2015

# DRIVER AND VEHICLE STATISTICS IN NORTHERN IRELAND – Administrative Data Quality Assessment Report

**This initial report highlights and seeks users views on the key outcomes of an in depth data quality assessment of administrative systems from which DOE/DVA Official Statistics (OS) are sourced and produced. Assessment outcomes are detailed in terms of key strengths and weaknesses, and potential sources of error and bias relating to these statistical series.**


Analytical Services Branch
Driver & Vehicle Agency
[Last updated September 2015]

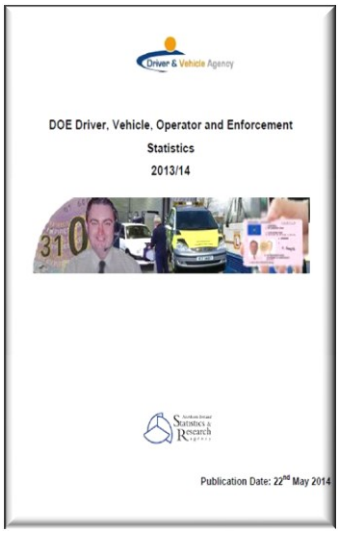
# Assessment of Driver and Vehicle Statistical Series (NI)
# Contents

**Dear User of Driver and Vehicle Statistics in Northern Ireland,**

**Your views are being sought on our quality assessment report of administrative sources from which driver and vehicle statistics in Northern Ireland are produced. Our assessment of administrative sources first published in March 2015, is based on quality standards published by the UK Statistics Authority. The statistical producer team are continuing to ask for your views on our updated assessment, in terms of process, outcomes and presentation. The two National Statistics publications to which this assessment report relates are detailed below, with links to the DOE website.**

Quarterly Statistical Publication


Annual Statistical Publication

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## Background

This updated assessment report highlights and continues to seek user's views on the key outcomes of our data quality assessment of administrative systems from which DOE/DVA National Statistics (NS) are sourced and produced. Assessment outcomes are detailed in terms of key strengths and weaknesses, and potential sources of error and bias.

## UK Statistics Authority (UKSA): Assessment of Administrative Sources

This assessment was carried out, and details our findings, to help users of our statistics better understand the range of administrative sources and processes from which our statistics are sourced and produced. As our statistics are classified as National Statistics, the assessment was carried out in line with the 'UKSA Regulatory Standard for the Quality Assurance of Administrative Data', as published on 29th January 2015 (see below).

UK Statistics Authority

Statement

# Statement

29 January 2015

**Quality Assurance of Administrative Data**

The UK Statistics Authority has today published a Regulatory Standard for the Quality Assurance of Administrative Data.[1]

The Authority produced this Standard in response to concerns about the quality of administrative data that emerged during its assessments of statistics on police recorded crime.[2] The Standard recognises the increasing role that administrative data are playing in the production of official statistics and clarifies the Authority's expectations for what producers of official statistics should do to assure themselves of the quality of these data.

The Standard encourages risk-based judgement and supports a proportionate approach, recognising that not all administrative data sources are high risk. As a result, the Standard is pragmatic, and the toolkit that supports it provides helpful guidance to statistical producers about the practices they can adopt to assure the quality of the data they receive.

Ed Humpherson, the Statistics Authority's' Director General for Regulation, today said:

"The Standard encourages statisticians not to take data at face value, but to be willing to question the data they receive and to convey this scepticism to the users of their statistics. We are grateful for the advice and input we have received from Government statisticians and others in the development of this standard and are confident that statisticians will be capable of implementing the Standard's principles; indeed, many already are."

To quote directly from the standard, " The Authority produced this Standard in response to concerns about the quality of administrative data that emerged during its assessments of statistics on police recorded crime. The Standard recognises the increasing role that administrative data are playing in the production of official statistics and clarifies the Authority's expectations for what producers of official statistics should do to assure themselves of the quality of these data."

## Quality Assurance of administrative data

As explained within the UKSA standard, "Quality assurance of administrative data is more than simply checking that the figures add up. It is an ongoing, iterative process to assess the data's fitness to serve their purpose. It covers the entire statistical production process and involves monitoring data quality over time and reporting on variations in that quality. Post-collection quality assurance methods, such as data validation, are an important part of the quality assurance process, but can be of limited value if the underlying data are of poor quality. The Authority encourages the application of critical judgment of the underlying data from administrative systems before the data are extracted for supply into the statistical production process. As with survey data, producers need to: investigate the administrative data to identify errors, uncertainty and potential bias in the data; make efforts to understand why these errors occur and to manage or, if possible, eliminate them; and communicate to users how these could affect the statistics and their use."

## The Driver and Vehicle Agency (Northern Ireland)

The Driver and Vehicle Agency (DVA) was established under the Review of Public Administration on 1 April 2007 by the merger of Driver and Vehicle Licensing NI (DVLNI) and the Driver & Vehicle Testing Agency (DVTA). The DVA is an Executive Agency of the Department of the Environment and contributes to the Department's key objective:

*"To deliver improved road safety and better regulation of the transport sector"*

The DVA are supported by an in-house team of three full-time statisticians out posted from the Northern Ireland and Statistics Research Agency (NISRA). The in-house statistical team are responsible for producing quarterly and annual National Statistics for both the DOE and the DVA, in accordance with code of practice for Official Statistics.

## DVA Administrative Systems and Assessment

Almost all of the statistics detailed within DOE quarterly and annual NS reporting are derived from in-house DVA administrative systems. These systems and the business areas to which they relate are detailed below in summary:

- Enforcement:- Enforcement databases (Live Enforcement)
- Driver and Vehicle Testing:- Booking Services Project (BSP)
- Driver Licensing:- Northern Ireland Driver Licensing System (NIDLS)
- Driver Theory Testing:- Pearson
- Transport Licensing (Operator, Driver, Vehicle and Goods)
    - Passenger Transport Licensing for:-
        - Buses (Operator Licensing Bus System - OLBS):
        - Taxis (Taxi Licensing System - TLIS):
    - Road Transport Licensing for
        - Heavy Good Vehicles (Operator Licensing Business System- OLBS):
- Vehicle Licensing and Registration (Vehicle Systems Software - VSS)

Road Transport Licensing is the responsibility of the Transport Regulation Unit within the DOE, and the DVLA in Swansea are responsible for Vehicle Licensing and Registration for the whole of the UK, including Northern Ireland.

Our assessment of in-house DVA administrative systems was carried out using the Quality Assurance Toolkit as detailed within the UKSA standard. The matrix approach to assessment advised by the UKSA has two components; namely, separate assessments of public interest in our statistics (low, medium, high) and data quality concern about our statistics (low, medium, high). The outcome of our assessment then determines the types and level of assurance and documentation required to keep our users informed about the quality assurance arrangements in place for the administrative systems from which our statistics are sourced.

As explained within the standard (page 4), "The need for investigation and documentation increases at each level of assurance 'Basic' (A1) to 'Enhanced' (A2) to 'Comprehensive' (A3)." There is also a 'No assurance' A0 level to indicate that, "Operational context and administrative data collection by supplier not investigated, managed or documented". Assessment at this level means that statistics are not being produced in accordance with the code of practice for official statistics.

The outcomes of our completed assessments for those of our statistical series sourced from in-house DVA administrative systems are detailed in the sections that follow. Following assessments of each statistical series using the QA Toolkit, the level of assurance required for these series was assessed either as 'Basic' (A1) or 'Enhanced' (A2). From the UKSA standard, summaries of each of the three possible assessment levels are detailed below:

- A1: Basic assurance Statistical producer has reviewed and published a summary of the administrative data QA arrangements
- A2: Enhanced assurance Statistical producer has evaluated the administrative data QA arrangements and published a fuller description of the assurance
- A3: Comprehensive assurance Statistical producer has investigated the administrative data QA arrangements, identified the results of independent audit, and published detailed documentation about the assurance and audit

These three levels of assurance are applied across a range of four areas relating to administrative data provided for producing DOE official statistics as outlined below:

- Operational context & administrative data collection
- Communication with data supply partners
- QA principles, standards and checks applied by data suppliers
- Producer's QA investigations & documentation

Within each of the sections that follow, presented in summary form is our assessed level of assurance for each of our statistical series, and the information available as supporting evidence in respect of the four areas above. To help gather additional supporting information not already available to the statistics producer team, data providers were asked to complete an ad-hoc questionnaire (designed by the producer team), with supporting documentation if available, relating to the processes and quality assurance procedures in place with respect to in-house administrative systems (REX,NIDLS, BSP etc). When these questionnaires were returned, the statistics producer team then arranged meetings with providers to review and collate supporting information to the level of detail consistent with our assessment outcomes (A1 or A2) for these administrative systems. The questionnaire in template form is detailed in Appendix 1 at the end of this report. Based on the information obtained through these questionnaires and from follow-up meetings with data providers, summary details relating to the data quality processes

employed and the key strengths and limitations of each statistical series are also detailed for each statistical series.

## Review and Updates

As part of our ongoing commitment to maintain user's and public confidence in our statistics, the administrative systems from which we source our data will be reviewed annually, or as required in line with planned changes to administrative systems. Reviews will be through formal consultation with data providers regarding changes/amendments to administrative systems which might then impact on our assessment of data quality concerns and changing public interest in our statistics. Should a revised assessment result in an increased or a decreased level of assurance, we will then update our assessment report for relevant statistical series. Users will be notified of revisions/updates to this report at the earliest opportunity, probably at the same time as publication of the next release of our quarterly or year-end statistical report.

## Administrative Data Quality Indicators

Based on our experience of producing this assessment report and taking due account of constructive suggestions for improvements made by UKSA colleagues arising from their review of an early draft of this report, going forward the National Statistics producer team will, where data are available, try to develop and publish administrative data quality indicators. These indicators will help to highlight for users where and how data quality issues impact on official statistics.

## ***Enforcement Statistics***

Enforcement is part of DVA Compliance and Enforcement Directorate, and refers to the enforcement of legislation pertaining to roadworthiness standards and transport licensing requirements at the roadside. Enforcement Section carries out the majority of its work in respect of goods vehicle (HGV), taxi and bus industries.

Enforcement officers have the legal power to stop vehicles (hgv, buses and taxis) at the roadside and inspect them for both roadworthiness defects (faulty lights, for example) and traffic offences (falsifying tachograph records, for example). Officers can also visit transport operators' premises (bus and taxi depots, for example) to inspect vehicles and documentation.

DVA Enforcement's strategic aim is to improve compliance levels within the road transport industries through education, improved information and guidance, closer working relationships with the industry and investment in staffing and equipment resource. The administrative systems used by the DVA to manage, record and monitor enforcement activity is referred to as 'Enforcement Live'.

Table 1 below details the outcome of our assessment of enforcement statistical series using the matrix assessment toolkit as explained in the previous section (pages 4 and 5), in terms of data quality concern and public interest. Enforcement statistical series were assessed as Medium both for data quality concern and public interest, indicating that an enhanced level of assurance is appropriate, which is A2 on our matrix classification.

### Table 1: Assessment of Enforcement Statistics

| Statistical Series | Administrative Source | Data quality concern | Public interest | Matrix Classification |
|---|---|---|---|---|
| Enforcement Checks Carried Out | Live Enforcement database | Medium | Medium | A2 |
| Enforcement Prosecutions and Penalties | NI Court Service / DVA Enforcement | Medium | Medium | A2 |
| Enforcement Operations | Live Enforcement database | Medium | Medium | A2 |
| Spot Checks on School Buses - Vehicles Inspected | Live Enforcement database | Medium | Medium | A2 |
| Spot Checks on School Buses - Offences/Issues Identified | Live Enforcement database ) | Medium | Medium | A2 |

### Operational Context and Administrative Data Collection

Enforcement data are collected by DVA management to monitor workloads, deploy resources and evaluate the effectiveness of enforcement operations and strategy. They also help monitor corporate targets to reduce the overall level of non-compliance in the road transport industry (hgv, buses and taxis) in respect of roadworthiness and transport licensing. Enforcement data may also be presented as evidence if enforcement notifications are challenged during court proceedings. If enforcement action is required following for example, roadside or onsite depot enforcement checks, this involves the completion of relevant notifications/forms (fixed penalty notices/prosecution/prohibition notices) the details of which are then transferred manually to

in-house dva live enforcement database , from which enforcement statistics are then sourced/derived.

The DVA do not have a detailed process map outlining the collection of enforcement data from roadside to live enforcement database, but enforcement data providers have indicated to the statistical producer team that they see the value in this, for example as part of induction or in-house training, and will consider developing process maps in the future. When data process maps become available they will be published as part of our quality assurance documentation for enforcement statistical series.

## Communications with Data Supply Partners

The Statistical producer team are in a unique position in that they are located in close proximity to the DVA operational teams that supply enforcement data, which helps facilitate frequent informal and formal contact to discuss/review statistical methodology (random roadside checks, for example) and data quality issues. Any significant issues the statistics producer team may wish to raise regarding data quality/methodology are addressed at regular meetings with DVA Enforcement Operational Support. Tailored guidance has also been produced to ensure that data providers are aware of their responsibilities under the Code of Practice for Official Statistics and particularly with regard to pre-release practices.

## Quality Assurance Principles, Standards and Checks by Data Supplier

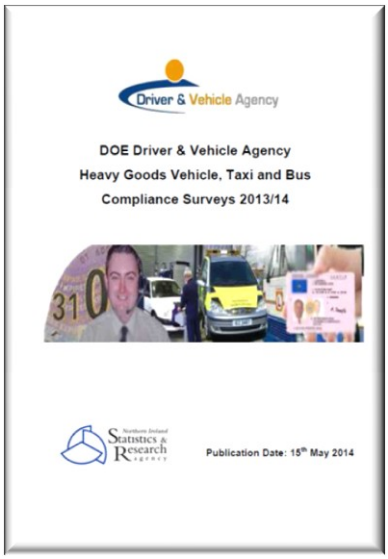
Enforcement Live has an information assurance accreditation certificate for security requirements. Enforcement forms and notices are scanned to electronic files, and as legal documents/evidence they are kept securely in accordance with in-house security policy and procedures. All data presented as enforcement statistics have a detailed paper trail back to the originating enforcement operation (and officer) through to the roadside database.

All enforcement forms/notifications are subject to supervisory checks by line management and these checks are evidenced (signed/dated) on statistical header sheets, confirming that statistical information from all staff have been collected and reviewed. Statistical records are then forwarded to the Operational Support Team who input these onto the live enforcement database, and the officer who inputs these evidences their involvement by signing/dating the statistical sheet. There is scope for manual error during these processes, but to date there has been no record kept at the level of initial error, or the frequency of revisions, at the data input stage.

Enforcement data collected during operational activity has a number of validation checks to ensure information is captured in consistent formats, in that some fields are mandatory and optional fields have values/categories within specific given ranges. A record is also maintained of the statistical information received and again this is evidenced by the officer inputting the data to the Enforcement Database. Line management within the Operational Support Team undertake supervisory checks to confirm accurate/complete input, these checks are evidenced

(signed/dated), checks are normally carried out on 100% of the paperwork received from the enforcement officers, and this is reinforced with a check on any statistics where a prohibition or fixed penalty has been issued. In addition the number of fixed penalty notices issued is reconciled with the Police Service of Northern Ireland (PSNI) records on a monthly basis. Records are kept of any inconsistencies with PSNI records and investigated. In terms of enforcement classifications, DVA use a range of Categorisation of Defects Manual to define their operational parameters at the roadside and to ensure uniformity for the enforcement of regulations by DVA officials. These manuals are available on the DOE website as detailed below[1].

Compliance Surveys




The Driver and Vehicle Agency (DVA) are responsible for the regulation of Heavy Goods, Taxi and Bus operators/drivers in Northern Ireland (NI). In this role the DVA is tasked with ensuring that all vehicles and operators comply with industry legal requirements. As well as targeted operations, the DVA has in the past carried out large scale goods and taxi biennial fleet compliance surveys. The aim of these was to establish a baseline of non-compliance within each industry, and to provide evidence for future enforcement activity. In 2012/13 the Agency instigated a system of quarterly random surveys to be measured over a two year period to establish compliance levels within the three transport industries. These quarterly random based surveys and subsequent analysis provided a rolling twelve month dataset to monitor compliance on an ongoing basis across each industry. The compliance surveys (results first published in our year end report[2] ) are subjected to the same rigour with regard to the clerical recording and checking of data entered onto the actual survey forms and subsequently input to the live enforcement database. However, additional checks are carried out by operational support managers to ensure the statistics provided match agreed survey criteria outlined by DVA in-house statisticians pertaining to times and locations of checks to ensure data integrity. We have no direct evidence to date that enforcement officers are not adhering to agreed vehicle selection methodology. Published results are completely consistent with the random selection of vehicles to check, in accordance with methodology outlined by the producer statistical team for DVA enforcement officers to apply during random survey operations.

[1] *http://www.doeni.gov.uk/index/road_users/corporate-driver-and-vehicle-agency/dva-services-and-publications.htm*

[2] *http://www.doeni.gov.uk/doe_driver_vehicle_operator_and_enforcement_statistics_2013-14_-_report.pdf*

## Producers Quality Assurance Investigations and Documentation

Trend analysis is carried out on each enforcement statistical series. There is no set measure of tolerance in terms of quarterly/annual percentage change which triggers a query back to the DVA provider, but back series comparisons help the statistical producer team to judge if particular data is out of kilter with historical trend. In terms of compliance random surveys statistics, to ensure DVA adhere to the agreed methodology, ASB statisticians have previously accompanied DVA on roadside operations to review and ensure vehicles are stopped at random in terms of location and sequence. Results from the surveys to date have not indicated any evidence of systematic bias in terms of vehicle selection.

Where possible, ASB statisticians also use external sources of data/surveys to validate their finalised statistics. However, there is very limited scope for this in respect of DVA enforcement statistics as DVA are the only body carrying out this function within the jurisdiction and there can be legislative differences between jurisdictions which mean comparisons are not like-for-like. Below are detailed in summary form, key strengths and weakness relating to our enforcement statistical series sourced from in-house DVA administrative systems.

*Strengths*

- Enforcement statistics sourced derived from DVA administrative system are underpinned by well established quality assurance procedures as outlined above.
- Full coverage of enforcement activity for non-survey sources e.g. hgv, buses and taxis.
- Full geographic coverage regionally over the year
- Standard classification systems used by all enforcement officers during onsite operations, reducing the scope for misclassification of roadworthiness and/or licensing violations.
- DVA data providers and statistical producer team work in close proximity aiding understanding of the process and facilitating resolution of issues impacting on data quality assurance.
- Data can often be used as part of legal process which helps ensure accurate recording and checking, for example, against PSNI records.

*Weaknesses*

- The relatively small sample size of the compliance surveys limits their ability to provide further breakdowns and to detect small changes in compliance year-on-year. Estimates of the sampling error are provided in the survey report.
- It is possible that DVA business targets to reduce non-compliance and improve road safety could impact on the choice of vehicles which enforcement officers 'target' for inspection. However, any potential incentive which may exist to ignore "suspect" vehicles in order to improve non-compliance performance would likely be counteracted by an enforcement officer's natural tendency to want to target those vehicles which are most likely to have defects. Officers are provided with a strict statistical sampling protocol to follow and statisticians have examined practices on the ground. Whilst no evidence of any systematic bias, either way, has been detected in the sample selection process to date, it still poses a small risk and requires ongoing monitoring.

## ***Vehicle and Driver Testing Statistics***

**Vehicle testing** includes the periodic inspection (usually once per year) of cars, lorries, buses, taxis, motorcycles to ensure compliance with statutory roadworthiness standards, and individual vehicle approval tests for one-off builds and imports. The vehicle testing function is carried out by DVA employed vehicle examiners across 15 vehicle test centres in Northern Ireland. Maintenance of the vehicle testing equipment, including the provision of calibration, is currently provided by MAHA Ireland Ltd, under a service delivery contract signed in May 2013.

The IT infrastructure to support the delivery of testing is maintained as a managed service within the Booking Services (BSP) Contract, with effect from May 2013 with Capita Managed IT Solutions. Other support service contracts incorporating cleaning and door maintenance.

DVA provides a wide range of **driving test** categories for testing learner drivers and motorcyclists to ensure that they meet the required standard of competence necessary to drive safely on public roads. Practical tests are carried out at 17 test centres, although not every centre carries out the full range of tests. In addition, the Agency supervises the theory test, which has been outsourced to a private company, Pearson. Service delivery by Pearson commenced on the 4th September 2004, with the contract due to run until 3rd September 2016.

Table 2 below details the outcome of our assessment of driver and vehicle testing statistical series using the matrix assessment toolkit as explained in the previous section (pages 4 and 5), in terms of data quality concern and public interest. All statistical series were assessed as Low for data quality concern and Low (A1) for public interest in respect of applications and tests conducted, but Medium for driver/vehicle test pass rates, given the higher level of public interest in testing outcomes. This would suggest an enhanced level (A2) of assurance is appropriate for these particular data series.

## Table 2: Assessment of Vehicle and Driver Testing Statistics

### Driver Testing

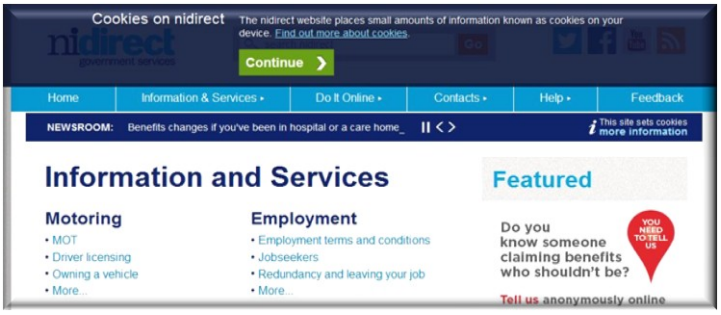
| Statistical Series | Administrative Source | Data quality concern | Public interest | Matrix Classification |
|---|---|---|---|---|
| Applications Received | BSP | Low | Low | A1 |
| Driving Tests Conducted by Test Category | BSP | Low | Low | A1 |
| Driving Tests Failure To Attend (FTA) by Test Category | BSP | Low | Low | A1 |
| Driving Test Pass Rates by Test Category | BSP | Low | Medium | A2 |
| Driver Test Pass Rates by Test Centre | BSP | Low | Medium | A2 |
| Car 'L' driving tests, Gender and NI/GB comparison | BSP/GB | Low | Medium | A2 |
| Motorcycle 'L' driving tests, Gender and NI/GB comparison | BSP/GB | Low | Medium | A2 |
| Large goods vehicle driving tests, Gender and NI/GB comparison | BSP/GB | Low | Medium | A2 |
| Passenger carrying vehicle driving tests, Gender and NI/GB comparison | BSP/GB | Low | Medium | A2 |

Vehicle Testing

| Statistical Series | Administrative Source | Data quality concern | Public interest | Matrix Classification |
|---|---|---|---|---|
| | | | | |
| Applications Received | BSP | Low | Low | A1 |
| | | | | |
| Tests Conducted - Full Tests | BSP | Low | Low | A1 |
| | | | | |
| Tests Conducted - Re-Tests | BSP | Low | Low | A1 |
| | | | | |
| Tests Conducted - Total | BSP | Low | Low | A1 |
| | | | | |
| Pass Rates - Full Tests | BSP | Low | Medium | A2 |
| | | | | |
| Pass Rates - Re-Tests | BSP | Low | Medium | A2 |
| | | | | |
| Pass Rates by Test Centre | BSP | Low | Medium | A2 |

## *Operational Context and Administrative Data Collection*

All vehicle and driver testing is booked through the DVA's internal booking system referred to internally as the Booking Services Project (BSP). This is a real time administrative database used to allocate the physical equipment, facilities and human resources required to provide vehicle and driver testing to DVA customers. BSP is managed and maintained under contract by an external vendor. Vehicle and Driver testing can be booked online, by phone or in person at local DVA testing offices. Whichever method is chosen, all data are entered onto the BSP in a standard way either by the customer directly (online option) or by DVA staff (telephone or in-person bookings). Details of vehicle and driver testing options are detailed on NI Direct website at:




DVA have a range of service delivery targets which are monitored using BSP. This includes for example a turnaround time of up to 21 days from when a test is booked to when it is carried out. The DVA do not have a detailed process map outlining the collection of vehicle and driver testing data, but statisticians have indicated to the producer team that they see the value in this and will consider developing one in the future. When available this will be added to this quality assessment report.

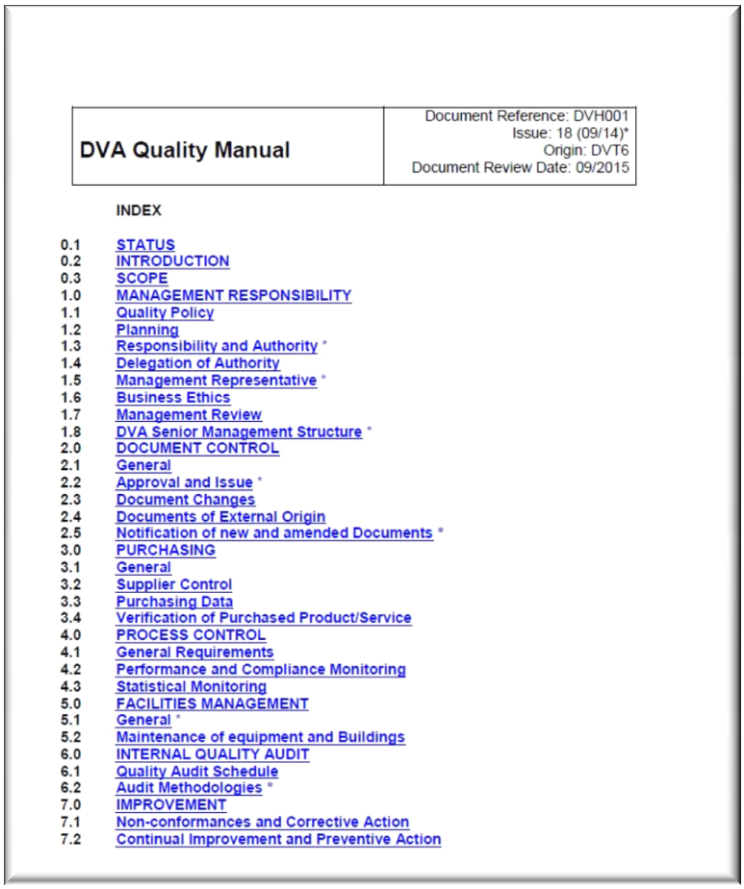
Comparisons of DVA test pass rates with those in GB are based on Official Statistics published by DFT. There is to date no published assessment of GB administrative driver test pass rates data,

but we will consult with DFT colleagues regarding future planned assessments and the reporting of this going forward.

## Communications with Data Supply Partners

The DVA statisticians are in a unique position in that we are located on site, have direct access to BSP, and are in close proximity to technical and administrative teams responsible for vehicle and driver testing. Any significant issues the statistical producer team may have regarding data quality can be addressed immediately onsite with relevant driver and vehicle testing operational managers. Tailored guidance has also been produced to ensure that data suppliers are aware of their responsibilities under the Code of Practice for Official Statistics, particularly with regard to release practices. We have indirect access to the external BSP vendor through local onsite (DVA) BSP support team, and we have to date received some external vendor provided BSP training. To help improve data quality assurance processes and procedures, the statistical producer team are aiming in future to establish direct channels of communications with the external vendors of BSP.

## Quality Assurance Principles, Standards and Checks by Data Supplier



**DVA Quality Manual**

Document Reference: DVH001
Issue: 18 (09/14)*
Origin: DVT6
Document Review Date: 09/2015

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DVA maintain a detailed comprehensive 'DVA Quality Manual', which outlines in some depth relevant quality assurance procedures. This manual is used by all DVA staff carrying out administration, supervision and delivery of practical driving tests and vehicle inspection activities for Private Cars and Goods Vehicles conducted in accordance with statutory requirements. This manual is reviewed and updated regularly as driver and vehicle testing procedures change, and is used to support induction training for new DVA testing and administrative staff. A screen shot of the contents of this manual is shown for users' information. Relevant sections within the manual include 'Quality Policy' and 'Process Control'. There are also detailed definitions and explanations used as part of vehicle and driver testing. This manual is available on request using e-mail dva.stats@doeni.gov.uk

To further improve the quality of information on DVA administrative systems, DVA has a dedicated quality manager for vehicle and driver testing. The Quality Manager is responsible for:

- The provision and continuous improvement of Administrative Systems, including BSP.
- Ensuring that the Quality Management processes are defined, implemented, audited and monitored in order to ensure that deliverables comply with DVA requirements, customer requirements and the requirements of the ISO 9001:2008 and ISO 17025:2005 standards as appropriate;
- Ensuring that high level reviews and promotion of quality management take place;
- Ensuring that DVA personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the objectives of quality management;
- Ensuring that corrective actions are taken and documented when non compliances with ISO 9001:2008, ISO 17025:2005 or DVA's own procedures are found;
- Ensuring that procedural problem solving is carried out, using appropriate statistical techniques (e.g. Trend Analysis), in a structured way and that it is documented accordingly;
- Ensuring that the customer's interests are protected.
- Internal quality audits – checking for example that BSP business volumetric reports/statistics reconcile and are consistent with financial transactions records. These reconciliations are carried out annually in line with departmental accounting and audit requirements. Errors identified are corrected if possible. Checking procedures may be amended if required and staff retrained but action of this sort has not been necessary to date.
- The producer team are in discussion with providers to establish a more systematic means for recording/monitoring outcomes from these types of check.

## Producers Quality Assurance Investigations and Documentation

All vehicle and driver testing statistics are produced by the statistical producer team directly from BSP at the end of each quarter and at year end for our annual report. The statistical reporting tools within BSP allow the extraction of information as standardised aggregated tables or as individual records from which tables are produced.

Trend analysis is carried out on each vehicle and driver testing series. There is no set measure of tolerance in terms of quarterly/annual percentage change which triggers a query back to the DVA providers, but back series comparisons helps us to judge if particular data is consistent with historical trend. Changes to testing policy/procedures may impact on future trend but we are usually aware of possible impact to trend before headline counts change and would document the estimated impact.

Where possible ASB statisticians use external sources of data/surveys or relevant economic indicators to validate finalised statistical trends. GB comparisons are also used although differences in legislation and/or testing procedures can limit their usefulness. These issues are highlighted in our quarterly and annual reports.

*Strengths*

- Vehicle and driver testing statistics derived from the BSP administrative system are underpinned by well established quality assurance procedures, manuals and audit controls as outlined above.
- Statisticians have full access to all vehicle and driver testing systems, data and reports.
- Standard booking procedures and online access controls help to minimise the risk of data manipulation.
- Standardisation of driver and vehicle testing systems across DVA test centres.
- Data suppliers and producers work in close proximity aiding understanding of processes and facilitating resolution of issues.
- Data can often be used as part of the legal process which helps ensure accurate recording should customers challenge test outcomes or make complaints.

*Weaknesses*

- There is some potential for distortion of driver test outcomes and, to a lesser extent, vehicle test outcomes through inconsistent application of test standards by examiners. However, the DVA proactively monitor test outcomes using robust statistical analysis both within and between test centres. Any evidence of non-random patterns of outcomes are closely scrutinised and DVA management take remedial action should this be required. This is not considered to be a significant issue with respect to data quality.

## ***Theory Testing Statistics***

The DVA has responsibility for the provision of the theory test element of the overall driving test process. The test is administered in Northern Ireland by Pearson under contract with the DOE through DVA.

Theory testing statistics are sourced from the ad-hoc returns provided by Pearson to DVA on both theory test applications received and theory tests carried out. This information is then used by DVA to calculate annual payments to Pearson under the terms of the contract, and is subjected to an independent annual systems audit to ensure information accuracy and reliability.

Table 3 below details the outcome of our assessment of theory testing statistics using the matrix assessment toolkit as explained in the previous section (pages 4 and 5), in terms of data quality concern and public interest. Theory test applications received and conducted were assessed as Low for data quality concern and Low for public interest, with a resultant matrix classification of A1. Theory test pass rates however were assessed as Medium both for data quality concern and public interest, requiring an enhanced level of assurance (A2).

Comparisons of DVA theory test pass rates with those in GB are based on Official Statistics for GB published by DFT. There is to date no published assessment of GB administrative theory test data, but we will consult with DFT colleagues regarding future planned assessments and report the outcomes of these to users at the earliest opportunity.

## Table 3: Theory Testing Statistics

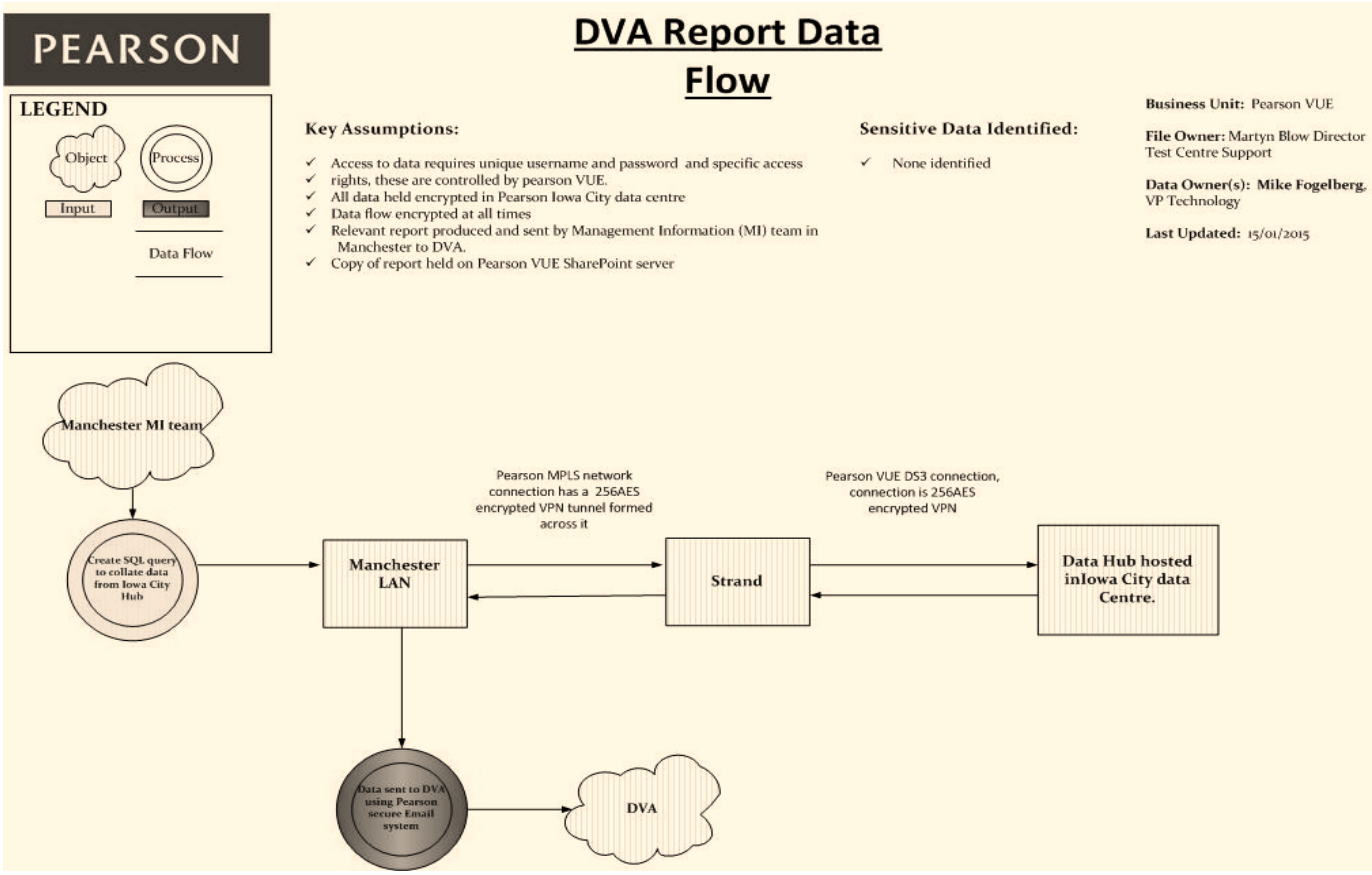
| Statistical Series | Administrative Source | Data quality concern | Public interest | Matrix Classification |
|---|---|---|---|---|
| Applications Received | Pearson Professional Assessments | Low | Low | A1 |
| Tests Conducted | Pearson Professional Assessments | Low | Low | A1 |
| Pass Rates | Pearson Professional Assessments | Medium | Medium | A2 |
| Theory tests for private car drivers, Gender and NI/GB comparison | Pearson Professional Assessments | Medium | Medium | A2 |
| Theory tests for motorcyclists, Gender and NI/GB comparison | Pearson Professional Assessments | Medium | Medium | A2 |
| Theory Test Pass Rates by Test Section and Category | Pearson Professional Assessments | Medium | Medium | A2 |
| Theory tests for private car drivers, Gender and NI/GB comparison | GB data | Medium | Medium | A2 |
| Theory tests for motorcyclists, Gender and NI/GB comparison | GB data | Medium | Medium | A2 |

## *Operational Context and Administrative Data Collection*

Theory testing is a fully automated online testing environment where data is captured as candidates complete each part of their test. This system is operated and maintained under contract with DVA by Pearson VUE. This is the system from which Theory Testing statistics are ultimately sourced. The producer statistics team do not have access to this system and the statistics we publish are derived from monthly and quarterly management returns sourced from Pearson VUE proprietary system and sent directly to DVA.

To reduce the scope for error, management information provided to DVA by Pearson is now copied directly to the statistical team, from which theory testing statistics are then produced. These statistics are then reconciled against returns produced independently by DVA administrative support. This reconciliation in the past has helped identify errors in figures and improved the validation process. A more formal method for recording the number and types of errors arising from internal checks is to be discussed with provider colleagues and implemented at the earliest opportunity.

The process map below outlines at a high level theory testing data flow and transfer from Person to the DVA. The producer statistical team will in future add updates to this assessment report try to improve the clarity of this process map which has been included as it forms part of the background to understanding the administrative system contracted by DVA from Pearson.



## Communications with Data Supply Partners

The DVA statistical producer team are in a unique position in that we are located on site, with DVA theory testing data providers making communications easy and convenient. Any significant issues the producer team may have regarding data quality are addressed immediately onsite with relevant operational managers. Tailored guidance has also been produced to ensure that DVA suppliers are aware of their responsibilities under the Code of Practice for Official Statistics and particularly with regard to release practices. The DVA provider and management team have close working relationships with Pearson, which can be used indirectly by the statistical team to obtain details relating to theory testing data and systems. We are hoping in future to establish and develop if possible direct lines of communication between Pearson and the statistical production team.

## Quality Assurance Principles, Standards and Checks by Data Suppliers

Theory testing data collected on behalf of DVA or supplied to the DVA is subject to classification in accordance with the Pearson Global Information and Security & Technology Policy. This policy outlines clearly how data should be classified and the methods and controls and processes which must be applied. Compliance with policy is internally audited on a twice yearly basis. To date no issues have arisen regarding data quality and which required remedial action.

Theory testing data collected are typically candidate demographics and payment details, supplied by test candidates via Pearson VUE's call centre or web registration system. There is some scope for administrative error which is minimised by strict quality monitoring processes within call centres and using web validation controls. Staff are trained to ensure procedures and quality controls are understood and implemented in practice. Pearson VUE is certified to ISO 9001, ISO 27001 and other international standards. Pearson VUE is audited externally each year by a range of parties including for example PriceWaterhouseCoopers. The statistical producer team are not aware of any issues arising from these audits in respect of data quality issues.

## Producers Quality Assurance Investigations and Documentation

All theory testing statistics are produced by ASB statisticians directly from information returns provided by Pearson VUE to the DVA. These are subject to detailed trend analysis. As with other statistical series there is no set measure of tolerance in terms of quarterly/annual percentage change which triggers a query back to the DVA providers, but back series comparisons helps us to judge if particular data is consistent with historical trend. Changes to theory testing policy/procedures may impact on future trend but we endeavour to keep aware of this before headline count changes and document these, and their potential impact, in our statistical releases. Where possible ASB statisticians draw upon external sources of data such as similar data published in GB which are directly comparable to theory testing statistics for Northern Ireland.

*Strengths*

- Administrative system is maintained and managed under contract by an external vendor, keeping pace with and taking advantage of technological progress and upgrades.
- Theory testing administrative system is ISO certified and regularly audited.
- Pearson's systems are subject to an annual ITF 01-07 Full Systems Audit by PriceWaterhouseCoopers
- Well established and documented data transfer process.
- Statisticians have onsite access to theory testing management team, aiding understanding of processes and facilitating resolution of issues.
- Standard theory testing classification systems in use.

*Weaknesses*

- There is some scope for clerical error as data from Pearson VUE is transferred manually to other file formats, but these are mitigated by internal checking both by the DVA administrative team and further independent checks by the statistical producer team.

## *Driver Licensing Statistics*

The DVA's Driver Licensing directorate is responsible for licensing drivers in Northern Ireland. This includes issuing and, where appropriate, revoking driving licences in respect of cars, motorcycles, buses, heavy goods vehicles etc. Driver licensing Official Statistics cover two main categories, Ordinary and Vocational Licences. Ordinary licences are used by the majority of road users. In contrast, Vocational Licences are required for those who drive for a living, for example, bus and lorry drivers. Official Statistics also includes the full range of driver licensing transactions such as for example licenses issued, upgrade from provisional, or requiring change of details.

Table 4 below details the outcome of the statistical producer teams assessment of driver licensing statistical series using the matrix assessment toolkit as explained in the previous section (pages 4 and 5), in terms of data quality concern and public interest.

All driver licensing Official Statistics were assessed as Medium for data quality concern and Low in terms of public interest for Transaction statistics and Medium for Driver Licensing statistics, given the slightly higher level of public interest in these statistics. Our assessment indicates an enhanced level (A2) of assurance is appropriate for driver licensing statistics sourced from in-house DVA administrative systems.

## Table 4: Driver Licensing Statistics

| Statistical Series | Administrative Source | Data quality concern | Public interest | Matrix Classification |
|---|---|---|---|---|
| Ordinary Licence Transactions | NIDLS, DVA Driver Licensing | Medium | Low | A2 |
| Vocational Licence Transactions | NIDLS, DVA Driver Licensing | Medium | Low | A2 |
| Other Licence Transactions | NIDLS, DVA Driver Licensing | Medium | Low | A2 |
| Private Car Licence Holders by Age and Entitlement | NIDLS Extract | Medium | Medium | A2 |
| Motorcycle Licence Holders by Age and Entitlement | NIDLS Extract | Medium | Medium | A2 |
| LGV Licence Holders by Age and Entitlement | NIDLS Extract | Medium | Medium | A2 |
| PCV Licence Holders by Age and Entitlement | NIDLS Extract | Medium | Medium | A2 |
| Private Car Licence Holders as a proportion of Mid Year Estimates (2013) | NIDLS Extract / MYE | Medium | Medium | A2 |

## *Operational Context and Administrative System*

The administrative system from which Driver Licensing statistics are sourced is called the Northern Ireland Driver Licensing System (NIDLS). NIDLS is operated under contract with DVA by an external vendor. The statistics producer team within the DVA have read only, direct and real-time access to NIDLS from which aggregated driver licensing statistics are derived quarterly and at year end. NIDLS is used to record all driver licensing transactions from applications for a provisional licence to licence renewal and changes of circumstances impacting on customer's licensing details. Applications for driver licensing and other licensing transactions are paper based, and involve the manual recording of information from a variety of forms directly onto NIDLS.

## Communications with Data Supply Partners

The statistician producer team are in a unique position in that although we are located off site in respect of driver licensing, we have over the years developed close working relationships with driver licensing data providers and management teams within the DVA. As a result of good working communications, any issues the statistical producer team may have regarding data quality are addressed quickly with provider managers and operational NIDLS administrative support teams. In addition, periodic face-to-face meetings are held with driver licensing managers to discuss and resolve issues arising from Official Statistics reporting requirements. Tailored guidance has also been produced and issued to data suppliers to ensure they are aware of their responsibilities under the Code of Practice for Official Statistics, particularly with regard to pre-release practices. The DVA do not have detailed process maps which outline driver licensing data quality assurance processes, but statisticians have indicated to data suppliers the value in this and will consider developing with them process maps for inclusion in future updates to this assessment report.

## Quality Assurance Principles, Standards and Checks by Data Suppliers

DVA have supervisors to carry out ad-hoc audit checks on licensing applications keyed into NIDLS, including the accuracy of customer's details, such as date of birth and home addresses. To date there has been no systematic recording of the numbers and nature of the errors arising from these checks.

There may also be occasions when DVA are contacted by customers directly regarding licensing inaccuracies which are then corrected as required. These change details are not systematically recorded. As a financial transaction system, NIDLS is subject to regular internal audit checks. To date the statistical producer team are not aware of any issues arising from these audits in respect of NIDLS data quality.

To help improve the accuracy of NIDLS, DVA administrative teams in the past have undertaken ad-hoc, non-random checks of driver licensing details for customers presenting at local vehicle licensing office[2] counters across Northern Ireland. Results from these ad-hoc checks have indicated that approximately 10% of NIDLS records may have some details which are inaccurate or out of date at any given time. The figure of 10% is not based on a robust random survey methodology and hence may not be representative of the actual level of inaccuracy for all records on NIDLS. In addition, to help improve the accuracy of NIDLS data, the DVA in the past have issued mail shots to their customers reminding them of their legal obligations to advise the DVA of any changes in circumstances which may require modifications to their driving licence details. The statistics producer team to date have not had any opportunity to assess the impact of mail shots on NIDLS data quality.

NIDLS is an out-of-date legacy system, and the DVA are working to replace it with a new system will facilitate the use of online transactions to provide customers with an online option to

[2] Local Vehicle Licensing Offices closed when DVLA centralised Vehicle Licensing to Swansea in July 2014

undertake driver licensing business and transactions. Online facilities will be offered through NI Direct, which is the online hub for local government, including the DVA. When up and running DVA customers will be able to review and amend their own driver licensing details online which should further improve accuracy. The statistical producer team are part of the DVA project development group working to define and specify the new NIDLS statistical reporting facilities. Statistics and management information are produced monthly directly from NIDLS and collated and approved by DVA management.

In preparation for migrating licensing records to a new system, the DVA with the statistics producer team are looking into the possibility of contacting customers using their telephone numbers to check key licensing details such as date of birth, name and current address. The outcome of this exercise and its impact on the quality of licensing statistics will be detailed within this report at the earliest opportunity.

## Producers Quality Assurance Investigations and Documentation

All driver licensing statistics are produced by the statistical producer team directly from NIDLS, and transactions statistics are sourced from NIDLS monthly information returns produced by DVA providers in the licensing section. All licensing statistics are subject to detailed trend analysis. As with other statistical series there is no set measure of tolerance in terms of quarterly/annual percentage change which triggers a query back to the DVA providers, but back series comparisons helps us to judge if particular data is consistent with historical trend.

Comparisons are also made with respect to alternative data sources such as licence holding estimated from the Travel survey for NI (TSNI)[1]. The findings from the travel survey has been consistent with driver licensing statistics in that based on Mid Year Population Estimates for Northern Ireland in 2012, it is estimated using driver licensing statistics that approaching 76% of Northern Irelands population aged 15+ had a full and eligible license with entitlement for Private Cars / Light Vans. Results from the latest available Travel Survey for Northern Ireland (2011-13) show the figure of 76% to be consistent with the Travel Survey result where 77% of all adults held a driving licence (aged 17+).This small difference of circa 4 percentage points, can likely be explained by survey sampling error and timing differences associated with the Travel Survey.

[1] http://www.drdni.gov.uk/northern_ireland_travel_survey.htm

*Strengths*

- Administrative system is maintained and managed under contract by an external vendor
- NIDLS system is to be replaced, and the statistical producer team are part of the in-house development group.
- Well established reporting and data transfer process.
- Statisticians have direct access to driver licensing management and operations team, aiding understanding of processes and facilitating resolution of issues.

*Weaknesses*

- The NIDLS database at any time will have licensing records which are out of date and need to be updated in terms of customer's details e.g. changes of address, which has the potential to impact on any geographic breakdowns of the data. However, this should not have any significant impact on headline volumes.
- The NIDLS system is due to be replaced with better access, validation, and statistical reporting tools to be integral to the new system, until then there remains greater potential for inaccurate information on NIDLS.
- There is some scope for clerical error as information is transferred manually from paper forms into NIDLS but any impact from this is thought to be minimal due to the checks outlined above.

## ***Road and Passenger Transport Licensing Statistics***

Passenger Transport Licensing Statistics covers all transport licensing transactions for Public Service Vehicles (PSV), Buses and Taxis, including Taxi Driver Licences and Road Service Licences. On 1 July 2012, responsibility for freight operator licensing in Northern Ireland transferred to the newly formed Transport Regulation Unit (TRU) within the DOE. Heavy Goods Vehicle Operator licensing are DVA supports TRU in the delivery of its functions through the provision of operator repute checks, referrals, public inquiry briefs and operating centre assessments. The 'PSV Licence – Taxi (for example)', relates to a vehicle, and the issuing of such a licence entitles the vehicle to be used as a Taxi. PSV licences are renewed annually. A Taxi Driver Licence relates to an individual driver, permitting them to use a registered vehicle for public or private hire in the transport of fare paying passengers. All taxi drivers must either work for a licensed operator, or apply for an Operator's licence. A taxi driver may for example, hold an operator's licence to which they may be affiliated as a taxi driver.

The two types of taxi operator's licence are:

- small operator - can only list up to two taxis on the licence;
- large operator - can operate three or more taxis as long as these are listed on the licence;

Taxi operator's licenses are issued for fixed periods of 1, 3 or 5 years.

**Transport Licensing (Goods Vehicle Operator Licensing)**

Anyone who drives a goods vehicle which is more than 3.5 tonnes in weight which is used to carry goods as part of a trade or business is required by law to have a Goods Vehicle Operator's Licence. Responsibility for goods vehicle operator licensing remains with the DOE's TRU with routine processing of applications handled on a delegated basis by DVSA (Driver and Vehicle Standards Agency, an executive agency of the Department for Transport) Central Licensing Office in Leeds, using the Operator Licensing Business System (OLBS).

DVSA hold the National Register on behalf of the UK Government. This register includes certain operator licensing and transport manager data that is required by EU Regulations to be held centrally. The National Register combines the required information from the various authorities who control the operator licensing system in Great Britain, Northern Ireland and Gibraltar. The main purpose of goods vehicle operator licensing is to ensure the safe and proper use of goods vehicles and to protect the environment.

There are three types of goods operator licence:

Restricted Licence – for those who carry their own goods or materials in connection with their trade or business - this licence covers all transport operations in the UK

Standard (National) Licence – for those who carry their own goods or materials in connection with their trade or business and/or carry goods for hire or reward - this licence covers all

transport operations in the UK - someone in, or employed by, the company must hold a Transport Manager Certificate of Professional Competence (CPC) qualification

Standard (International) Licence – same as above except this licence covers transport operations throughout the European Union.

Table 5 below details the outcome of the statistical producer teams assessment of transport and passenger licensing statistical series using the matrix assessment toolkit as explained in the previous section (pages 4 and 5), in terms of data quality concern and public interest.

All Passenger and Transport Licensing Official Statistics were assessed as Medium for data quality concern and Low in terms of public interest for Goods Vehicles but Medium for Buses and Taxis, given the higher level of public interest in these statistics. Our assessment indicates an enhanced level (A2) of assurance is appropriate for transport licensing statistics sourced from in-house DVA administrative systems.

## Table 5: Passenger and Road Transport Licensing Statistics

| Statistical Series | Administrative Source | Data quality concern | Public interest | Matrix Classification |
|---|---|---|---|---|
| Road Transport Licences Issued by Licence Type | Taxi and Bus Transport Licensing System | Medium | Medium | A2 |
| Taxi and Bus Operator, Driver and Vehicle Licensing | Taxi and Bus Transport Licensing System | Medium | Medium | A2 |
| Goods Vehicle Operator Licences (in force) | Operator Licensing & Bus System (OLBS) | Medium | Low | A2 |

## Operational Context and Administrative System

Passenger licensing transport statistics are sourced from two separate administrative systems, for Taxis (TLIS – Taxi Licensing Information System) and for Buses (BOLS – Bus Operator Licensing System). Passenger Transport Licensing Division has an administrative support team in the DVA supporting Bus and Taxi licensing.

Goods licensing since 2012 has been administered by the TRU within the DOE. Transport licensing statistics are sourced from a single administrative system, the Operator Licensing Business System (OLBS – this is not the same as BOLS). This is administered by DVSA in Leeds, which TRU within the DOE use for transport licensing in Northern Ireland. Each transport licensing system operates clerically in that information provided by customers through licensing application forms are transferred manually by clerical staff to respective licensing system databases from which Official Statistics are then sourced. The statistics producer team have no direct or indirect access to any of the administrative systems from which passenger licensing statistics are sourced.

## Communications with Data Supply Partners

The statistics producer team are in a unique position in that although we are located off site in respect of both road and passenger transport licensing, we have over the years developed close working relationships with data providers and management teams within the DVA and the DOE. With the transfer of vehicle licensing in July 2014 to DVLA in Swansea, and the subsequent loss of experienced staff within the DVA there was a temporary impact to our communications with data suppliers but these were quickly re-established. As a result of continued good working communications, any issues the statistics producer team have regarding data quality are addressed quickly with data provider managers and operational transport licensing support teams. These are complemented with regular statistics review meeting to address broader statistics issues and ongoing support to the DVA. Tailored guidance has also been produced and issued to DVA/TRU data suppliers to ensure they are aware of their responsibilities under the Code of Practice for Official Statistics, particularly with regard to pre-release practices. Neither the DVA nor the TRU have detailed process maps which outline transport licensing data quality assurance processes, but statisticians have indicated to data suppliers the value in this and will consider developing with them process maps for inclusion in future updates to this assessment report.

## Quality Assurance Principles, Standards and Checks by Data Suppliers

### Taxi and Bus Operator Licensing

The DVA and TRU administrative data supplier teams for passenger and transport operator licensing run ad-hoc reports from TLIS, and BOLS which are checked by supervising managers then collated in spreadsheets for return to the statistics producer team.

Late in 2014, with the transfer of vehicle licensing to the DVLA in Swansea, many experienced staff working in bus and taxis licensing services transferred out of the DVA to work in other Departments. This impacted on licensing statistics with greater potential for error in the production, collation and checking of information from data suppliers to the statistics production team. Although it took slightly longer to verify passenger licensing statistics, there was no evidence the change of administrative support staff within the DVA had any adverse impact on the quality of subsequent official statistics.

*Strengths*

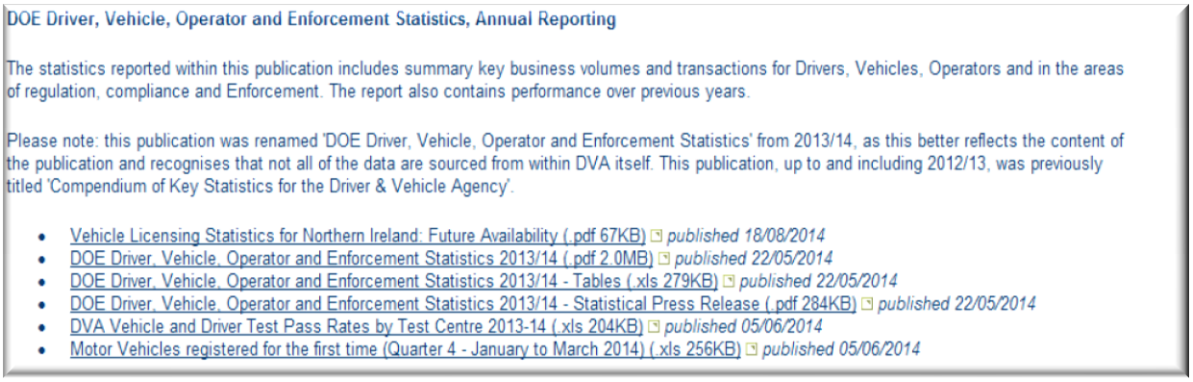
- Statisticians have access to transport licensing management and operations team, aiding understanding of processes and facilitating resolution of data quality issues.
- The DVA have started a transformation programme to upgrade transport licensing administrative databases with improved quality assurance checks and better statistical reporting facilities.

*Weaknesses*

- Loss of experienced staff due to transfer of vehicle licensing function to DVLA in Swansea has increased potential for error although no significant issues have arisen to-date.
- Passenger Transport Licensing has some scope for clerical error as information is transferred manually from paper forms to administrative databases.
- No systematic mapping of administrative transport licensing processes.

## ***Northern Ireland Vehicle Licensing and Registration Statistics***

Responsibility for vehicle licensing in Northern Ireland transferred to the Driver and Vehicle Licensing Agency (DVLA) in July 2014, As a consequence of this, first release Vehicle Licensing Official Statistics are produced by the Department for Transport (DFT). Under a service level agreement (SLA) between DFT and DOE, the DOE continue to produce NI specific vehicle licensing statistics as part of our quarterly and year end National Statistics reporting. These are published on our website after the first release of headline vehicle licensing NS by DFT.



**DOE Driver, Vehicle, Operator and Enforcement Statistics, Annual Reporting**

The statistics reported within this publication includes summary key business volumes and transactions for Drivers, Vehicles, Operators and in the areas of regulation, compliance and Enforcement. The report also contains performance over previous years.

Please note: this publication was renamed 'DOE Driver, Vehicle, Operator and Enforcement Statistics' from 2013/14, as this better reflects the content of the publication and recognises that not all of the data are sourced from within DVA itself. This publication, up to and including 2012/13, was previously titled 'Compendium of Key Statistics for the Driver & Vehicle Agency'.

- Vehicle Licensing Statistics for Northern Ireland: Future Availability (.pdf 67KB) *published 18/08/2014*
- DOE Driver, Vehicle, Operator and Enforcement Statistics 2013/14 (.pdf 2.0MB) *published 22/05/2014*
- DOE Driver, Vehicle, Operator and Enforcement Statistics 2013/14 - Tables (.xls 279KB) *published 22/05/2014*
- DOE Driver, Vehicle, Operator and Enforcement Statistics 2013/14 - Statistical Press Release (.pdf 284KB) *published 22/05/2014*
- DVA Vehicle and Driver Test Pass Rates by Test Centre 2013-14 (.xls 204KB) *published 05/06/2014*
- Motor Vehicles registered for the first time (Quarter 4 - January to March 2014) (.xls 256KB) *published 05/06/2014*

Table 6 below details the outcome of the statistical producer teams recent review of vehicle licensing and registration statistical series using the matrix assessment toolkit as explained in the previous section (pages 4 and 5), in terms of data quality concern and public interest. The outcome from this is that all NI Vehicle Licensing and Registration Statistics were revised to Low for data quality concern and remain High for public interest, indicating an enhanced level (A2) of assurance is appropriate for these statistical series. The revision to Low data quality concern is because NI vehicle licensing data are subject to the same detailed quality assurance procedures and checks DFT have in place for all UK vehicle licensing records.

# Table 6: NI Vehicle Licensing and Registration and Licensing Statistics

| Statistical Series | Administrative Source | Data quality concern | Public interest | Matrix Classification |
|---|---|---|---|---|
| Motor vehicles registered for the first time | DfT | Low | High | A2 |
| Motor vehicles registered for the first time by month | DfT | Low | High | A2 |
| New and used cars registered for the first time by make | DfT | Low | High | A2 |
| New cars registered for the first time by make and month | DfT | Low | High | A2 |
| Used cars registered for the first time by make and month | DfT | Low | High | A2 |
| New and used light goods vehicles registered for the first time by make | DfT | Low | High | A2 |
| Light goods vehicles registered for the first time by make, month and new/used breakdown | DfT | Low | High | A2 |
| New and used heavy goods vehicles registered for the first time by make | DfT | Low | High | A2 |
| Heavy goods vehicles registered for the first time by make, month and new/used breakdown | DfT | Low | High | A2 |
| Agricultural vehicles (including tractors) registered for the first time by make, month and new/used breakdown | DfT | Low | High | A2 |
| Motorcycles registered for the first time by make, month and new/used breakdown | DfT | Low | High | A2 |

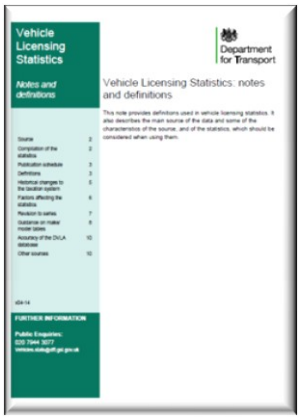
## *Operational Context and Administrative System*

All vehicles using public roads in the UK by law are required to be registered with the DVLA. This includes vehicles bought within the UK, vehicles imported from outside the UK, and vehicles exempt from vehicle excise duty. Vehicles with a statutory off road notification also need to be registered with DVLA. Northern Ireland had its own system of vehicle registration but this was discontinued, and since July 2014 all vehicles in the UK have to be registered with the DVLA in Swansea. Vehicle records that had been part of the NI system of registration were migrated to the DVLA system during the summer of 2014 and are now part of a UK administrative data set managed and maintained by the DVLA and for which DFT are responsible for producing National Statistics. The name of the administrative system from which all vehicle licensing statistics are produced is the Driver and Vehicle Licensing Agency Vehicle Information Database (DVLA VID). There are no process maps available to explain the data collection process but statisticians have indicated to DFT the value in this and together we will consider developing these for inclusion in future updates to this assessment report.

NI vehicle licensing and registration statistics are sourced from administrative systems used by the DVLA to support vehicle licensing across the UK. Under the terms of an SLA between DFT and DOE, since September 2014 DVLA have been providing quarterly extracts of vehicles registered, licensed and sorned in Northern Ireland. From these extracts NI specific vehicle licensing and registration statistics are produced. DOE have published these quarterly in arrears on their website. Back series of these statistical are available in our quarterly reports. The NI statistics producer team have no direct or indirect access to the administrative systems from which NI vehicle licensing and registration extracts files are produced.

Detailed technical notes and definitions explaining these data and a statement of administrative sources are published and updated regularly by DFT. These are detailed below.

Technical Notes


Vehicle Licensing Statistics

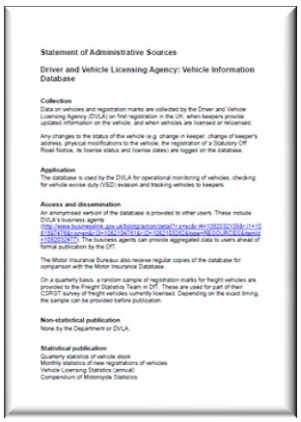
Notes and definitions

Department for Transport

Vehicle Licensing Statistics: notes and definitions

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/302251/vls-notes-and-definitions.pdf

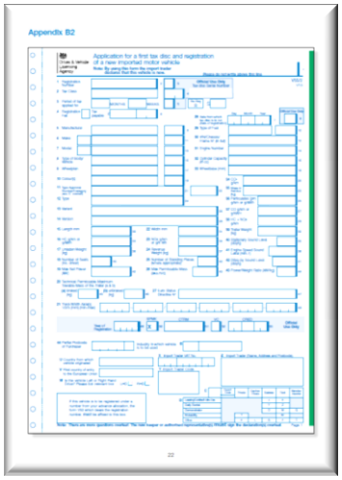
Statement of Administrative Sources


Statement of Administrative Sources

Driver and Vehicle Licensing Agency: Vehicle Information Database

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/10962/dft-statement-dvla-vid.pdf

Further detail on the original administrative source definitions are available at:


Appendix B2

http://assets.dft.gov.uk/dvla/V355_290613.pdf

## Communications with Data Supply Partners

Communication with DVLA and DFT has been working well since July 2014 and the statistics producer team have established effective working relationships and communications with DVLA/DFT colleagues responsible for providing NI vehicle licensing and registration extract files.

## Quality Assurance Principles, Standards and Checks by Data Suppliers

Vehicle registration data are mostly collected through automated procedures agreed collectively by the motor industry, therefore most data are consistent. A small percentage (5%) are entered individually therefore are subject to more variability, but these are unlikely to cause bias in the main headline counts. Some data are more complete than others because they are required for mandatory or financial processes (e.g. tax class to charge vehicle tax) – the completeness and reliability of fields used is considered within the published statistics.

DVLA also has internal processes to quality assure the work of administrative support colleagues, and DFT statisticians make completeness and consistency checks on data extracts received, and maintain documented database programmes for managing and enhancing data for publication. Since July 2014 the registered keepers post code has been used by DVLA to identify NI vehicles, which when missing is not a comprehensive means of reporting NI registered vehicles. However, at the point of system migration, all NI missing postcodes were assigned a dummy postcode to indicate that the registered owner resided in NI. As vehicle tax is renewed NI postcodes missing initially will over time be updated with postcode information. However, as some customers do not always know/provide some postcodes will remain missing for NI vehicle and these will simply be identified as "missing" in any geographic analysis and will not be attributable to any individual country/region. This is what currently happens with English, Scottish or Welsh registrations where postcode is missing. Because of the mitigating action of including a dummy postcode prior to transfer, which would otherwise have impacted on around 1%-2% of NI records, it is expected that the impact on our statistics will be minimal.

*Strengths*

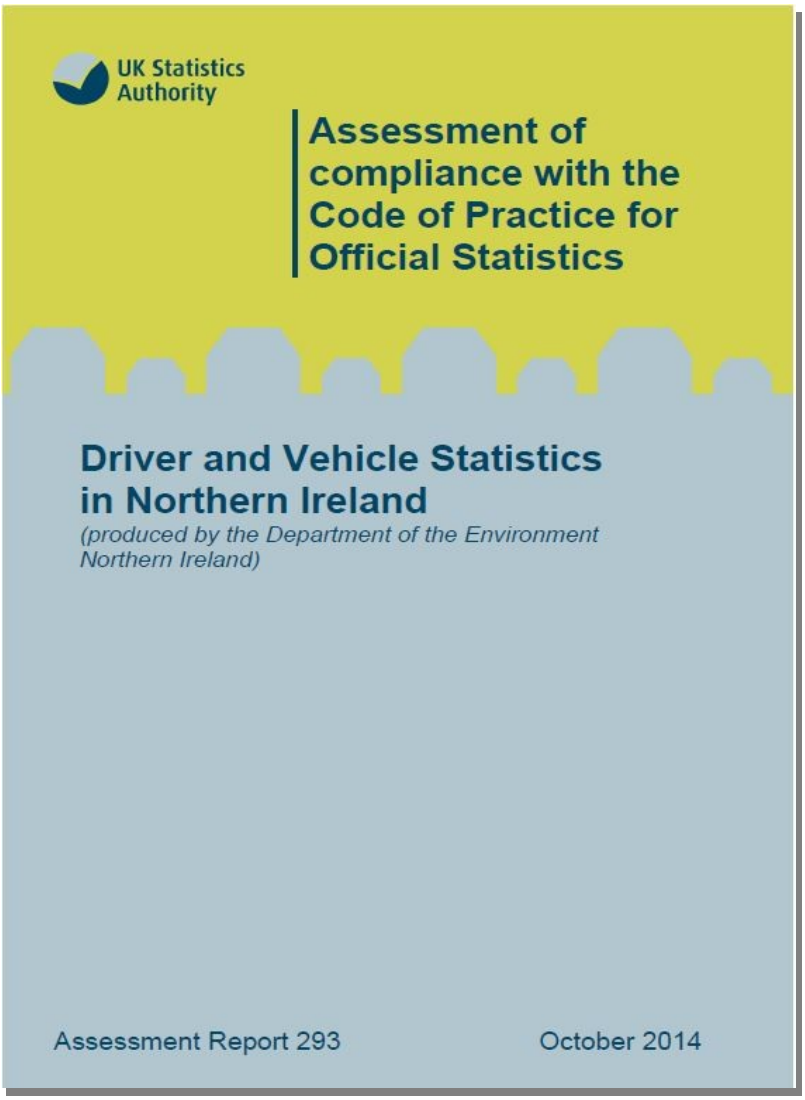
- Subset of validated data set
- DOE statisticians have good communications with statistical and technical staff within the DFT and DVAL, aiding understanding of data production and facilitating resolution of data quality issues.
- The producer team have direct access to NI vehicle level data;
- An agreed SLA between DOE and DFT outlines procedures and processes for data transfer and resolving data quality issues.

*Weaknesses*

- Interruption and rebasing of statistical trends and classifications.
- Temporary validation problems migrating vehicle licensing data from DVA to DVLA

# Appendix 1

# NATIONAL STATISTICS ASSESSMENT OF THE 'DOE DRIVER, VEHICLE, OPERATOR AND ENFORCEMENT STATISTICS'



**Background**

This questionnaire is part of an ongoing assessment of 'DOE DRIVER, VEHICLE, OPERATOR AND ENFORCEMENT STATISTICS', and is part of a follow-up requirement to assess the quality assurance of specific statistical series reported and published as Official Statistics by the DOE.

We would be very grateful if you could complete the following list of questions:

(1) Contact Name:

(2) Email address:

(3) Contact telephone number:

(4) Business Area:

(5) Are the data provided to DVA Statistics branch sourced:

a. From an internal administrative system or;
b. From an administrative system provided and maintained by an external vendor?

(6) Name of administrative system used to provide data for publication in the 'DOE Driver, Vehicle, Operator and Enforcement Statistics'.

(7) Do you possess a detailed process map which explains the data collection processes?

a. Yes
b. No

(8) If yes to question 7, can you provide a copy of this process map, either hard copy or electronic?

a. Yes
b. No

if yes, can you please provide a copy.

(9) If you have answered No to question 7, would you be willing to develop a process map in the future?

(10) Please use this space for any other relevant information related to the data collection process:

| |
|---|
| |

(11) Do you possess a document detailing explanations/definitions for classifications used in the data collection?

a. Yes
b. No

(12) If yes to question 11, can you provide a copy of these classification definitions, either hard copy of electronic?

a. Yes
b. No

if yes, can you please provide a copy.

(13) If you have answered No to question 11, would you be willing to develop such a document in the future?

(14) Please use this space for any other relevant information related to the data classifications or definitions used:

| |
|---|
| |

Please continue to Question 15 on following page.

(15) Can you tell us about any potential elements within the data collection process or the data supply process which may give rise to error or potential bias? Examples of which might include differing local practices for data collection, data entry and/or inconsistent definitions; or where the use of targets/performance management may lead to a distorting of the data, either deliberately or indirectly as a result of local interpretation of a target definition.

(16) Can you please identify and describe for us the safeguards taken to minimise risks to data quality, including audit arrangements.

(17) Could you detail for us any suggestions of how to improve contact and data supply with members of the DOE-DVA statistical team?

**Please return completed returns to:**

**Paul.Scullion@doeni.gov.uk**

**THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE**