

# Assessment of compliance with the Code of Practice for Official Statistics

## Statistics on Road Freight

*(produced by the Department for Transport)*

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### **About the UK Statistics Authority**

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

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

The Statistics Authority has two main functions:

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

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# **Assessment of compliance with the Code of Practice for Official Statistics**

## **Statistics on Road Freight**

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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

## Introduction

- 1.1 This is one of a series of reports<sup>1</sup> prepared under the provisions of the *Statistics and Registration Service Act 2007*<sup>2</sup>. The Act gives the Statistics Authority power to re-assess whether the *Code of Practice for Official Statistics*<sup>3</sup> continues to be complied with in relation to official statistics already designated as National Statistics. The report covers the set of statistics reported in *Domestic Road Freight*<sup>4</sup> and *International Road Freight*<sup>5</sup> produced by the Department for Transport (DfT).
- 1.2 The previous assessment of these sets of statistics was reported in Assessment report 6<sup>6</sup>. This re-assessment has followed work to address data collection issues which led to the removal of the designation as National Statistics from these statistics in October 2014<sup>7</sup> (see annex 3).
- 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.

## Decision concerning designation as National Statistics

- 1.4 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 *Domestic Road Freight* and *International Road Freight* cannot be designated as National Statistics until the Authority has confirmed that appropriate actions have been taken by DfT to meet the Requirements listed in paragraph 1.10. DfT is expected to report its completed actions to the Authority by November 2016.
- 1.5 DfT has informed the Assessment team that it has started to implement the Requirements listed in paragraph 1.10. The Statistics Authority welcomes this.

## Summary of findings in relation to trustworthiness, quality and value

### Trustworthiness

- 1.6 The statistical team has demonstrated integrity and objectivity in the way that it has approached the production and release of the statistics. It has established secure ways of working that protect the business information that it receives. It has ensured that it can deliver the data required under European legislation. It

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<sup>1</sup> <https://www.statisticsauthority.gov.uk/publications-list/?keyword=&type=assessment-report>

<sup>2</sup> [http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga\\_20070018\\_en.pdf](http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga_20070018_en.pdf)

<sup>3</sup> <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/code-of-practice/>

<sup>4</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/480115/domestic-road-freight-statistics-2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480115/domestic-road-freight-statistics-2014.pdf)

<sup>5</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/479256/international-road-freight-statistics-2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/479256/international-road-freight-statistics-2014.pdf)

<sup>6</sup> <https://www.statisticsauthority.gov.uk/publication/road-freight-statistics/>

<sup>7</sup> <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/assessment/register-of-designations/>

has developed means of presenting the statistics that reflect the needs of users for clear and impartial narrative. It has acted responsibly in the way that it has engaged with industry and government representatives to find better ways of meeting their needs.

### Quality

- 1.7 DfT has implemented essential improvements to the data collection mechanisms that improve data quality by moving away from manual returns and transcription of hand-written entries to digital returns and integrated validation. It has also introduced more timely collection and processing of the surveys. DfT, however, does not provide sufficient explanation of quality, including the methods of imputation and grossing.

### Public Value

- 1.8 The value of the statistics is reduced in not being at the level of detail, or released with the frequency and speed, desired by the industry and academia to support their research and decision-making activities. The willingness of DfT's statisticians to engage with these users to find the ways of achieving this is very positive. The effectiveness of the team's engagement with trade bodies, and its efforts to meet Eurostat's needs, reflect its responsiveness to user needs. The team has supported the statistics by providing contextual information but the value of the statistical outputs can be enhanced by further improving their data presentation and publishing its statistics in a machine-readable format to encourage reuse.

### Detailed recommendations

- 1.9 The Assessment team identified some areas where it felt that DfT should improve the production and presentation of statistics on road freight. Those which are essential for DfT to address in order to strengthen its compliance with the *Code* and to enable re-designation as National Statistics are listed – as Requirements – in paragraph 1.10, 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 paragraph 1.11.

### Requirements for designation as National Statistics

- 1.10 This section includes those improvements that DfT is required to make in respect of its statistics on road freight in order to fully comply with the *Code of Practice for Official Statistics*, and to enable designation as National Statistics.

Finding	Requirement	
DfT could strengthen confidence and trust	1	Publish information that assures users about the quality of the road freight statistics that:

<p>in the road freight statistics by fully describing their strengths and limitations and explaining its assurance approach. DfT should:</p>		<ul style="list-style-type: none"> <li>a) covers all aspects of the ESS quality dimensions, including a description of the strengths and limitations of the statistics in relation to use;</li> <li>b) explains the methods of grossing and imputation of the survey data and identifies potential sources of bias;</li> <li>c) outlines the quality assurance procedures of the administrative data used in producing the road freight statistics;</li> <li>d) extends the Statement of Administrative Sources to include DVSA licensing road haulage operator data, as well as information about audit and assurance arrangements (para 3.9).</li> </ul> <p>As part of meeting this requirement, DfT should consider the Authority's Report <i>Quality Assurance of Administrative Data</i>.</p>
<p>DfT could increase the public value of the statistics by clarifying the relevance of key findings and improving chart presentation. DfT should:</p>	<p><b>2</b></p>	<p>Ensure the clear presentation of the road freight statistics to aid user interpretation:</p> <ul style="list-style-type: none"> <li>a) presenting a narrative that helps users draw meaningful conclusions from the analysis presented,</li> <li>b) improving the data presentation within <i>Domestic RF</i> and <i>International RF</i></li> </ul> <p>(para 3.11).</p> <p>In meeting this Requirement, we suggest that DfT consider the points detailed in annex 1.</p>
<p>DfT could enhance the quality and public value of these statistics by adopting the Government Statistical Service's standardised geographical practices in its accompanying data tables. DfT should:</p>	<p><b>3</b></p>	<p>Support the re-use of the road freight data and linkage with other data sources by reviewing the sub-regional geographies used and adopting GSS standard geography codes (para 3.12).</p> <p>As part of meeting this requirement, DfT should consider its presentation of geography breakdown in line with the <i>Presentation Guidance for Administrative Geographies</i>.</p>
<p>DfT could increase the public value of the road freight</p>	<p><b>4</b></p>	<p>Ensure that the road freight statistics are sufficiently accessible and comply with <i>Open Standards Principles</i> by publishing the road</p>

<p>statistics by publishing them in a machine-readable format. DfT should:</p>		<p>freight statistics in an open format that equates to at least a three-star level under the Five Star Scheme (para 3.13).</p>
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**Suggestions for extracting maximum value from the statistics**

1.11 This section includes a suggestion for improvement to DfT’s statistics on road freight, in the interest of the public good. This is not formally required for designation, but the Assessment team considers that its implementation will improve public confidence in the production, management and dissemination of official statistics.

We suggest that DfT:

<p>1</p>	<p>Publish a development plan for the road freight statistics; seek users’ views about the plans, and update users on progress made (para 3.3).</p>
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## 2 Subject of the assessment

### Introduction

- 2.1 Road freight statistics are an indicator of the performance of the road freight industry and of the wider economy. They are important for providing an understanding of freight transport trends; for example, they support a better understanding of the load on the road network, impact on emissions, and the effectiveness of the freight industry. The collection of statistics on road freight is governed by European Regulation (EU) No 70/2012<sup>8</sup> and is used to support EU competition policy and regulation of the European market. Statistics have been collected in this area since the 1950s, using powers under the *Statistics of Trade Act 1947*<sup>9</sup>.
- 2.2 The Authority first assessed DfT's road freight statistics in July 2009 and the statistics were confirmed as National Statistics in January 2010. In 2011, DfT changed its survey processing methodology. However, developing the new processes proved more challenging than expected, leading to a delay in the production and publication of the road freight statistical series. This also led to a significant issue in providing data to Eurostat under Regulation 70/2012. The statistical Head of Profession at DfT wrote to the Authority concerning these matters and in October 2014, the Director General for Regulation confirmed<sup>10</sup> that the National Statistics status should be suspended for these statistics until improvements were made and a re-assessment carried out.
- 2.3 Since that time, DfT engaged closely with Eurostat and prioritised meeting its European requirements. DfT has now published all delayed statistical reports and submitted the backlog of data to Eurostat. More recently, DfT contacted the Authority to explain that it has an obligation to Eurostat to provide data on a quarterly basis when its current data reporting is on an annual basis. In order to meet the Eurostat requirement and to remain Code compliant with respect to pre-release access, DfT started to produce quarterly data releases from May 2016.
- 2.4 The Authority welcomes the steps taken by DfT in responding to this issue and seeking advice on Code compliance matters. This re-assessment considers the statistics in their current form, following the resolution of the issues leading to the temporary suspension of National Statistics status.

### Use and user views

- 2.5 The Office for National Statistics (ONS) uses the data on road goods vehicles travelling to mainland Europe as a data source for the short-term indicator of economic growth in the Index of Services and the output approach to measuring gross domestic product (GDP(O)). GDP(O) is the measure of output or production in the economy and is one of the main indicators of economic growth. Use also occurs across various types of public and private bodies: local and central government, such as DfT, Department for Energy and Climate Change (now part of Department for Business, Energy and Industrial Strategy)

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<sup>8</sup> Regulation (EU) No 70/2012: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:032:0001:0018:EN:PDF>

<sup>9</sup> <http://www.legislation.gov.uk/ukpga/Geo6/10-11/39>

<sup>10</sup> <https://www.statisticsauthority.gov.uk/correspondence/road-freight-statistics/>

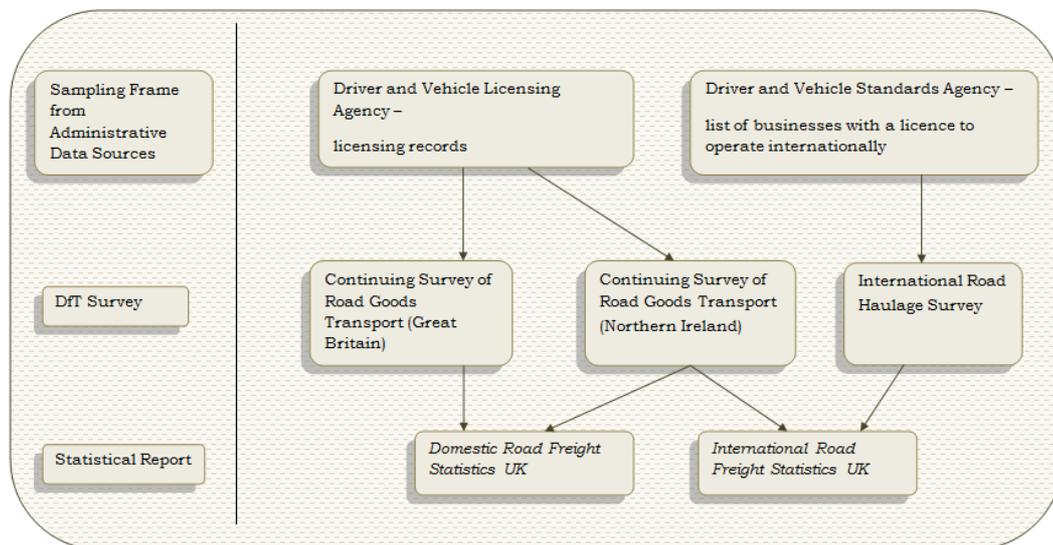
and the Highways Agency; local town and transport planning bodies; commercial organisations, such as haulage operators and transport consultants, and academics. Users are interested in information such as the length of haul, whether vehicles are running empty on return, the volume and pattern of freight from abroad on UK roads. The statistics also support policies on road safety and to reduce congestion and pollution.

- 2.6 We invited the views of road freight statistics users about the statistics. We received six written responses, conducted three interviews and met with one transport interest group (see Annex 2). Users were generally positive in their responses about the statistical reports and supporting information; however, many are interested in rapidly released, detailed, record-level data for modelling purposes, to inform business decisions, and for academic research.
- 2.7 Users expressed interest in a greater range of information than is currently available through the DfT road freight statistics. For example, users were interested in information about pick-up and drop-off points, content of loads (commodity), volume and weight, size of vehicles, type of vehicles (heavy good vehicles (HGVs) as well as light goods vehicles (such as vans), given their increased use in delivering online shopping); and type of roads (whether on strategic road network or local roads).
- 2.8 Users were positive about their engagement with DfT, from answering queries to arranging joint conferences to discuss improvements in data collection.

## **Data collection**

- 2.9 DfT runs three continuous road freight surveys:
  - the Continuing Survey of Road Goods Transport (Great Britain) (CSRGT GB)
  - the Continuing Survey of Road Goods Transport (Northern Ireland) (CSRGT NI)
  - the International Road Haulage Survey (IRHS)
- 2.10 Historically, paper forms were sent to HGV fleet operators asking them to record the activity that a specific vehicle had undertaken for a specific week within the UK (for the domestic surveys), or the international activity undertaken by any vehicle leaving the UK within a specified time period (for the international survey). The DfT team manually validated, coded and imputed the data during data entry. It was a relatively time-consuming process. Typically, a staff member could only process around four to six forms each day. DfT changed its data collection from paper to Excel forms, asking operators to complete them electronically and email them back. The change increased throughput and reduced data quality issues with the manual operation, related to unreadable handwriting on paper forms.
- 2.11 In 2011, DfT introduced an improved process including some automated validation, imputation and coding. It also introduced standard coding lists for hauliers. These changes resulted in significant issues upon implementation that impacted the reporting timescales and data submissions to Eurostat. However, the new process resulted in improved data entry speeds and data quality. The data collection arrangements are illustrated in Figure 1.

**Figure 1: Illustration of the data sources and responsible body**



Source: Assessment team

- 2.12 CSRGT GB collects information on the domestic activity of GB-registered heavy goods vehicles, using a sample drawn from licensing records held by the Driver and Vehicle Licensing Agency (DVLA). The driver or operator of each vehicle completes a log for each journey made over the course of a specific survey week. The sample size is around 3,000 vehicles per quarter. The survey uses stratified sampling for vehicle groups based on weight bands and different types of freight activity. The sample is allocated to the group based on the proportionate size of the vehicle population in each group. The sample sizes for each group are then divided over each region based on the proportionate size of the vehicle population in the region, to ensure adequate coverage for each area. CSRGT GB is the main source of road freight statistics used in *Domestic Road Freight*.
- 2.13 CSRGT NI collects information about the domestic and international activity of NI registered vehicles, including journeys made across the land border with the Republic of Ireland. As with CSRGT GB, DfT uses the DVLA vehicle licensing records as the sampling frame. The sample size is around 450 vehicles per quarter. DfT uses the CSRGT NI data to produce both *Domestic Road Freight* and *International Road Freight*. The survey covers both domestic and international journeys made by Northern Irish-registered vehicles. These are mostly trips made to and from the Republic of Ireland. However, the published statistics exclude the journeys solely between Northern Ireland and the land border with Ireland.
- 2.14 IRHS is a business-level survey. The survey collects information on journeys made by UK-registered vehicles travelling to mainland Europe via the Channel Tunnel or on roll-on roll-off ferries from ports in the North Sea, Dover Strait and English Channel. The sampling frame is a list of companies with a licence to

operate internationally, provided by the Driver and Vehicle Standards Agency (DVSA). The resulting sample size is generally around 3,000-4,000 vehicle trips per year, although was 2,796 round trips in the 2014 survey. DfT samples businesses on the basis of the number of international trips they expect to undertake in a year – they are asked to provide details of international trips completed over a specified time-period.

- 2.15 Results from the IRHS are grossed-up using data from the roll-on roll-off (Ro-Ro) enquiry<sup>11</sup>. This consists of monthly returns from Eurotunnel and quarterly returns from ferry operators, detailing the number of UK and foreign-registered powered vehicles and unaccompanied trailers carried on each route to mainland Europe. Since 1978, this survey has collected information on outward traffic only.

### **Costs**

- 2.16 DfT told us that the combined cost of producing and publishing the statistics for the financial year 2015-16 was around £110,000.

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<sup>11</sup> <https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics>

### 3 Assessment findings

#### User engagement and statistical planning

- 3.1 The road freight statistics team in DfT has developed good relationships with industry representatives such as the Road Haulage Association, Freight Transport Association, and the Independent Transport Commission (ITC). It held a joint workshop with the ITC to discuss quality issues and the future development of road freight statistics to better meet both industry and government needs. DfT statisticians, including the road freight team, regularly engage with the members of the Transport Statistics User Group<sup>12</sup>. The team also established contact with academics and commercial businesses, particularly those seeking to better model and map the movement of freight such as the Centre for Sustainable Road Freight at Heriot Watt University.
- 3.2 The team has also developed effective working relationships with users in government both in the UK and at Eurostat. It has met with the Committee on Climate Change Control<sup>13</sup> to discuss emissions from HGVs and the sharing of DfT's data for a research project. It has also worked with economist and policy officials in DfT, to explore the use of fuel-saving technologies for HGVs.
- 3.3 The statistics team has a business plan integrated within the directorate's plan that sets out the statistical goals and developments for road freight. It specifically refers to improving the method used to validate and impute the survey data, and investigating the move to web-based data capture. It highlights the work to develop improved data collection to support the evidence base for policy and to meet Eurostat needs. It also highlights building a user base and engaging with customers to ensure that the statistics meet user needs. The team told us of its longer-term goals to work closely with users to identify other data sources that would better meet their needs for detailed and real-time data on the movement of freight. In order to keep users apprised and involved in statistical development plans, we suggest that DfT publish a development plan for the road freight statistics; seek users' views about the plans, and update users on progress made.

#### Data collection and quality

- 3.4 DfT collects data on the transportation of road freight by surveying samples of haulage operators. In 2011, it changed the survey processing methodology to introduce greater automation. Problems during the development of the new processing methods led to delays in the production and publication of the road freight statistical series. As noted in section 2, the Authority temporarily removed the designation as National Statistics in October 2014 after a request by DfT's Head of Profession for Statistics. Since that time, DfT has successfully completed the implementation of the new data processing arrangements. It addressed the data supply issues in providing timely quarterly data to Eurostat by developing a quarterly release of road freight statistics (from May 2016).
- 3.5 DfT has published *Road Freight Statistics Notes and Definitions document (Notes and Definitions)*, supported by other notes related to specific method

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<sup>12</sup> <http://www.tsug.org.uk/>

<sup>13</sup> <https://www.theccc.org.uk/>

changes. These are clear and written in an accessible way. They outline the survey approach, describing the sampling frame, survey design, sampling error, responses rates and sample size. The reports also signpost the Excel data tables giving the detailed response rates.

- 3.6 The reports contain background notes which, in the main, signpost users to other relevant material, including *Notes and Definitions* and a note describing the method change associated with the new processing arrangements introduced for the 2011 data. The reports also provide links to supporting information for other data sources quoted, such as emissions statistics. However, the supporting material does not specifically set out the strengths and limitations in relation to use. While DfT's policy<sup>14</sup> on quality refers to the ESS quality dimensions<sup>15</sup>, the road freight supporting documentation does not.
- 3.7 DfT refers to a Quality Improvement Fund project in 2009 to review the grossing and method for calculating sampling errors for IRHS. It provides a link to its old webpage for the 2009 IRF statistics with access to the ONS Methodology Centre report<sup>16</sup>. While this webpage provides a background note that refers to addressing the report recommendations, there is no explanation of the changes made to procedures, such as the new grossing method. ONS included a number of recommendations for the improvement of sampling and grossing in its report but it is not clear whether (and how) DfT addressed these and whether the methods sufficiently overcome potential sources of bias.
- 3.8 DfT provides some information about the steps taken to ensure that the statistics are of suitable quality for use, in terms of the survey production and methods, but has released little specific information about the checks carried out or its assurance approach. It uses administrative data sources from DVLA licensing records and DVSA in the sampling frames for the surveys. It has published a Statement of Administrative Sources that includes DVLA's data but does not include any information about the validation or audit arrangements, or refer to DVSA's data. Also, DfT does not describe its use of DVSA's road haulage operator license data in *Notes and Definitions*.
- 3.9 DfT could strengthen confidence and trust in the road freight statistics by fully describing their strengths and limitations and explaining its assurance approach. As part of the designation as National Statistics, DfT should publish information that assures users about the quality of the road freight statistics that:
- a) covers all aspects of the ESS quality dimensions, including a description of the strengths and limitations of the statistics in relation to use;
  - b) explains the methods of grossing and imputation of the survey data and identifies potential sources of bias;

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<sup>14</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/10957/statement-on-quality.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/10957/statement-on-quality.pdf)

<sup>15</sup> The five dimensions of the ESS Quality Framework are: relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability, accessibility and clarity, <http://ec.europa.eu/eurostat/web/quality/implementation-in-the-ess>

<sup>16</sup>

<http://tna.europarchive.org/20110503185748/http://www.dft.gov.uk/pgr/statistics/datatablespublications/reight/goodsbyroad/roadfreightstatistics2009>

- c) outlines the quality assurance procedures of the administrative data used in producing the road freight statistics;
- d) extends the Statement of Administrative Sources to include DVSA licensing road haulage operator data, as well as information about audit and assurance arrangements<sup>17</sup> (Requirement 1).

As part of meeting this Requirement, DfT should consider the Authority's Report *Quality Assurance of Administrative Data*<sup>18</sup>.

### **Presentation and accessibility**

3.10 DfT presents the statistical reports in an accessible and engaging form – it has designed them specifically to provide a broad summary picture for all types of users. Overall, they are successful in achieving this goal, but there is scope for further improvement by making the relevance of the key findings clearer. The commentary could also more fully describe the main patterns; for example, the overall trends section on page 2 of *Domestic RF* does not refer to the economic recession, even though it clearly affects the trends shown in Chart 1. The description of the overall trend summarises the pattern between the start and end of the series but does not reflect the more complex pattern shown in the chart. DfT presents relevant charts, highlighting helpful findings; however, some of the chart designs are unclear (see Annex 1 for detailed examples):

- it is difficult to distinguish the goods lifted and the goods moved lines (even when printed in colour) in Chart 1 of *Domestic RF*
- Chart 1 of *International RF* gives two horizontal bar charts as mirror images for goods lifted to the UK and those from the UK, making it difficult to compare the two series
- a number of charts include two vertical (y) axes – but use scale labels that do not align with the gridlines used (see example chart below), making it difficult for the user to read

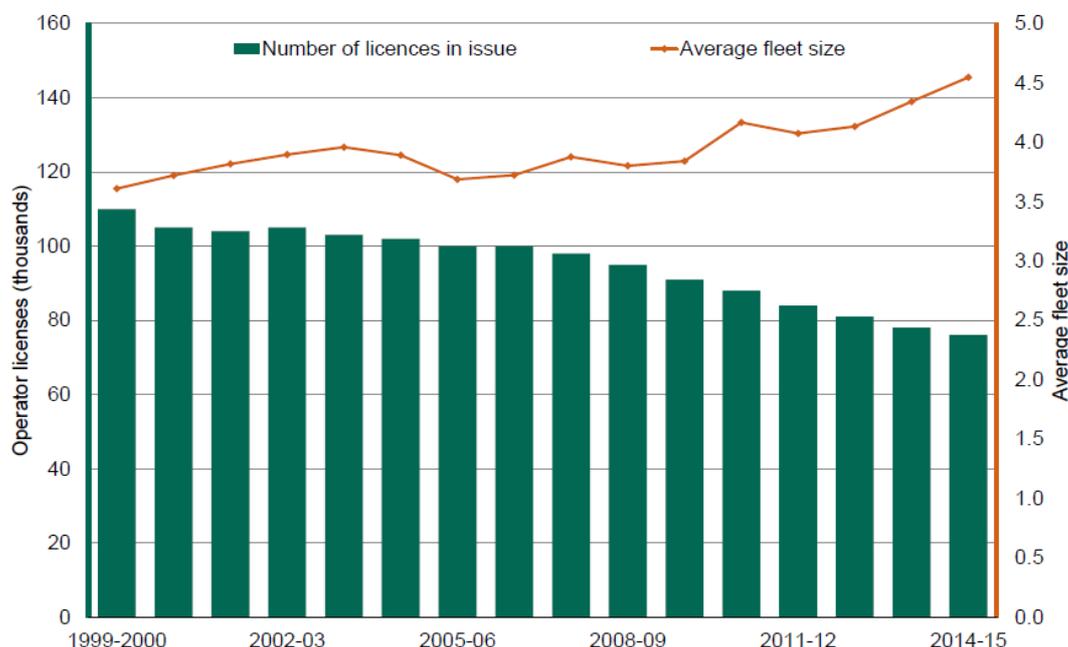
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<sup>17</sup> In relation to Principle 4, Practices 1 and 2, and Protocol 3, Practice 5 of the *Code of Practice*

<sup>18</sup> <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/monitoring/administrative-data-and-official-statistics/>

## An example of a chart with dual vertical axes:

Chart 4 Goods vehicle operator licences in issue and average fleet size, Great Britain, 1999-2000 to 2014-15



Source: DfT *Domestic Road Freight 2014*

3.11 DfT could increase the public value of the statistics by clarifying the relevance of key findings and improving chart presentation. As part of the designation as National Statistics, DfT should ensure the clear presentation of the road freight statistics to aid user interpretation by:

- a) presenting a narrative that helps users draw meaningful conclusions from the analysis presented;
- b) improving the data presentation within *Domestic RF* and *International RF*<sup>19</sup> (Requirement 2).

In meeting this Requirement, we suggest that DfT consider the points detailed in annex 1.

3.12 DfT releases detailed data tables alongside the reports. Two of these tables give breakdowns by country and region. Sub-regional figures are presented for former metropolitan counties, but it is not clear why these geographies are used. The presentation order does not follow the standard country and region order as shown in the *Presentation Guidance for Administrative Geographies*<sup>20</sup>. GSS standard geography codes have not been used for countries, regions or former metropolitan counties which may be a barrier to data sharing and reuse. DfT could enhance the quality and public value of these statistics by adopting the Government Statistical Service's standardised geographical practices in its accompanying data tables. As part of the designation as National Statistics, DfT should support the re-use of the road freight data and linkage with other

<sup>19</sup> In relation to Principle 8, Practice 2 of the *Code of Practice*

<sup>20</sup> <http://www.ons.gov.uk/ons/guide-method/geography/geographic-policy/best-practice-guidance/presentation-order-guidance/administrative-areas/presentation-guidance-for-administrative-areas.pdf>

data sources by reviewing the sub-regional geographies used and adopting GSS standard geography codes<sup>21</sup> (Requirement 3).

As part of meeting this requirement, DfT should consider its presentation of geography breakdown in line with the *Presentation Guidance for Administrative Geographies*.

- 3.13 Users can download the tables in a zip package or individually through a web page that gives an index<sup>22</sup>, listing the full table titles. It would be helpful if the zip packages included the table catalogue file as well, since the data table filenames give the table numbers only. The data are available for re-use through the Excel files but these are not machine-readable and the data are not available in open data format. The file format of the road freight statistics equates to a level of two stars under the Five Star Scheme that forms part of the Open Standards Principles proposed in the *Open Data White Paper: Unleashing the Potential*<sup>23</sup>. DfT could increase the public value of the road freight statistics by publishing them in a machine-readable format. As part of the designation as National Statistics, DfT should ensure that the road freight statistics are sufficiently accessible and comply with *Open Standards Principles* by publishing the road freight statistics in an open format that equates to at least a three-star level under the Five Star Scheme<sup>24</sup> (Requirement 4).

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<sup>21</sup> In relation to Principle 4, Practice 6 of the *Code of Practice*

<sup>22</sup> <https://www.gov.uk/government/statistical-data-sets/road-freight-statistical-tables-index>

<sup>23</sup> [http://data.gov.uk/sites/default/files/Open\\_data\\_White\\_Paper.pdf](http://data.gov.uk/sites/default/files/Open_data_White_Paper.pdf)

<sup>24</sup> In relation to Principle 8, Practice 6 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*<sup>25</sup>. 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 road freight statistical reports, this annex comments on compliance with the statement on standards. The comments included in this annex are based on a review of *Domestic Road Freight Statistics UK 2014*<sup>26</sup> and *International Road Freight Statistics UK 2014*<sup>27</sup>.
- A1.2 In implementing any Requirements of this report (at paragraph 1.10) 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 The reports have a design that seeks to provide the essential narrative in an accessible style using short descriptions alongside charts, together with definitions and percentage change summary boxes. Both reports present brief summaries of key topics accompanied by generally appropriate charts. However, the narrative in the overview of *Domestic RF* is somewhat cursory – the overall trends section on page 2 does not refer to the economic recession even though it clearly affects the trends shown in Chart 1. The description of the overall trend summarises the pattern between the start and end of the series but does not reflect the more complex pattern shown in the chart. However, it does emphasise the unusual finding that HGVs lifted more goods in 2014 while travelling shorter distances – it is less clear what is behind that pattern. The report goes on to look at different aspects of the road freight context that should provide some insight – the report does not draw out an overall conclusion about the pattern though.
- A1.4 *Domestic RF* refers to transportation across the UK but the survey covers the GB-registered vehicles transporting goods in the UK; it is unclear whether this means vehicles travel in Northern Ireland as well, and scales of impact of excluding Northern Irish vehicles.

### **Include information about the context and likely uses of the statistics**

- A1.5 *Domestic RF* includes helpful contextual analysis, including an economic activity analysis (although this does not mention the recession) – on page 3. It also presents statistics from other sources including an analysis of employment (LFS) and unemployment (Claimant Count) of HGV drivers, and road freight enterprises from Annual Business Survey, fleet size and operator licences, driver working times, and an analysis of types of goods transported.

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<sup>25</sup> <http://www.statisticsauthority.gov.uk/news/standards-for-statistical-reports.html>

<sup>26</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/480115/domestic-road-freight-statistics-2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480115/domestic-road-freight-statistics-2014.pdf)

<sup>27</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/479256/international-road-freight-statistics-2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/479256/international-road-freight-statistics-2014.pdf)

- A1.6 *International RF* also presents helpful summary descriptions of key topics, supported by useful charts and clear definitions in text boxes and infographics. It gives statistical patterns over time, such as, freight from UK to mainland Europe, as well as the number of licences and average fleet size. It also breaks down the latest figures by country of origin/destination and types of commodities. The section on the freight carried by foreign carriers within the UK and by UK carriers abroad was helpful but could have mentioned the impact of the French industrial action in 2014 as a potential driver of the sharp fall in year.
- A1.7 Neither of the reports, nor *Notes and Definitions*, provides a description of the use made of the statistics by either the Department or other users.

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

- A1.8 Both reports include background note sections which provide links to other relevant material, such as source documents, method notes on compiling the statistics and other similar statistics. *International RF* refers users to *Notes and Definitions* for information about strengths and limitations, but there is no section on this in the document.
- A1.9 The supporting information provides helpful details about the surveys including sample size, response rate, sampling frame and design. There is some information about potential limitations, such as handling of seasonal effects through the spread of surveying over the year and describes using stratified sampling with random samples within various vehicle groups.
- A1.10 The method note for the questionnaire change for the three surveys in 2011 is signposted (and a link provided) in the reports. This note sets out the impact of the processing change compared with data in 2010 and in 2012. It would have been helpful to include a summary of the conclusion in the reports or *Notes and Definitions*. The method note warns on page 5 about making comparisons over time and states that method changes are highlighted in output tables by break lines and footnotes; however, DfT has not done this in the charts in either *International RF* or *Domestic RF*.

### **Be professionally sound**

- A1.11 Overall, DfT makes appropriate statements about the statistics. Useful charts are provided however, the presentation of some charts could be improved. For example, it is difficult to distinguish the goods lifted and the goods moved lines (even when printed in colour) in Chart 1 of *Domestic RF*. A number of charts include two vertical scales – DfT has chosen to set the gridlines according the primary (left hand) axis, and to use labels on the right hand axis that do not align with the gridlines (eg Charts 3 and 4 of *Domestic RF*). Some of the title labels are cut off (eg Chart 5 *Domestic RF*).
- A1.12 Chart 7 in *Domestic RF* is an infographic, and includes two charts but without axes. The scales do not look consistent with each other or with Chart 8 which presents an area under the curve line chart with a break down by type of vehicle. Chart 8 could make clearer that the two charts are using different scales – currently they give a visual impression that the amount of goods moved is equivalent for rigid vs articulated vehicles.

A1.13 The category breakdowns for articulated vehicles (with groups of up to 33 tonnes and over 33 tonnes) present little useful distinction. *Notes and Definitions* states (page 8) that the categorisation is based on an old classification and has continued to be applied to enable comparability with earlier years. It is over 10 years since the classification change; it would seem more helpful to now apply the 'new' classification. It is unclear whether a more informative breakdown is available.

A1.14 Chart 1 of *International RF* gives two horizontal bar charts as mirror images for goods lifted to the UK, comparing with those from the UK – since the purpose of the chart is to compare the two series a line chart would be a more effective presentation. It is difficult to compare the patterns in the current form. Chart 6 of *International RF* presents an international comparison, focusing on two years, 2004 and 2014. It is a helpful comparison but it is unclear how typical these two selected years are of the overall trends.

**Include, or link to, appropriate metadata**

A1.15 The road freight web page on gov.uk includes links to data tables, held in a zip file as well as downloadable in Excel format. The design of the files is for print rather than in machine readable format. No CSVs appear to be available, and the tables are not in open data format. The zip file contains folders for the tables accompanying the two statistical reports. These both contain multiple Excel files using table title numbers, but with no description – it is unclear what each table contains. Users have to go to the website to the table index page to find out the content or open individual tables. It would help to include a list of tables and descriptions.

## **Annex 2: Summary of assessment process**

A2.1 This assessment was conducted from July 2015 to July 2016.

A2.2 The Assessment team – Penny Babb and Marie McGhee – agreed the scope of and timetable for this assessment with representatives of DfT in July 2015. The documentary evidence was provided on 10 December. The Assessment team subsequently met DfT during February 2016 to review compliance with the *Code of Practice*, taking account of the written evidence provided and other relevant sources of evidence.

### **Summary of users contacted**

A2.3 Part of the assessment process involves our consideration of the views of users. We approach some known and potential users of the set of statistics, and we invite comments via an open note on the Authority’s website. This process is not a statistical survey, but it enables us to gain some insights about the extent to which the statistics meet users’ needs and the extent to which users feel that the producers of those statistics engage with them. We are aware that responses from users may not be representative of wider views, and we take account of this in the way that we prepare Assessment reports.

A2.4 The Assessment team received 10 responses from the user consultation and are summarised in section 2 (see paragraphs 2.5 – 2.8). The respondents were grouped as follows:

Central government/devolved administrations	2
International	1
Regulator	2
Commercial	2
Academic	1
Voluntary sector	1
Member of the public	1

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

Documentary evidence

## Annex 3: Summary of Requirements from Assessment Report 6

A3.1 The road freight statistics in this assessment, published in *Domestic Road Freight and International Road Freight*, were assessed in Assessment report 6, published in July 2009<sup>28</sup>. The designation as National Statistics was removed in October 2014 after DfT informed the Authority of its concerns about data quality due to collection issues. DfT undertook improvement work to address the concerns. These statistics have been re-assessed following the completion of these activities.

A3.2 Assessment report 6 identified the following Requirements in relation to the statistics being re-assessed here:

- |                      |   |
|----------------------|---|
| <b>Requirement 1</b> | Publish a plan for engaging with users, and document their needs.   |
| <b>Requirement 2</b> | Provide more information in each publication about data quality, commenting on possible sources of bias and on inconsistencies with other data sources.               |
| <b>Requirement 3</b> | Include factual information about the policy or operational context in the annual volume of Road Freight Statistics.  |
| <b>Requirement 4</b> | Undertake to deposit data from the IRHS and foreign vehicles surveys with the relevant national archive, accompanied by appropriate metadata to facilitate their use. |
| <b>Requirement 5</b> | Publish a Statement of Administrative Sources.  |

A3.3 The Statistics Authority confirmed the National Statistics designation of these statistics in a letter to DfT on 26 January 2010<sup>29</sup>.

A3.4 One Requirement within this report relates to aspects of *Code* compliance that resulted in Requirements in Assessment report 6. This is:

### Requirement 1

- outline assurance of administrative data used in producing the road freight statistics;
- describe the quality of the statistics in relation to the ESS quality dimensions, including describing the strengths and limitations of the statistics in relation to use;
- explain the methods of grossing and imputation of the survey data and identify potential sources of bias;
- extend the Statement of Administrative Sources to include DVSA licensing data, as well as information about audit and assurance arrangements (Requirement 1) (para 3.9).

<sup>28</sup> <https://www.statisticsauthority.gov.uk/publication/road-freight-statistics/>

<sup>29</sup> <https://www.statisticsauthority.gov.uk/publication/road-freight-statistics-letter-of-confirmation-as-national-statistics/>

