Report

Driver and Vehicle Licensing Agency

Introduction

1 This report addresses my annual examination of the Motor Tax Account prepared by the Driver and Vehicle Licensing Agency (the Agency), an on-vote executive agency of the Department of the Environment, Transport and the Regions (the Department).

2 In this report, I:

- set out the basis and results of my audit (paragraphs 3 and 4);
- summarise the financial performance of the Motor Tax Account (paragraphs 5 to 7);
- describe the varying methods of revenue collection employed by the Agency (paragraphs 8 to 14);
- consider the implications of the Agency's telephone re-licensing pilot scheme (paragraphs 15 to 22);
- comment on measures to tackle evasion (paragraphs 23 to 34);
- note the Agency's progress in introducing Graduated Vehicle Excise Duty scheme (paragraphs 35 to 51); and
- consider the issues arising from the Agency's implementation of the Vehicle System Software Project (paragraphs 52 to 92).

Basis of my examination

3 I examine the accounts of the receipt of revenue by government departments under Section 2 of the Exchequer and Audit Departments Act 1921. These accounts are not published and I am not statutorily required to certify their accuracy. However, I am required to examine them on behalf of the House of Commons in order to ascertain that adequate regulations and procedures have been framed to secure an effective check on the assessment, collection and proper allocation of revenue, and to satisfy myself that such regulations and procedures are being duly carried out. I am also required to carry out such examinations as I think fit with respect to the correctness of sums brought to account and report my findings to the House of Commons.

Results of my Audit

4 My staff have carried out test examinations of the 1999-2000 revenue accounts of vehicle excise duties prepared by the Agency, and of the sums brought to account. As a result, I am satisfied that adequate regulations and procedures to assess, collect and allocate vehicle excise duties were in place and were duly carried out.

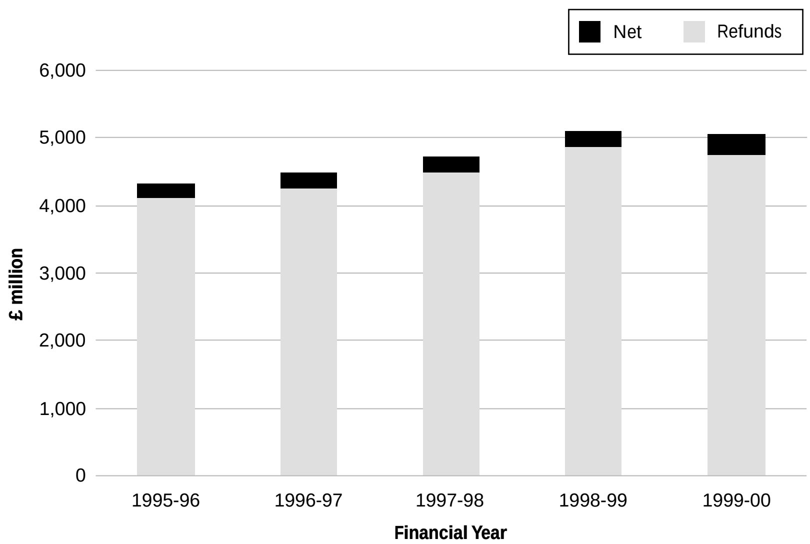
Financial Performance

5 In his March 1999 Budget speech, the Chancellor of the Exchequer announced that from 1 June 1999, Private Lights Goods vehicles with an engine size not exceeding 1100 c.c. would be subject to a reduced rate of Vehicle Excise Duty (the 'Graduated VED' initiative). The Government intended that the implementation of this initiative would be tax-neutral in the 1999-2000 financial year as it would be offset by increases in other classes of duty, and actual gross receipts decreased by only £45 million (0.88 per cent) to £5,045 billion.

6 The total net proceeds of vehicle excise duty for the United Kingdom brought to account in the 1999-2000 Motor Tax Account amounted to £4,738 million (£4,855 million in 1998-99), a decrease of £117 million (2.4 per cent). This was net of refunds totalling £316 million (1998-99: £244 million) paid in the year to applicants wishing to cancel the remaining eligible period on individual discs. Of these refunds, £49.2 million (15.6 per cent) related to the implementation of Phase 1 of the Graduated VED initiative.

7 Gross revenues remained above the £5 billion threshold attained for the first time in 1998-99, and have increased by 17.3 per cent over the last five years, as shown in **Figure 1**.

1 **Vehicle Excise Duty collected by the Driver and Vehicle Licensing Agency, 1995-96 to 1999-2000**



Source: Motor Tax Account

Collection of Vehicle Excise Duty

8 The Agency accounts for vehicle excise duty collected across the United Kingdom from the public by several collection methods. In this section of my Report, I set out these methods and comment on changes in collection trends.

9 The following table shows the amount of gross vehicle excise duty revenues collected via each method and compares this with the previous year's figures.

2 **Vehicle Excise Duty collected in 1998-99 and 1999-2000, by method**

Method of Duty Collection	1998-99		1999-2000	
	£ million	%	£ million	%
Post Office Counters Ltd	4,194	82.2	**4,082**	**80.8**
Vehicle Registration Offices	611	12.0	**600**	**11.9**
Northern Ireland	122	2.4	**125**	**2.5**
Automated First Registrations	122	2.4	**185**	**3.6**
Fleet Operators	50	1.0	**61**	**1.2**
Telephone Re-licensing	0	-	**1**	**-**
Gross Vehicle Duty	**5,099**	**100**	**5,054**	**100**

Source: 1999-2000 Motor Tax Account

Methods of collection

10 **Post Office Counters Limited** has contracted with the Agency to provide vehicle re-licensing services to the public at approximately 4,000 post offices. Over 80 per cent of vehicle excise duty continues to be collected for the Agency by this method, despite the rising popularity of electronic methods of collection.

11 The Agency maintains a network of some 40 **Local Offices** across Great Britain. Until recently, these offices were known as Vehicle Registration Offices (VROs). They have been renamed 'DVLA Local Offices' to reflect the widening range of activities that each office undertakes. Their primary role is to tackle evasion at a local level. In addition, each office has responsibilities for registering and taxing new vehicles, together with a range of other registration and licensing customer services. Following recent budget changes, these offices have also taken responsibility for assessing vehicles eligible for the reduced rates of duty, including the validation of certificates for reduced pollution and for goods vehicles fitted with concessionary wheel-plans.

12 In my report on the Agency's 1998-99 accounts, I commented on its successful introduction of the **Automated First Registration and Licensing** scheme. This scheme enables motor dealers to register and tax new vehicles electronically and has expanded significantly over the last three years. Revenues collected in 1999-2000 totalled £185 million; an increase of some £63 million (52 per cent) over the previous year. This represents almost 48 per cent of all new car registrations across Great Britain during 1999-2000.

13 Since March 1997, large fleet operators have been able to re-license their vehicles by **electronic data interchange**, removing the need to visit a Vehicle Registration Office or a post office. This scheme continues to expand rapidly, with over 400,000 vehicles being re-licensed in this way during 1999-2000. Revenues during the year from this scheme totalled £61 million; an increase of 22 per cent (£11 million) over 1998-99. The Agency told me that, based on current forecasts, it expects the number of vehicles in the scheme to increase to some 700,000 annually by March 2001.

14 The Department's statutory responsibilities for the collection of vehicle excise duty in Northern Ireland are undertaken on its behalf by the **Driver and Vehicle Licensing Agency Northern Ireland (DVLNI)**, an executive agency of the Department of Environment (Northern Ireland). In 1999-2000, DVLNI collected some £120 million of net revenues.

Telephone re-licensing pilot scheme

15 During 1999-2000, the Agency undertook a pilot scheme, in partnership with one insurance company and one motor manufacturer, to offer **re-licensing over the telephone** for vehicles under three years old. Funding for this scheme was made available under the Invest to Save programme, and total revenues amounted to £613,000. A similar pilot scheme was also implemented by DVLNI for Northern Ireland. The pilot commenced in September 1999 and was intended originally to operate until July 2000. However, lower than expected take-up levels led to the extension of the pilot and the service remains available.

Operation of the scheme

16 The registered keeper is required to provide evidence that he or she is insured to drive a vehicle before it can be relicensed. The partner insurance company was able to offer a select group of keepers who had purchased the partner manufacturer's vehicles. These vehicles had been first registered, taxed and insured under the manufacturer's own arrangements with the insurance company.

17 In early discussions with the Agency, the insurance company indicated that it expected to attract a 70 per cent renewal rate within the selected group of customers. The Agency estimated that, of these, around half would avail themselves of the telephone re-licensing facility.

18 In practice, the take-up level has been much lower than the original forecasts. Only 4,360 vehicle excise disks were issued under the pilot scheme to 31 August 2000. The Agency told me that this was mainly because the insurance company's forecast of renewal levels proved optimistic, although around 50 per cent of those renewing their polices did indeed opt for telephone re-licensing.

19 For the pilot scheme to be practical, the Agency offered debit and credit card payment facilities. The banks and credit card companies charge a levy for use of these cards and this surcharge was absorbed by the Agency as it would be illegal to pass this on to the customer. Whilst the surcharge for the pilot scheme totalled only some £5,000, the Agency has estimated that if all individual vehicle-keepers opted to use this method of payment, the total annual surcharge would be up to £50 million.

Evaluation of the pilot scheme

20 The pilot scheme has been evaluated by the Agency's project management team. A customer service satisfaction questionnaire sent to pilot scheme participants revealed that over 98 per cent of respondents were satisfied or very satisfied and would want to use the service again. The evaluation report recommended the continuation of the pilot beyond its original end date and an expansion of the potential customer base. The Agency told me that the partner insurance company intends to bring a further 53,500 potential telephone re-licensing customers within the scope of the extended pilot by December 2000. Negotiations with other insurance companies to identify new scheme partners are continuing.

21 The Agency told me that it believes a successful future introduction nationally of telephone re-licensing will depend on the timely and complete delivery of two major computer projects currently underway. These projects are development of a national MOT database by the Vehicle Inspectorate (due to become available in March 2002) and a new database of vehicle insurances being constructed by the Association of British Insurers (due to become operational during the summer of 2001).

22 These developments will open the option of telephone re-licensing to keepers of vehicles over three years old, and would also create the possibility of Internet re-licensing. The Agency also told me that it considers the extension of the scheme nation-wide will have a positive effect on levels of vehicle excise duty evasion and also on other categories of vehicle-related crime.

Measures to Combat Evasion

23 This section of my report looks at the incidence of vehicle excise duty evasion, the measures that have been introduced to combat evasion, estimates of revenue lost through evasion and amounts recovered through enforcement activities.

24 Evasion of Vehicle Excise Duty remains a problem that the Agency continues to take very seriously. A full roadside survey covering all vehicle groups for both Great Britain and Northern Ireland was conducted in June 1999, and the results published in February 2000. The survey results showed that evaders are travelling shorter distances and less frequently. The Agency told me that it has concluded from this that evaders may be becoming increasingly wary of the Agency's enforcement efforts and as a result less prepared to take the risk of travelling unlicensed.

Levels of evasion

25 The evasion level in Great Britain was estimated in the latest roadside survey to be some 3.9 per cent, an improvement on the 4.1 per cent level estimated in the 1994 survey. The revenue lost in Great Britain during 1999-2000 due to vehicle excise duty evasion is estimated by the Agency to be around £97 million (£116 million in 1998-99). This comprises a gross evasion loss of £183 million (£195 million in 1998-99), offset by some £86 million (£79 million in 1998-99) recovered through enforcement activities.

26 The latest estimate for evasion in Northern Ireland is 9.6 per cent, which is an improvement from the previous reported level of 10.1 per cent. The estimated consequent loss of revenue in 1999-2000 was some £13.7 million (1998-99: £11 million).

27 As noted in paragraph 7, total Vehicle Excise Duty revenues have increased by some 17.3 per cent in the last five years. This is due, in part, to an 11 per cent growth in the vehicle population and an increase in the rates of duty over that period. However, the Agency told me that the increase in revenues is also partly attributable to the increasing impact of various schemes that they have introduced to combat evasion.

28 The various sources of enforcement revenues are shown in **Figure 3** below:

3 **Revenues generated from Counter-Evasion Measures, 1998-99 and 1999-2000 (Great Britain and Northern Ireland)**

Source: Driver and Vehicle Licensing Agency

Expansion of measures to combat evasion

29 In my report on the 1998-99 accounts, I referred to the extension of the Agency's wheel-clamping scheme nation-wide. For the year 1999-2000, there were twelve permanent teams in operation, together with two mobile teams operating in areas where 'blitz' campaigns were held. The private sector contractor targets key areas and locates unlicensed vehicles parked on public highways. Following wheel-clamping, the vehicle owner has to pay a fee for the release of the vehicle, and also purchase a valid tax disc. Aside from the revenues specifically generated by this measure, a notable effect of the scheme has been the induced re-licensing evident within each geographic area during the period when the well-publicised scheme is in operation.

30 Twenty- six wheel-clamping / Vehicle Excise Duty enforcement campaigns with individual police forces took place in 1999-2000. As a result, around 21,000 vehicles were clamped/impounded. Over 7,000 of these were released on payment of fees and 10,000 disposed of mainly by crushing. At 31 March 2000, the remaining 4,000 vehicles were within the "awaiting authorisation to crush" period, which is between 5 and 7 weeks. In addition, the Agency has calculated that over 62,000 motorists voluntarily re-licensed their vehicles during the year as a direct result of the campaign, generating £8.8 million in additional revenue and a further £0.7 million from fees and penalties.

31 The Agency told me that it is continuing to identify ways of reducing levels of vehicle excise duty evasion. One pilot scheme planned to commence during 2000-01 is a trial of Automatic Number Plate Readers (ANPR) to gather evidence of unlicensed vehicles on public roads, with a nation-wide operation planned for spring 2001. A further initiative involves fourteen police forces, who are using their own ANPR systems in roadside checks to detect unlicensed vehicles by comparing number plates against an unlicensed vehicle database.

Extra Statutory payments

32 Prior to 1 February 1998, a keeper did not have to notify the Agency if they chose not to renew a vehicle licence. This made it easier to evade vehicle excise duty. Under the new Statutory Off-Road Notification Regulations, if a new licence is not taken out to run consecutively, the keeper must make a statutory declaration that the vehicle is being taken off-road for the untaxed period. Similarly, if a keeper applies for a refund because the vehicle is being taken off-road, he or she must also make a statutory declaration. Failure to make such a declaration is an offence that is followed up by the Agency.

33 In my report on the 1998-99 accounts, I noted that the Agency had identified some cases where applicants for refunds had taken their vehicle off-road but mistakenly failed to make the required declaration. As a consequence, no refund of vehicle excise duty was payable under the new regulations. The Department concluded that, in such cases, the inadvertent failure to make a declaration should not preclude the vehicle owner from receiving the appropriate refund of duty. However, under the regulations, the Agency did not possess powers to make refund payments in the absence of a signed declaration and therefore sought Treasury approval to make extra-statutory payments in these cases. The Treasury granted a £4 million annual delegation to the Agency for such payments, with the proviso that suitable legislative cover must be sought by the Agency to rectify the position at the earliest opportunity.

34 The Agency's information systems are unable to identify separately all refunds made in this way. However the Agency has estimated, from a statistical extrapolation of a sample of all refunds, that approximately 120,000 extra-statutory payments were made during 1999-2000, totalling some £3.9 million. I am satisfied that the results of this statistical analysis provide a fair representation of the volume and total value of the extra-statutory payments made during 1999-2000.

Graduated Vehicle Excise Duty

Introduction of the Initiative

35 In his budget of 9 March 1999, the Chancellor announced a package of measures to reform vehicle excise duty. One key feature of this was the introduction of Graduated Vehicle Excise Duty (the 'Graduated VED' initiative) for vehicles in the Private Light Goods tax class.

36 The Graduated VED initiative was implemented in two phases. Under phase 1, from June 1999 the level of duty charged was determined by reference to a vehicle's engine size. The new two-banded system introduced the following charges:

4 **Phase 1 Graduated Vehicle Excise Duty levels**

Vehicle type	12-month licence (£)	6-month licence (£)
Engine size not exceeding 1100cc.	100	55
Engine size exceeding 1100cc.	155	85.25

Source: Driver and Vehicle Licensing Agency

37 Under phase 2 of the initiative, a graduated charging regime for new cars based primarily on their emissions of carbon dioxide (CO_2) was announced in September 1999. This formed part of the Government's policy to reduce CO_2 emissions from cars and improve local air quality. Further reforms to the VED system were announced in the Chancellor's March 2000 Budget and November 2000 pre-Budget Report.

Implementation of Phase 1

38 The two-band system with the engine size threshold of 1100 c.c. affects some 1.8 million vehicles in the Private Light Goods class. The reduced rate applied to new licences taken out from 1 June 1999. Under the normal rules, vehicle keepers were entitled to surrender their existing licences for a refund of the unexpired period, and also to take out a new licence at the lower rate from 1 June 1999.

39 To avoid the inconvenience to the public of having to apply for two separate transactions, and the extra operating costs to the Agency, two special systems were introduced which had the effect of providing the financial benefit through a single transaction. One system was available only to fleet operators, whilst the other was available to all other vehicle keepers affected by the two-band assessment of duty. For Northern Ireland, DVLNI carried out its own trawl of vehicle records. All drivers in the Province received direct refunds, as DVLNI chose not to adopt the combined refund and re-licensing form-based system used by the Agency.

Fleet Operators

40 Fleet operators received from the Agency a payment equal to the difference between the old and new rates, on the unexpired portion of their existing licences. The Agency told me that this process offered an efficient, automated way of providing the net benefit of the new rates to companies operating large numbers of vehicles often distributed across the country.

Non-fleet vehicle keepers

41 The Agency initiated a special one-off exercise to give individual keepers of small cars the opportunity, if they wished, to take out a new licence at the reduced rate from 1 June 1999 and to off-set the purchase cost by the value of the unexpired period on their existing disk. The Agency regarded this synchronised approach to the refund and re-licensing activities as the optimal means of effecting the initiative, given the time available.

42 The Agency told me that if it had not offered this synchronised service, the expected substantial increase in public demand for refunds and the issue of new licences would have created severe operational problems for the Agency. Any significant time delays in processing refund applications would have created public impatience and led to the besieging of the Agency's telephone enquiry points.

43 This special scheme was voluntary, and vehicle keepers were free to apply for refunds under the normal rules, if they wished to do so. The Agency contracted with Post Office Service Counters Limited to undertake the refund / re-licensing service on the Agency's behalf, including the provision of a telephone help-line to allow counter clerks to check engine size where relicensing applicants did not have their registration documents. The Post Office had never before handled refunds of Vehicle Excise Duty, and this process involved both a refund and a re-license at non-standard values in one simultaneous transaction. The additional charge for this arrangement was equivalent to around two week's worth of the Post Office's standard contract with the Agency.

44 A key initial task for the Agency was to carry out an exercise to check and, where necessary, correct the engine sizes for vehicles shown in the record. To prevent further problems in the future, the Agency has since introduced a 'blocking' process, whereby notifications of changes in engine size are not accepted without supporting documentary evidence - particularly for claimed reductions in engine size. The necessary legislation to require keepers to produce such evidence was enacted in the Finance Act 2000.

45 In May 1999 some 1.6 million V901 application forms were issued, following a second scan of the record to identify recently notified changes of keeper and/or address. This was accompanied by extensive advertising in national and regional press, on radio and the internet. Nevertheless, the Agency recognised that its identification procedures could not be entirely error-proof, and waited for individual keepers to appeal if they believed they should have been included in the refund system. Such appeals, from vehicle keepers claiming ownership of vehicles with engine sizes below the threshold, were few in number. The majority came from owners of vehicles who believed from dealer advertisements that they had purchased vehicles with engine sizes below 1100c.c, whereas the accurate engine size exceeded the threshold. For some models the margin of excess was very small. For example, over 750,000 '1.1 litre' Ford Fiestas have been sold in Great Britain, but which have an actual engine size of 1,117 c.c.

Results of the Phase 1 implementation

46 The two systems used by the Agency met with differing degrees of success. The Fleet scheme was well received by users and received public praise from the relevant trade associations. However, the system used for private keepers was subject to criticism:

- Despite the Agency's public information campaign, there remained considerable public misunderstanding over the operation of the scheme and the value of the refund. Many members of the public expected to receive a monetary refund, rather than having to incur the costs of a new six or twelve-month licence, albeit that this cost was abated by the value of the refund; and
- Many members of the public found the specially designed form confusing and difficult to understand.

47 Partly as a result of these factors, the eventual take-up rate for the non-Fleet scheme, around 50 per cent of the eligible population, was relatively low. The Agency told me that a higher proportion of those who opted to take up the refund offer had a long expiry period on their existing licence. These keepers were consequently able to obtain a new licence for little, if any, monetary outlay.

Raising of the two band threshold level

48 The Chancellor of the Exchequer announced in March 2000 that the threshold level for reduced duty would be raised from 1100 c.c. to 1200 c.c. from March 2001. This will increase from 1.8 million to some 4 million the population of vehicles that will be taxed at the lower rate. This equates to approximately 20 per cent of the total vehicle population. The Agency told me that it does not expect the problem that arose with large numbers of vehicles marginally exceeding the 1100 c.c. limit to recur at the higher threshold.

Implementation of Phase 2

49 Phase 2 of the Graduated VED initiative will also come into effect in March 2001. This will result in the taxation of vehicles being assessed on two entirely different bases. For existing vehicles, the current two-tier duty rates will remain applicable, but for all new vehicles registered after 1 March 2001, the level of vehicle emissions becomes the determinant of duty. There will be no opportunity for vehicle owners to move between the bases of assessment.

50 Under phase 2, a taxation matrix of four bands and three fuel differentials is introduced. Diesel vehicles will be levied at the highest duty rates, with vehicles using alternative fuels being charged the lowest rate. Petrol vehicles will be charged at various rates between these two extremes. **Figure 5** below shows the levels of duty and the categories of vehicle to which they will apply.

5 **Levels of annual Vehicle Excise Duty payable on new passenger cars from 1 March 2001**

	Duty Band A	Duty Band B	Duty Band C	Duty Band D
CO_2 Emission Figure (g/km)*	Up to 150	151 - 165	166 - 185	Over 185
Diesel Car	£110	£130	£150	£160
Petrol Car	£100	£120	£140	£155
Alternative Fuel Car	£90	£110	£130	£150

* g/km = grammes of CO_2 emitted per kilometre travelled.

Source: DVLA Information leaflet number - INS139

51 I will examine the Agency's handling of the implementation of Phase 2 of the Graduated VED initiative, and the further measures announced by the Chancellor in his November 2000 pre-Budget Report, as part of my audit of the 2000-01 accounts. In particular, I will ascertain whether the procedures and regulations adopted by the Agency to manage this radical change in the system of taxation continue to provide for the effective assessment, collection and allocation of vehicle excise duty.

Vehicle System Software Project

Introduction

52 For many years, the Agency has operated two large databases containing driver details and vehicle details respectively. These systems provide the cornerstone of the Agency's operations in undertaking its statutory responsibilities for the registration and licensing of drivers and vehicles. The original vehicles database, called 'Legacy', came into service during the mid-1970s.

53 In 1996, the Agency carried out a wholesale review of its computer systems for millennium compatibility. The 'Legacy' vehicles system was one of those identified as a potential cause for concern by this review. Very few people still possessed any expertise in the, by now obsolete, language used to create the database and the cost of maintaining the system was becoming increasingly expensive. The Agency identified that there was a serious risk of system breakdown.

54 At the same time, the Agency was looking to introduce new initiatives to aid enforcement of vehicle excise duty. Since the Vehicle Excise and Registration Act - Road Vehicle (Registration and Licensing) Regulations 1971, which provided for the issue of registration documents by the Agency, there had been little legislative change that impacted directly on the data to be recorded within the vehicles database. However, new initiatives such as the Statutory Off Road Notification (paragraphs 32 - 34 refer), were placing additional demands on the functionality of the system.

55 The Agency business case submitted to Treasury in June 1996 sought to demonstrate that a replacement system would make such changes cheaper and easier to implement than merely adapting the existing database. The Treasury approved this business case on 31 July 1996.

Stage I - scope and confirmation of requirements

56 The IT division of the Agency (known as DVOIT) was sold to Electronic Data Systems Ltd (EDS) in 1993. The Agency's initial contract with EDS included a 'Services Provision Agreement' which was to run until 30 June 1999, with an option for the Agency to extend this for a further eighteen months until 31 December 2000. In addition, the Agency was contractually bound under the terms of the Agreement to employ EDS for all development work on both the vehicle and driver systems during this period.

57 On receiving Treasury approval, the Agency therefore commissioned EDS to prepare a detailed scope and costing for the new system, based on the comprehensive user requirement that the Agency had drawn up.

58 EDS proposed that the Agency commission EDS to design, build and operate a new Vehicles Licensing and Registration System, and at the same time exercise the option for extending the existing Services Provision Agreement. The Agency agreed to this proposal in January 1997.

59 The contract for the new Vehicle System Software (VSS) project was for a fixed price of £4,998,880. This price included a risk contingency element of £414,000 against 83 specified potential risks, any of which would require remedial work to resolve. The agreed list of risks was designed to cover all eventualities, and specifically included the risks that a two year development period would be insufficient and that 'Coolgen' (the program development language proposed by EDS) skills and training might prove inadequate.

60 EDS told me that it did not appreciate the extent to which these risks would materialise at the outset, and that the amount of financial cover included for risk contingency proved to be significantly lower than required. However, these additional costs were borne by EDS rather than the Agency.

61 The planned target date for implementation of the full, re-engineered VSS system was 1 October 1998. In the event of project slippage, EDS estimated that the cost of extending the life of the 'Legacy' system from October 1998 to October 1999 would be £350,000. The Agency gave final approval to the project in January 1997.

Stage II - design, build and implementation

62 The Agency sought the advice of external consultants on an appropriate management structure to adopt for the VSS project. As a result, the Agency established a Project Board which included the Agency's Director of Operations and Director of Development, together with representation from EDS. Generally, this board met on a monthly basis. It was supported by a project team of Agency staff that met fortnightly with EDS for a checkpoint meeting that assessed progress against plans and any emerging issues.

63 The Project Board identified at an early stage that the timetable for completing this project was tight. It agreed to take a firm line against all but the most necessary requests for changes to the original user requirement. In all, 80 change control notes were prepared over the development period, and some of these were subsequently withdrawn or superseded. Although some of these changes are still to be delivered, the additional cost to the Agency is expected to be around £120,000. This includes the cost of additional equipment and programming costs, and represents a 2.4 per cent increase to the original fixed contract price. EDS told me that the timescale for evaluating and approving each change, and in particular the introduction of Graduated VED, had a major impact on the project timescale. EDS also considered that both they and the Agency could have processed change requests in a more timely manner.

64 A phased implementation of the new system was planned, and the first live transaction was processed through VSS in January 1998. From this date, the 'Legacy' and VSS databases were operating in tandem. Different transactions were processed through each of the systems, and nightly reconciliations were performed. The two systems were not directly compatible and EDS therefore had to establish a process for ensuring that both databases were continuously up to date. This was achieved by identifying and extracting nightly the changes made to each system during each day's operation, comparing the two systems and then making the appropriate updates. During this transitional period, the 'Legacy' system was used as the master database for both enquiry and output / printing purposes.

65 Progress on the new VSS system was not as fast as expected, although it was not until August 1998 that EDS acknowledged that it would not be possible to meet the planned final 'cut over' date of 1 October 1998. As a result, the Agency and EDS therefore had to activate the contingency procedure to allow the 'Legacy' system to continue in operation for a further twelve months. The additional costs of this procedure were met by EDS, who told me that the slow progress was due to the system proving more complex than anticipated, the lower than expected productivity achieved from the use of 'Coolgen', and the length of time required to approve system requirements.

'Cut over' to the new system

66 'Cut over' was the term employed for the final implementation of the VSS system. At this point, VSS would become the master database and 'Legacy' would be decommissioned. The 'cut over' date slipped from October 1998, at first to March 1999, and then to the end of August 1999. Following the introduction of the Graduated VED initiative in the March 1999 Budget, further significant adjustments were required to the new system. This pushed the 'cut over' date back one further month to 1 October 1999. This degree of slippage caused considerable alarm within the Agency, as it knew that the 'Legacy' system could not be made millennium-compliant any further.

67 The Project Board met on 23 September 1999 to decide whether to proceed with the plan for 'cut over' on the weekend of 2-3 October 1999. However, the Project Board knew that there were still some key transaction types that had yet to be fully or successfully tested on the new system:

- refunds of duty;
- cherished transfers, for which the new process had been totally re-written, with the aim of cutting the transaction processing time from three days to one day;
- fleets licensing;

- the processing of returned (bounced) cheques;
- on-line amendments to records; and
- a considerable amount of the information provided to external customers.

In addition, the testing of the disaster recovery action plan had not been completed, and EDS had yet to prepare a new Service Provision Agreement.

68 The Project Board accordingly decided to postpone 'cut over' for two weeks, aiming for the weekend of 16-17 October 1999. The timing of the transition was sensitive because the Automated First Registration and Licensing system would have to be taken temporarily off-line, during which time motor dealers would be unable to register new vehicles. Thus the end of a month would not have been convenient to these users. The Police National Computer (PNC) operators also needed to conduct their own system testing on the 'cut over' day, to verify that the new links were operating effectively.

69 The Project Board met again on 13 October 1999 to confirm 'cut over' for the coming weekend. However, the project manager advised the Project Board to postpone for a further three weeks, because there were still unresolved problems with the processing of refund transactions and with the data supplied to the Police National Computer. The Project Board agreed to meet again on Friday 15 October to make a final decision, thereby allowing a further two working days for EDS to resolve some of the key outstanding issues.

70 At this next Project Board meeting, EDS advised that the 'Legacy' system might not continue to function adequately into November 1999, as millennium compliance failures would then start to emerge. As a result, the Project Board decided to go ahead with 'cut over' during the weekend of 16-17 October 1999.

71 During the summer and autumn of 1999, the Agency had drawn up contingency plans in case the VSS and 'Legacy' systems both failed. These fall-back measures largely relied on manual processing of transactions, and would have required significant additional resources (up to 400 temporary staff). It swiftly became apparent that the Agency would be unable to recruit at this level, and that such resource demands could probably only be met by offering overtime to existing staff throughout the Agency. There was clearly no guarantee that the Agency would have been able to handle the volume of work manually and, at the very least, there would inevitably have been a serious disruption of customer services.

Post implementation

72 In the period immediately following the cut over, the Agency and EDS implemented a system of rigorous controls to monitor the performance of the VSS system. For example, the Agency withheld customer outputs for two to three days, to avoid the need for later recovery action if errors were subsequently identified. The volumes of data input to VSS were restricted, to ensure the system was not overloaded, and the Agency implemented a procedure to check all paper output from the system manually. In addition, EDS undertook regular scans of the system to detect potential failures. During the first full week of operation, the 'Legacy' system was decommissioned, and VSS became the Agency's master vehicles database.

73 The 'cut over' in October 1999 was undoubtedly a high risk strategy, but one which the Agency had little option but to follow because of the instability of the 'Legacy' system. Since implementation VSS has, for the most part, operated relatively successfully and EDS told me that it considered the adopted approach to have been justified. However, a number of serious problems have arisen during the first year of operation:

- Refunds of vehicle excise duty remain the most problematic transactions, and I comment further on these at paragraph 78;
- During the Christmas 1999 period, there were instances of corrupt data being downloaded to the Police National Computer. There was no evidence of any wrongful arrests or of legal action based on this incorrect data, but these failures did create a risk of such occurrences. EDS was able to resolve this problem in January 2000;
- A failure in manual printing procedures resulted in the VSS system generating duplicate registration marks for issue to motor dealers, although this error was discovered by the Agency's internal manual controls before any dealers had been notified of the marks. However, this failure almost resulted in the issue of 100,000 duplicate registration marks, which would have caused an enormous administrative problem as well as posing a significant risk to enforcement activities;
- Agency staff identified one vehicle more than 20 years old, for which no history was contained within VSS before October 1999. A detailed scan of the 60 million records on the system showed that this failure to migrate data from 'Legacy' was limited to under 100 vehicles, and the Agency were able to recreate the vehicle histories for these from back-up log tapes;
- the Agency sells anonymised data, providing certain statistical details, to a number of commercial organisations. However, in the period immediately following implementation of VSS in October 1999, the data often proved to be corrupt or even undeliverable. This resulted in complaints from the customer base, and resulted in the Agency having to forgo total income of some £20,000 which would normally have been due from these organisations over several months in Spring 2000. EDS told me that this loss of income, although regrettable, was not covered under the terms of its agreement with the Agency;
- The Secretary of State for the Environment, Transport and the Regions uses transport statistics extracted from the Agency's vehicles database to inform certain policy decisions. These statistics were not available immediately after 'cut over' from VSS, and this situation was not rectified until Summer 2000.

Post-implementation 'Trouble Reports'

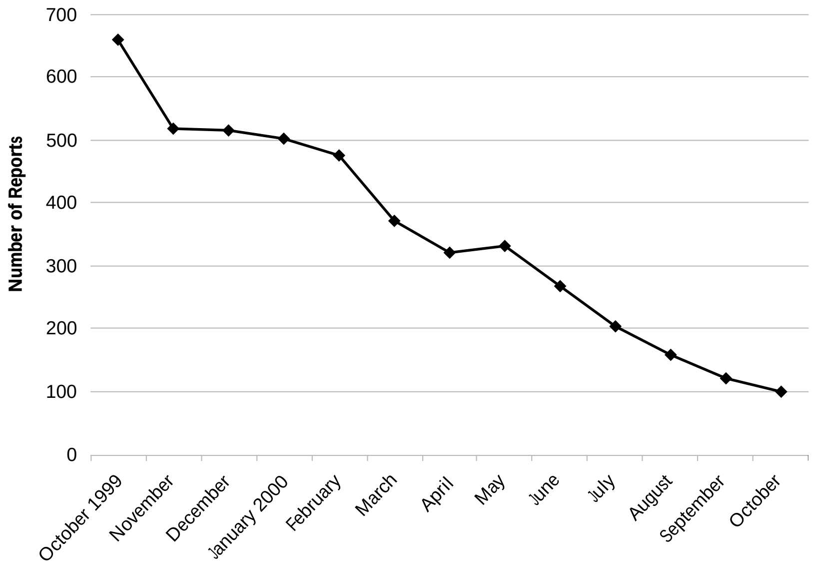
74 When Agency operators or testers identified an error or failure within the new VSS system, the project team raised a 'trouble report' for EDS to action. Immediately following the cut over in October 1999, the number of trouble reports grew rapidly to over 600 separate items. In line with its normal procedures, EDS had cut the number of system testers and development staff working on the project once VSS had been implemented and, as the problems started to mount, the Agency wrote to EDS several times expressing concerns over low staffing levels. EDS told me that it had retained more staff than anticipated and retained key contractors for three months following implementation.

75 By April 2000, some six months after VSS became the master database, the outstanding trouble reports still numbered over 300. Whilst approximately 50 of these items related to cosmetic issues such as screen layout, the majority concerned fundamental failures or errors within the operation of the system. This led to the Agency categorising trouble reports and specifically highlighting the top 25 items for EDS to correct.

76 In order for the project to be deemed complete, and therefore for EDS to be able to claim the final instalment payment, the Agency required the number of outstanding trouble reports to be no more than 100, and for none of these to be critical to the effective operation of VSS. By the beginning of September 2000, the number of trouble reports still stood at around 120. EDS was able to reduce this figure to the 100 target, whilst also clearing all the critical 'top priority' trouble reports and other outstanding project deliverables by mid-October 2000. By this date, the Agency and EDS were able to conclude a 'Closure Protocol and Agreement', which also included measures for reducing the trouble reports to 50 by December 2000.

77 The following figure shows the progress since 'cut over' in clearing outstanding trouble reports:

6 **Number of trouble reports post implementation**



Source: Project Board Minutes

Processing of refunds of vehicle duty

78 A vehicle keeper can apply for a refund of vehicle excise duty by surrendering a current tax disc. The refund paid corresponds to the number of complete months remaining on the life of the disc. If a disc has been lost or stolen, then the keeper can still obtain a refund on application, but an administration charge is levied (the appropriate legislation[1] requires a new disc to be issued, for which a fee is chargeable. The refund is then technically offset against this replacement disc).

79 In order to prevent fraudulent claims for refunds, for example when a vehicle is stolen, the Agency withholds payment of the refund for a set period to establish that no other activity occurs for that record (for example, police notification of a stolen vehicle). This withholding of payment is known as 'recycling'.

80 The Agency originally planned for the refund transaction type to migrate from 'Legacy' to VSS at an early stage, but this proved problematic. During the testing stage the process was not operating properly, although EDS made significant progress in the final week before cut over. Nevertheless, this

1 *Vehicle Excise and Registration Act 1994.*

transaction type has been plagued by difficulties since going live, and Agency operational staff have had to install their own set of cumbersome manual checks.

81 In the period October to December 1999, the VSS system did not release some payments for refund transactions, as a fault in the program resulted in it not releasing some 'recycling' transactions. When this issue was resolved in January 2000, a backlog of some 100,000 refunds had built up. The system has only the capacity to process 30,000 refunds per working day, and it automatically prioritises new payments ahead of the backlog transactions. This resulted in customer complaints, and the Agency had to initiate a manual payment procedure to clear the backlog, building in appropriate safeguards to prevent duplicate payments.

82 A separate VSS system fault caused some refund payments to be made to an incorrect payee or sent to an incorrect address, because the system was interrogating the main file record rather than the specific details given by customers on their refund applications. This error was brought to the Agency's attention by a commercial customer, who received an unexpected refund. However, the Agency has not been able to identify how many more incorrect payments were made in this way.

83 A further failure in the refund system resulted in Heavy Goods Vehicle keepers receiving incorrect amounts, again because the system calculated the amount due based on historical data contained in the main file record rather than current weight and wheel base plans. This error was discovered when a customer informed the Agency that he had been overpaid. The Agency confirmed to me that this fault has since been corrected, and no further instances have been reported. It is unable, however, to establish with certainty the total value and volume of incorrect refund payments made.

84 In February 2000, the Agency identified that the refund transaction process also contained a 'Year 2000' fault. The system would not issue refunds for discs with an expiry date in January 2001, because it recognised dates in 2001 as 1901 and the transactions therefore failed a key test that the expiry date should be after the application date. The refund transaction process had not been included within the otherwise rigorous millennium compliance testing of the system because it had not been ready at the time of testing. However, EDS was able to rectify this programming bug before customer service was adversely affected.

Costs of the VSS Project

85 The 1996 EDS project proposal provided for seven quarterly payments from March 1997 to the planned implementation date of October 1998, based on EDS delivering against agreed project 'milestones'. The first six milestones were reached by June 1998, by which point some 85 per cent of the monies due in respect of those milestones had been paid to EDS. The Agency was retaining almost £560,000 against undelivered products or functions. Shortly after this, EDS told the Agency that it could not meet the October 1998 completion target. Although further progress was made in delivering the project, the Agency did not make a further payment to EDS until March 1999.

86 However in August 1998, when it became clear that the VSS system would not be delivered to the original schedule, the Agency informed EDS that the final payment would be withheld until completion, and that no running cost payments would be made until the system had been fully operational for one month.

87 The Agency paid a further instalment of system development costs totalling £350,000 in March 1999, and another payment of £300,000 in March 2000. This left a remaining outstanding balance of some £200,000, which was paid on closure of the project in October 2000. This equated to a 4 per cent retention element against the total contract price.

88 The VSS project has lasted four years, although 73 per cent of the fixed price contract was paid during the first eighteen months. The milestones that EDS was working to allowed the company to claim payments when processes had been documented, as well as when they became fully operational, and so EDS was entitled to draw down further stage payments despite the project running increasingly behind the original timetable.

89 Despite the difficulties experienced with this project, the Agency has managed to avoid spiralling project costs by preparing a detailed user requirement at the outset, concluding a fixed price contract and keeping subsequent changes to a minimum. The Agency also negotiated reductions in running costs with EDS to reflect the Agency's additional costs incurred by the project delays. As a result, the Agency's latest estimate of total project costs, including both capital spend and the Agency's own running costs, is £11.1 million. This compares to the business case estimate of £10.5 million, and represents a 6 per cent overspend. EDS told me that it considered that certain areas of the user requirement produced at the outset were not fully comprehensive, and it believed that this had undoubtedly contributed to the delays, cost under-estimate and volume of trouble reports that affected the overall success of the VSS project.

Project Closure

90 The VSS project finally closed in mid-October 2000, when the project team was disbanded and the final instalment of the contract was paid by the Agency to EDS. The project had lasted four years, twice the original timescale, although the direct cost to the Agency has remained within the limit set within the Treasury-approved business case. The Agency and EDS discussed the requirements for project closure following 'cut over' in October 1999 and agreed, in two Agency letters to EDS in February and March 2000, the following conditions for closure:

- An agreed detailed Service Provision Agreement must be in place, specifying EDS's responsibilities for the upkeep of VSS, and setting out the running costs chargeable to the Agency;
- Satisfactory completion of the "top priority" trouble reports, and those of "mid-priority". In practice, this would leave around 100 outstanding trouble reports, relating mainly to cosmetic changes which could be addressed post-closure within the terms of the Service Provision Agreement;
- Delivery of all products that impacted on external customers. This particularly related to the adequate provision of anonymised data for resale;
- Completion of all system documentation. The EDS contract expires in March 2002, at which point the contract for the maintenance and operation of the Agency's information technology systems will be re-tendered. If a different contractor were to be appointed, it would require this documentation to allow it to fulfil its responsibilities;

- A successful resolution to the ongoing commercial discussions regarding VSS finances since April 2000, and the issue of post-VSS development costs. A key feature of the VSS proposal prepared for the Agency by EDS in January 1997 was an estimated 30 per cent potential reduction in the full cost of a range of typical vehicle system changes, against the development costs associated with the predecessor 'Legacy' system. The Agency told me that in reality for some other projects their development costs have seemed higher than expected. EDS is conducting a review with its software supplier to see where further productivity improvements can be made, and told me that its original estimate of a potential 30 per cent saving was a cautious commitment designed not to create unrealistic expectations within the Agency. EDS had also proposed to move away from the existing mainframe system, but technical difficulties have meant that this must still be used for printing VSS outputs. Thus, at present, two systems are now required rather than one.

91 In addition to the above issues, work remains to be performed on testing the Disaster Recovery Plan. Although limited testing was undertaken prior to the 'cut over', no further progress was made by EDS until early October 2000 when a further limited test was carried out. The results of this test are awaited by the Agency from EDS. The Agency told me that in the longer term EDS accepts the absolute requirement for a full-scale Disaster Recovery Plan for the entirety of the Agency's Vehicle and Driver systems, and is planning to do so in October 2001. Given the number of failures and problems encountered since implementation, I consider that the Agency should complete testing of the Disaster Recovery Plan urgently.

92 The Agency told me that it intended to draw up a project evaluation report by mid-November 2000, analysing the overall benefits delivered, the lessons learned and the costs incurred. The Agency's internal audit unit plans to carry out a formal Post Implementation Review six months after project closure, to evaluate the successes of the VSS project and to identify lessons for future Agency projects. I intend to monitor the outcome of this review as part of my future audit work.

John Bourn
Comptroller and Auditor General

20 December 2000

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