

UNIT EVIDENCE AND RESEARCH STRATEGY
VEHICLE AND OPERATOR SERVICES AGENCY

SRO	Stephen Tetlow
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Circulation:	
Stephen Tetlow	VOSA Chief Executive Officer
Hugh Edwards	VOSA Goods Vehicle Director
Kevin Rooney	VOSA Passenger Vehicle Director
Alex Fiddes	VOSA Private Vehicle Director
Tony Downes	VOSA Business Strategy and Corporate Development Director
Alastair Peoples	VOSA Testing and Inspection Director
Janice James	VOSA Intelligence and Targeting Director
Andrew White	VOSA Information Technology Director
David Trussler	VOSA Commercial Customer Services Director
Heather Cruickshank	Passenger Vehicle Customer Relations Manager
Alastair Mitchell	Goods Vehicle Customer Relations Manager
Dave Easton	Private Vehicle Customer Relations Manager – no response
Alan Wilson	Head of Private Vehicle Scheme Management
Stephen Fidler	Head of DfT Logistics Policy
Helen Morris	Head of DVO Policy Unit
David Briggs	DVO Policy Unit
Ian Yarnold	TTS Head of Division
Franco Degan	DVO Group S&R Directorate

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1 INTRODUCTION

VOSA is a member of the DVO Group and works closely with the other parts of the group and other stakeholders to contribute to broader DfT objectives.

Within VOSA, research and evidence gathering activity is carried out within two key teams - the Research & Development (R&D) team, and the Customer Experience team. This document focuses on the work carried out by these teams.

VOSA R&D is responsible for leading and supporting research across three 'sector' directorates within VOSA: Private Vehicle (PrV), Passenger Vehicle (PV) and Goods Vehicle (GV). It works closely with sister Agencies, DVO Group policy and other policy teams in the Department. The R&D team aims to deliver continual improvements to existing procedures and seeks innovative solutions using new technologies for annual testing and vehicle roadworthiness enforcement.

Currently VOSA measures customer satisfaction using customer satisfaction surveys, forums and focus groups. In the first quarter of 2007, a new Customer Experience team is being set up, responsible for looking at the whole customer experience, and measuring customer experience performance, working closely with the DVO Group S&R Customer Insight Team.

2 OBJECTIVES

As part of the DVO Group, VOSA's objectives are aligned to DVO and DfT objectives (summarised in the DVO Group S&R directorate strategy). Within this broader context, VOSA's vision is:

"By 2008 VOSA will be DVO's on-road vehicle and operator standards and enforcement specialist delivering value for money services, targeting the non-compliant, championing safe, clean and economic road transport."

VOSA's strategy to achieve this vision focuses on contributing to the goals of improved road safety and a better environment, whilst addressing wider government objectives including: reduced vehicle crime; value for money; customer satisfaction; and sustainable UK economy.

VOSA R&D uses evidence and research to inform decision-making in the following ways:

- For outcome-based objectives, evidence may be gathered as appropriate from one or more of the following sources: analysis of statistics, consultations, VOSA sector directorate policy, DVO Group policy and Transport Technology and Standards (TTS) policy. Evidence is gathered to better inform policy development, implementation and the monitoring of policy effectiveness.
- For customer service and value-for-money objectives, evidence from the analysis of management information and research based evidence on new technology drives action plans to deliver new initiatives and improve existing services where this is needed.

Table 1 – VOSA contribution to DVO Group Outcomes and End States 2011

Strategic Outcome	End State	DVO S&R	VOSA	DVLA	DSA	VCA
Better services to customers	BSC01 In each main customer group satisfaction levels with the services they receive from the DVO Group will be maintained or improved compared to 2006/7 levels.	√	√	√	√	√
	BSC02 Customers who need physical contact to carry out their transactions with the DVO Group will have access to, and timely provisions of, those services.		√	√	√	√
	BSC03 Accessible e-channels, tailored to customer needs, will be the preferred channel for the provision of services and other interactions where face to face contact is not required.		√	√	√	√
	BSC04 DVO Group data will be of high quality, accurate and consistent, enabling ourselves and our partners to deliver new and more accurately targeted services.	√	√	√	√	√
Improved road safety	IRS01 Compliance will be maintained or improved in the areas of <ul style="list-style-type: none"> ● Vehicle roadworthiness ● Driver licensing ● Vehicle registration ● Vehicle testing ● Motor insurance 	√ √ √ √ √	√ √ √ √	√ √ √ √	√ √ √	√ √ √
	IRS02 Quality and consistency of testing will be achieved at an appropriate standard in the areas of <ul style="list-style-type: none"> ● Private motor vehicles ● Commercial vehicles ● Driver competence ● Vehicle type approval 		√ √ √		√	√

Improved journey time reliability	IJT01 The DVO Group will contribute to journey time reliability improvements through activities such as targeted enforcement and the provision of accurate data to local road charging schemes.		√	√	√	
Better regulation	BR01 The impact of regulation on the compliant customer will be reduced in line with the Department's wider regulatory Simplification Plan.	√	√	√		√
Reduced environmental impact, crime and anti-social behaviour	REI01 DVO Group, working with its partners, will promote and contribute to a cleaner, better environment through information, education, enforcement of standards and through reducing the impact of its own internal operations.	√	√	√	√	√
	REI02 DVO Group, working with its partners, will contribute to the tackling of identity fraud and other serious crime connected to its services through the provision of high quality data and the integrity of its systems.	√		√	√	
Raising tax revenues to fund public spending	RTR01 Compliance on Vehicle Excise Duty will be delivered to the level agreed with HMT	√		√		
	RTR02 Opportunities for Wider Markets activity will be proactively identified and delivered in line with Departmental and Government policy		√	√	√	√
Better value for money	BVM01 The DVO Group will continue to demonstrate its commitment to providing value for money services.	√	√	√	√	√
	BVM A higher level of interactions between the DVO Group and its customers will take place via the preferred electronic channel.	√	√	√	√	√
	BVM03 DVO Group will provide effective governance and management of its agencies to enable the delivery of high quality services in terms of the capabilities of its staff, resources and partners.	√	√	√	√	√

Each of the above strategic outcomes has been mapped to at least one Government Public Service Agreement or Public Service Objective. These mappings are shown in Appendix C

3 EVIDENCE NEEDS

VOSA's research and evidence needs derive from broader DfT objectives, key SoS targets and strategies concerning Private Vehicles, Passenger Vehicles and Goods Vehicles. Evidence is also required to measure performance against the Secretary of State targets as set out in the VOSA Business Plan. Table 2 below, summarises VOSA's evidence needs for 2007/08 in the context of DfT objectives and SoS targets:

Table 2 – VOSA's evidence needs

DfT Objectives	Key SoS Targets	Key Measures	Evidence Needs
To enable economic growth and improved productivity.	<p>Customer Satisfaction: To maintain or improve customer satisfaction at 2006/07 levels.</p>	<ul style="list-style-type: none"> ● Operators \geq 81% (with 4% tolerance) ● Drivers, fitters and presenters \geq 92% (with 2% tolerance) ● MOT \geq 94% (with 4% tolerance) 	<p>Annual surveys of:</p> <ul style="list-style-type: none"> - Passenger & Goods Vehicles Drivers - Service Agents - MOT Garages Survey - Private Motorists - MOT Customers (data from the DVO Group Private Motorists survey)
To strengthen the safety and security of the UK transport system.	<p>Quality of Service:</p> <p>To improve the consistency of VOSA's vehicle testing service across the country.</p> <p>Enforcement on non-compliant vehicles and drivers.</p>	<p>By 31 March 2008 to have reduced the range of initial test fail rates for motor vehicles, trailers and PSVs through:</p> <ul style="list-style-type: none"> ● The application of consistent [and standardised] testing policy and procedures, and ● Effective liaison with operators, drivers and presenters to improve the standard of vehicles presented for test. 	<p>Diesel Smoke Meter Testing</p> <p>VOSA conducts a full metered smoke test on trucks and buses annually or at roadside checks. This provides data on test outcome, time taken etc.</p> <p>VOSA R&D are working with an equipment manufacturer to investigate the possibility of developing a prototype sift tool which may reduce the need for full metered tests carried out at roadside enforcement checks or at annual test.</p> <p>On Board Diagnostics - emissions</p> <p>Feasibility study for using OBD for diesel testing emission control and after-treatment systems such as recirculation devices and urea additives – for Goods and Passenger Vehicles.</p> <p>Investigate the potential for introducing OBD testing into the light vehicle scheme for all engine types.</p>

			<p>Remote Sensing</p> <p>It is considered that recent developments in truck and bus electronic technologies may enable outside entities, such as VOSA, to remotely interrogate the on board databases of vehicles (including digital tachographs) whilst they are in motion. Preliminary discussions with vehicle manufacturers and IT transport consultants lead us to believe that there may be an opportunity to exploit these technologies for more targeted enforcement and intelligent testing purposes.</p> <p>For 07/08 the R&D team, in collaboration with stakeholders, qualified external research suppliers and Universities where appropriate, will investigate and report on the feasibility and cost benefits of this state of the art technology.</p>
<p>To enable economic growth and improved productivity.</p> <p>To strengthen the safety and security of the UK transport system</p>	<p>Better Regulation: To contribute to improved road safety by reducing the administrative burden of commercial operation and increasingly targeting enforcement on non-compliant vehicles and drivers.</p>	<p><i>Reduce Administrative Burden</i></p> <ul style="list-style-type: none"> ● Implement agreed plan for licensing reform by April 2008 ● Implement operational Graduated Fixed Penalties & Deposits system by 7 November 2007 <p><i>Improved Targeting</i> Improved targeting of enforcement action at the roadside, delivered by:</p> <ul style="list-style-type: none"> ● reducing the percentage of vehicles detained at the roadside that have not contravened driver and vehicle regulations from to below 62.50% in 2007/08; and, ● increasing effective targeting of serious offences, measured by the average of quality prohibition points per roadside check. 	<p>Driver, Vehicle and Operator Profiling</p> <p>The GV and PV sectors have tasked R&D to examine the feasibility of profiling drivers, vehicles and operators to improve VOSA's understanding of compliance and non compliance within the industry. There have been several reported studies on profiling in the industry. From a VOSA perspective BS4a and BS12 identified the benefits of linking a driver to the operator for OCRS purposes. Profiling gives VOSA the opportunity to predict non compliance and intervene at an early stage.</p> <p>A Memorandum of Understanding has been agreed between DfT Statistics and Roads and VOSA on data sharing of accident statistics that will feed into the profiling process.</p> <p>For 07/08 the R&D team, in collaboration with stakeholders, will investigate and report on the feasibility of producing a profile on driver, vehicles and operators.</p>

		Introduce risk-based targeting regime to the enforcement of MOT garages and testers by 1 April 2008.	
<p>To enable economic growth and improved productivity.</p> <p>To strengthen the safety and security of the UK transport system</p>	<p>Reduced Congestion: To contribute to making journeys more reliable on the strategic road network, improving road safety and minimising congestion, by working in partnership with the Highways Agency and targeting “at risk” vehicles.</p>	<p>To extend the initial pilot scheme in the South East to take action* on goods vehicles identified as "at risk"</p> <ul style="list-style-type: none"> ● increasing the volume of checks of vehicles on international journeys, and ● a programme of education and advisory activity targeted at international vehicles and drivers to help improve compliance. 	<p>‘At risk’ to be identified through Highways and VOSA research.</p>

4 COMMUNICATING RESEARCH & EVIDENCE

INTERNAL COMMUNICATION

VOSA research issues are communicated internally (i.e. within the Department for Transport) through a number of formal channels, which are described below.

DVO Vehicle Technology Forum

The purpose of the Vehicle Technology Forum is to provide a coordinated conduit between DfT(c) policy makers and DVO Group agencies to better inform strategies on existing and future vehicle technologies, enabling DVO Group to deliver its objectives effectively. Representatives from VOSA, VCA, DVO Group policy, Cleaner Fuels and Vehicles (CFV) and TTS attend these meetings on a quarterly basis. The main aims are:

1. To ensure that DfT strategies are aligned;
2. To identify key issues and ensure effective DVO Group engagement;
3. To ensure that DVO Group agencies integrate their approach and delivery to policy;
4. To provide feedback from customers, consumers and industry to DfT(c).

DVO Electronics Group

The purpose of the this Group, which sits below the DVO Vehicle Technology Forum, is to ensure that at a working level VOSA responds effectively to, and maximises the potential of, new electronic vehicle technologies to ensure continuous compliance of vehicles with road safety and environmental standards. The main aims are:

1. To agree an over-arching vehicle electronics strategy that aligns with DfT and VOSA Compliance and Investment Strategies, and the DVO Vehicle Technology Forum.
2. Share and develop with the industry a high level view of how technology can contribute to the raising of vehicle operating standards and compliance.
3. Develop appropriate partnerships where this will give VOSA greater leverage in achieving strategic aims.

Emissions In-Service Group

This group comprises representatives from VOSA, DVO Group, TTS, CFV, Defra and other Government departments that have an interest in testing and/or regulating vehicle emissions. It has sufficient cross-government expertise to shape strategic planning and commission research for the testing and enforcement of road vehicles.

TTS Heads of Branch

The purpose of this group is to maintain good communications between DfT(c) and its agencies on political, legal and environmental changes both within the UK and Europe. As TTS has ownership of policy it is useful for VOSA to be kept informed on likely developments that may impact on our vehicle testing and enforcement roles. It also gives the agencies an opportunity to influence the debate on particular areas of interest.

DVO Policy Group

The DVO Policy Group meets quarterly. It is attended by policy leads from each agency, S&R and policy leads from across DfT(c) who have an interest in driver and vehicle policy. VOSA is represented by Hugh Edwards, Goods Vehicle Director. The group is chaired by Vivien Bodnar, S&R Director.

The group provides a valuable network for discussing current and forthcoming policy issues, for discussing cross-cutting policies, and for sharing policy research programmes at a high level. The group's remit is to provide a forum for updating colleagues on activity across the group, for setting forward strategy, and for identifying priorities.

DVO Customer Insight Group

The DVO Customer Insight Group (CIG) meets every eight weeks. Its members include representatives from DVO Group S&R, the DVO Group Customer Directors and agency customer research teams, DVO Customer Champions, and a representative from the Social Research and Evaluation Unit (SRE) in DfT. VOSA is represented by the VOSA Customer Experience team.

The meetings are used to communicate customer research findings through DfT and DVO Group. They are also used to discuss cross-cutting issues, share best practice, and discuss the customer research programmes of each agency and DVO Group S&R. (Please refer to the DVO Group S & R strategy for more details).

EXTERNAL COMMUNICATION

Outside the Department for Transport, the majority of communication on research is conducted on an ad hoc basis when there is a specific need. However, there are some more formal arrangements with certain stakeholders, for example, private vehicle test station annual MOT seminars and regular GV and PSV stakeholders meetings. Research issues are regularly discussed with external stakeholders, in particular Trade Associations and the Councils for private garages.

VOSA communicates with affected organisations or representative bodies on potentially sensitive research in advance of formal communications with stakeholders to allow concerns to be identified and managed. VOSA has a clear procedure for press management and the pragmatic introduction of policy.

These arrangements with stakeholders allow for a two-way communication process, giving stakeholders the opportunity to feed back to VOSA. The formal consultation process also allows interested parties to feed their views back to VOSA.

Publication of Research

Research summaries are made available through regular VOSA publications such as 'Matters of Testing' for private garages and 'Moving On' for HGV and PSV operators.

At a higher level, VOSA informs the general public, key stakeholders and key partners of research findings using:

- VOSA website;
- Annual Business Plan;
- Annual Report and Accounts;
- Annual Effectiveness Report.

Research Management Database

In 2007-08, VOSA intends to publish its research on the RMD.

5 COLLABORATION

Internal Collaboration

Internal collaboration on research is well established between DVO Group policy units and TTS policy teams. VOSA attends TTS's External Research Advisers' Meeting, which informs VOSA of TTS's annual research programme. VOSA is aware of research planned by RUS and has a stake in the delivery of activities based on research outputs.

VOSA has a Memorandum of Understanding with:

- Highways Agency to work together to help reduce congestion and target non-compliant operators i.e. the South East International Pilot.
- DVO Group S&R Directorate to gain a better understanding of the causes of accidents through joint data sharing.

DfT's Statistics: Roads division to work together to achieve congestion reduction targets

Links also exist with other parts of the Department for Transport, for example, CFV and Statistics Roads. Outside of DfT, VOSA R&D identifies partners according to the needs of particular areas. These may include colleagues in other Government departments, for instance, the Cabinet Office and Defra (on vehicle emissions).

External Collaboration

VOSA maintains close working relationships with Trade organisations such as the FTA, GEA, RHA, RMIF and the MOT Trade bodies (please see Glossary for full names). Regular meetings are held prior to, during and at the completion of research projects, for example, the work currently underway researching side swiping by foreign GV's has been influenced and assisted by colleagues in the FTA and RHA.

VOSA Research and Development also works in partnership with a Manufacturers Forum which is responsible for developing a two-way communication on new vehicle and equipment technologies. This is achieved through a liaison engineer network between VOSA R&D and individual vehicle manufacturers. At a higher level this forum meets annually when VOSA Directors and supporting staff presents policy and strategic outlines, gaining invaluable feedback from key stakeholders in the manufacturing industry.

There is a programme of regular collaboration with colleagues in CITA which is a global association of organisations involved in vehicle roadworthiness inspection. It is a primary consultee on vehicle technology and inspection standards to both the European Commission and the UN ECE. VOSA is actively involved in seven working groups within CITA (Europe) each focussing on a different area of vehicle and test equipment technology research that make recommendations on test standards and best practice to the Roadworthiness Directive Technical Adaptation Committee of the European Commission.

VOSA has also collaborated with other countries, for example working with the French to allow the UK Immigration Services to distribute piloted mirror lenses to non-UK GVs in France. The R&D team has built up contacts through CITA and through these are able to tap into European universities' research databases.

6 PROFESSIONAL AND TECHNICAL SKILLS

Staff within VOSA possess the necessary professional skills to enable them to act as intelligent customers in their interactions with external consultants and contractors.

VOSA recognises the value that can be added through liaising with universities and partners in the public and private sectors. There are also consultants working on specific policy areas, helping to expand VOSA's knowledge base.

At a strategic level R&D specialist skills are essential for:

- Identifying where research evidence is required;
- Setting clear research objectives and advising on appropriate methodology;
- Identifying where analysis of statistics and data is required;
- Clear communication of research insights to key users and decision-makers;
- Making the case for research to key stakeholders.

The following specialist skills are identified for a research project officer:

- To write a clear and full research brief;
- To understand the types and uses of the range of research methodologies;
- To challenge and test potential research suppliers;
- To negotiate contracts and oversee research projects;
- To review and assess the quality of research results provided by suppliers before they are disseminated;
- Project management skills, including PRINCE2 and MS Project;
- Communicating and promoting research and its implementation
- Strong customer and stakeholder communication skills
- Ability to view agency services from the customer perspective

When necessary, VOSA will bring in skills and expertise from outside the agency. This includes experts from within DfT such as the TTS Heads of Branch and Statistics: Roads. The R&D team also has a budget to buy-in skills from external research bodies such as TRL.

7 RESEARCH MANAGEMENT

STRATEGIC MANAGEMENT

The VOSA Research Programme is led by the Goods Vehicle Director who reports on the planning, progress and implementation of the programme to the VOSA Directing Board and its Chief Executive Officer.

The status of individual projects is monitored through established project boards and, if appropriate, a relevant steering group i.e. emissions in-service projects.

FINANCIAL MANAGEMENT AND FINANCIAL PLANNING

Detailed financial management and planning are agreed in-house before being circulated wider within the Department for approval.

Each year's VOSA research programme is produced taking into account the aims, objectives and strategies of VOSA, DVO Group and TTS. A costed programme of research will be put to VOSA Directing Board for approval.

Funding for VOSA R&D comes from a ring fenced levy of 1p on the charge of each MOT test certificate issued which creates circa £300k. Agreement in principle has been given by DVO Group PU2 that funding should also come from the GV and PV fee.

The R&D team leader manages the research budget and has half-yearly meetings with VOSA Finance colleagues to provide updates on spend against a budget forecast year end spend. Additionally, monthly reports are provided by the Finance team which is incorporated into the performance report to Directors as previously described.

Where the need for immediate research is identified, within a financial year, VOSA Directing Board approval can be obtained, by exception, for extra funds but a business case must be provided by the sponsor.

RESEARCH PROJECT MANAGEMENT

VOSA research projects are proposed, developed and appraised to deliver the required evidence and that the estimated costs and benefits are realistic. Projects are run using appropriate project management disciplines, for example, PRINCE2.

Once individual projects have been identified and approved the nominated project manager becomes responsible for all the project's deliverables.

COMMISSIONING RESEARCH

When commissioning a research project, a brief is prepared to outline the project specifications. Costed proposals are requested from the supplier to ensure that the required evidence will be produced and the project represents value for money. One or more than one supplier can be invited to submit a proposal, depending on the nature of the project to be conducted and the available skills of the suppliers. Bids are compared by the R&D team, along with TTS and DVO Group, using a matrix scoring system to assess the requirements in the contract against the bids.

Draft briefs and full proposals are circulated to all stakeholders in the research for comment and agreement.

MANAGEMENT, MONITORING AND EVALUATION OF CONTRACT AND CUSTOMER RESEARCH

Once the contract has been awarded a joint Project Board/Steering Group will be initiated; the role of this body will be to monitor and make decisions on:

- Cost
- Resource
- Timescales
- Quality
- Scope
- Risks and issues
- Options and priorities

The R&D manager provides a monthly update of key outputs of the research programme to VOSA Management Board. When necessary, research projects can be subjected to a peer review.

8 TECHNOLOGY AND INNOVATION

Common transport policy throughout EU member states centralises on existing networks, managing congestion, improving safety for road users and pedestrians, better services and improving overall economic performance. New technology plays an essential role in delivering these improvements. Onboard systems are key to providing road user charging, vehicle identification, freight management, e-safety, as well as being the strategic foundation for future road networks across Europe.

The introduction of electronic communication devices brings intelligence to road vehicles that have until recently been 'dumb'. Vehicles communicate, and are communicated to; hence they become active within the road network rather than inert. This technology will play a key role in future improvements to road safety and the environment.

The introduction of such devices provides additional services to the driver and operator whilst providing authorities with a potential real-time monitoring enforcement tool; hence the issues of privacy, security and confidentiality will need to be addressed. There will also be a requirement for the architecture to be 'open' and accessible but secure enough to 'firewall' illegal interference.

For a number of ITS applications there has been a requirement to install both in-vehicle and infrastructure based technology. Vehicle manufacturers are responsible for onboard systems and third parties, including public bodies, are responsible for roadside infrastructure. Applications that have been developed are based on commercial business needs, such as satellite navigation and e-call systems, hence the myriad of office to car and truck/freight management systems. The automotive and telecommunications industries are developing 'open telematic platforms' whereby several applications can be added and thereby monitored via fixed infrastructures, satellite or 'service providers'.

VOSA has set out road maps for 2008, 2011 and 2015. This has allowed the identification of innovative use of new technology to meet compliance and other statutory objectives, for example:

- Remote sensing - the remote transfer of information from vehicles to VOSA, thereby reducing the burden on operators and exposing the non-compliant;
- Driver, vehicle and operator profiling - identifying the factors that linked with an increased risk of a driver, vehicle or operator being involved in an accident, to help reduce accidents and therefore congestion.

The VOSA Commercial Customer Services Director sits on the Cabinet Office's Varney Working Group (which takes forward the recommendations made in the Varney Review of 2006, including work on electronic service delivery channels).

9 TRANSPORT FUTURES

The challenge for VOSA is to work in partnership with manufacturers, service providers and other stakeholders to advance our understanding of the technology and exploit its potential. The DVO Vehicle Technology Forum, TTS Heads of Branch, the Manufacturers' Forum, and collaborative working with the European Commission all provide opportunities for VOSA to keep abreast of developments in technology.

Work is currently underway to agree the Terms of Reference for a joint forum to look at new technologies. VCA, TTS and DVO Group Policy Unit have been invited to become involved in the development of a joint strategy. The new forum could develop, for example, an end to end strategy for the design, build, type approval, and in-service exploitation of On-Board Diagnostic Units that could deliver safer operation and improved compliance.

Horizon scanning work is carried out by relevant policy divisions such as TTS and CFV, and it is their responsibility to ensure that policy is fit for the future. VOSA is kept up to date with this work through the forums outlined above and considers the service delivery aspects coming from this.

KEY ISSUES AND TRENDS

Set out below are some of the broader policy issues and longer term trends that will have a significant impact on the DVO Group - and its research needs considered by VOSA - over the coming years:

Better Regulation: VOSA has played an active part in the broader DVO Group significant contribution to the cross-government initiative to reduce the administrative burden on business. VOSA has focused on Goods and Passenger Vehicle operators, considering ways to simplify and streamline its interactions with and demands on these customers.

Targeted Enforcement: Working closely with other parts of DVO Group and key stakeholders, VOSA is developing greater use of databases and intelligence to make sure that they identify those operators who are at most risk of non-compliance.

Mobile Communications: VOSA is considering if and how mobile devices may be used to deliver services to its commercial customer base in the future.

Technological Advances: VOSA is particularly interested in technology for on-board diagnostics for emissions testing and other technological advances in vehicle testing and vehicle identification. VOSA will work with other stakeholders to identify and investigate emerging technologies to assess how they may be utilised in VOSA's areas of delivery.

Reducing CO₂ Emissions: Cleaner vehicles are already making a key contribution to reducing CO₂ emissions. VOSA is working on issues of testing of vehicle emissions. Driver behaviour is another crucial area in which VOSA has an interest on reducing emissions by promoting initiatives such as eco-safe driving and fuel-efficiency amongst goods and passenger vehicle drivers.

REFERENCES

Research published on the VOSA website:

<http://www.vosa.gov.uk/vosacorp/publications/consultationsandresearch/researchanddevelopment/researchanddevelopment.htm>

VOSA Consultations

<http://www.vosa.gov.uk/vosacorp/publications/consultationsandresearch/consultationsandresearch.htm>

"Moving On" - The Newsletter for HGV and PSV Operators

<http://www.vosa.gov.uk/vosacorp/publications/newsletters/movingon.htm>

"Matters of Testing" - For Authorised Examiners and Testers

<http://www.vosa.gov.uk/vosacorp/publications/newsletters/mattersoftesting.htm>

Customer Satisfaction Surveys

<http://www.vosa.gov.uk/vosacorp/publications/customersatisfactionsurveys.htm>

VOSA Business Plans and Annual Reports

<http://www.vosa.gov.uk/vosacorp/publications/corporatereports/corporatereports.htm>

Theme	Scope, Objectives and Outcomes
<p data-bbox="176 267 447 332">Driver, Vehicle and Operator Profiling</p> <p data-bbox="176 378 415 435">Constraints – none identified at this stage</p> <p data-bbox="176 1239 422 1312">Sponsor GV and PV sectors</p>	<p data-bbox="506 267 583 292">Scope</p> <p data-bbox="506 310 1745 451">The GV and PV sectors have tasked R&D to examine the feasibility of profiling drivers, vehicles and operators to improve VOSAs understanding of compliance and non compliance within the industry. There have been several reported studies on profiling in the industry. From a VOSA perspective BS4a and BS12 identified the benefits of linking a driver to the operator for OCRS purposes. Profiling gives VOSA the opportunity to predict non compliance and intervene at an early stage.</p> <p data-bbox="506 469 1766 526">A Memorandum of Understanding has been agreed between DfT Statistics and Roads and VOSA on data sharing of accident statistics that will feed into the profiling process.</p> <p data-bbox="506 535 1776 592">For 07/08 the R&D team, in collaboration with stakeholders, will investigate and report on the feasibility of producing a profile on driver, vehicles and operators.</p> <p data-bbox="506 610 632 634">Objectives</p> <p data-bbox="506 652 1178 677">VOSA requirements for drivers, vehicles and operator profiling</p> <ul data-bbox="506 695 1402 995" style="list-style-type: none"> • Identify profile criteria with internal and external stakeholders • Identify available databases and their contents against the profile requirements • Improve our understanding of accident causation • Source additional profile requirements • Identify any gaps • Identify any value additions – eg risk based scoring for vehicles and drivers • Identify driver groups – eg agency drivers <p data-bbox="506 1013 632 1037">Outcomes</p> <p data-bbox="506 1055 867 1079">Report detailing the profile model</p> <ul data-bbox="506 1097 1255 1312" style="list-style-type: none"> • Stand alone Driver profile • Link to OCRS • Identify likely IT requirements (including links to other databases) • Potential barriers to change • Proposals on the next steps

Theme	Scope, Objectives and Outcomes
<p>Diesel Smoke Meter Testing (cont. from 06/07)</p> <p>Constraints Directive 96/96EC instructs Member States to meter test diesel engine vehicles at MOT.</p> <p>Sponsor GV, PV, PrV and T&I</p>	<p>Scope</p> <p><u>Annual Test</u> VOSA conducts a full metered smoke test on 545,727 trucks and buses annually. The time taken to conduct a test is 4 minutes equating to 22 man years of work. The overall failrate for these vehicles is 0.9%. Research commissioned by VOSA reported that vehicles with Euro 3 (1999) engines onwards, given their electronic controls, are unlikely to fail the test.</p> <p><u>Roadside Enforcement</u> In 04/05 there were 6234 HGVs and 4199 PSVs tested at the roadside with a prohibition rate of 0.3% and 0.2%, respectively. This equates nationally to a total number of PG9s issued of 25. There is no allotted time for a metered test at roadside. However, using the timings from the annual test this would equate to approx. 0.5 man years.</p> <p>In 06/07 R&D engineers began working with an equipment manufacturer to investigate the possibility of developing a prototype sift tool. The aim is to significantly reduce the amount of full metered tests carried out at annual test and at the roadside. This work is seen as a short term solution to modern electronically controlled engines until research can be carried out on the reliability of OBD systems. However, it is envisaged that the device would be used in the long term for older engines.</p> <p>For 07/08 the R&D team will progress this work to test and trial stage and produce a report on the justification and benefits.</p> <p>Objective To find a more cost effective solution to 100% metering.</p> <ul style="list-style-type: none"> • Correlate to existing DSM specification • Test and trial stage • User friendly • Give VFM <p>Outcomes Report detailing the state of application</p> <ul style="list-style-type: none"> • VOSA requirements • Technology capabilities • Identify VFM savings • Potential barriers to change • Proposals on the next steps

Theme	Scope, Objectives and Outcomes
<p data-bbox="176 305 415 334">OBD - emissions</p> <p data-bbox="176 383 449 496">Constraints – European Directive 96/96 does not permit full use of OBD testing at this time.</p> <p data-bbox="176 1157 380 1255">Sponsor GV, PV and PrV sectors</p>	<p data-bbox="506 266 583 293">Scope</p> <p data-bbox="506 305 1745 358">1. The GV and PV sectors have tasked the R&D team to investigate the feasibility of making use of OBD for diesel testing emission control and after-treatment systems such as recirculation devices and urea additives.</p> <p data-bbox="506 370 1724 451">Euro 4 (2005) engines are fitted with emissions after-treatment systems to control, amongst others, NOx and particulate mass. There is an increasing political interest to monitor these emission species that cannot be tested using a traditional opacity smoke meter.</p> <p data-bbox="506 462 1745 576">2. The LV sector has tasked the R&D team to investigate the potential for introducing OBD testing into the light vehicle scheme for all engine types. IDELSY reported that 80% of vehicles could communicate with a generic scan tool and we will progress this work to seek further improvements to develop a test procedure that can be used in conjunction with the VTS Comp. device.</p> <p data-bbox="506 620 617 647">Objective</p> <p data-bbox="506 659 1402 686">To find a method of testing post Euro 3 engine controls and after-treatment devices</p> <ul data-bbox="506 698 1535 911" style="list-style-type: none"> • Collaborate with vehicle manufacturers to gain an in-depth understanding of the technology • Conduct trials with OEM equipment • Source the availability of a universal scan tool • Trial 'sourced' universal scan tool against OEM tools • Identify test criteria • Source/develop an acceptable method for testing urea quality <p data-bbox="506 954 627 982">Outcomes</p> <p data-bbox="506 993 1325 1021">Report detailing the state of application of OBD and after-treatment systems</p> <ul data-bbox="506 1032 1457 1206" style="list-style-type: none"> • VOSA requirements • Technology capabilities • Potential barriers to change • Proposals on the next steps • Identify the potential use for OBD in other areas of inspection (non emission related)

Theme	Scope, Objectives and Outcomes
<p>Disabled Access to PSVs</p> <p>Constraints – DDA</p> <p>Sponsor PV sector</p>	<p>Scope</p> <p>The PV sector has tasked the R&D team to develop a method of inspection and test criteria for buses that are designed to 'kneel' to allow easy access and egress.</p> <p>Objectives</p> <ul style="list-style-type: none"> • Gain an in depth understanding of the legislative requirements • Develop inspection standards in partnership with stakeholders • Identify any equipment costs to VOSA <p>Outcomes</p> <p>Report detailing</p> <ul style="list-style-type: none"> • Legislative requirements • Methods of Inspection/s • Timings and costs
<p>Limousine and Novelty vehicles</p> <p>Constraints – none identified at this stage</p>	<p>Scope</p> <p>The use of stretch limousine and modified novelty vehicles in the UK is on the increase. A recent police check supported by VOSA highlighted some major offence both in the operation and the mechanical condition of the vehicles. Some limousines have been subjected to an SVA check, but there are many that haven't undergone any design check by using various loop holes. The results from the check have indicated there are some common safety critical failures with these vehicles including tyre, steering and brakes.</p> <p>For 07/08 the R&D team, in collaboration with stakeholders, will investigate the most common in-use defects and C&U offences and the reasons why. This information will be used to inform the front line staff on the key areas of road safety enforcement, MoT testing and removal of the prohibitions. This information can also be used to produce educational material for the trade, drivers and the public.</p> <p>Objectives</p> <ul style="list-style-type: none"> • Review of what information is available on the roadworthiness of limousines and novelty vehicles. • Define what is the range of vehicles that have been and will be converted. • Identify the base specification for the novelty vehicles, such as a fire engine, and develop a list of changes that are needed to comply with minibuss/ coach requirements.

Theme	Scope, Objectives and Outcomes
<p>Sponsor PV and PrV sectors</p>	<ul style="list-style-type: none"> • Work with UK converters and American specialist to understand initial design limitations. • Look at the spares network and availability for common safety critical items. • Highlight what are the MoT requirements and what are the main difficulties in obtaining the correct MoT. <p>Outcomes A Report detailing :</p> <ul style="list-style-type: none"> • The range of vehicles available in the UK, the specifications and the know problems to date. • A guide of what to check on a novelty vehicle to show it complies with passenger carrying regulations, aimed at VOSA and the trade. • The restriction of gaining a MoT on the range of vehicles. • A list of industry contacts.

Planned Customer Research 2007-08

Research Project	Objective	Methodology	Date
Drivers, Fitters & Presenters	To determine customer satisfaction with testing and enforcement services. To track changes and address any areas of dissatisfaction.	Face to face interview.	Sept 07
MOT Garages Survey	To determine customer satisfaction, including with MOT Computerisation To review attitudes to the MOT Scheme	TBC	TBC
Service Agents	To understand more about their role in the industry, needs and impact on Operators' compliance.	Qualitative	TBC
Segmentation Research	To understand the attitudes of the identified major customer segments to VOSA and clarify the appropriateness of segmentation basis selected	Qualitative research - Face to Face Business Depths (Circa 30)	TBD
Service Agents - Customer Attitudes	To understand the attitudes of this major customer segment to VOSA and the segments and trends within the sector	Qualitative research - Face to Face Business Depths (Circa 30)	TBD
Service Agents - Customer Satisfaction	To quantify the attitudes, segments and trends within the sector identified during the qualitative phase	Quantitative research - Telephone research based, sample size not yet determined	TBD
e Test Bookings	To quantify, by segment the propensity for customers to move to an e enabled self service test booking procedure	Quantitative research - Telephone research based, sample size not yet determined	TBD

Note: VOSA (like other DVO Group Agencies) takes full part in cross-Agency customer research funded by DVO Group S&R. VOSA's key areas of interest are:

- Operators Survey
- Private Motorists Survey (MOT section)
- DSA Candidates Survey (for commercial drivers)

Appendix B: Financial Summaries of Research Programmes

Research area	Estimated budget for 2007-08
Customer Research	£250k
R&D research	£210k
Total	£355k

Appendix C: DVO Strategic Outcomes

Table C - DVO Strategic Outcomes mapped to Government PSA Targets

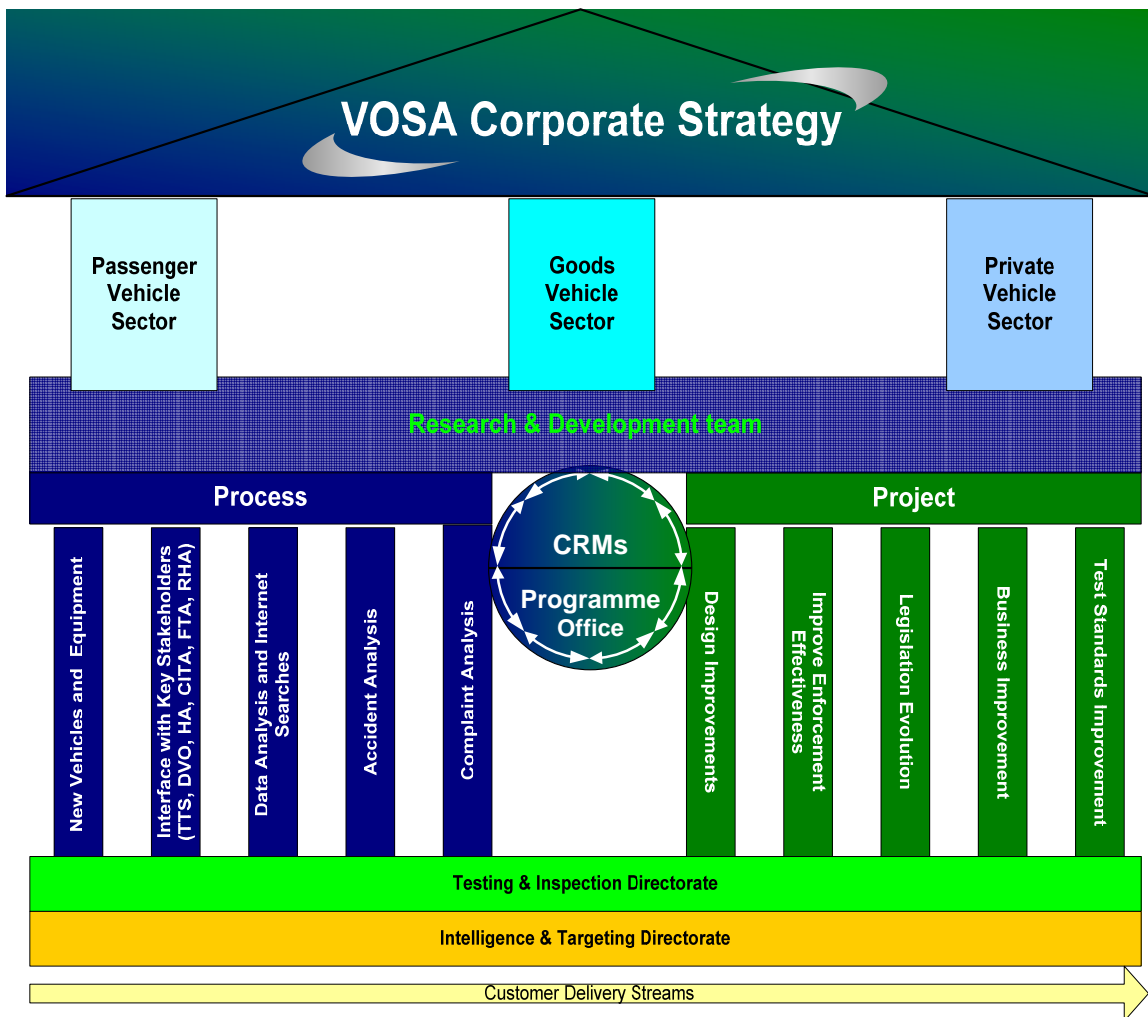
Effective service to customers	HM Treasury Public Service Objective "Improve the quality and cost effectiveness of public services."
Improved road safety	Department for Transport Public Service Agreement "Reduce the number of people killed or seriously injured in Great Britain in road accidents by 40% and the number of children killed or seriously injured by 50%, by 2010 compared with the average for 1994-98, tackling the significantly higher incidence in disadvantaged communities."
Improved journey time reliability on our roads	Department for Transport Public Service Agreement "By 2007/8, make journeys more reliable on the strategic road network."
Better regulation	Cabinet Office Public Service Agreement "By April 2008, ensure departments deliver better regulation and tackle unnecessary bureaucracy in both public and private sectors." HM Revenue & Customs Public Service Objective "Improve customer experience, support business and reduce the compliance burden."
Reduced environmental impact, crime & anti-social behaviour	Department for Transport, DEFRA and Department of Trade and Industry Public Service Agreement "To reduce greenhouse gas emissions to 12.5% below 1990 levels in line with Kyoto commitment and move towards a 20% reduction in carbon dioxide emissions below 1990 levels by 2010, through measures including energy efficiency and renewable." Criminal Justice System Public Service Objective "Reduce crime and the fear of crime, including organised and international crime, and ensure the effective delivery of justice." Home Office Public Service Agreement "Reassure the public, reducing the fear of crime and anti-social behaviour, and building confidence in the Criminal Justice System without compromising fairness."
Raising tax revenue to fund public spending	HM Revenue & Customs Public Service Objective "Improve the extent to which individuals and businesses pay the amount of tax due and receive the credits and payments to which they are entitled."
Better value for money	Department for Transport Public Service Objective "Improve cost-effectiveness through sound financial management, robust cost control, and clear appraisal of transport investment choices across different modes and locations."

Appendix D: Research Contacts in VOSA

Jonathan Hearth	Head of Customer Experience	01179 542628	Jonathan.Hearth@vosa.gov.uk
Mark Warden	Research and Development Manager	01179 542534	Mark.Warden@vosa.gov.uk
Franco Degan	DVO Group Head of Customer Insight	020 7944 4568	Franco.Degan@df.gsi.gov.uk

VOSA Research Organisation Chart

[Organisation chart to illustrate how evidence and research management within VOSA is organised]



Sound knowledge coupled with creativity and innovation will underpin VOSA's effectiveness

Appendix E: Glossary of Acronyms

BRU	Better Regulation Executive
CEO	Chief Executive Officer
CFV	Cleaner Fuels and Vehicles Division
CITA	Comité International de l'Inspection Technique Automobile International Motor Vehicle Inspection Committee
CRM	Customer Relationship Manager
Defra	Department for the Environment, Food and Rural Affairs
DfT	Department for Transport
DG-TREN	Director General for Transport and Energy
DSA	Driving Standards Agency
DVLA	Driver and Vehicle Licensing Agency
DVO	Driver Vehicle and Operator Group
GEA	Garage Equipment Association
GV	Goods Vehicle
IDELSY	Initiative for the Diagnosis of Electronic Systems
ITS	Intelligent Transport Systems
OBD	On-board diagnostic
OEM	Original Equipment Manufacturer
PrV	Private Vehicle
PSV	Public Service Vehicle
PU	(DVO) Policy Unit
PV	Passenger Vehicle
R&D	Research and Development
RMIF	Retail Motor Industry Federation
S&R	(DVO) Strategy and Resources Directorate
TTS	Transport Technology and Standards Division
UN ECE	United Nations Economic Commission for Europe
VCA	Vehicle Certification Agency
VOSA	Vehicle and Operator Services Agency
