONS recognises a need for, but cannot resource in the short term. ONS told us that it plans to publish this information as soon as it is in a position to do so. As part of the designation as National Statistics, ONS should publish a development programme for UK Trade statistics that:

- a) Sets out the priority projects, including the rationale for those priorities, a broad timeline, and an assessment of their likely impact
 - b) Is appropriately resourced
 - c) Explains how it will keep users regularly updated on progress⁸⁰
- (Requirement 8).

⁸⁰ In relation to Principle 1 Practice 3; Principle 4 Practices 1, 2 and 5; and Principle 7 Practices 1 and 3 of the *Code of Practice*

Principle 8: Frankness and accessibility

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

Requirements from previous Assessment report 45 (May 2010):

- Review options for improving the way in which these statistics are disseminated on ONS's website to provide easier access to these statistics
- Provide commentary and contextual information that aid the interpretation of the statistics published in Monthly Review of External Trade Statistics and UK Trade in Goods analysed in Terms of Industries
- Take appropriate steps to deposit business survey data with the relevant national archive

Suggestions from previous Assessment report 45 (May 2010):

- Develop a new home page on ONS's website for Balance of Payments statistics
- Implement recent presentational changes made to UK Trade Monthly Bulletin to the other releases in this assessment
- Explain the use of the specific codes for each data series in all publications of these statistics and provide a link to the Time Series Data service.
- Take steps to ensure appropriate standards are observed in the web-dissemination of these statistics

3.34 ONS told us that in recent years it has not been able to prioritise resources to improve the commentary and analysis that it presents in *UK Trade* and *UK Trade in Goods by CPA* as it focused on implementing BPM6 and ESA10. ONS told us that it is now taking steps to make improvements, and is beginning by consulting users about their experiences of using the statistics (see paragraph 3.3). ONS has also started to publish regular pieces of additional narrative alongside the statistical report to give users insights into specific aspects of the statistics – for example, *The Rotterdam Effect*⁸¹. Users responding to this assessment told us that they welcome such pieces, particularly those focused on the methodological challenges in measuring UK Trade – users suggested that ONS ask about topics of interest, for example at user events, and publish these as a managed rolling programme within its resource capacity. Users were keen that additional analyses and narrative do not draw resources away from assuring the quality of the statistics, but might instead be regarded as a vehicle for strengthening that assurance.

3.35 The Assessment team considers that the key improvements needed to *UK Trade* include:

- *UK Trade* might easily be mistaken for a statistical report about UK trade in goods. While we understand that there is considerably more information

⁸¹ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade/december-2014/sty-trade-rotterdam-effect-.html>

available in relation to UK trade in goods, the lack of prominence given to services, particularly in the key points of the release, has the potential to lead to misuse of the statistics – ONS told us that it has historically relied upon Balance of Payments to present commentary about trade in services but agreed that it needs to present a more balanced narrative

- *UK Trade* headlines on the trade balance in the latest month, compared with the previous month. ONS does not present any prominent information to caution users about the volatility of the monthly time series. ONS told us that it focuses on the latest monthly estimates as users are interested in the timeliest data. During the course of this assessment, more experienced users told us that they are making less use of the monthly estimates due to their volatility, and some are no longer using them at all. We consider that while users want timely data, this does not necessarily mean that headlining on the latest monthly estimates is appropriate – for example, might focusing on the three-month rolling average better serve users?
- Users told us that they find some of the terminology used in *UK Trade* difficult to interpret, particularly in relation to production classifications. ONS could do more to explain unusual terms such as ‘erratics’⁸² the first time that they are used and ONS might helpfully consider relabeling where terms are a hangover from historical titles of the statistical report – for example, MRETS (Monthly Review of External Trade Statistics)
- ONS could do more to offer insight in to the statistics. Users said that they find the commentary dry and that rather than describing the increases and decreases already illustrated in the tables and charts, they would welcome better interpretation of trends and a more pertinent presentation of the economic context – the long-term economic perspective currently presented was considered too generic and it only looks back to 2007. We consider that ONS could do more to contextualise the statistics – for example, by presenting the contribution of UK trade to GDP and making better connections with other related statistics such as the Balance of Payments and estimates of Foreign Direct Investment. Users told us that they would also welcome information about reasons for differences between the ONS and HRMC statistics about trade in goods
- Users said that they would also welcome the presentation of more detailed statistics, and deeper analysis within the statistical reports, particularly in relation to trade in services. Users were generally pragmatic that such analysis might not be available every month, but we consider that ONS could do more to present such analysis – for example regional statistics, international comparisons, and trade with emerging economies – within the statistical reports, or through well sign-posted analytical pieces, on a less frequent basis. ONS told us that it considers that this should be possible

3.36 The narrative that ONS presents in *UK Trade in Goods by CPA* adds little to that presented in *UK Trade* and does not serve to aid interpretation of the UK’s trade in goods. Users generally told us that they do not use the commentary, and some users of *UK Trade* were not aware that *UK Trade in Goods by CPA* is published. The Assessment team considers that ONS, in consultation with

⁸² Erratics are defined as ships, aircraft, precious stones, silver and non-monetary gold

users, should consider whether bringing the commentary up to the standards required by the *Code* and publishing a quarterly statistical report represents the best use of its resources, or whether it might be sensible to publish the statistics once a quarter, as well-signposted supplementary datasets to *UK Trade* (albeit publishing with a lag of one week). ONS might then redirect resources to other aspects of the production of UK Trade statistics. The Assessment team communicated this view to ONS early in the assessment process and ONS agreed it was worthy of consideration. ONS told us that it has posed this question as part of its user survey. We also consider that there would be some value for users in ONS considering its approach to publishing *International Trade in Services* annually as a completely separate entity to *UK Trade*, and how it might present these statistics more coherently.

3.37 As part of the designation as National Statistics, ONS should improve the commentary in *UK Trade* and supporting analytical pieces so that it aids users' interpretation of the statistics by:

- a) Presenting a clear narrative about UK Trade, with a balanced representation of trade in both goods and services, including considering how it can present more detail about trade in services
- b) Presenting prominent information about uncertainty around the estimates and cautioning users appropriately about focusing on latest monthly estimates
- c) Providing plain language descriptions and contextual information about *UK Trade*
- d) Presenting a narrative that helps users to draw meaningful conclusions from the analysis presented, including presenting the latest statistics within the context of a longer time series
- e) Setting *UK Trade* against the range of trade and balance of payments statistics published by ONS and other organisations, including presenting international comparisons and more prominent information about why ONS and HMRC trade in goods statistics differ⁸³

(Requirement 9).

As part of meeting this Requirement we suggest that ONS:

- a) Consider, in consultation with users, whether it would aid interpretation, and represent a better use of resources, to include information about trade in goods by activity within *UK Trade*, rather than as a separate National Statistics output. ONS might also helpfully consider the relationship of *UK Trade* with *International Trade in Services*
- b) Work with colleagues producing *Balance of Payments* and *International Trade in Services* and with HMRC to provide helpful explanatory information to support the coherent presentation and wider use of the portfolio of official statistics about UK trade
- c) Consider the points detailed in annex 1 and annex 2

3.38 The latest estimates for *UK Trade* and *UK Trade in Goods by CPA* are relatively easy to locate on ONS's website but the release pages for these

⁸³ In relation to Principle 8, Practice 2 of the *Code of Practice*

statistics do not cross-reference each other, nor does ONS signpost related statistics such as *Second Estimate of GDP* and *Balance of Payments*.

- 3.39 ONS publishes reference tables in Excel format⁸⁴ alongside the statistical reports and makes time series available in .csv format⁸⁵. ONS also makes ITIS data available through the Virtual Microdata Laboratory⁸⁶ and the UK Data Service⁸⁷ and told us that it is also currently working towards making UK trade data available in open data format for users' interrogation via its API service⁸⁸, something which we anticipate that users will welcome – ONS expects users to be able to create bespoke tables by industry, product and country. As part of this Assessment, users highlighted some basic improvements that ONS could make to better facilitate their re-use of the data including: labelling the Excel data tables consistently with those presented in the statistical report; signposting more clearly how users can access the most complete consistent time series; and providing clearer links to datasets published in response to ad hoc requests. Users repeatedly referred to ad hoc data requests when responding to this Assessment – we consider that ONS might helpfully review whether any of these datasets⁸⁹ could be published as standard each month or quarter alongside the statistical reports – for example, volume estimates⁹⁰ and trade in services by country⁹¹. We also consider that ONS needs to do more to describe for users the contents of the different data tables and datasets that it publishes about UK trade, when they become available and where users can locate them. For example, ONS does not explain where users can find detailed statistics about the UK's bilateral trade in services with different countries or where they might find time series adjusted to remove the effects of price inflation – ONS publishes a whole range of data about UK Trade that a user of the monthly statistics may never find. For users coming new to these statistics, the picture presented is opaque and incoherent.
- 3.40 As part of the designation as National Statistics, ONS should improve the accessibility of *UK Trade* and *UK Trade in Goods by CPA* through its website by:
- a) Signposting clearly to users how the statistical reports relate to each other and to other trade and economic statistics
 - b) Providing users with clear information about what data on UK trade in goods and services is available, where and when, including data published

⁸⁴ <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-373980>

⁸⁵ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade/february-2015/tsd-time-series-data--trade-in-goods-mrets--february-2015.html>

⁸⁶ <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/virtual-microdata-laboratory--vml-/index.html>

⁸⁷ <http://ukdataservice.ac.uk/>

⁸⁸ <http://www.ons.gov.uk/ons/about-ons/who-ons-are/programmes-and-projects/enhancing-access/ons-api/index.html>

⁸⁹ <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/published-ad-hoc-data/econ/index.html>

⁹⁰ <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/published-ad-hoc-data/econ/march-2015/uk-trade-in-services-by-account--chain-volume-measures--cvm-.xls>

⁹¹ <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/published-ad-hoc-data/econ/january-2015/trade-in-services--exports-and-imports.xls>

as part of other ONS statistical releases or by other organisations such as HMRC

- c) Ensuring that the data that it releases on its website as a result of ad hoc requests are clearly labelled and easy for users of *UK Trade* to find, and considering whether any of this data should be published as standard as part of the statistical reports
- d) Using consistent and clear labelling and numbering of tables within the statistical report and in Excel⁹²

(Requirement 10).

⁹² In relation to Principle 2 Practice 3 and Principle 8 Practices 4 and 6 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.

3.41 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.

Requirements from previous Assessment report 45 (May 2010):

- Publish the name and contact details of the responsible statistician in the releases for all these statistics
- Ensure that all releases are issued at 9.30am on the day of release
- Review the lists of those with pre-release access to these statistics

3.42 ONS makes *UK Trade* and *UK Trade in Goods by CPA* available through the GOV.UK Statistics Release Calendar⁹³ and publishes a timetable of releases as part of that calendar and through its website⁹⁴. ONS also publishes the date of the next release alongside the latest statistics. Users can also sign up for email alerts⁹⁵. However, the forward calendar only covers nine months rather than the twelve months required by the *Code*. Also the GOV.UK Statistics Release Calendar is difficult to navigate and a search filtered by 'UK Trade' and 'ONS' returned 157 announcements (see figure 9). The Authority's *Monitoring Review: The Coherence and Accessibility of Official Statistics on Income and Earnings*⁹⁶ published in February 2015 recommended that the National Statistician facilitate solutions to the problems with the release calendar. As part of the designation as National Statistics, ONS should publish and maintain a rolling twelve month timetable of *UK Trade* and *UK Trade in Goods by CPA* release dates⁹⁷ (Requirement 11).

3.43 *UK Trade* and *UK Trade in Goods by CPA* include the name and contact details of the responsible statistician and are normally issued at 9.30am. As part of this assessment, ONS shared with us a log that it maintains of 9.30am breaches. While ONS has experienced technical breaches almost every time it has published *UK Trade*, these have been mainly been restricted to supporting data tables being published one to two minutes late due to the number of preceding items queued for release. ONS warns users of this type of delay on its website. The exception to this was in December 2014 when ONS told us that a post-release check identified that a data table had corrupted on being uploaded and had to be republished leading to a delay of approximately three and a half hours. We suggest that ONS should, as part of its published documentation of assurance arrangements for *UK Trade*, include information about how it minimises the risk of breaches of 9.30am release and pre-release access.

⁹³ <https://www.gov.uk/government/statistics/announcements>

⁹⁴ <http://www.ons.gov.uk/ons/release-calendar/index.html>

⁹⁵ <http://www.ons.gov.uk/ons/about-ons/who-ons-are/newsletter/index.html>

⁹⁶ <http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-reviews/monitoring-review-1-2015---the-coherence-and-accessibility-of-official-statistics-on-income-and-earnings.pdf>

⁹⁷ In relation to Protocol 2 Practice 2 of the *Code of Practice*

Figure 9: Screenshot of GOV.UK search of Statistics Release Calendar (13 April 2015)

You can use the filters to show only results that match your interests.

Contains

Topic

Department

Published after

Published before

157 release announcements containing **UK trade** × by **Office for National Statistics** ×

UK house price index: Feb 2015
 14 April 2015 9:30am (confirmed) [Statistics](#) [Office for National Statistics](#) [UK economy](#)

UK Environmental Goods and Services Sector (EGSS), 2010 to 2012
 15 April 2015 9:30am (confirmed) [Statistics](#) [Office for National Statistics](#) [UK economy](#)

Overseas travel and tourism, monthly provisional results: February 2015
 16 April 2015 9:30am (confirmed) [Statistics - national statistics](#) [Office for National Statistics](#) [Community and society](#)

Electoral statistics for UK: 2014
 16 April 2015 9:30am (confirmed) [Statistics - national statistics](#) [Office for National Statistics](#) [Community and society](#)

Production and services industries, turnover and order, UK: February 2015
 17 April 2015 9:30am (confirmed) [Statistics - national statistics](#) [Office for National Statistics](#) [Business and enterprise](#)

Index of services: February 2015
 28 April 2015 9:30am (confirmed) [Statistics - national statistics](#) [Office for National Statistics](#) [UK economy](#)

Gross domestic product, preliminary estimate: January to March 2015
 28 April 2015 9:30am (confirmed) [Statistics - national statistics](#) [Office for National Statistics](#) [UK economy](#)

Family Resources Survey 2013 to 2014
 May to June 2015 (provisional) [Statistics - national statistics](#) [Office for National Statistics](#) [Community and society](#)

Source: Statistics Release Calendar, GOV.UK

- 3.44 On 19 June 2014⁹⁸, the Chair of the Statistics Authority wrote to the Permanent Secretary to the Treasury following a breach at HM Treasury of the statutory arrangements for pre-release access to official statistics. *UK Trade* was distributed to 421 officials who were not permitted to receive them in HM Treasury and other departments, 40 minutes ahead of publication at 9.30am on 9 May 2014. While welcoming the corrective action taken by HM Treasury to prevent this from happening again, the Chair confirmed that it remains the Statistics Authority’s view that arrangements for pre-release access are unsatisfactory and that the existence of pre-release access can undermine public confidence both in the statistical evidence and in the policies to which official statistics relate. ONS told us that it reviews its lists of those with pre-release access to UK Trade as per the timetable set out by the National Statistician and Chair of the UK Statistics Authority – the last review was in April 2014. The published list⁹⁹ of those with pre-release access to *UK Trade February 2015* includes 36 individuals including the Prime Minister, Deputy Prime Minister, 9 from HM Treasury, 11 from BIS and 7 from the Bank of England. While this represents ten fewer individuals than recorded in 2010 when these statistics were last assessed, we consider that the list remains excessively long. As part of the designation as National Statistics, ONS should review the list of those with pre-release access, with a view to minimising the

⁹⁸ <http://www.statisticsauthority.gov.uk/reports---correspondence/correspondence/letter-from-sir-andrew-dilnot-to-sir-nicholas-macpherson---19062014.pdf>

⁹⁹ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade/february-2015/pr-uk-trade--february-2015.html>

numbers of individuals included, and inform the Statistics Authority of the justification for each inclusion¹⁰⁰ (Requirement 12).

- 3.45 In March 2014, ONS announced a delay to the pre-announced date for the publication of *UK Trade January 2014* from 12 March 2014 to 14 March 2014¹⁰¹. ONS advised that ‘the final stages of rigorous quality assurance of these data have identified an issue with one of the data sources provided to ONS to compile the estimates’. ONS did not subsequently expand on this in the statistical report but ONS told us that errors were found in a dataset at the final stages of quality assurance and that the delay was to allow sufficient time to quality assure the redelivered version – the error related to data supplied for the Missing Trader Intra Community (MTIC) fraud adjustment. ONS documented the issue internally and conducted a lessons learned review, and it told us that it has now introduced additional earlier checks to ensure that this does not happen again. While final quality assurance checks picked up on the error, this was worryingly close to publication, and so the points raised under Principle 4 are pertinent.

¹⁰⁰ In relation to Protocol 2, Practice 7 of the *Code of Practice*

¹⁰¹ <http://www.ons.gov.uk/ons/about-ons/business-transparency/changes-to-release-dates/index.html>

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.

Requirements from previous Assessment report 45 (May 2010):

- Publish a Statement of Administrative Sources

Suggestions from previous Assessment report 45 (May 2010):

- Ensure the team is made aware of changes to HMRC's administrative systems which may have implications for these statistics

3.46 ONS has published a *Statement of Administrative Sources*¹⁰² (SoAS) and includes many of the sources of administrative data used to produce its UK Trade statistics. However, the list is out of date and some of the descriptions are unclear. For example, data about rail freight provided by Eurotunnel is not listed and one of the HMRC sources listed is Extrastat – we understand that historically this terminology was used to refer to the administrative data about trade in goods with non-EU countries, but HMRC and ONS do not use this language in their latest publications. We consider it important that users can easily cross-reference the SoAS with the statistical reports and supporting information about methods and quality, particularly since ONS includes only very minimal information about its assurance arrangements in the SoAS and relies instead on published quality reports associated with the statistical outputs, in this case *UK Trade*. As part of the designation as National Statistics, ONS should update its *Statement of Administrative Sources* to clearly and accurately list all of the administrative data sources used to produce its UK Trade statistics¹⁰³ (Requirement 13).

¹⁰² <http://www.ons.gov.uk/ons/guide-method/the-national-statistics-standard/code-of-practice/statement-of-administrative-sources/index.html>

¹⁰³ In relation to Protocol 3, Practice 5 of the *Code of Practice*

Annex 1: Compliance with Standards for Statistical Reports

- A1.1 In November 2012, the Statistics Authority issued a statement on *Standards for Statistical Reports*¹⁰⁴. While 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 reports associated with the ONS's UK Trade Statistics, this annex comments on compliance with the statement on standards. The comments included in this annex are based on a review of *UK Trade February 2015*¹⁰⁵ and *UK Trade in Goods by CPA Quarter 4 2014*¹⁰⁶.
- A1.2 In implementing any Requirements of this report (at paragraph 1.5) which relate to the content of statistical reports, we encourage the producer body to apply the standards as fully as possible.

Include an impartial narrative in plain English that draws out the main messages from the statistics

- A1.3 *UK Trade* focuses heavily on trade in goods, with trade in services discussed only briefly in the publication. Considering the significant contribution of services to the UK economy the publication should be reformatted to provide sufficient analytical discussion on all contributions to UK Trade. Until ONS can improve the quality of the trade in services data, it should consider how to make better use of the information from its existing quarterly and annual data sources to present a more complete analysis.
- A1.4 *UK Trade* begins with a standard set of four bullet points which describe the main figures and is followed by a standard comparison table and figure comparing monthly data over the short-term for trade in goods and trade in services. These would benefit from additional insight – for example, a discussion of the key contributors to, and the possible reasons for, change including the relevant products and countries.
- A1.5 To ensure clarity, *UK Trade* requires a contents page or introduction to explain the structure and content of the publication. The publication is descriptive and would benefit from greater analysis and interpretation of the data. In particular, *UK Trade* should present a more detailed pertinent analysis of economic factors which affect trade in the longer term, comparisons with the trade performance of international trading partners and a greater analysis and discussion of UK trade in services. ONS would need to consider how and when it might do this, given the pressures of a monthly publication cycle – some elements might be presented less frequently and/or as separate analytical pieces.

¹⁰⁴ <http://www.statisticsauthority.gov.uk/news/standards-for-statistical-reports.html>

¹⁰⁵ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade/february-2015/index.html>

¹⁰⁶ <http://www.ons.gov.uk/ons/rel/uktrade/uk-trade-in-goods-analysed-in-terms-of-industry/q4-2014/index.html>

A1.6 *UK Trade in Goods by CPA* describes the content of the statistical report and presents some basic explanatory notes but adds little value to the published data tables, beyond the commentary already published in *UK Trade*.

A1.7 Both *UK Trade* and *UK Trade in Goods by CPA* would benefit from an explanation of key words and technical terms used, rather than relying solely on links to other publications, to ensure that the statistics can be widely understood.

Include information about the context and likely uses of the statistics

A1.8 In both *UK Trade* and *UK Trade in Goods by CPA* standard, broad descriptions of the statistics are given, but greater explanation and examples should be included to detail the economic importance of these data, who uses them and what they use them for.

A1.9 Reference to additional analytical pieces published by ONS pertinent to *UK Trade*, such as the Rotterdam Effect, Reasons behind the trade deficit, and Measurements of non-monetary gold, are helpful in explaining current phenomena to users. These pieces have been received well by users and should be continued as best practice.

Include information about the strengths and limitations of the statistics in relation to their potential use

A1.10 There is insufficient information about the strengths and limitations of the statistics in either *UK Trade* or *UK Trade in Goods by CPA*. In particular ONS should provide further information about:

- data quality for *UK Trade*, including reflecting changes made to adhere to BPM6 – the current linked quality document was published in 2009 and is out of date
- data quality for *UK Trade in Goods by CPA*, which is currently missing (except for a revisions analysis)
- greater discussion of uncertainty around the estimates of *UK Trade*
- potential sources of error and bias in relation to use for both *UK Trade* and *UK Trade in Goods by CPA*.

Be professionally sound

A1.11 In both *UK Trade* and *UK Trade in Goods by CPA*:

- graphs, tables and charts are of a good quality throughout, descriptive statistics clearly and accurately describe the data presented, and the date of next release is clearly stated
- appropriate contact details for the statistical team are listed, along with the next publication date

Include, or link to, appropriate metadata

A1.12 ONS should check the links that are included in *UK Trade*, regularly assess each link for relevance; ensure that the links work and that the information

contained in them is up-to-date. For example, the link to HMRC's trade statistics published on UKtradeinfo is broken. Also, ONS does not include sufficient cross-references between *UK Trade* and *UK Trade in Goods by CPA*.

- A1.13 Recent changes to definitions and methods are documented in *UK Trade*; this should be taken further to document the impact that these changes have on the statistics, including consideration of those working with long time series.
- A1.14 Further links to other relevant statistics should be included in *UK Trade*, including links to international statistics and the UK National Accounts. The relevance and coherence of these should be discussed to ensure that the reader understands how *UK Trade* contributes to these. ONS should describe what additional data can be accessed where, and when.
- A1.15 *UK Trade* and *UK Trade in Goods by CPA* should provide clear links to information on data sources and methodology.

Annex 2: Summary of assessment process and users' views

A2.1 This assessment was conducted from January to May 2015.

A2.2 The Assessment team – Johanna Hutchinson and Donna Livesey – agreed the scope of and timetable for this assessment with representatives of ONS in January. The Written Evidence for Assessment was provided on 5 March 2015. The Assessment team subsequently met ONS during March to review compliance with the *Code of Practice*, taking account of the written evidence provided and other relevant sources of evidence.

Summary of users and data suppliers contacted, and issues raised

A2.3 Part of the assessment process involves our consideration of the views of users and data suppliers.

A2.4 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.

A2.5 As part of this assessment, we considered any user feedback gathered about UK trade statistics as part of *Assessment Report 299 – Annual and Quarterly National Accounts*. We also sought feedback from those supplying the data used by ONS to produce *UK Trade*, and we held meetings with the key data suppliers.

A2.6 The Assessment team received 52 responses from the user and data supplier consultation. The respondents were grouped as follows:

Academics	5
Commercial	4
Professional Bodies/Trade Associations	4
Office for National Statistics	4
Central Government	4
Embassies/High Commissions	3
Devolved Government	3
Individuals	2
Analysts/Researchers	1
Local Government	1
Central Bank	1
Suppliers	20

Key themes raised by users

A2.7 Users were broadly content with the UK Trade statistics, and many were keen to stress that the areas for improvement they suggested should be considered within that context. Users generally found the statistics team to be very professional and helpful, if inexperienced. Users said that they welcomed the

increasing opportunities to engage with ONS – for example, Balance of Payments seminars and Economic Fora – particularly in relation to the introduction of BPM6 and ESA10, which users felt was very well managed and communicated. Users said that they would welcome quicker response times to ad hoc queries. Regular users and those with ad hoc queries both raised the concern that ONS is not well positioned to be highly responsive as it lacks easy access to the granular data that underpins the estimates.

- A2.8 Users told us that their trust in the UK Trade statistics had been damaged by the errors that led to their de-designation as National Statistics in 2014. Some users told us that their first task when the statistics are released is to consider their quality, when they should expect to be able to move to directly analysing the statistics, confident that they have been fully assured. Two users identified occasions when they had identified errors following simple checks and had reported them to ONS – in all instances they considered that these were errors that ONS should have identified. Users said that they would like to see evidence that ONS has strengthened its assurance arrangements and is doing more sense checking in order to minimise errors, and that when there are errors it is responding quickly and briefing users about the impact, including on past estimates and other official statistics.
- A2.9 Users were generally interested in seeing more detailed information about the methods and sources used to produce the UK trade statistics and their quality, including strengths and limitations, and to see such information set within the context of how the statistics are used. For example, one user said that they were concerned that there is a bias in the trade in services estimates and that they would welcome more engagement with ONS on this. Another user said that they had concerns about the estimates of higher education exports but that they could not find any transparent information about the source of the data to be able to reach an informed judgement. Another said that relying on companies to tell HMRC what they have imported from Europe comes with risks that are not drawn out, such as the risks of misclassification and omission of information, either accidentally or deliberately.
- A2.10 Some users said that they were unclear how everything fits together – for example, within the context of the Balance of Payments, GDP, and statistics presented by international organisations including the IMF and Eurostat. Users told us that they would also appreciate ONS explaining and quantifying the differences between ONS’s UK Trade statistics and other related statistics – for example, the UK Trade in Goods statistics published by HMRC and ONS’s own *International Trade in Services*. Users told us that they find ONS’s Monthly Economic Review helpful and also welcomed the recent introduction of the ad hoc pieces around topics like the ‘Rotterdam effect’. Users expressed an interest in this becoming a rolling programme, with users consulted on possible topics – some ideas shared as part of the assessment suggested an interest in pieces ONS offering more technical insight rather than pure commentary pieces – for example, about the volatility of UK trade estimates; non-monetary gold; MTIC fraud and asymmetry.
- A2.11 Users conveyed a range of opinions in respect of the commentary that ONS presents alongside the statistics. As is generally the case with respect to economic statistics, the most expert users make little or no use of the commentary, other than information about methods and quality, relying instead

on their own knowledge to interpret the statistics. These users told us that they would prefer ONS to focus on getting the numbers right – strengthening methods and reducing errors – rather than interpreting the statistics. Other users identified some key areas for improvement:

- *UK Trade* does not have a clear identity – it reads like a trade in goods report that has evolved to include trade in services but does so really only in the margins. More than one user said that the first time that they used the statistics they assumed the report only covered trade in goods. Other users raised concerns that this imbalance in the statistical report could potentially lead to the misinterpretation and misuse of the statistics. Users generally recognised that it is more difficult to measure trade in services but some questioned whether, given the contribution of services to the UK economy, the balance of investment in collecting data about goods and services needed to be revisited. Users said that they would welcome ONS sharing its medium term strategy to overcome the challenges in measuring trade in services
- Users also raised concerns about the focus in *UK Trade* on the latest monthly estimates, noting the volatility of the series and the fact that the trade in services figures are mainly estimates based on quarterly and annual sources – one user raised concerns that it is not clear whether the volatility is natural or introduced as a result of ONS’s methods. Users said they would like more information about when the different sources feed into the estimates and how this impacts upon revisions. Some users said that they do not use, or are steering away from using, the monthly estimates, and there was demand for more focus on trends and the presentation of more prominent information about the uncertainty associated with the estimates
- Users generally like the key points summary but cautioned that ONS needs to consider that some users *only* use this information, which therefore needs to present a balanced story. A range of users want insightful commentary to be presented in the statistical reports but many commented that the current commentary is dry and focuses on repeating information in the tables rather than adding value. Users said that the economic context offered is too generic and the long-term perspective is fairly static and that some of the language used is inaccessible to most users
- Users said they would like more information about the detail of trade in services; including product, country, regional and industry breakdowns – for example:
 - trade in manufactured goods with China
 - the contribution of UK trade to economic growth
 - insight into emerging international markets and an expansion of the coverage of countries that the UK trades with – examples included Nigeria and some countries in South America and South East Asia
 - the regional perspective, especially for services as there is no alternative source – for example, for Wales, Scotland, Northern Ireland and London
 - the relationship between trade and investment and the labour market

- the distribution of trade by size of business
- the distribution of trade by ultimate destination
- international comparisons – how are UK exports performing in relation to Germany or France?

Users recognised that ONS might not be resourced or have the data to cover all these topics every month but said that they would be interested to see such topics explored on some regular basis. Some users suggested that ONS could better utilise its economists in interpreting and sense checking the statistics.

- *UK Trade in Goods by CPA* – the commentary does not add any value to the published data tables beyond the information already presented in *UK Trade*

A2.12 Users raised a number of concerns about the accessibility of the statistics. Many told us about the difficulties navigating ONS's website, although some had been involved in testing the new website and were positive about the direction that ONS is taking. A number suggested improvements that they considered could be made within the confines of the current website including better signposting of the statistics, methods and quality information, release dates, and data tables; and consistent labelling of data tables between the statistical report and the Excel tables. Users were also frustrated by difficulties in accessing long time series in a form that supported re-use, in particular when they know the 4-digit identifier for a series but still need to go through a number of steps to locate it. There was interest from users in ONS's work towards releasing data through the ONS Application Programming Interface (API), which would potentially allow them to create their own subsets of data for re-use – one user said that in comparison with other countries, it is most difficult to extract UK data. Users expressed disappointment that sometimes when they asked for data for particular countries and products not published as standard, the reason they were given for not receiving the data was that it could not be extracted from ONS systems.

Key themes raised by data suppliers

A2.13 ONS uses data from over forty data suppliers – the largest contributions come from HMRC and ONS, but other data suppliers fill important gaps in the coverage of the services industries and provide information to adjust trade estimates to comply with Balance of Payments concepts. In addition to the major data suppliers, we spoke to a number of these small but important data suppliers. The data sources are described in Section 2 and the specifics around the events that led to the errors in 2014 and the lessons learned are discussed under Principle 4. Otherwise, some common themes that emerged were:

- The major data suppliers have strong working relationships with the UK Trade team, and where there were weaknesses in engagement, these came to the fore in 2014 and ONS has started to take steps to address them – for example, through more regular and timely discussions about the data and any emerging issues. One user told us that the recent problems

have highlighted the significance of these data sources to the UK National Accounts, and that this has led to positive steps being taken

- Suppliers raised the inexperience of the UK Trade team as a short term limitation and some said that wholesale changes in personnel had caused some uncertainty. Suppliers recognised that as the team is learning, its responsiveness and processing times will potentially be affected but they stressed the importance of the team focusing its learning on understanding the context of the statistics and the data used to produce them, as well as the mechanics of producing the monthly estimates. Some data suppliers shared examples of where ONS is working to achieve this, including arranging shadowing opportunities, establishing meetings with data suppliers, and asking for briefing as a standard part of the process. Major suppliers within ONS also considered that it would be helpful if the UK Trade team could offer training on how data from the different ONS sources is used – so facilitating more informed sense-checking of the data by all parties
- For suppliers providing data to ONS on a voluntary basis, that make a smaller contribution to *UK Trade*, engagement is almost wholly managed by email correspondence. These suppliers also told us that they would welcome better information about how the information they supply is used, with one user saying that it takes them some time to compile the information and that they were unclear whether the use is appropriate. Another data supplier said that they understand that ONS does not use all of the data they supply. Many of the arrangements for supplying data to ONS are not underpinned by formal agreements and some of the individuals supplying data were not in post when the first deliveries were established, and so are not clear about the importance of their contribution to these statistics.
- Suppliers of the smaller contributing datasets also told us that they consider that it would be helpful to ONS to understand more about the source of the data. ONS asks data suppliers by email to highlight any reasons for change or quality concerns, but more than one data supplier said that when they did this, they never heard back from ONS and so they were unsure how the information has been accounted for. For example, one user told us about major changes to their administrative systems that are still impacting upon data quality, and also a period of resource constraints that had led to administrative returns being stockpiled and recorded on their systems in large batches at the date of data entry, rather than the date of the transaction. Another data supplier said they had received two queries in six years and had never been asked about the perceived quality of the data
- Some data suppliers were able to tell us in some detail about operational checks carried out on administrative data and about audit arrangements. Others were less sure of such assurance arrangements and told us that it was unlikely that ONS would have a good understanding of the quality of the source data

Key documents/links provided

Written Evidence for Assessment document

