Methodological Improvements to National Accounts for Blue Book 2015: Classifications

Authors: Eduard Moskalenko, Gueorguie Vassilev, Office for National Statistics

Date: 11 September 2015

Executive summary

This article covers the treatment of institutional units and transactions that have been reclassified in accordance with the latest international statistical guidance. These changes will be introduced when revised figures for the UK National Accounts, consistent with Blue Book 2015 and Pink Book 2015, are published in September 2015.

In Blue Book 2014, ONS introduced a large number of changes as a result of the implementation of European System of Accounts 2010 (ESA 2010) and the associated Manual on Government Deficits and Debt (MGDD). A further comprehensive classification review was initiated but did not conclude in time to allow for implementation of the classification changes alongside other ESA 2010 revision in Blue Book 2014 and Pink Book 2014.

In Blue Book 2015 and Pink Book 2015, ONS will be revising the statistical treatment of Network Rail, Transport for London, sale of 3G/4G licenses, contributions to Multilateral Development Banks, Vehicle Registration Tax and tax credits in accordance with ESA 2010. Most classification decisions do not impact UK aggregates, such as GDP, as they move institutional units from one sector to another, however, owing to the differences in valuing market and non-market output and improvements to data coverage, the Network Rail and Transport for London reclassifications will affect current and constant price GDP.

Although these classifications are only being implemented in National Accounts in September 2015, all the changes, except the reclassification of Transport for London, have already been implemented in the published monthly Public Sector Finances. Classification of units into the public sector and the classification of flows between the public sector and the rest of the economy have an impact on the main fiscal aggregates of debt and deficit so it was important to reflect these changes earlier in Public Sector Finances. The reclassification of Transport for London will be implemented in the Public Sector Finances in September 2015 in parallel to the National Accounts implementation.

1 Introduction

The UK National Accounts comply with international standards set out in the European System of Accounts 2010 (ESA 2010), Balance of Payments Manuals 6 (BPM6) and the Manual on Government Deficit and Debt (MGDD). These standards ensure that economic statistics produced by all EU member states are compiled in a consistent, comparable and reliable way. Periodically, these manuals are reviewed to ensure that they continue to reflect economic and technological developments in domestic and global economies and meet user needs.

The new ESA 2010 and BPM6 became a mandatory basis for compiling economic statistics in the EU in 2014. The revised standards introduce a number of new concepts and bring the way in which national accounts and balance of payments across the EU member states are produced into line with the worldwide System of National Accounts 2008 (SNA 2008), already adopted by other parts of the world, including Canada, the United States and Australia.

As part of the implementation of ESA 2010, ONS conducted a review to identify any bodies and transactions whose classification was impacted by the new guidance in ESA 2010 and the revised MGDD. The outcome of the review has been published in a series of classification updates. Most of these classifications were implemented in the Public Sector Finances in September 2014 but not all were implemented in National Accounts in Blue Book 2014. Classification changes being implemented in Blue Book 2015 and covered in this article are:

- Network Rail reclassified to the central government sub-sector from the private non-financial corporations sub-sector from April 2004;
- 3G and 4G mobile phone spectra auction receipts, in 2000 and 2013 respectively, reclassified as rental of a non-produced asset;
- some tax credits reclassified as social benefits;
- some government injections into multilateral development banks reclassified as capital transfers;
- Vehicle Registration Tax reclassified as a tax on products;
- some Transport for London subsidiaries reclassified to the local government sub-sector from the public non-financial corporations sub-sector from 2003.

The changes to classifications affect the accounts retrospectively from the point when the updated classification applies. This article provides an overview of the associated methodology for each of the classification changes.

2 National Accounts concepts

2.1 Institutional Units and Sectors

A key principle in the accounting frameworks is that the economy is made up of a large number of 'institutional units' such as businesses, government bodies, charities and households. For analytical purposes these individual units are classified into groups according to their characteristics. One of the main classification systems in National Accounts collects units into one of six 'institutional sectors' according to the different economic incentives they face. For example, businesses exist to make profits and can generally be described as market producers. Such units are grouped together in the market sectors of the economy (either in the financial corporation sector or non-financial corporation sector). Some other units, such as government bodies and charities have different aims, so these are considered non-market producers (either in the general government sector or non-profit institutions serving households (NPISH) sector). The remaining two institutional sectors are the households sector and the rest of the world sector. Some of the sectors are further split into sub-sectors, so in the UK the general government sector consists of the local government and central government sub-sectors.

2.2 Transactions and Accounts

Institutional units interact with other institutional units in the UK and abroad in a number of different ways – they manufacture goods, provide services, buy materials from a range of suppliers, invest in capital, issue financial instruments that are sold on the market and so on. In the National Accounts' statistical system, such interactions are recorded as transactions, where each transaction reflects a specific type of economic interaction. Some changes occur as a result of events in the wider economy and are not caused by interactions between individual institutional units – for example, the value of shares could go up or down following the general movements in the stock market.

Transactions and other changes in assets are known as flows – the effect of economic events that take place within a given period of time (ESA 2010, paras. 1.64-1.66). The starting (ending) position before (after) the event is an example of stock, often referred to as opening (closing) balance.

Transactions, other changes in assets and balance sheets are grouped into accounts. The accounts unite transactions that are related to different types of economic activity such as, for example, production, distribution and redistribution of income. All of the accounts together form an interrelated system, referred to as the sequence of accounts. The full sequence of accounts provides a complete view of the economic activity of an institutional unit or sector. The classification of flows (or stocks) is an essential part of National Accounts, to in order to establish their true economic nature, which may be different from the legal form. There can be a significant difference between the accounts compiled in compliance with the business accounting standards, such as Generally Accepted Accounting Practice (UK) and International Financial Reporting Standards, and the accounts of the same institutional unit (or sector) compiled using the ESA framework.

3 Data sources and methodology

3.1 Impact of reclassifications

In most cases, a change in the classification of an institutional unit has no effect on the UK summary accounts and therefore no impact on UK aggregates such as Gross Domestic Product (GDP). In these situations, transactions related to the unit in question would be moved from the accounts of the sector to which the unit originally belonged to the accounts of the sector it has been reclassified to. The sector changes will cancel out at the UK Economy level leading to no impact on GDP or other UK Economy aggregates.

In some situations, the impact of classifications is not neutral on the total economy level. This can be the case when a transaction is reclassified. For instance, a tax on income relates to a secondary distribution of income and so has no impact on GDP, but a tax on production does impact GDP. Therefore, if a tax is reclassified from being one type of tax to another, then there may be an impact on GDP.

The impact of some reclassifications of institutional units can be less obvious and the sections below provide an overview of the most common reasons for the revisions. Detailed information on individual classifications implemented in Blue Book and Pink Book 2015 can be found in section 4.

3.1.1 Market and Non-Market Producers

In order to determine whether an institutional unit in question is a market or a non-market producer, it is assessed against a set of criteria, such as, for example, profit-maximising behaviour, existence of competition and ability to cover production costs. A reclassification of an institutional unit from a market producer to a non-market producer would generally have an impact on GDP owing to the differences in valuation of market and non-market output.

The total output of a market producer is limited to its market output (P.11), that is, output that is disposed of or intended to be disposed of on the market, and a lower volume of output produced for own final use (P.12). The concept of market output is closely related to the concept of sales, or revenue raised through selling goods and services, but also includes specific forms of government subsidies (ESA 2010 paras. 3.17-3.18).

The output of a non-market producer in current prices is valued by summing the costs of production. The majority of output is provided free of charge or sold at economically insignificant prices, and therefore denoted as non-market output (P.13). In specific circumstances, total output of a non-market producer also includes a lower volume of market output (P.11) and output produced for own final use (P.12).

In Chained Volume Measure (CVM) terms, government non-market output is derived in one of two ways: approximately one-third is calculated by deflating the current price (CP) figures using price deflators for compensation of employees, intermediate consumption and consumption of fixed capital. However, for the remaining two-thirds, output is calculated directly using cost-weighted activity indices. For areas of government treated in this way (health, education, etc.) no deflator is used to derive the CVM; instead, a deflator is implied from the ratio of the current price to the CVM figure.

3.1.2 Impact on stocks

A classification itself does not involve interactions between units. As such, no transactions are recorded between the original sector of the unit in question and its sector following the classification. However, all of the unit’s assets and liabilities are transferred to the new sector, thus impacting the stocks of non-financial assets recorded in the non-financial balance sheet and the levels of financial assets and liabilities recorded in the financial balance sheet.

3.1.3 Consolidation

Generally, transactions between institutional units classified to a single sector of the economy are not consolidated. Consolidation refers to the elimination of transactions when units are grouped. That is, a cash payment made by one company to another company in the same sector will be recorded as both an asset (for the unit receiving the cash) and a liability (for the unit paying the cash) in the sector accounts. However, consolidation does occur in certain instances, most commonly when the accounts of the government sector are compiled (ESA 2010, paras. 1.106-1.109). It is therefore not uncommon that when a unit is re-classified into one of the government sub-sectors, some transactions that involve other units in the same sub-sector will be consolidated out. As an example, a capital transfer paid by a central government department to its executive agency will not be recorded in the accounts if the agency is classified to the central government sector, however the same transfer will be recorded if it is given to a public corporation.

4 Impact of the changes

4.1 Network Rail

4.1.1 About Network Rail

Network Rail Ltd was incorporated in 2002 as a company limited by guarantee. It was set up to replace Railtrack plc, which owned the majority of the UK railway infrastructure but was placed into administration following a number of accidents and financial difficulties in the preceding years. In October 2002, Network Rail Ltd acquired Railtrack plc and renamed it Network Rail Infrastructure Ltd.

4.1.2 Classification

Network Rail Ltd (and its subsidiaries, hereafter NR) had been highlighted as likely to be affected by the new ESA 2010 guidelines in the Eurostat biennial Excessive Deficit Procedure (EDP) visit to ONS in January 2013. Following a review, the classification was changed from a private non-financial corporation (S.11002/3) to a central government (S.1311) body. The rationale for this decision was explained in a classification article.

4.1.3 Impact

From April 2004, when NR became a non-market body as defined in the updated international guidance, all of its transactions have to be recorded in the accounts of the central government, rather than the private non-financial corporations, sub-sector. In principle, the entire sequence of accounts has been affected; a few most noticeable changes being as follows:

a) **Output:** Historically, NR was treated as a market producer, hence its output was measured in terms of goods and services it sold on the market and produced for own final use. NR's production costs remained higher than the value of goods and services sold and were in part financed by grant income. In compliance with the updated international guidance, NR's output as a non-market entity within the government sector has been estimated by summing the costs of production. Therefore, the output of the central government sub-sector goes up by a larger amount than the output of private non-financial corporations goes down as a result of the reclassification, causing upward GDP revisions. The CVM contribution of NR is calculated by deflating input expenditure. The impact is small with government output rising by more, to a similar degree to the CP figures.

b) **Non-financial assets:** NR is an institution with a high level of investment in new assets. It is also a legal owner of the majority of the UK's railways and some of the biggest railway stations. In 2014, the value of these assets was approximately £50bn. In the statistical system, construction of fixed assets such as railway lines, bridges and tunnels are recorded as gross fixed capital formation (P.51g) in the accumulation accounts. The stock of these assets is recorded in the non-financial balance sheet. As the classification shifts NR's assets between the sectors, central government's stocks of non-financial assets and gross fixed capital formation associated with construction of the new assets increase considerably.

c) **Financial assets and liabilities:** NR's long-term investment programme has been funded to a large degree by debt issuance - in 2014, the value of NR's bonds was roughly £33bn. Such financial instruments are recorded in the financial account and balance sheet as securities other than shares. The classification creates a step increase in the level of debt securities (AF.3) and NR's other financial instruments, in the government accounts in 2004 (and an equivalent drop in the accounts of private non-financial corporations). The classification itself does not constitute a transaction and therefore is not recorded as a flow in the financial account, however all transactions and other changes that occurred thereafter are recorded in the central government sub-sector.

d) **Transfers from government:** In the UK National Accounts, grants are recorded on a consolidated basis within each government sub-sector. Therefore, the value of central government grants provided to other sectors decreased even though Network Rail continues to receive financial assistance and investment grants from other institutional units recorded in the same sub-sector.

The full impact of the reclassification on GDP is described in the article titled 'Impact of Blue Book 2015 Changes on Current Price Gross Domestic Product Estimates, 1997 to 2010'.

This reclassification was implemented in the UK Public Sector Finances in September 2014. The impact on the government sector's fiscal aggregates, as will be recorded in the Blue Book 2015 in October 2015, can be found in the Annex to this paper.

4.2 Transport for London

4.2.1 About Transport for London

Transport for London (TfL) is a local government body established in 2000 as part of the administrative reform in the Greater London area. It has a relatively complicated organisational structure, with various activities undertaken by over twenty separate companies that together form the Transport for London Group.

4.2.2 Classification

Under the ESA 1995 methodology, most parts of the group were classified in the public non-financial corporation sub-sector (S.11001) with the exception of Transport for London Corporation itself and Crossrail Limited, a company involved in the construction of a new railway line under the city, both of which were recorded as local government (S.1313) bodies.[1] In accordance with new rules in ESA 2010 regarding the recording of head offices and special purpose entities, some of the subsidiaries previously recorded as public non-financial corporations have been reclassified as local government bodies. Additionally, the economic nature of TfL's inter-group loans was examined and resulted in their formal classification as long-term loans (F.42). Further information can be found in the February 2014 Classification Update.

4.2.3 Impact

Conceptually, the impact of the classification of TfL's subsidiaries is similar to that of Network Rail discussed in section 4.1 above. The classification affects a wide range of transactions throughout the entire sequence of accounts. Together, these transactions form an exhaustive picture of TfL's economic activity.

Most of the subsidiaries in question do not cover the entirety of their production costs with income from sales and rely on other sources of finance, including subsidies and other transfers. For this reason, the application of the principles of valuing non-market output whereby the costs of production are used to calculate total output, creates upward revisions to nominal GDP. In addition, transfers taking place within the same group of companies individually classified to the local government sub-sector have been consolidated.

The work to implement this reclassification has identified some areas to make improvements in coverage, exhaustiveness and quality of the data; and so the impact on nominal GDP is partly a result of the classification change and partly a result of these data improvements. These improvements include the following aspects:

a) **Coverage:** Subsequent to the passage of the Greater London Authority Act 1999, a range of the new local government bodies and public corporations were formed to manage and operate London's transport. The classification review identified gaps in data collection during several years that followed the reform. Notably, London Bus Services Limited, a company that manages London's bus route network but does not itself operate buses, will be retrospectively included in the accounts of the public non-financial corporations (S.11001) sub-sector.

b) **Exhaustiveness:** As part of the work to show inter-group loans (F.424), other financial transactions have been tested for exhaustiveness. Finance leases have been identified as an area with potential for improvements. Finance leases are distinguished from other types of leases in that the economic ownership of the assets

[1] Between 2010 and 2012, another TfL's subsidiary, Rail for London, was temporarily classified in the local government sub-sector until it met the ESA 1995 criteria for being a market producer.

is transferred from the legal owner to the lessee who is deemed to bear the risks and rewards. The legal owner is shown as issuing a loan (F.423), which the lessee uses to acquire the non-financial asset (ESA 2010 paras. 15.13-15.22). The recording of the loans (F.423) will be implemented in Blue Book 2015. These improvements to the financial account do not affect GDP but they are important for providing a complete picture of TfL's interactions with other units in the economy.

c) **Use of audited data**: Full sets of accounts can take a long to time to prepare, and sometimes, only the provisional estimates exist at the time of compiling the UK National Accounts. Where this has been the case these estimates have been replaced with the finalised and audited data.

The full impact of the reclassification on GDP is described in the article titled 'Impact of Blue Book 2015 Changes on Current Price Gross Domestic Product Estimates, 1997 to 2010'. The impact of these changes on GDP has been most pronounced after 2010 owing to the rapid growth of the non-market subsidiaries.

This reclassification will be implemented in the UK Public Sector Finances in September 2015. The impact on the government sector's fiscal aggregates, as will be recorded in the Blue Book 2015 in October 2015, can be found in the Annex to this paper.

4.3 Contributions to Multilateral Development Banks

4.3.1 About Multilateral Development Banks

The UK Government subscribes to a number of Multilateral Development Banks (MLDBs). These are international institutions, created by groups of countries to provide finance and advice relating to economic and social activities in developing countries. Examples of MDLBs are the International Development Association, the European Bank for Reconstruction and Development (EBRD) and the African Development Banks (AfBD). Membership includes both donor and beneficiary countries, with the UK typically performing a donor role.

4.3.2 Classification

In the past, all UK Government payments to MLDBs were recorded as equity injections (F.519), which positively impacts government equity asset levels but has no impact on public sector net borrowing.

The 2014 edition of MGDD offers new guidance on the treatment of payments by national governments into these organisations. For some types of payment this differs from the treatment previously adopted in the UK. Specifically, the MGDD explains that contributions to MDLBs which principally make "concessional loans" to developing countries (that is, loans which are often long-term, have long grace periods and offer rates substantially below the market) are to be treated as capital transfers (D.99) rather than equity injections.

4.3.3 Impact

The UK Government has made regular contributions to MLDBs which principally engage in providing concessional loans. The MLDB of this type to which the UK Government makes the largest annual contributions is the International Development Association (IDA). For Blue

Book 2015 and Pink Book 2015 the contributions to the IDA have been reclassified from equity injections to capital transfers. This reclassification impacts all years back to 1997.

There are other MLDBs offering concessional loans to which the UK Government contributes smaller amounts of money, but it was not possible to obtain a full data time series for these contributions in time for the 2015 annual National Accounts' publications and so these will be implemented in a future Blue/Pink Book.

The inclusion of the contributions as capital grants (D.99) leads to upward revisions in the accumulation accounts and net borrowing of the central government sub-sector (S.1311). MLDBs are located abroad; therefore, the increase is matched by an equivalent rise in capital grants receivable in the Rest of the World (S.2) accounts.

Similarly, since the contributions have to be removed from equity injections (F.519), there are downward revisions to the central government assets and the rest of the world liabilities in the financial account. The stock of these flows accumulated over time is removed from the financial balance sheet.

UK investments in multilateral banks do not generate any income in terms of interest or dividends. Thus, the sequence of accounts is not be impacted in any further way.

This reclassification was implemented in the UK Public Sector Finances in March 2015. The impact on the government sector's fiscal aggregates, as will be recorded in the Blue Book 2015 in October 2015, can be found in the Annex to this paper.

4.4 3G and 4G Licenses

4.4.1 About 3G and 4G Licenses

In 2000, the UK Government auctioned licences for the period from 2000 to 2021 to five UK mobile phone companies giving them exclusive access to parts of the radio spectrum and enabling them to offer third generation mobile phone services (3G) that would allow high-speed data access to the internet on mobile phones. The 3G auction of the licences raised a total of just under £22.5bn. Similarly, licenses to use the 4G spectra were sold by auction in February 2013 for £2.3bn.

4.4.2 Classification

Historically, the ONS treated the payments to government following the transfer of the 3G licence spectrum in 2000 as rent (D.45). Following a Eurostat ruling, this treatment was reviewed and consequently in 2011, the treatment of 3G licences was changed and the 2000 auction was treated as a sale of non-produced non-financial assets (AN.2). Correspondingly, the auction of 4G licenses was also recorded as a sale of non-produced non-financial assets. However, guidance in ESA 2010, has once again clarified the statistical treatment and under ESA 2010 both the 3G and 4G license auctions are treated as rent (D.45) where the cash is received at the start of the rent period but the rent is accrued over the lifetime of the lease.

4.4.3 Impact

Payments of rent (D.45) are accrued over the length of the lease even if paid up front in a lump sum. The 3G licenses last 20 years; thus, annual income of around £1.1 billion per annum is recorded in the allocation of primary income account of central government instead of a one off receipt of £22.5 billion in 2000 in the acquisition of non-financial assets account. The licenses have been purchased by private non-financial corporations (S.11002/3); hence an equivalent change is applied to their sector accounts.

Spreading the rent income over the duration of the scheme requires an accruals adjustment to be recorded in the financial account. In compliance with the guidance, an accruals adjustment is imputed as other accounts payable for central government (F.89; receivable for private non-financial corporations).

The impact on 4G licences is the same albeit on a much smaller scale as the 4G auction only raised £2.3 billion.

There is no impact on UK GDP as a result of this reclassification.

This reclassification was implemented in the UK Public Sector Finances in September 2014. The impact on the government sector's fiscal aggregates, as will be recorded in the Blue Book 2015 in October 2015, can be found in the Annex to this paper.

4.5 Tax Credits

4.5.1 About Tax Credits

Tax credits are credits distributed to a particular institutional unit, to lower their tax liability. From a social perspective, they are introduced to encourage a particular type of behaviour, or to provide financial help. They are explicitly defined within ESA 2010 for the first time, and two types of tax credit are described within the guidance: payable tax credits are ones for which if the value the tax credit is larger than the total tax liability, the extra 'payable' part is still paid to the recipient, whereas non-payable tax credits are those for which the extra credit is not distributed to the recipient. For each one of these tax credits, there is a negative tax figure, and a payable figure. Any sector can be affected, and under this specification, the total value of tax credits (both the payable and negative taxation parts) is counted as government expenditure. Equivalently, the figure should appear on the recipient's resource side, to whichever sector they belong.

4.5.2 Classification

Working tax credits, child tax credits and corporation tax relief were investigated as under ESA 1995 they were all being recorded partly as negative tax and partly as expenditure. Working tax credits and child tax credits were not classified as payable tax credits under ESA 2010, but were classified as social assistance benefits in cash (D.623). However, corporation tax reliefs were classified as payable tax credits. These latter tax credits include:

- Vaccines research
- Land remediation
- R&D – three schemes – one for Large Companies, one for small and medium enterprises (SMEs) and one for above-the-line profit makers
- Creative industries tax relief (film, animation, video games, high-end TV, and as of Autumn 2014, theatre tax relief)

4.5.3 Impact

Working and child tax credits under ESA95 were treated partly as negative tax and partly as social assistance benefits in cash with the split calculated based on the amount of tax credits paid out which were above the tax liability of the recipient.

Under ESA 2010, the negative tax element is recorded as social benefit expenditure and so social assistance benefits in cash (D.623) is increased by the same amount that taxes on income (D.51) are decreased. This affects the central government (S.1311) sub-sector accounts and as counterparty of the transactions the household sector's (S.14) accounts.

Under ESA 1995, the UK was recording corporation tax reliefs in their entirety as subsidies with no part of the payments being recognised as negative tax. Therefore, the new guidance in ESA 2010 has had no impact on the recording of corporation tax reliefs.

There is no impact on UK GDP as a result of this reclassification.

This reclassification was implemented in the UK Public Sector Finances in December 2014. The impact on the government sector's fiscal aggregates, as will be recorded in the Blue Book 2015 in October 2015, can be found in the Annex to this paper.

4.6 Vehicle Registration Tax

4.6.1 About Vehicle Registration Tax

Vehicle Registration Tax (VRT) is a fee paid to the Driver and Vehicle Licensing Agency (DVLA) on a vehicle when it is first registered. It is only charged once and each subsequent re-registration is done free of charge.

4.6.2 Classification

Historically, VRT was considered to be a sale of service because it covered the costs associated with vehicle registration throughout its entire life. As such, it was recorded as market output (P.11) in the UK National Accounts. The guidance in ESA 2010 requires that vehicle registration fees are recorded as taxes on products (ESA 2010, paras. 4.19-4.20).

4.6.3 Impact

In accordance with ESA 2010, VRT will be recorded in the allocation of primary income account as a tax on products, except VAT and import taxes (D.214). A decrease of central government's (S.1311) market output (P.11) equal to the VRT receipts will be recorded in the production account. The re-classification will not affect central government's total output (P.1), which is valued by summing the costs of production, and will therefore cause an equivalent upward revision in non-market output (P.13). Economically, this can be interpreted as funding the provision of a service from tax revenue rather than by charging for it directly.

There is no impact on UK GDP as a result of this reclassification.

This reclassification was implemented in the UK Public Sector Finances in March 2015. The impact on the government sector's fiscal aggregates, as will be recorded in the Blue Book 2015 in October 2015, can be found in the Annex to this paper. The data sources and methodology are described in the article titled 'Methodological Improvements to National Accounts for Blue Book 2015: Vehicle Registration Tax, Treatment of Roads, and Spending on Repairs and Maintenance of Dwellings'.

5 Conclusions

In 2014, the new 2010 edition of the European System of Accounts (ESA 2010) became a mandatory basis for compiling National Accounts across the European Union. Along with the methodological innovations covered in a series of articles that accompanied Blue Book 2014, ESA 2010 included updated guidance on determining the classification of institutional units and flows. It was not possible to implement all reclassifications as a result of ESA 2010 in the National Accounts in 2014. Therefore, ONS in Blue Book 2015 and Pink Book 2015, in line with ESA 2010, will be implementing the reclassifications of Network Rail, Transport for London's subsidiaries, contributions to Multilateral Development Banks, 3G/4G licenses and the Vehicle Registration Tax concluding that these should be revised with retrospective effect in compliance with the new guidance. Some of these changes affect current price GDP because of the differences in valuing market and non-market output.

6 Contact

Eduard Moskalenko
Government, Corporations and Classifications Division
eduard.moskalenko@ons.gsi.gov.uk
+44 (0)1633 456739

Gueorguie Vassilev
National Accounts Strategy, Change and Support Division
gueorguie.vassilev@ons.gsi.gov.uk
+44 (0)1633 456265

7 References

Eurostat (1996). European System of Accounts ESA 1995, Luxembourg: Office for Official Publications of the European Communities.

Eurostat (2013). European System of Accounts ESA 2010, Luxembourg: Publications Office of the European Union.

Eurostat (2014). Manual on Government Deficit and Debt - Implementation of ESA 2010 – 2014 edition, Luxembourg: Publications Office of the European Union.

ONS (2013). 'Classification of Network Rail under European System of Accounts 2010', available at: http://www.ons.gov.uk/ons/rel/na-classification/national-accounts-sector-classification/classification-of-network-rail-under-european-system-of-accounts-2010/index.html

ONS (2014a). 'National Accounts Sector Classification, Classification Update, February 2014', available at: http://www.ons.gov.uk/ons/rel/na-classification/national-accounts-sector-classification/classification-update--february-2014/index.html

ONS (2014b). 'National Accounts Sector Classification, Classification Update, May 2014', available at: http://www.ons.gov.uk/ons/rel/na-classification/national-accounts-sector-classification/classification-update--may-2014/index.html

ONS (2015a). 'Impact of Blue Book 2015 Changes on Current Price Gross Domestic Product Estimates, 1997 to 2010', available at: http://www.ons.gov.uk/ons/rel/naa1-rd/national-accounts-articles/impact-on-gdp-current-price-annual-estimates-1997-2010/art-impact-on-gdp-current-price-annual-estimates-1997-2010.html

ONS (2015b). 'Methodological Improvements to National Accounts for Blue Book 2015: Vehicle Registration Tax, Treatment of Roads, and Spending on Repairs and Maintenance of Dwellings', available at: http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/national-accounts/changes-to-national-accounts/blue-book-and-pink-book-2015-changes/methodological-improvements-to-national-accounts-for-blue-book-2015.pdf