Cambridge Policy Consultants

Evaluation of the Scottish Road Haulage Modernisation Fund

Final Report

October 2007

Newton Hall
Newton
Cambridge CB22 7ZE
Tel: (01223) 871551
Fax:(01223) 871303
cpc@campolco.co.uk

CONTENTS

EXECUTIVE SUMMARY

Background

1. In March 2001 proposals for a £100 million Road Haulage Modernisation Fund (RHMF) were announced by the Chancellor of the Exchequer. The majority of the fund was devolved to the nations on the basis of population shares. Responsibility for the expenditure of £10.2 million within Scotland was devolved to the Scottish Executive.

2. The package of projects under the Scottish Road Haulage Modernisation Fund (SRHMF) were designed following consultations with industry. These consultations had revealed a concern in relation to a shortage of drivers. Stakeholders were also keen to target skills and training on educating drivers in methods of driving which save fuel and shorten journeys. It was also felt that there was a lack of training infrastructure in Scotland for the logistics industry and that any proposals for skill development needed to first address this constraint.

3. Four projects were developed to help to respond to these needs. The Scottish Young Driver Training Scheme (SYTS) primarily aimed to expand the pool of labour by permitting drivers to obtain a category C licence at 18 rather than at 21 and providing a well structured career path for young people who wish to become LGV drivers. The Scottish Driver Training Scheme (SDTS) was aimed at the over 21 year old age group and aimed to attract and train new LGV drivers to help address the driver shortage. Safe and Fuel Efficient Driving (SAFED) aimed to contribute to the professional development of existing Scottish LGV drivers while demonstrating that a modest investment in training can lead to real savings in fuel and associated costs. Scotsim aimed to demonstrate to the industry, transport practitioners, drivers and other interested parties the effectiveness of simulators as a way of training LGV drivers.

Aims and objectives of the SHRMF

4. The aims and objectives of the fund as set out in the initial proposal documents were linked to four core themes:

- **Recruitment** - to attract and train new LGV drivers to help address the driver shortage; and expanding the pool of labour by permitting drivers to obtain a category C licence at 18 rather than at 21.
- **Training and career progression** - to raise the standards of existing drivers and support road safety objectives; to contribute to the professional development of existing Scottish LGV drivers; and to provide a well structured career path for young people who wish to become LGV drivers.
- **Good practice and sustainability** - to demonstrate to the industry, transport practitioners, drivers and other interested parties the effectiveness of simulators as a way of training LGV drivers; to create a

network of training providers who would continue to provide LGV training on a commercial basis post operation of the SRHMF; and to encourage companies to see the long term value of LGV driver training .

- **Wider economic and environmental objectives** - to benefit the Scottish economy through raising standards in the industry, promoting road safety and improving the environment through more efficient use of fuel; and to demonstrate that a modest investment in training can lead to real savings in fuel and associated costs.

Overall performance of the SRHMF

5. CPC held interviews with representatives of the Freight Transport Association, Road Haulage Association, Scottish Executive, Transport Research Laboratory, Momenta, Skills for Logistics as well as employers and training providers who had participated on or been involved in the delivery of one or more of the projects. The interviews aimed to gauge reactions within the industry to the SRHMF as a whole, as well as to explore any views on the relative merits of different projects. The main points to emerge in relation to the fund in general are summarised below:

Meeting the aims and objectives of the fund

- *Driver recruitment*: All stakeholders agreed that driver recruitment was a key issue for the industry and recognised this problem of an aging employment structure. The SYDS and the SDTS were welcomed as a way of helping to ease the issue of driver recruitment and were seen to be largely effective in helping to mitigate this issue.
- *Training and progression:* A core aim of the fund was to encourage companies to see the long term value of training. Discussions with employers revealed a reluctance to take part in driver training unless it was free. However there was evidence, in particular in relation to the SAFED project, that employers would be willing to pay providing tangible benefits could be demonstrated. All stakeholders agreed that a key success of this particular project was to stimulate demand from employers as well as in building a network of providers who were able to deliver this training on a commercial basis. Employers however were clearly more reluctant to contribute to the costs of training under the driver training schemes.
- *Good practise and sustainability:* One of the stated aims for the fund was to develop a sustainable training infrastructure. Some stakeholders questioned the exit strategies of the driver training schemes where the network of training providers, although accredited to deliver SVQs, were be unable to deliver on a commercial basis due to a lack of demand. Other stakeholders commented upon the unequal footing of Scottish employers in relation to future funding for training – with their English counterparts able to access funding for SVQ level two through Trian2Gain.
- *Good practise and sustainability:* The initial costs of Scotsim led some stakeholders to question the strategy for the afteruse of the simulators -

although all agreed that it would not be possible to operate the simulators on a commercial basis some stakeholders felt the simulators should be subsidised to maximise the value of the initial investment.

- *Wider economic and environmental objectives:* stakeholders agreed that all the projects contributed to these objectives although clearly some projects contributed to a greater extent than others. It was largely considered that the fund helped to raise standards in the industry and interviews with employers revealed that a significant proportion of the training, in particular in relation to the SVQ, was additional and would not have taken place in the absence of the fund.

Partnership working and management

- All partner organisations praised the overall management of the fund and the support received from the industry associations in relation to marketing and publicity.
- Performance and management reviews undertaken by the steering group were effective in helping to ensure that the projects represented value for money and in incentivising providers to increase completion rates. The high completion rates for both of the driver training schemes are clearly linked to this review process.
- There was some confusion amongst employers over the multiplicity of projects and the level of awareness of employers about the different projects was relatively low. A small number of stakeholders felt that more could have been done to build linkages between projects, for example by using the simulators as a promotional tool to attract young people on to the driver training scheme.

Funding and value for money

- The total funding for the SRHMF was around £10.2 million. An assessment of the approximate breakdown of funding on a project by project basis reveals that over half of the total funds were spent on the SDTS and a further third was spent on Scotsim. Under 10% of the total funding pot was allocated to the SYDS and under 5% was allocated to SAFED. Some stakeholders commented upon the balance of funding between the projects and the relative value for money of each of the projects.
- A number of stakeholders felt that it was disappointing that the SDTS had been more successful than the SYDS in attracting recruits and there was some suggestion that more could have been done to promote the industry to young people. Given the age structure of the industry some stakeholders questioned the rationale of not placing any age restrictions on recruits to the SDTS project.
- Some stakeholders pointed to some problems in relation to the financial management of the driver training projects which led to a requirement for additional funding at the closure of the projects.
- There were wide variations in stakeholders views on the rationale for funding the SVQs with some stakeholders feeling that they were an

expensive way of accrediting existing skills and other stakeholders commenting on their value in providing a structured training route into the industry for young drivers.

- Stakeholders generally agreed that the funding for the projects had encouraged smaller companies to participate in line with the stated objectives for the fund.

6. Overall the Scottish Road Haulage Modernisation Fund has clearly resulted in tangible benefits for the road haulage industry and contributed to easing recruitment issues by enabling 1,362 individuals to achieve qualified driver status with either a C licence or a C+E licence - an estimated 800 of whom would not have been trained to this level in the absence of the project.

7. The SAFED and SCOTSIM projects together trained over 2,000 drivers and were estimated to resulting in fuel cost savings of between £3.7 million and £4.4 million per year and CO2 savings of between 11,400 and 13,400 per year.

8. The fund was well supported by industry stakeholders and all the projects were generally well supported. The partnerships and lead bodies involved in delivering the individual projects were successful in promoting the projects to industry members. The fund also made some progress in helping to raise the profile of training practices within the road haulage industry although clearly there is a long way to go.

9. Driver recruitment although no longer appearing to be an immediate concern will certainly be an issue in the future given the age structure of the industry. All four projects in raising the profile of the industry as well as in encouraging new entrants to the industry have helped to support driver recruitment and retention.

Relative performance and future delivery options

10. Given the variation in objectives for each of the projects it is hard to make any direct comparisons in relation to their relative performance. However it is evident that, given their relative costs, some appeared to offer greater value for money than others. For example SAFED which cost around 5% of the total budget clearly has the most potential to become commercially sustainable following the creation of a network of training providers many of whom are already operating on a commercial basis. Arguably one of this projects core strengths was in gaining the 'buy in' from employers who clearly saw and valued the benefits from participation.

11. It is disappointing that the Scottish Driver Training Schemes only provided very limited evidence of any impact on the attitudes of employers in relation to training - only a very small minority of employers saw any additional value in relation to the SVQ. Nonetheless the value to the individuals participating may have been substantially greater and the potential of such a scheme in helping to raise the profile of the industry should not be understated. In assessing the future rationale for any further funding consideration should be given both to the additionality of funding the C-licence and the content of the

SVQ. It should also be noted that currently under the Train2Gain there is currently funding for NVQ level 2, which places Scottish Road Haulage employers on an unequal footing in relation to driver training compared to those in England.

12. It was clear that Scotsim did not reach its potential partially due to the initial configuration problems which were not conducive to the aim of demonstrating to industry the effectiveness of simulators as a way of training LGV drivers. Employers and other stakeholders commented upon the potential of the simulators to deliver training that could not be delivered on the road for example to demonstrate aspects of safer driving and accident mitigation. The value of the simulators in delivering SAFED training however was felt to be more limited due to the higher cost and many employers preferring the more flexible approach that 'in cab' training offered.

13. There is potentially a case for providing additional funding for Scotsim given the high initial investment and the initial problems in relation to the configuration of the simulators which have now been overcome. However any further investment should be undertaken in the context of a clearly costed business plan and further investigation will need to be undertaken to ensure that this is justifiable in relation to the potential benefits.

1. INTRODUCTION

1.1. Purpose of this research

1.1.1. In June 2007 Cambridge Policy Consultants were asked by the Scottish Executive to provide an independent evaluation of the Scottish Road Haulage Modernisation Fund (SRHMF). Their aim was to secure an independent view of the SRHMF overall and of the individual projects funded to date.

1.1.2. On the basis of the above the research sought to consider:

- The clarity and appropriateness of objectives
- Challenges in delivery
- Impacts and sustainability
- The value for money of the projects and of the programme
- The key elements of good practice
- Any areas of the process where improvements might be considered

1.1.3. The following research methodology was undertaken:

- Interviews with SRHMF Steering Group members
- A desk study of background policy documents, including project specifications, steering group meeting minutes and project monitoring and evaluation reports.
- Interviews with key staff in Skills for Logistics who were responsible for the management of the SDTS and the SYDS.
- Interviews with the Transport Research Laboratory and Momenta who were responsible for the management of Scotsim and SAFED respectively.
- Interviews with representatives from the Freight Transport Association, Road Haulage Association and the Scottish Executive.
- Telephone interviews with 10 employers who were involved with SAFED and with 9 SAFED instructors.
- Telephone interviews with Ritchies Training Centre who were responsible for the delivery of Scotsim and with 6 employers whose employees participated on Scotsim.
- Telephone interviews with 8 training providers who delivered the SYDS and/or SDTS and with 16 employers whose employees participated on the projects.

1.2. Background to the SRHMF

1.2.1. In March 2001 proposals for a £100 million Road Haulage Modernisation Fund (RHMF) were announced by the Chancellor of the Exchequer. The majority of the fund was devolved to the nations on the basis of population shares. Responsibility for the expenditure of £10.2 million within Scotland was devolved to the Scottish Executive. No additional resources were provided to the Executive to fund the project and expenditure was made from existing budgets.

1.2.2. In Scotland the Scottish Executive and industry representatives undertook consultations with industry to identify how the Scottish funds could be used to benefit the Scottish Road Haulage Industry and the Scottish economy. The Workforce Development Plan for the sector in Scotland was published by the Road Haulage and Distribution Training Council (RHDTC) in May 2001. The Plan indicated that the primary concern of industry members was a shortage of drivers. In addition Scottish stakeholders were keen to target skills and training on educating drivers in methods of driving which save fuel and shorten journeys. It was also felt that there was a lack of training infrastructure in Scotland for the logistics industry and that any proposals for skill development needed to first address this constraint.

1.2.3. The package of projects under the Scottish Road Haulage Modernisation Fund (SRHMF) were designed to respond to this driver shortage as well as to upskill existing drivers to encourage safer and more fuel efficient driving. Detailed programme objectives are summarised below and relate to support with recruitment, training and professional development; good practice and sustainability and; wider economic and environmental objectives:

Recruitment

- To attract and train new LGV drivers to help address the driver shortage (SDTS, SYDS)
- Expanding the pool of labour by permitting drivers to obtain a category C licence at 18 rather than at 21 (SYDS)

Training and progression

- To raise the standards of existing drivers and support road safety objectives (SAFED, SCOTSIM)

- To contribute to the professional development of existing Scottish LGV drivers (SAFED, SCOTSIM)
- To provide a well structured career path for young people who wish to become LGV drivers (SYDS)

Good practice and sustainability

- To demonstrate to the industry, transport practitioners, drivers and other interested parties the effectiveness of simulators as a way of training LGV drivers (SCOTSIM)
- To create a network of training providers who would continue to provide LGV training on a commercial basis post operation of the SRHMF (SYDS, SDTS, SAFED)
- To encourage companies to see the long term value of LGV driver training (SYDS, SDTS, SAFED, SCOTSIM)

Wider economic and environmental objectives

- To benefit the Scottish economy through raising standards in the industry, promoting road safety and improving the environment through more efficient use of fuel (SYDS, SDTS, SAFED, SCOTSIM)
- To demonstrate that a modest investment in training can lead to real savings in fuel and associated costs (SAFED)

1.2.4. Table 1.1 overleaf provides an overview of the characteristics of the four individual projects which were funded under the SRHMF. The following chapters provide assessments of the impact, value for money and sustainability of the individual projects in relation to their original objectives. Chapter 5 draws together these assessments and concludes on the overall sustainability and value of the SRHMF. The two annexes provide supporting information in relation to the content of the SVQ level 2 in Road Haulage and the background and structure of the road haulage industry in Scotland drawing on secondary statistical material.

Table 1.1: Overview of the projects funding by the SRHMF

Project	Project manager	Target group	Core objectives	Initial targets	Progress against targets	Costs
Scottish Young Driver Scheme (SYDS)	Skills for Logistics	16-21 year olds	• Attract and train new LGV drivers to help address the driver shortage • Expanding the pool of labour by permitting drivers to obtain a category C licence at 18 rather than at 21 • Provide a well structured career path for young people who wish to become LGV drivers • Benefit the Scottish economy through raising standards in the industry • Create a network of training providers • Encourage companies to see the long term value of LGV driver training	320 registrations later revised to 240 65% completion rate	241 registered 62% competed	£2,500 to £3,750 per trainee revised in 2005/06 to £2,750
Scottish Driver Training Scheme (SDTS)	Skills for Logistics	21 + age group	• Attract and train new LGV drivers to help address the driver shortage • Benefit the Scottish economy through raising standards in the industry • Create a network of training providers • Encourage companies to see the long term value of LGV driver training	320 registrations later revised to 1,426 65% completion rate	1,426 registered 78% completed	£2,500 to £4,750 per trainee revised in 2005/06 to £2,500
SAFED	Momenta	Scottish Truck Drivers	• Raise the standards of existing drivers and support road safety objectives • Contribute to the professional development of existing Scottish LGV drivers • Benefit the Scottish economy through raising standards in the industry • Demonstrate that a modest investment in training can lead to real savings in fuel and associated costs • Create a network of training providers • Encourage companies to see the long term value of LGV driver training	560 drivers including 60 novice. 20 instructors, 20 in-house trainers	1,400 drivers including 83 novice 60 trainers	£272,100 (for original target of 560 drivers and 40 instructors)
SCOTSIM	TRL	Scottish Truck Drivers	• Raise the standards of existing drivers and support road safety objectives • Contribute to the professional development of existing Scottish LGV drivers • Benefit the Scottish economy through raising standards in the industry • Demonstrate to the industry, transport practitioners, drivers and other interested parties the effectiveness of simulators as a way of training LGV drivers • Encourage companies to see the long term value of LGV driver training	700 drivers	710 drivers	£3,229,080 including research and procurement

2. THE DRIVER TRAINING SCHEMES

2.1. Aims and objectives

Scottish Young Driver Scheme (SYDS)

2.1.1. The aim of the Scottish Young Driver Scheme (SYDS) as set out in the initial project submission was to '*provide short term, pump-priming support for the current (unfunded) Young LGV Driver Project (YDS) through subsidy of driver training costs'* thereby providing '*a direct response to the driver shortage.'*[1] The project therefore provided *'substantial financial assistance to companies to allow young drivers to obtain a Category 'C' licence from age 18, without having to wait until 21'*[2].

2.1.2. The programme was structured around three milestones linked to the trainee gaining:

- the provisional Category C licence;
- the full Category C licence; and
- completion of the SVQ and accompanying post test driving assessments

2.1.3. The original proposal also identified a long term aim to '*encourage companies to see the long term value of the project as a way of developing new drivers and expand demand for the project to a point where training providers can justify investment in delivering the project'*

2.1.4. Four specific outcomes were identified for the project:

- individuals to obtain sustained employment through the achievement of Category C (and C+E if required) licence and a Level 2 S/NVQ;
- companies to obtain well-trained and motivated young drivers;

---

1 Since 1997 Skills for Logistics had operated the Young Driver Project in both Scotland and in England. In Scotland take up was very low largely due to the more limited funding available for 18-24s and absence of funding for older (over 25) workers for level 2 training and the cost of participation was estimated to be an average of £5,000 per trainee. In comparison in England employers were able either to draw upon £1,650 through the English Road Haulage Modernisation Fund or could incorporate the English Young Driver Project into a Foundation Modern Apprenticeship (FMA) and then draw upon FMA funding through the Learning and Skills Council.

2 Project Submission to the Deputy Minister for Enterprise, Transport and Lifelong Learning, 24th March 2004

- the increased ability of the Freight Transport Industry to promote a well structured career path for young people who wish to become LGV drivers; and
- to widen access to LGV jobs and raise the standards of drivers in the industry.

Scottish Driver Training Scheme (SDTS)

2.1.5. The aim of this project as set out in the August 2003 Proposal for the Development of An Adult Driver Project was *"to provide the basis for a sustainable model for the future training and employment of Large Goods Vehicle Drivers throughout Scotland."* Trainees were required to be at least 21 years old and there was no upper age limit.

2.1.6. The SDTS was structured around three milestones:

- Milestone 1: Person recruited / selected by company. Registered on the SDTS. Training plan agreed and induction training given. Literacy and numeracy assessment completed. Application for provisional Category C licence or Category C+E licence.
- Milestone 2: Driver Training, Registration for Driving Goods Vehicles SVQ, literacy and numeracy skill building as required. Pass Category C or C+E test and gain licence.
- Milestone 3: Complete SVQ, literacy/numeracy reassessment if required. Scottish Driver Training Scheme certificate issued.

2.2. Engagement and participation

Scottish Young Driver Scheme (SYDS)

2.2.1. The SRHMF Steering Group set an initial target for 320 trainees on the SYDS. Due to low take up this target was subsequentially revised downwards to 240 and 241 trainees registered on the project.[3]

2.2.2. The relatively low level of take up appears to be partially linked to the existing age structure of the industry and the use of the project to upskill

[3] The SYDS project was launched in England in April 2002, a full year prior to the Scottish launch. In England, take up had been significantly lower than expected, thought to be due largely to the resistance of road haulage and distribution companies to provide employment to Young LGV drivers. However, low take up in England was also linked to the funding differences as funding for Modern Apprentices aged over 19 was double that available under SYDS.

existing employees rather than to recruit new younger entrants. For example table 2.1 presents the reasons employers gave for participating and seven of the nine employers who were interviewed in relation to the SYDS used the project to upskill existing staff.

Table 2.1: Reasons for participation on the SYDS

Company details[4]	Number of participants		Reasons for participation
	SYDS	SDTS	
SYDS only			
Own account / UK / 11-250 employees	1	-	'It was advantageous to us because it meant that one of our existing employees could work as a driver'
Own account / Local / 11-250 employees	1	-	'We were having trouble recruiting a driver and it gave us a chance to qualify one of our existing employees'
Own account / UK / 250+ employees	1	-	'Haulage is not core to our operations but we needed a driver so we took on a young lad to complete his C licence'
Own account (public sector) / Europe / 250+ employees	2	-	'It was really good to use it to train our young people before they developed any bad habits'
Own account / Europe / 250+ employees	2	-	'We used it to upskill our warehouse staff and enable them to get their C-licence'
Carry for others / UK / 10-249 employees	1	-	"I was on the phone to the RHA and they told me about the training, it happened that at that point my son wanted to get his C licence and I thought this would be great as it would save me money"
SDTS and SYDS			
Own account / UK / 250+ employees	2	2	'To pay for the C licence for existing staff who wanted to train as drivers'
Own account & carry for others / UK / 11-250 employees	6	6	'We participated to give our young employees a chance to get their SVQ, this is really good for them as it tests drivers skills at a higher level than the C licence.'
Own account / UK / 11-250 employees	6	6	'To pay for the C licence for some new recruits and some existing staff'

2.2.3. Employers also commented on the barriers to recruitment from this age group which included the lack of motivated younger recruits:

> *"We would consider recruiting someone younger but they would need to be worth it as it means the insurance excess is*

4 Company Details provides information on the type of haulage organisation (own account or carry for others), geographical coverage (local, UK, Europe), size band (1-10, 11-250, 250+ employees).

> *raised from £1,000 to £2,000. There are not that many good drivers about and those that are aged under 25 tend to be those that the jobcentre has sent to us with 6 months unemployment and are less motivated"(Employer 1-10 employees).*

2.2.4. Evidence from the employers and training providers suggested that a large proportion of the young drivers seemed to work for their family's firm:

> *"I was on the phone to the RHA and they told me about the training, it happened that at that point my son wanted to get his C licence and I thought this would be great as it would save me money" (Employer 10-249 employees)*

2.2.5. The core reason behind the use of the project provided by the employers who were interviewed in relation to their participation on this project was to pay for the C licence:

> *"We were having trouble recruiting a driver and it gave us a chance to get our existing employees his C licence rather than having to worry about recruiting someone new and then paying for his C licence" (Employer 1-10 employees)*

Scottish Driver Training Scheme (SDTS)

2.2.6. The project was originally intended to have 320 places for existing adult employees (aged over 21 years old) and new recruits into the road freight sector. There was considerable demand from employers for this project and places were rapidly filled. Some places were transferred from the SYDS and the Scottish Executive also provided some additional funding. By November 2004 a total of 879 SDTS places had been allocated highlighting the strength of demand for the project. The final registration target of 1,426 was met in May 2006.

2.2.7. As for the SYDS, the core reason for participation related to the ability to train staff to get their C Licence. In the context of this project however it often related to the need to upgrade existing staff who already had their C1 licence which enabled them to drive 3.5 tonne trucks to C Licence standard to enable them to drive 7.5 tonne trucks (table 2.2).

Table 2.2: Reasons for participation on the SDTS

Company details	Number of participants on SYDS	Number of participants on SDTS	Reasons for participation
SDTS only			
Carry for others / UK / 1-10 employees	-	40	'We used it to get our warehouse staff their C licence'
Own account / UK / 11-250 employees	-	5	'We used the project to upskill our C1 licence holders to C+E'
Own account / Local / 11-250 employees	-	4	'It was free and we needed some of our staff who had done their test before 1997 to upgrade their C1 to the C licence'
Carry for others / Europe / 11-250 employees	-	1	'It was an opportunity to get my son his C licence…I phoned the RHA and they told me about the training, it happened that at that point my son wanted to get his C licence'
Own account / UK / 11-250 employees	-	2	'We offer the C licence as there is a severe lack of trained drivers in Aberdeen. Participation meant we saved the £1,000 we normally spend on putting drivers through the C licence'
Carry for others / UK / 250+	-	5	'We felt it was a good opportunity to upgrade our existing staff who had their C1'
Own account / UK / 250+ employees	-	3	'We had been speaking to a training provider training and they mentioned the SDTS. We wanted to give some of our existing staff a shot at driving HGVs'
SDTS and SYDS			
Own account / UK / 250+ employees	2	2	'To pay for the C licence for existing staff who wanted to train as drivers'
Own account & carry for others / UK / 11-250 employees	6	6	'We participated to give our young employees a chance to get their SVQ, this is really good for them as it tests drivers skills at a higher level than the C licence.'
Own account / UK / 11-250 employees	6	6	'To pay for the C licence for some new recruits and some existing staff'

2.3. Benefits from participation

2.3.1. Employers who participated on both projects were asked what they felt to be the main impacts of the projects and what they would have done if the projects had not been available. Eight of the employers would have recruited a trained driver who already possessed a C Licence and a further two employers would have first tried to recruit a trained driver but trained to C licence if recruitment failed. Four of the employers suggested that they would have been willing to fund the C licence is the first instance (table 2.3).

Table 2.3: Perceptions of impact of the SYDS and SDTS

Company details	Summary of alternatives in absence of project	Perceptions of impact
Own account / Europe / 250+ employees	Paid for C licence	'We would have paid for the young people to complete their C licence. I am not sure if council regulations would have allowed us to fund their SVQ'
Own account / Europe / 250+ employees	Recruited trained driver(s)	'We don't face particular problems in recruiting drivers and the working time directive has made it easier to recruit because drivers get more money for less hours. If the fund hadn't been available we wouldn't have paid for the C licence and would have recruited new drivers who already had a licence'
Carry for others / UK / 10-249 employees	Recruited trained driver(s)	'We don't find any particular issues in recruiting if you pay the right price…we pay 10% above our competitors and ask for a minimum of 3 years experience. If the fund didn't exist we would have recruited an experienced driver'
Carry for others / Europe / 10-249 employees	Recruited trained driver(s)	'We tend to recruit people that already have their C licence, aged over 25 and with 2 years experience. In the future we will only train if legislation requires it as at present there isn't enough leeway in profits for training…we take what we can get for free'
Own account / UK / 250+ employees	Recruited trained driver(s)	'Recruitment is not an issue as we have a reputation as a good company to work for.. Our new recruits are always transporter drivers with several years experience and are usually recruited on the recommendation of our existing drivers. We do train our drivers but would not pay for the SVQ as it has not additional value to us.'
Own account & carry for others / UK / 11-250 employees	Paid for C licence Paid for SVQ	'I would fund the C licence and the SVQ but would need to ensure that the employee stays with the company as a result. It has always been difficult to recruit new drivers and when recruiting the we test drivers skills, particularly if drivers have come from an agency. The project has encouraged us to recruit younger drivers however we are careful in our selection procedures. In the past we have had to provide remedial driver training and use a private training provider for this'
Own account / Local / 11-250 employees	Paid for C licence	'If the funding has not been available we would have put fewer people through the course and they would have just done the C licence. We find it hard to find class C drivers and advertise in the local paper'
Own account / Local / 11-250 employees	Recruited trained driver(s)	'I don't think we could afford to pay for a driver to complete their C licence. It was good in that it solved our recruitment problem and we would use it again if we needed higher levels of driving skills'
Carry for others / UK / 1-10 employees	-	Not applicable – the company went bankrupt
Own account / UK / 250+ employees	Recruited trained driver(s) or Paid for C licence	'If there hadn't been the funding I think we would just have put 1 person through. We would have tried to advertise as well but it is hard as agencies snap up a lot of the drivers.'
Own account / UK / 11-250 employees	Paid for C licence	'If there was no funding we would have tried to recruit someone without the licence and then trained them to get the C but not the SVQ'

Own account / UK / 11-250 employees	Recruited trained driver(s)	'In the absence of the project we would have tried to recruit trained drivers'
Own account / UK / 11-250 employees	Paid for C licence	'In the absence of funding would have paid for the C licence'
Carry for others / UK / 250+	Recruited trained driver(s) or Paid for C licence	'We would have tried first to recruit trained drivers and then trained to get the C licence. We find there is a bigger pool of labour to draw form in Scotland than in England in the area we operate (between Edinburgh and Glasgow). We would have just paid for the C licence and not the SVQ'
Own account / UK / 250+ employees	Recruited trained driver(s)	'We would only recruit fully trained drivers and only took an unqualified person on because we could get the funding to quality him for free'
Own account / UK / 11-250 employees	Recruited trained driver(s)	'We wouldn't have funded the SVQ and in the absence of funding we would have had to have recruited trained drivers'

2.3.2. Employers only recognised very limited value in the SVQ and only one employer said they would have also have been willing to fund the SVQ. Two employers did however recognise some additional value in the SVQ one of whom felt that the SVQ was especially valuable for younger drivers with limited driving experience as it allowed them to have longer term follow-up and feedback on their driving:

> *"We participated to give our young employees a chance to get their SVQ, this is really good for them as it tests drivers skills at a higher level than the C licence and provides me with more assurance that they are driving safely. (Employer 250+ employees)*

2.3.3. The other employer felt that the qualification was useful in raising of the profile of the industry although this employer was not willing to contribute towards its funding:

> *'All our trainees completed the SVQ and some have gone on to do level 3. This requires a higher degree of driving proficiency including skills in working with others, health and safety. Although the value of the qualification is mainly to the individual - they gain a qualification, earn more money and secure a future with the company - it also helps to raise the profile of the industry'(Employer, 250+ employees)*

Impact on literacy and numeracy skills

2.3.4. The literary and numeracy element of the SDTS was introduced following research by Skills for Logistics for its Pathfinder Literacy and Numeracy Project which explored the literacy and numeracy requirements of Scottish

Road Hauliers and the extent to which these match with employee skills. Training Providers were required to use an assessment toolkit developed by Skills for Logistics to identify skills needs. From this assessment, an action plan should be prepared by the ATO for candidates who require training. In cases where no existing public funding is available to pay for the training, then up to £1,000 per candidate was made available.

2.3.5. Take up of this element of the project was minimal. Most stakeholders suggested that this was due to three reasons:

- a reluctance of employers to admit that their employees have a problem with literacy/numeracy skills,
- a reluctance of employees to admit that they had a problem with literacy and/or numeracy skills; and
- a reluctance of employees undertake literacy/numeracy training in their own time.

2.3.6. Some employers admitted that although literacy and numeracy was an issue within the industry they had been able to develop various coping strategies to deal with it, for example by giving verbal rather than written instructions or using an administrator to provide assistance with form filling.

> *'A couple of our employees did the literacy and numeracy assessments. I think though their skills were good enough for the work they need to do and we have a administrator who can help the lads with their paperwork'* (Employer, 11-250 employees)

2.3.7. Stakeholders suggested that literacy and numeracy skills were less of an issue now as new technology had introduced electronic stock tracking and delivery systems.

Uptake by women

2.3.8. In its initial stages the SDTS had very minimal take up by women. It was therefore decided that 75 places would be allocated to ATOs to specifically market the project to women. Eighty places were taken up by women and 59 women completed the project (74%); a rate similar to that of male trainees. The majority of female trainees already worked within the industry for

example in warehouse or administration or had partners who were already working within the industry.

2.4. Completion rates

Scottish Young Driver Scheme

2.4.1. The SRHMF Steering Group set a target for the overall completion of the project of 65% and the final completion rate was 62%, substantially higher than the completion rate for the English version of the project.[5]

2.4.2. Table 2.3 shows that 41 participants (17% of total registrations) dropped out after getting their Category C Licence in milestone two. Training providers suggested that this was often due to a trainee switching jobs once completing the C Licence and then either being hard to track down or moving to an employer who was not keen on them continuing the SVQ.

Table 2.4: Completions for each SYDS milestone

	Total completing milestone	Still on project	Dropped-out (cumulative)
Registrations	241	-	-
M1 - Provisional Licence	213 (88%)	15	13
M2 - Category C or C+E licence	166 (66%)	43	32
M3 - SVQ	149 (62%)	19	73

Source: SfL Scottish Young Driver Scheme Project Performance Indicators

Scottish Driver Training Scheme

2.4.3. Table 2.5 outlines the number of candidates that completed the three milestones. In total 78% of trainees completed all three milestones against a target of 65%.[6]

[5] This is likely to be an underestimate because of the 92 non-completers, 43 left the project because they reached 21. A number of these 'non-completers' will have achieved the licence plus the SVQ (their outcomes are not recorded because the training provider was not eligible to claim for milestone 3 due to their age).

[6] 78% of candidates achieved the SVQ however a small number failed to pass the LGV driving test after at least 2 attempts and were allowed to complete to the project in a Category C vehicle. Taking account of this the overall completion rate was 74%.

Table 2.5: Registrations and Completions

	Total completing milestone	Still on project	Dropped-out (cumulative)
Registrations	1,427	-	-
M1 - Provisional Licence	1,371 (96%)	0	56
M2 - Category C or C+E licence	1,197 (83%)	0	230
M3 - SVQ	1,112 (78%)	0	315

Source: SfL Scottish Driver Training Scheme Project Performance Indicators

2.5. Costs of provision

2.5.1. The SYDS and the SDTS initially allowed funding support of up to 40/50% of the full costs to a company and provided tiered support of up to £3,500 per driver in the area covered by Scottish Enterprise and £3,750 in assisted areas. (table 2.6). In addition to this support a further £1,000 per trainee was allowed on the SDTS for expenditure on literacy and/or numeracy.

Table 2.6: Initial payment milestones for SYDS and SDTS

	Milestone 1	Milestone 2	Milestone 3	Total
Non-SME	£500	£1,250	£750	£2,500
SME	£700	£1,950	£850	£3,500
SME in assisted areas	£750	£2,050	£950	£3,750

Source: SDTS and SYDS Proposal for 2005/06 and 2006/07 (April 2005)

2.5.2. In January 2005, the steering group undertook a review of the general performance and management of the SDTS and SYDS. It was decided that the additional payments made to SMEs and those in assisted areas were not necessary and these were removed providing a total subsidy of £2,750 (table 2.7).

Table 2.7: Revised payment milestones for SYDS

	Milestone 1	Milestone 2	Milestone 3	Total
SYDS	£400	£1,100	£1,250	£2,750
SDTS	£200	£800	£1,500	£2,500

Source: SDTS and SYDS Proposal for 2005/06 and 2006/07 (April 2005)

2.5.3. Analysis of engagement rates by employer size and location suggests that this reduction in funding did not impact on uptake by these two priority groups. The Performance and Management Review also concluded that the time taken by the candidates to progress through the milestones was too long and raised the issue of a relatively high number of drop outs after the completion of the

mandatory training at milestone two. This issue was echoed by the provider interviewees who reported that in the initial stages of the project trainees tended to drop out soon after achieving their C licence.

2.5.4. The steering group recommended that the funding should be revised to provide a higher gearing towards milestone three to incentivise training providers to increase completions (Table 2.7). This change was successful in incentivising providers to develop mechanisms to keep in touch with trainees and secure better completion rates:

> *'At the start we had lots of trainees who did their C licence and then changed jobs or were very difficult to contact, I don't think employers really saw the value of the SVQ. In year 2 the funding was reversed so we only got 30% when trainees got their C licence and then 70% at the end. To stop trainees dropping out we then started telling employers that they would have to cover our training costs (£2,000) for those that dropped out). This reduced our non completions to zero' (Training Provider, SYDS)*

2.5.5. The initial funding also comprised management costs. Funding was made available to support up to 50 percent of the cost of the training of trainers and to also support local marketing initiatives and promotional activities. This additional funding of £130,000 (approximately £80 per registered trainee) was reasonable for project of this scale.

2.6. Value for money

2.6.1. Private costs for the acquisition of the C licence amount to between £500 and £1,000 per trainee and require around 5 days training. However this does not include any allowance for failures (around 50% of candidates fail their test). These costs also do not take account of the opportunity cost of putting an employee through five days training when they are not able to work. Taking these considerations in to account it may be estimated that the total cost to an employer of putting their employee through their C licence is around £1,375[7]

[7] 1.5*£750 plus an estimated weekly employment cost of £350

2.6.2. Skills for Logistics estimate that training providers take around 3 months to get the trainees through this initial test. Once the trainees have completed their C licence they then complete 4 post test assessments over a period of around 6 months. These tests are aimed at assessing their driving skills and do not form part of the SVQ assessment. The SVQ assessment comprises 5 to 8 visits which may be combined with the post test assessments which cover the units identified in the SVQ (Annex A).

2.6.3. Training providers reported that the number of post test visits varied widely depending upon the employer. Some providers felt that there were issues in that some employers did not conform to industry standards and extra training had to be undertaken in addition the assessment. Due to SVQ regulations any additional training that was required had to be undertaken on a separate visit.

2.6.4. A number of training providers felt that it was very hard to arrange employee visits due to the busy workload and off site nature of the employees. However where one provider had adopted a more flexible approach with visits outside 9-5 office hours there did not appear to be any difficulties relating to access.

2.6.5. The employers' contribution to the training lay in covering the entire wage costs of the candidates as candidates had to be employed from the point at which they were first registered on the project. Employers reported that the '*employee's time spent doing assessments and not working'* equated to between one and two days over the twelve month period, in addition to the five days spent training for the C licence[8]. At an employment cost of around £350 per week this equates to a total cost to the employer from participation of £490. Given that the employers' contribution to costs is meant to be 50% and that public funding was between £2,000 to £2,500 per trainee, the employers contribution is relatively low and the public subsidy is high.

[8] Employers reported that all of the training for the SVQ was undertaken on the job and hence did not result in any reduction in time spent working

2.7. Sustainability

2.7.1. A central aim of the two driver training projects was to develop the network of Approved Training Organisations (ATOs). The ATO network built up steadily over the first months from 2 existing ATOs to 12 by June 2003. In 2004 the number of ATOs peaked at 21 but subsequently fell to 16 in 2006 following some amalgamations and withdrawals.

2.7.2. All of the providers who were interviewed had backgrounds in the delivery of private training for the road haulage industry. This ranged from the delivery of apprenticeships and Skillseekers, to C licences, fork lift truck operation and health and safety training. None of the providers identified any issues in relation to the process of becoming an ATO.

2.7.3. At the start of the project no limitations were set on the number of candidates that were allocated to each training provider. A number of providers reported that this led to under capacity and a number of candidates having to wait excessively long to start training.

2.7.4. Two of the providers had recently received funding to deliver the MA in Driving Goods Vehicles. Both providers were uncertain about the content of the apprenticeship and how it differed from the level 2. The other five providers stated that they would not continue to deliver the vocational qualification at level 2 in the future when the funding was discontinued as they felt it would not be commercially viable. This was confirmed in our discussions with employers who were asked how much they would be prepared to pay to enable a trainee to complete the SVQ:

> *'We only participated for the C licence. In the future if there is no funding we will only train if legally necessary as at present there isn't enough leeway in profits for training….we take what we can get for free' (Employer 1-10 employees)*

3. SAFED (SAFE AND FUEL EFFICIENT DRIVING)

3.1. Aims and objectives

3.1.1. The Safe and Fuel Efficient Driving (SAFED) guide was first published in May 2003 by TransportEnergy BestPractice (TEBP). The guide was developed specifically to enable both vehicle operators and training providers to implement driver training and development for existing LGV drivers within the road freight industry. SAFED training allows drivers to see the change in fuel used over two separate runs, pre and post training, with training carried out on vehicles that have on-board fuel monitoring equipment. Other data is collected on gear changes and time taken for the training runs. This allows the driver to actually see what improvements they have made against a baseline in their own environment.

3.1.2. The SAFED training project in Scotland was envisaged to meet the identified industry demand in Scotland for in-cab training directed specifically at lowering operating costs, increasing road safety and improving driver recruitment and retention. The training comprised a one day programme including practical and theoretical assessments on the reduction and prevention of accidents and the implementation of fuel efficient driving.

3.1.3. The primary objective for the Scottish SAFED programme was to "*demonstrate and quantify to the industry the operational effectiveness of the SAFED training with a view to it being permanently embedded within industry*." In addition, five secondary objectives aimed to:

- demonstrate and quantify the effectiveness of SAFED in driver development training;
- promote the benefits of SAFED to the Scottish road haulage industry;
- achieve leverage by developing partnerships with training providers to deliver training to different horizontal groups such as novices, experiences drivers, commercial and in-house Instructors;
- recruit and train up to 600 participants within the above range of skill groups; and,
- evaluate the short-term and longer-term effectiveness of the training.

3.2. Engagement and participation

Targets

3.2.1. The target profile for participation was:

- up to 500 'regular' drivers trained and certified to the SAFED standard;
- 60 novice drivers trained and certified to the SAFED standard;
- 20 commercial instructors trained to provide long-term leverage and embedding in the industry; and,
- 20 in-house trainers for leverage during driver selection, refresher training and embedding.

3.2.2. In November 2005 Momenta was awarded an extension with revised targets to train:

- 60 Instructors to deliver SAFED (30 in-house and 30 commercial); and
- 1,400 drivers including 60 novice drivers (those which had held their licence for less than two years).

3.2.3. The SAFED project trained 83 novice drivers and 1,317 'experienced' drivers meeting the target of 1,400 trainees.

Marketing and engagement

3.2.4. The project manager Momenta was very successful in recruiting both instructors and trainees through a combination of marketing methods comprising:

- mailings sent out to training providers, companies and other stakeholders;
- the SAFED website and e-news bulletins kept instructors up-to-date with progress;
- SAFED was represented at targeted events including Truckfest and a promotional event at the Ibrox Football Stadium;
- a washroom campaign in service stations;
- a 'fax back' leaflet which was insert into Scottish transport publications with Scottish readerships designed to target the smaller operators and to raise awareness of the SAFED brand; and
- consumables developed to raise awareness. These included key rings, in cab air fresheners, stickers and model trucks.

3.2.5. Although Momenta exceeded its targets in relation to engagement a number of companies did drop out, usually due to due to resource constraints where they needed either a driver or a vehicle on the training day. This issue is linked to the structure of the industry whereby many haulage contracts are secured with limited notice. In order to help mitigate this issue the project introduced a small fine for non-attendance and instructors were also asked to confirm the training date with each company.

3.2.6. However this remained an issue for many smaller companies in particular and the instructors highlighted the relative difficulty in marketing the project to this client group:

> *'They (the smaller companies) have more difficulties in releasing vehicles and drivers for a day to participate in the training. They want it all to be arranged for them but when I call to arrange dates they ate always too busy. There is one company that has been interested for a long while but each time I call they say they are too busy' (SAFED instructor).*
>
> *'It is difficult to convince smaller companies to take time off to participate – taking off both a driver and truck away for a day is too much for them.' (SAFED instructor).*

3.2.7. Overall around two-thirds of employers who sent their employees on the programme had less than 50 employees (Table 3.1). Although this is smaller than the proportion amongst all Scottish road freight transport companies it still represents a good level of take up amongst this harder to reach group.

Table 3.1: Trainees by Company Size

	Individual	Less than 50	50-250	Over 250	Total
SAFED trainees	54 (4%)	450 (33%)	429 (31%)	449 (32%)	1,382
SAFED employers	-	60 (64%)	19 (20%)	15 (16%)	94
Freight transport by Road Employers		2,330 (98%)	35 (2%)	5 (0%)	2,370

Source: SAFED Final Report

3.2.8. The project trained 54 'individuals' who were either those who chose to do the course in their own time or were unemployed or agency drivers. This was felt to be due to the marketing campaigns and in particular the washroom adverts. The achievement is noteworthy particularly as our discussions with

stakeholders highlighted the limited access to training and potentially poor driving standards of many agency drivers.

3.2.9. SAFED was marketed amongst all regions equally however take-up focussed on the West & South West (50%), South East (20%) and Central & Tay (15%). The North East and Highlands and Islands together accounted for 15% of take up. This was linked to the recruitment of instructors and discussions with Momenta highlighted difficulties in recruiting instructors in a more remote areas. Momenta also reported the necessity to take charge of a large element of the marketing and felt that they would not have been able to reach their targets in relation to engagement if they had left the marketing to instructors.

3.2.10. Table 3.2 outlines the age structure of the SAFED participants. It appears that SAFED attracted a relatively even balance of people from across the age groups when compared to the population of the road freight sector.

Table 3.2: Age band of participants

Age band	Count	%	Road Freight Sector
<20	2	0%	3% (age 16-24)
21-30	157	11%	20% (age 25-34)
31-40	435	31%	48% (age 35-54)
41-50	409	29%	
51-60	289	21%	28% (age 55 +)
61-70	78	6%	
Unknown	30	2%	-
Total	1400	100%	100%

Source: SAFED Scotland Final Report

Reasons for participation

3.2.11. Ten employers were interviewed who had participated in SAFED training. Eight of the ten employers had less that 50 employees which was relatively representative of the overall pattern of participation outlined in table 4.1. Eight of the ten participants were road haulage firms and the other two firms were a garage and a removals company (table 3.3). The employers varied widely in their attitudes to and provision of training although the majority of employers did not offer any training in linked to improving driving safety standards or fuel efficiency. One of the two largest employers offered a

comprehensive driver training programme which offered drivers a chance to gain their SVQ.

3.2.12. Six of the interviewees gave increased fuel efficiency as their primary reason for participating. Six interviewees however also mentioned the importance of improving driving and safety standards.

Table 3.3: Employers reasons for participating in SAFED

Size of business/ no. of trainees	Existing training provision	Reasons for participation
Under 50 / 20	'We offer training in house in hydraulic and fork-lift truck operation'	'To improve the driving of our older drivers'
Under 50 / 1	'We do basic driver training in house and removal and storage training. We would give in formal advice on fuel efficient driving'	'Regulations….you constantly need more training and I wanted to improve fuel efficiency'
Under 50 / 1	'We mainly focus on mechanics MOT training'	'We are interested in both safer driving and fuel efficiency'
Under 50 / 1	'We do in house training in loading and unloading and general driver training'	'To make fuel consumption go down'
Under 50 / 6	'Our in house training included fuel efficient and safe loading/unloading. We work with many different vehicles and buy in consultancy services to ensure drivers can work with any of the vehicles'	'We had spoken to training providers about training and one company told us that we could get this training for free so we thought why not. Fuel is our bigger cost and it would be nice to reduce it'
Under 50 / 6	'We just provide general induction training when a new person joins in health and safety'	'Because it was offered to us for free'
Under 50 / 6	'We provide fork lift and manual handling in house'	'Safety and fuel efficiency; training staff to be better at what they do'
250 + / 6	'We do in house tachograph training. We don't provide any driving training because all our drivers are class 1 when they are hired'	'We are an ISO company and it is important that we are seen to be improving and enhancing our drivers'
Under 50 / 16	'We do some in house training in customer service but no driving related training'	'It was offered to us and fitted our training needs - to improve driving and lower fuel consumption'
250 + / 21	'Yes we do ongoing training in house in health and safety, CPC (externally) and SVQs'	'We made a company wide decision to invest in SAFED training to improve standards of driving to being costs down and help drivers kick their bad habits'

3.3. Completion rates

3.3.1. Of the 1,400 drivers who received the training 1,392 passed and 8 failed. Our interviews with SAFED instructors highlighted that the standard required to pass could have been raised:

> *'The training was quite straightforward and basic, maybe a bit too easy as it was easy to pass although only about one in five passed with distinction. The overall assessment could be tightened around general driving skills and road craft, for example ability to plan to drive better' (SAFED instructor).*

3.3.2. The high completion rates are at least partially linked to the quality of the training and two of the SAFED instructors highlighted peer-to-peer tutorage as an issue which was potentially impacting upon the quality of the training provision:

> *'I've heard that some instructors were being intimidated by trainees and were giving them a better mark than what they would deserve on a few occasions.' (SAFED instructor).*

> *'Sometimes you feel that you are not being taken quite seriously enough by the drivers especially with the older one who may have had many more years experience' (SAFED instructor).*

3.3.3. In addition the large number of word of mouth referrals, as commented upon by a number of training providers, provides evidence of a high level of employer satisfaction with the training provision:

> *'The main marketing tool (for SAFED) was word-of-mouth when drivers who had already participated in training told others about the benefits.'* (SAFED instructor).

3.4. Benefits from participation

3.4.1. The main benefit which employers identified as a result of participation was an increase in fuel efficiency (table 3.4). Five of the interviewees were able to quantify this improvement although it varied widely from between 1% and 12%. Only one of the participants, a removal company, was less certain about whether there had been any fuel efficiency benefits because their primary concern was to protect the load. Three of the interviewees also pointed to additional benefits in terms of staff motivation and reductions in vehicle maintenance costs.

3.4.2. Employers and training providers views of the sustainability of these benefits were mixed. A number of instructors pointed to the importance of ensuring that the training was embedded into company practice:

'SAFED will only be effective in the long term if there is someone monitoring fuel consumption, like a fuel champion. If not, drivers will go back driving their own way' (SAFED instructor)

Table 3.4: Identified benefits from participation

Size of business/ no. of trainees	Identified benefits	Sustainability of benefits
Under 50 / 20	'We notices an slight decreased in fuel consumption of 2-3%'	'Training is easily forgotten once drivers are back on the road….we introduced a fuel efficient prize for the most efficient driver per month'
Under 50 / 1	'It is quite mixed…our main concern as a removal company is protecting the loads. If you avoid changing gears the vehicle can jump'	-
Under 50 / 1	'We are using about 5% less fuel and road awareness is better'	-
Under 50 / 1	'We are using less fuel but not much less at about 1-2%'	-
Under 50 / 6	'All drivers came out very good in terms of performance. There has been a slight improvement in fuel efficiency 1-5%. Drivers like to feel that the company is investing in them especially the younger ones. The main benefit was not the fuel efficient but more awareness among the drivers of what their employers are up against in the industry (professional standards)'	'The improvement is for the first 2 months after the course, then they fall back into their old routines; it is important to keep reminding people'
Under 50 / 6	'We noted fuel consumption before and after the training and there was an improvement immediately afterwards of 8-12%. There could also been improvements in terms of maintenance'	'We hope this improvement is sustained but have not monitored it'
Under 50 / 6	'Not sure as there has not been any follow-up and some of the drivers have left. We do a survey of fuel consumption 2/3 times a year but this is not linked to individual drivers or cars'	-
250 + / 6	'Fuel efficiency depends on the type of vehicle but averages a reduction of around 7% per month. Staff motivation has gone up and all drivers mentioned during their appraisal that they enjoyed the course. Several asked for other courses but there is only so much you can offer in this sector'	'The training took place 18 months ago and benefits are still good. Several drivers have started using the same techniques in their own cars'
Under 50 / 16	'All drivers improved in fuel consumption during their training so there is a potential for improvement but it is hard to say exactly what'	'The initial benefits were quite good but it slipped back. Everybody drives well if you sit next to them, but not if they are on their own'
250 + / 21	'The cost of fuel went down and has definitely helped. We matched the performance of our own drivers who were SAFED trained and agency drivers and there was a big difference'	-

3.4.3. Other instructors felt that refresher courses would be necessary in order to ensure the benefits were sustained:

> *'The improvements will be partly permanent; maybe around 50% will be retained. I think it would be a good idea to have a refresher course after a few years or so.' (SAFED instructor)*

3.5. Creation of the instructor network

3.5.1. Initially three senior instructors were recruited. These instructors were located in the South, Central and North of Scotland to provide a geographical coverage across Scotland and undertook a four day training course in July 2005.

3.5.2. The senior instructors were responsible for training the instructors. There were two types of instructors trained, commercial instructors and in-house trainers. By the end of the project six senior instructors were in place and had trained 60 instructors. Table 3.5 outlines the main stages involved in the delivery of SAFED in Scotland.

Table 3.5: Delivery Timescale

Date	Processes	Numbers trained
April – June 2005	Preparation of course timetable and content	
July 2005 – Mar 2006	Instructor training	60 instructors
October - Dec 2005	Initial driver training	20 drivers
January – April 2006	Driver Training	1,122 drivers
May 2006 – Nov 2007	Driver Training	278 drivers

3.5.3. In England there was a significant training shortfall by both these types of instructors (50% of instructors failed to train any trainees) thought to be both due to the availability of longer term contracts for learning driver training and in firm training priorities taking precedence over SAFED training[9]. In Scotland only 4 of the 61 instructors trained failed to teach any drivers.

[9] DfT (2004) Review of the Road Haulage Modernisation Fund

3.5.4. The high proportion of instructors who delivered training is testament to the processes in place for managing instructors expectations from the outset as well as the funding regime whereby instructors pay a registration fee depending on the size of the training organisation. The aim was to achieve a balance between encouraging their training as an instructor and encouraging them to cascade the training to other drivers in their companies. Once instructors started training they could claim back this registration fee as it was designed to encourage instructors to train drivers.

3.5.5. To ensure that the instructors were carrying out the training within the programme procedures instructors were subject to an audit. This however largely appeared to focus on checking administrative processes and 12 instructors were audited in year 1 and 10 in year 2. Four of the nine SAFED instructors who participated in the CPC interviews commented upon the need for auditing of the delivery of the training in order to raise standards amongst their competitors:

> *'There are a lot of cowboys and more inspection is needed. I was audited for administration which was fine, but delivery of training should also be audited so there is no chance for people to cut corners' (SAFED instructor)*

> *'The quality of instructors varies quite a bit. Some were very good but I heard from people that participated in training that some others cut corners and missed out some of the material' (SAFED instructor)*

3.5.6. Instructors praised the organisation and content of the instructor training and were very positive about the ease of communications with Momenta both online and by telephone. They were also very positive about the quality of the materials provided and in particular the case studies which provided illustrative examples which made it easy to sell the product.

3.6. Costs of provision and sustainability

3.6.1. A core challenge for the project was to embed SAFED training within the industry and create motivation and enthusiasm for it to become self-sustaining and to ensure that skills are retained. Mechanisms which were undertaken to secure the future of SAFED on a commercial basis included:

- **Ensuring linkages with the future CPC** – SAFED needs to be added onto the approved list of courses so it can be recognised as contributing to the Certificate of Professional Competence (CPC).
- **Supporting instructors to sell SAFED** – The Continue to Train the SAFED Way Event included a workshop on how to sell SAFED commercially. All instructors were issued with Sales Presenter Packs which included spreadsheets that can be used to estimate the potential benefits of implementing SAFED training within a given organisation. Case studies of participating companies were issued and were used as targeted sales literature by instructors. The SAFED website was re-branded for the commercialisation phase.
- **Insurance discounts** - AXA agreed to offer 5% discount to RHA members who used AXA Direct if all drivers were SAFED trained. They also agreed to recognise SAFED Instructors and SAFED as suitable if defensive driving training was required as a condition of insurance.

3.6.2. By May 2007, the SAFED Scotland final report identified that 32 Instructors had registered with the online database demonstrating a commitment to the commercial delivery of SAFED. In addition, 67 drivers completed the training post funding on a purely commercial basis. Of the nine SAFED instructors who were interviewed as part of this evaluation seven felt that there was sufficient demand from employers to deliver the training on a commercial basis although of these seven, two felt that the cost to the company would need to be less that the cost of currently delivering the training, £175.

3.6.3. The interviews with employers revealed a very mixed response in relation to whether they would have been prepared to pay for the training on a commercial basis. Under the project, to encourage participation, no contribution had been required from drivers from companies with less than 50 employees. The Steering Group also wished to encourage trainees to use their own vehicles by using different contributions for medium and large operators. EU state aid regulations, with greater restrictions on aid for large companies, were reflected in a higher contribution.

Table 3.6: Employer/Driver Contributions to Training

Operator/employer size	Using own truck	Other truck
< 50	£0	£0
50 - 249	£0	£50
250 +	£50	£100

3.6.4. The two employers which had at over 250 employees appeared to be more willing to pay for full costs of the training although possibly with an in-house trainer:

> *'We do lots of miles as a company so it is really important that we increase our fuel efficiency. We would have looked into the training even if there hadn't been any funding available' (Employer 250+ employees)*

3.6.5. The other eight employers who all had less than 50 employees and therefore did not contribute to the costs of the training had more mixed views about whether the costs of the training would result in sufficient benefits to justify the costs:

> *'The training provider rang me and told me about the training. At first I was a bit sceptical but as it was free I though it would be worth giving it a try. I am not sure whether I would pay for it though, although the fuel saving was good our employees come and go so the investment may not be worthwhile' (Employer < 50 employees)*
>
> *'In the short term we would not offer the training to new drivers if we had to pay for it ourselves but in the long term will due to CPC requirements' (Employer < 50 employees)*
>
> *'We do lots of training anyway and would do something similar in house if there wasn't any funding' (Employer < 50 employees)*
>
> *'We could have done as good a job ourselves and will not use it in the future' (Employer < 50 employees)*
>
> *'If there was no funding we would have probably just tried it with one driver' (Employer < 50 employees)*

3.6.6. There was however some evidence amongst the smaller companies that participation had made them more open to the consideration of paying for training in the future:

> *'I didn't realise that the training would have such an impact on our drivers. I would certainly pay for more training in the future if the costs were reasonable' (Employer < 50 employees)*

4. SCOTSIM

4.1. Aims and objectives

4.1.1. In Scotland in November 2003 the Scottish Executive issued a tender for the Project Management of the Development and Provision and Evaluation of Truck Driver Simulation Training. The contract for this work was awarded to TRL who already had expertise in procuring, commissioning and training gained on the English RHMF TRUCKSIM.

4.1.2. The primary objective of this project as set out in the invitation to tender was to demonstrate the effectiveness of simulators as a training method for safe and fuel-efficient driving. It aimed to train drivers of goods vehicles on driving simulator equipment for environmental and safety improvement through reduced fuel use, improved hazard perception and better use of truck's safety systems.

4.1.3. The secondary objectives comprised:

- to project manage the development, provision and evaluation of truck driver simulator training in Scotland;
- to develop a detailed specification for simulator equipment which reflects the Scottish geographic and freight industry requirements and to evaluate training simulator equipment;
- to project manage the development of the hardware to be representative of the truck driving experience in Scotland;
- to project manage the development of the software and databases to display road junctions, networks, signs and surrounding areas representative of the wide variety of driving environments in Scotland;
- to project manage the building and delivery of a fully functional fixed simulator to ensure the initial research project is complete by March 2006;
- to project manage the building and delivery of a fully functional mobile simulator to ensure the initial research project is complete by March 2006;
- to propose suitable locations to house/garage both simulators and describe appropriate insurance arrangements based on the proposals;
- to market the training to relevant stakeholders to recruit a minimum of 500 commercial vehicle drivers from a diverse range of truck using sectors with a range of existing skill sets to ensure the project is complete by March 2006; and

- to analyse the results and report whether the simulator has demonstrated training effectiveness.

4.2. Engagement and participation

4.2.1. The first stage in delivery involved the procurement of the simulators. TRL developed functional specifications for two high fidelity truck simulators – one fixed and one mobile. Thales were considered by TRL to have the strongest technical solution and were recommended to the Scottish Executive as the preferred bidder.

4.2.2. TRL conducted a search of suitable locations to find an appropriate site for the fixed location simulator. Strathclyde Business Park was identified due to its good access to logistics companies in the central belt, storage facilities for the mobile simulator (if required) and security. Although the mobile simulator was self-contained it was frequently situated in army barracks as they offered secure space, packing for LGVs, toilets and kitchen faculties.

4.2.3. Ritchie's Training Centre, based in Glasgow, were selected to provide the driver trainers required to deliver the simulator training. Each of the driver trainers underwent training to be able to train drivers to the Safe and Fuel Efficient Driving (SAFED) standard. They also visited the Thales technical centre in Cergy, France, to experience a one week training course in the operation and maintenance of the simulator equipment.

Table 4.1: Delivery Timescale

Phase	Timescale	Drivers	Content
Phase 1 - training	Aug 05 – Mar 06	640	Familiarisation exercise and two drives comprising distribution, village, highway, town.
Phase 2 - training	Aug 06 – Nov 06	69	
Phase 2 - Enhanced Screening and Familiarisation	Nov 06- Feb 07	80	An evening session with screening questionnaire, single drive and 4 exercises to test for simulation sickness
Phase 2 – New module development	Jan – Feb 2007	33	New modules developed in hazard perception, driver attitude, slow manoeuvring and emergency manoeuvres. Drivers recruited to validate the modules

4.2.4. Table 4.1 outlines the timescale for the delivery of the training. TRL were contracted to train 700 drivers as part of the original contract issued by the Scottish Executive. In phase I of the project which ran until March 2006, 641

drivers participated in simulator training. In August 2006 TRL delivered training to an additional group of 69 drivers to fulfil the contract. These drivers underwent exactly the same process as described for Phase I.

4.2.5. A budget of £245,000 had been set aside for marketing to include the design, printing, advertising, video production, mailshots, third party events and so on. This was seen as a crucial element of the project, ensuring sufficient drivers could be trained in the timescale of the project. However at a cost of £350 per trainee it appears to be relatively high, for example, by comparison the English project had set aside £300,000 to include developing and delivering 617 training sessions in addition to the marketing.

4.2.6. Drivers were recruited to participate in driver training on SCOTSIM primarily by a combination of telephone calls made to previous contacts in the Scottish haulage industry from within the project team and by cold calls to other Scottish logistics companies. In addition a website was used to provide information for potential participants about SCOTSIM and offered the possibility of securing bookings for training online.

4.2.7. No data could be provided by TRL in relation to the types of companies engaged by size or by geographical location however the final report did provide a breakdown of participants by age and experience. A substantially smaller proportion of participants were aged over 56 and a higher proportion were aged under 25 than the population highlighting both the impact of targeting to the younger age groups as well as the tendency of employers to put their younger employees on the project.

Table 4.2: Age band of participants

	Count	%	Road Freight Sector
25 and under	41	6%	3% (age 16-24)
26 to 40	284	40%	20% (age 25-34)
41 to 55	322	45%	48% (age 35-54)
56 and over	62	9%	28%
Total	**709**	**100%**	**100%**

4.2.8. TRL reported difficulties in recruiting trainees and experienced problems with late withdrawals of the trainees by employers due to commercial pressures. The training on Scotsim was delivered at zero cost to the

employers which may have exacerbated this situation as the employers did not have to pay any form of deposit.

4.2.9. Six employers who had participated in Scotsim took part in the interviews. Four of these employers also sat on the advisory group and therefore may have represented a higher than average level of engagement with the project. Four of the employers employed over 250 employees and all of the employers provided some element of in-house training or were part of a vehicle manufacturers training project. The majority of this training appeared to be geared towards upskilling existing experienced drivers (table 4.3).

4.2.10. Five of the six employers has also participated on SAFED. Two of the six employers would have liked to have put more drivers on the Scotsim programme but felt that they couldn't due to operational reasons. In general Scotsim was not felt to fit as easily as SAFED around existing workloads due to less flexibility in the timings of sessions.

4.2.11. A number of the employers pointed towards the novelty value of the simulator and in general tended to be slightly more sceptical than the SAFED employers in relation to any potential benefits. Two of the six employers did however cite potential safety and fuel efficiency benefits as reasons for participating.

Table 4.3: Employers' reasons for participation on SCOTSIM

No. of employees	No. of trainees on Scotsim	No. of trainees on SAFED	Existing training provision	Reasons for participation
250+	1	26-50	'We try to recruit experienced drivers where we can who already have their licence. We do some in house training in forklift and health and safety. More vehicle manufacturers are now providing training with the purchase of a vehicle'	'We were initially approached by TRL and I was invited on to the advisory group. I would have liked to put more of my drivers on the project but couldn't due to operational constraints'
250+	51-100	0	'We employ a driver trainer who delivers in cab training for our younger drivers with less experience'	'To upskill existing drivers and improve driver awareness of safety and economy'
50-249	2-5	26-50	'We do in house training in unloading and loading and health and safety'	'One of our directors heard about it and we though we should give it a go as it was free'
250+	5-25	5-25	'Yes we have our own in house training department and we try to teach our drivers to use fuel efficiently'	'To try something new and improve drivers awareness of road conditions'
<50	5-25	2-5	'We will only employ drivers with 3+ years experience and has salaries that are 10% higher than competitors to reflect this. We don't have a need to train our drivers although we do use the Vehicle Manufacturers Training Project when buying a new vehicle'	'We applied for places for 7 and 2 got a place on the mobile simulator…. it was really for the novelty value...our drivers are already very experienced'
250+	2-5	5-25	'We offer lots of training for our existing employees with our in house trainer although we always look to recruit those with experience. Our training is in health and safety, fuel efficiency and loading'	' We only put 2 drivers on the training due to timing issues. I was also a bit sceptical about the benefits'

4.3. Completion rates

4.3.1. In Phase I around a quarter of trainees did not complete their training (table 4.4). A large proportion of non-completions were caused by a technical fault caused the motion system to be inoperative on the T5000 for approximately six weeks between September and October 2005. The simulator exercises could still be undertaken and training continued however the driver did not experience the motion cues that the system should provide leading to feelings of nausea.

Table 4.4: Non-completions (in phase 1)

	T5000 Fixed		T3000 Mobile		Overall	
	N	%	N	%	N	%
Completed	364	78.4%	114	67.1%	478	75.4%
Dropped out	100	21.6%	56	32.9%	156	24.6%
Total	464	100.0%	170	100.0%	634	100.0%

Source: TRL Final Report

4.3.2. As a result of the high drop out rates TRL undertook further research to explore the various factors which were considered to impact on drop-out rates including:

- comparing the effects of the in-operation of the motion system on drop out rates;
- assessing the impact of changes to the exercise order on drop-outs;
- assessing the correlation between simulator sickness and driver drop outs; and
- assessing the correlation between various driver screening criteria and driver drop outs.

4.3.3. Based on this research TRL were able to develop a number of counter measures. At the end of Phase I Thales conducted an audit of both the visual and motion systems which resulted in reduced simulator sickness scores. As part of Phase 2 an enhanced screening and familiarisation process was undertaken with 80 drivers which consisted of an evening when trainees attended the simulator facility and one of the driving instructors explained the purpose of the simulator training programme. It was anticipated that attendance at this event would reduce drivers' anxiety before participating in simulator training and therefore lead to a reduction in the occurrence of

simulator sickness. However it appeared, based on these small numbers, that familiarisation did not provide any additional benefit.

4.3.4. By Phase 2 the additional screening and changes to the configuration of the simulator reduced the simulator sickness drop out rate to around 5%. However the high levels of drop-outs in earlier stages of the project did damage to its reputation, evidenced in a number of the telephone interviews that were undertaken with the employers:

> *'We put 5 of our drivers on the simulator but 3 of them felt ill afterwards which put us off sending anymore…there is a cost for the company to send them and it is not worth it if they don't complete' (Employer 11-50 employees)*

4.4. Benefits from participation

Qualitative perceptions

4.4.1. Early within the project definition it was decided to integrate SAFED training principles into the simulator training modules. Trainees undertaking SAFED completed a baseline drive on which they were given feedback by an instructor. Trainees then completed a second drive to demonstrate the skills that they had been taught. The instructor scored the trainee on 17 different criteria and objective measures relating to fuel consumption, timing and gear changes were also made.

4.4.2. Scotsim drivers undertook a five minute familiarisation drive in the simulator in order to become acquainted with the vehicle controls and to get used to driving in the virtual environment. If they felt comfortable with the simulator they then undertook four training drives testing a variety of different environments; a distribution centre, village, highway and town.

4.4.3. After completing the four drives, each participant was given feedback on their performance and training advice by the instructor. They were then required to complete the four exercises a second time ('Drive 2') to demonstrate the skills that they had been taught. Comparison could then be made across drive 1 and drive 2 to investigate any improvements in performance.

4.4.4. 335 evaluation criteria were set across the four exercises and, in consultation with stakeholders, were allocated into the 17 criteria set out in the SAFED standard which would be assessed using simulator technology. For five of the criteria; driving position/seat belt, road and weather conditions, use of mirrors and bind spots, driver attitude/technique, overtaking and steering it was decided that the simulator was not suited to the assessment and scoring was undertaken by an instructor. SAFED scores were calculated separately for each drive to allow an assessment of improvements in performance to be made. However for the purposes of calculating overall SAFED scores the mean SAFED score for each drive was taken into account.

4.4.5. One of the aims of the Scotsim project was to contribute to the evidence on the benefits of simulation training over traditional on-road methods given its substantially higher cost.[10] Our discussions with TRL highlighted the main advantages and areas of added value of simulator training compared to in-cab training as comprising:

- **Concentration and variation of experiences** – Scotsim is able to simulate different driving conditions *'the trainee can get 5 years worth of different experiences in half a day'*. It is particularly useful in relation to safety as it can simulate conditions which cannot be duplicated on a road
- **Independence of experience –** the Scotsim instructor sits in a room outside the simulator and will hence have less of an impact on the driving experience than an in cab instructor.
- **Consistency of scoring** – for the non-electronic elements of the scoring Scotsim recorded wide variations in scoring dependent upon the trainer. For SAFED which is delivered in-cab the instructor will score all of the elements.
- **Objectivity** – the SAFED in-cab instructors have varying levels of experience. In the simulator measurement can be more accurate due to the ability to control and repeat the presentation of events and traffic and weather conditions, and to measure with great precision factors such as speed, lane position, distance from other vehicles, and have perfect knowledge of the use of the controls in the vehicle

[10] As outlined above the total cost of the project was £3.2 million although a large proportion of these costs comprise the procurement, initial set up and research -the direct training costs for 709 trainees only amounted to 5% of this total cost at £146,000. However this does not include any estimates for ongoing maintenance, insurance and storage of the simulator estimated at around £150,000 pa and any additional marketing or module development costs. In comparison the total cost of delivering SAFED Scotland was £272,100.

4.4.6. Interviews with the six employers who participated on Scotsim confirmed a number of these points although it is very hard to identify whether these benefits outweighed the additional cost of delivering the simulated training. Table 4.5 outlines employers' main perceptions of the benefits derived from participation. There were wide variations in perceptions partially linked to whether participants had experienced problems with nausea. Employers' tended to agree that the area in which Scotsim added the most value compared to on-road methods of instruction was in allowing the trainee to drive the route with more independence from the instructor and in teaching safer driving.

Table 4.5: Employer's perceptions of benefits derived form participation

No. of employees	Benefits derived	Relative perceptions of in-cab training projects such as SAFED
50-249	'I though the simulator training was very good and I would have loved to put our guys on it. There was a fuel efficiency saving but to an extent you are getting used to it on your first drive so the saving may not be as much as they say. It is hard to know if it is sustained because you are on your best behaviour'	'It is much harder to teach safety on the road. In the cab you are able to get the message across and have more of an attention span to focus on specific issues'
50-249	'We used it to upskill our existing drivers and although some were a little nervy at the start it was generally beneficial. The main benefits were improved driver awareness of safety and economy.	'When you are driving on the road with an instructor next to you and do something wrong he will give you a warning. Drivers on a simulator do not get immediate warnings when they do things wrong - they get to experience the consequences. This is much better for them and the situation can later be explained by an instructor so the driver can understand what went wrong'
50-249	'Not sure - both the drivers felt really queasy. I don't think you get a real feel for driving on a simulator'	'The simulator is not very realistic'
250+	'The benefit is mainly in terms of safety for new drivers. We run our own fuel efficiency programme anyway'	'I was really impressed with the realism of the simulator and the graphics'
<50	'It was a waste of time - our drivers are already very experienced and all our vehicles are computerised and monitored for fuel usage. We will ask questions if fuel usage appears to be high although we tend to blame the vehicle before blaming the driver'	'In cab training is better as you are more likely to sustain the benefits especially if you use your own cab to train in. The simulator is too different'
250+	'It is hard to know if there are any improvements as they didn't complete due to nausea'	'I think they both have advantages and disadvantages. However the cost of the simulator means that in cab is better'

4.4.7. All the interviewees would have liked the simulator to provide a greater focus on dealing with dangerous situations such as tyre blow outs which could not be taught on the road and felt that its potential had not been maximised:

> *'All our drivers drive articulated trucks and initially there wasn't an articulated module so it wasn't very useful. It would also have been good if it had looked at blow outs and other dangerous situations' (Employer 50-249 employees)*

4.4.8. In addition four of the drivers commented upon the lack of any simulation of the impact of different weather conditions which they felt to be a missed opportunity.

> *'The key gaps in the simulation would be to differ the weather conditions and to adjust for heavy loads' (Employer 50-249 employees)*

4.4.9. Research was a core element of the Scotsim project and TRL sought to obtain the opinions of the trainees regarding the effectiveness and realism of the simulator training. TRL's Evaluation Report of Scotsim[11] noted that all participants agreed with the statements that they learned from the experience, that they felt that the exercises were realistic and that they would recommend it to friends. However there was marginal disagreement with the statement that they found learning easier than learning in a real truck. The lowest rated elements in terms of realism were steering, acceleration and deceleration. All other elements of driving experience were deemed by participants to be either similar or very similar to a real truck.

Economic and environmental benefits

4.4.10. TRL's Evaluation Report concluded that participants showed the following average improvements between the two assessment drives:

- a reduction in fuel usage of 11.4%
- a reduction in the number of gear changes of 20.8%
- a reduction in the time taken to complete the drives of 10.6%

11 TRL (2007) SCOTSIM: An Evaluation of the Effectiveness of Two Truck Simulators for Professional Driver Training

4.4.11. The fuel usage reduction is marginally higher that the SAFED reduction which is cited as 9.8% however the reduction in gear changes is substantially below that reported by SAFED (36%) and the reduction in time taken is substantially higher than the 1.6% reported by SAFED.

4.4.12. Two of the six employers who participated in the research stated that their employees did not complete the training because of nausea problems. Of the other four interviewees two reported a reduction in fuel usage of 10% by their employees immediately after using the simulator however both these employers said that this was not maintained over time and needed to be tied in to a company fuel saving project. The other two employers felt that although there was a potential fuel saving benefit it was impossible to quantify and were sceptical if the benefit was as high as it had been proclaimed:

> *'We run our own in-house fuel saving programme anyway which will have a greater impact as our lads are trained and then continually monitored. The trouble with the Scotsim scoring is that by recording improvements over just two drives there is bound to be an improvement as on the first drive the drivers are still getting used to the system and the exercises' (Employer 50-249 employees).*

4.5. Costs of provision and sustainability

Costs of provision

4.5.1. The total costs for the project were expected to be £3.2m, comprising £1.65m for the purchase of the two simulators and a further £0.6m for software development.

4.5.2. The costs for Scotsim were substantially higher than those for the English TRUCKSIM (£1.2m) reflecting the purchase of two rather than one simulator and the higher technical specification of the Scottish simulators. In addition TRL, under their contract for TRUCKSIM were under an obligation to purchase the simulator from the department of Transport if required for the sum of £200,000.

Table 4.6: Costs for Delivery of Scotsim

	Cost excl. VAT
Development of ITT for simulator equipment	£32,965
Commissioning of simulators, equipment management and training	£167,755
Developing the training and research	£112,260
Marketing	£245,205
Quarterly meetings	£24,660
Reporting	£31,470
End of Life Review	£16,535
Training in fixed simulator 515 drivers @ £206 per driver	£106,090
Training in mobile simulator 190 drivers @ £209 per driver	£39,710
Purchase of fixed simulator	£700,000
Purchase of mobile simulator	£950,000
Design and development of software	£600,000
Additional costs (building acquisition and fit out, insurance, vehicle operating costs)	£203,000
Total Estimated Cost of the Project	**£3,229,080**

Source: TRL Proposal to Scottish Executive

Future sustainability

4.5.3. Scottish Executive's original ITT for the delivery of Scotsim outlined the potential for the future use of the simulators *'Government policy would benefit from contributions to C02 emissions, reducing injury accidents and for sustainable distribution…if the Scottish Executive simulator is demonstrated as effective in achieving some or all of the above benefits, at a reasonable cost, then the output of this project could be used to support the case for a Scottish roll out of truck driver training simulators'* (para. 3.5)

4.5.4. The research element of Scotsim demonstrated contributions to CO2 emissions and driver safety however it is questionable whether these benefits were delivered at a reasonable cost.[12] Nonetheless the substantial investment that has already made in relation to procurement, simulator configuration and module development is front ended and will represent greater value for money if the simulators have a continued use.

[12] The total costs for the project were expected to be £3.2 million

4.5.5. The ITT asked tenderers to provide a range of proposals to the Scottish Executive regarding an exit strategy for the simulator technology on conclusion of the project. TRL's response outlined a range of potential uses including:

- Driver training
- Trainer training
- Training certification
- Training development
- R&D - safety, distraction, fatigue
- R&D – in-cab intelligent traffic systems evaluation

4.5.6. In June 2006 the Scottish Executive issued a tender for the procurement of the simulators. Little initial interest was generated, partially due to the high ongoing maintenance costs which meant that commercial operation without any form of public subsidy would potentially be unviable. However a number of stakeholders felt that the lack of initial interest may have also reflected the closed procurement process and short time to turn around tenders.

4.5.7. The employers who participated in the project were asked for their views on the future use of the simulators and whether they would be willing to pay for simulator based training in the future. Four of the six employees felt that it did have a future use in relation to training and promotion of the industry however only two of the employers were willing to pay to use it (table 4.7).

Table 4.7: Employer's views on future provision and willingness to pay

No. of employees	Views on future provision	Willingness to pay
50-249	'It could be used on a commercial basis and should be used to promote the industry'	'I would not pay for it - the haulage industry is already getting hammered. If the government want to improve emissions they should pay'
50-249	'I would like to see it continue but the software maintenance costs are too high'	'I would pay but only around £150 per trainee'
50-249	'It may be more useful for new drivers as a way of building up their experience safely'	'I would not pay for it as our guys didn't benefit'
250+	'I don't think is would be commercially viable due to the costs of running it'	'Nothing. They need to fix the nausea problems first' (when problems fixed) maybe £100 per trainee'

<50	'I guess it could be run commercially and some people would pay but it couldn't be too expensive as people don't have much money for training'	'I wouldn't pay for it as our drivers are already very good'
250+	'Given the problems with nausea I don't think the simulators would be good way of training drivers'	'I wouldn't pay to use it due to the nausea issues'

4.5.8. There are however a number of other factors which may impact on the viability for the future (commercial) use of the simulators. These include:

- the 2009 EU Driver Training Directive which will require all commercial vehicle drivers to acquire a driver's CPC comprising 35 hours of instruction within a five year period;
- it is the view of a number of industry stakeholders that the simulators should be used on a non-commercial basis to promote the industry to young people to help mitigate the problem of the aging population of drivers; and
- a number of employers and other industry stakeholders identified that the simulators could be used to develop more tailored training, for example training for the safe transport of fuel.

5. CONCLUSIONS

5.1. Targets and engagement

5.1.1. Three of the four projects exceeded their targets in relation to the number of registrations (table 5.1). It was evident that the inclusion of the mandatory driver training in the form of the C licence led to the high level of engagement on the SDTS with 90 percent of employers citing this as their main reason for participation on this project.

5.1.2. Completions rates were high for all four projects. Although the completion rate for the SYDS fell marginally short of its target it is important to note that this is likely to be an underestimate.[13] On the SDTS completion rates exceeded targets. This is partially testament to the steering group who recommended that the funding should be revised to provide a higher gearing towards milestone three to incentivise training providers to increase completions.

Table 5.1: Registration and completion targets

	Initial targets	Progress against targets
SYDS	320 registered 65% completed	241 registered 62% competed
SDTS	320 registered 65% completed	1,426 registered 78% completed
SAFED	560 drivers	1,400 drivers 99% completed
SCOTSIM	700 drivers	710 registered 75% completed

5.1.3. From our discussions with stakeholders, training providers and employers it does not however appear that the SYDS and the SDTS have encouraged a large number of new recruits from outside the industry to take up employment within the industry. In particular on the SYDS the low take up from this younger age group may be linked to employers' preferences for using the projects to upskill existing staff, a large proportion of whom tend to be in the older age groups.

[13] This is likely to be an underestimate because of the 92 non-completers, 43 left the project because they reached 21. A number of these 'non-completers' will have achieved the licence plus the SVQ (their outcomes are not recorded because the training provider was not eligible to claim for milestone 3 due to their age

5.1.4. This low take up is somewhat disappointing given that one of the main aims of the project was to provide an entry route into the industry for new young drivers by overcoming the barrier of a lack of driving experience. There was no evidence however that employers had been encouraged to take on new younger drivers as a result of the project and the majority of trainees seemed to comprise existing family members who would have entered the industry in the absence of the project.

5.1.5. Take up of the SAFED project exceeded targets with 1,400 drivers participating against a target of 560 encouraged to participate by the clearly demonstratable benefits in relation to fuel efficiency. Scotsim met its target of 700 drivers with 710 drivers registered on the project.

ENGAGEMENT

Best Practice:

Where training places on the Scottish Driver Training Schemes were directly targeted at women take-up and completion rates were good. Although the majority of female trainees already worked within the industry in a different role the success of the marketing revealed that this is a potential group of recruits that the industry should target further.

Lessons Learned:

Resource constraints and the nature of the sector, with many contracts secured at short notice led to a number of employers experiencing difficulties in participating on the SAFED and Scotsim projects. SAFED introduced a small fine for non attendance and mechanisms were put in place to ensure that instructors confirmed the training date with the company which resulted in lower levels of withdrawal.

Employers participating on Scotsim did not have to pay any form of deposit which may have contributed towards a high number of companies withdrawing their employees at short notice.

5.2. Outcomes and additionality

5.2.1. Through the Scottish Driver Training Scheme and the Scottish Young Driver Scheme 1,363 individuals achieved qualified driver status with either a C Licence or a C+E licence and 1,261 of these also achieved their SVQ level 2 in Driving Goods Vehicles. Completion rates on the Young Driver Project at 62% were close to target and at 78% on the Adult Driver Training Project exceeded targets (table 5.2).

Table 5.2: Registration and completion targets

	Initial targets	Progress against targets
SYDS	320 registered 65% completed	241 registered 62% competed
SDTS	320 registered 65% completed	1,426 registered 78% completed
SAFED	560 drivers	1,400 drivers 99% completed
SCOTSIM	700 drivers	710 registered 75% completed

5.2.2. Given that around 60 percent of the employers who were interviewed in relation to the programme said that they would have tried to recruit a driver who already possessed their C Licence additionality appears to be relatively high. If these employers are representative of the industry at least 800 additional people will have been trained to C licence standard and over 1,200 additional people will have gained their SVQ level 2.

5.2.3. Nearly 500 drivers completed the simulated training course and a further 1,400 drivers completed the SAFED programme resulting in a considerable increase in the number of LGV drivers with additional skills in fuel efficient and safe driving.

5.2.4. Over 99% of drivers who participated on the SAFED programme completed and a number of instructors felt that the standard required to complete could have been raised. Nonetheless if viewed as a way of raising skills and promoting better standards of safety and fuel efficiency the project can be viewed as very successful.

COMPLETION RATES

Best Practice:
The January 2005 performance and management review undertaken in relation to the SYDS and the SDTS concluded that the time taken by the candidates to progress through the milestones was too long and raised the issue of a relatively high number of drop outs after the completion of the mandatory training at milestone two. The steering group recommended that the funding should be revised to provide a higher gearing towards milestone three to incentivise training providers to increase completions. This change had a positive impact on completion rates.

Lessons Learned:
Around three quarters of the employers who participated on Scotsim completed the simulated training. A large proportion of the non-completions had been caused by a technical fault which caused the motion system to be inoperative. As a result of the high drop out rates TRL undertook further research to explore the factors which impacted on completion rates. By phase 2 additional screening of drivers and changes to the configuration of the simulator reduced the non-completion rate to around 5%. By this time however there had been some negative impacts on image of the simulators which may have

ultimately impacted on the ease of securing their sustainable afteruse. If a similar approach to training is taken in the future more care needs to be taken in the procurement and set up process to ensure the system is operating correctly. The trainee screening process appeared to work well and this should be used in the future.

5.3. Delivery arrangements

5.3.1. The difference in delivery structures between SAFED and Scotsim impacted on engagement. On the former project training providers were incentivised to engage, recruit and train which helped to ensure engagement levels were high and levels of withdrawal were lower. On the latter project the marketing was centralised and despite substantially higher marketing costs at around £350 per participant the project reported difficulties in engaging employers.

5.3.2. All four projects operated through a partnership based approach. The Scottish Driver Training Schemes were managed by Skills for Logistics and supported by the Scottish Executive, the Freight Transport Association and the Road Haulage Association. SAFED was led by Momenta who partnered with Scottish Executive, the Freight Transport Association, the Road Haulage Association and System Group. Scotsim was led by the Transport Research Laboratory in partnership with Scottish Executive, the Freight Transport Association, the Road Haulage Association, Skills for Logistics, Transport Association, COSLA, the Driving Standards Agency and a number of industry representatives.

5.3.3. In all cases this partnership led approach seems to have been important in publicising the projects and providing them with credibility within the industry. For example the SAFED project needed to create a functioning network of instructors prior to raising demand within the industry. The RHA, FTA and Skills for Logistics were successfully used to promote the programme to commercial instructors. The training modules developed by Scotsim were piloted at a one-day-workshop to which the project partners including the industry representatives were invited to provide feedback ensuring that the modules would provide the most benefit.

DELIVERY ARRANGEMENTS

Best practice:

The two driver training projects provided dedicated funding for a Skills Development Manager. This post was used to built the network of Approved Training Organisations as well to work with other partner agencies including the FTS and RHA in promoting the project to employers. Feedback from stakeholders suggest that this role was key in securing the engagement of employers and providers.

Lessons learned:

The delivery arrangements for the two Driver Training Projects, SAFED and Scotsim were relatively disconnected and there appeared to be very little evidence of any effort to maximise potential synergies, for example through joint marketing processes. This may have helped to reduced marketing costs, as well providing employers with more choice and hence more appropriate support. It was evident from the employer interviews that awareness amongst employers of the 'other' projects was quite low.

5.4. Quality of provision

5.4.1. Employers who were interviewed in relation to the driver training projects had relatively limited knowledge about the content of the training over and above the C licence and could not for example describe the content of the SVQ. It appears therefore that more needs to be done to relation to either creating awareness of demonstratable benefits gained through the additional qualification or ensuring that the qualification is designed to deliver demonstrable benefits.

5.4.2. Two employers did recognise the broader benefits that the SVQ offers, for example '*covering a wider range of skills which are needed to be a fully functioning driver such as the use of tachographs and more advanced driving skills*' however the real value of the SVQ appears to be in supporting new drivers to gain the experience to enter the industry. Given that stakeholders and employers generally agreed that the recruitment difficulties experienced in the past have now been largely alleviated the rationale for future public funding of this project, at least at such high levels, appears to be questionable.

5.4.3. There was some mention of the variable quality of the SAFED training and a number of instructors mentioned that the auditing should have also covered the quality of training provision in addition to administrative standards. The SAFED final report has suggested that the commercial phase of the project should require instructors to pay an administration fee to cover auditing costs.

This approach seems sensible and it is suggested that the future auditing process should place more weight upon training quality.

5.4.4. Employers whose employees had participated on Scotsim were largely positive about their experiences and there was some evidence to suggest that the added value of simulator training compared to the on-the-road training was in relation to the range of different experiences that could be simulated in a short period of time, the relatively high level of independence of the trainee from the instructor, the greater consistency of scoring and the higher level of objectivity of scoring.

QUALITY OF PROVISION

Best practice:

Case studies were successfully used by both the Driver Training Projects and SAFED as a way of demonstrating the benefits to employers from participation. The case studies developed for SAFED were designed to be used by both commercial and in-house instructors to promote the project on a commercial basis.

Lessons Learned:

Employers suggested that Scotsim was not being used to its full potential, for example in relation to the simulation of dangerous driving conditions or different weather conditions. There is potential in the future to expand the use of Scotsim to cover more of these aspects.

5.5. Sustainability

5.5.1. One of the main impacts of the Driver Training Projects was the establishment of a network of approved training providers (ATOs). Prior to the establishment of the fund there were two ATOs that were accredited to deliver SVQs in Scotland. Skills for Logistics figures from 2006 suggest that there are now 16 accreted ATOs. Nonetheless it was clear from our discussions with the training providers that the Driver Training Projects could not be delivered in the future on a commercial basis as employers would not be willing to fund the SVQ. This suggests that in the absence of any further public funding for the SVQ the majority of this network will shift emphasis to delivery of other forms of driver training on a private basis such as the C licence[14] and lose their expertise as ATOs.

[14] Two of the training providers have secured funding to deliver the MA level 3 in Driving Goods Vehicles.

5.5.2. The SAFED project resulted in 1,400 individuals trained to the SAFED standard and the establishment of a network of 60 SAFED instructors. There is already evidence that this project can be delivered on a commercial basis and by May 2007 the SAFED final report identified that 32 instructors had registered to deliver the training on a commercial basis.

5.5.3. There appears to have been relatively little commercial interest in the future operation of the two simulators. Nonetheless given the high level of investment that has already been made in relation to the procurement of the simulators, set up and subsequent module development, it would be sensible to secure a future use, even if some further public subsidy is required to supplement a semi-commercial operation. However before any further public monies are invested the commercial potential of the simulators should be fully explored, for example whether they would have any future use in developing tailored training for particular segments of the industry such as the safe transport of fuel.

FUTURE SUSTAINABILTY

Best Practice:

The SAFED project was a successful example of the embedding of best practice into the industry so that continued funding was not required. The level of embedding was more limited in relation to the Scottish Driver Training Schemes with many employers remaining sceptical of the benefits of their employers completing the SVQ.

SAFED instructors praised the training and marketing material which they had been provided with and largely felt that Momenta had prepared them well for the commercial phase.

Lessons Learned:

The strategy for the afteruse of the simulators, especially given their high initial procurement and set up costs should have been given more attention from the outset, for example a buy-back clause imposed on the project manager, as in the case of TRUCKSIM, may have represented better value for money. Some stakeholders felt that the simulators could have a future use in promoting the industry to young people.

5.6. Costs and value for money

5.6.1. The level of funding per trainee costs for the two driver training projects was based on the assumption of providing a subsidy of around 40-50% of the total costs to the company from participation. Although the subsidy was revised

downwards in January 2005 the costs still appear high at £5,000 per trainee on the SDTS and £5,500 per trainee on the SYDS[15].

5.6.2. This cost is substantially higher than the cost employers would have incurred in qualifying their staff to gain their C Licence estimated to be around £1,300-£1,400 (including opportunity costs). This implies that additional costs incurred through the inclusion of the SVQ is around £3,700. It is worth considering whether this additional cost represents value for money, particularly given employers' opinions on the value of SVQ.

Table 5.3: Project delivery costs

Project	Total delivery cost	Funding per trainee
SYDS	-	£2,500 to £3,750 per trainee revised in 2005/06 to £2,750
SDTS	-	£2,500 to £4,750 per trainee revised in 2005/06 to £2,500
SAFED	£272,100 (for original target of 560 drivers and 40 instructors)	(Indicative cost of £485 based on 560 trainees)
Scotsim	£3,229,080 including research and procurement	(Indicative cost of £4,613 based on 700 trainees)

5.6.3. The total delivery cost of the SAFED programme was around £270,000 under its original targets for training 560 drivers and 40 instructors (table 5.3). This cost included the costs for marketing the project and training both the instructors and drivers. This cost appears reasonable particularly given that a large proportion is front ended in relation to raising awareness of the programme and setting up the network of instructors. The commercial cost of delivering the training is £175 per trainee and companies have indicated that they are willing to pay this cost. By May 2007 67 drivers had completed the training on a commercial basis.

5.6.4. The total delivery cost for Scotsim was £3.2 million. Of this just 4 percent (£145,800) had been spent directly on the delivery of training. This was partly because the primary aim of Scotsim was as a research tool aimed at demonstrating the effectiveness of simulators as a training method. As such a considerable proportion of the budget had been spent on software

[15] Assuming a subsidy of £2,750 on the SYDS and a subsidy of £2,500 on the SDTS

development and the development of the research and training rather than actual delivery.

VALUE FOR MONEY

Best practice:

The additional subsidy for employers in assisted areas and SMEs on the Scottish Driver and Young Driver Training Projects was dropped after high levels of engagement were evidenced. This decision did not affect engagement of these groups and made the projects more cost effective.

The SAFED project sought to encourage instructors to train drivers by making them pay a registration fee before they could be trained dependent upon the size of the training organisation. This fee was then refunded once they had started training. This was very successful and of the 61 instructors trained only 4 failed to teach any drivers.

Lessons learned:
Around fifty percent of the total delivery cost of Scotsim (£1.65 million) had been spent on the procurement of the two simulators. Given the uncertainty of the future use of the simulators it may have been expedient to include a buy-back clause as had been the case in relation to the English TRUCKSIM project.

5.7. The impact of the SRHMF

5.7.1. Overall the main successes of the Scottish Road Haulage Modernisation Fund are be summarised as follows:

- Enabling 1,362 individuals to achieve qualified driver status with either a C Licence or a C+E licence, an estimated 800 of whom would not have been trained to this level in the absence of the project
- Enabling 1,261 individuals to achieve achieved their SVQ level 2 in Driving Goods Vehicles, an estimated 1,200 of whom would not have been trained to this level in the absence of the project.
- 1,400 drivers trained on the SAFED project and linked to this estimated fuel cost savings of between £2.1 and £2.8 million per year and CO2 savings of between 6,400 and 8,400 tonnes per year.[16]
- 710 drivers trained on SCOTSIM and linked to this estimated fuel cost savings of £1.6 million per year and CO2 savings of 5,041 tonnes per year.[17]
- The creation of a sustainable network of SAFED training providers well placed to deliver the project on a commercial basis.

[16] Momenta (2007) SAFED Scotland Final Report, Tables 3.5 and 3.5

[17] TRL (2007) SCOTSIM: An Evaluation Of The Effectiveness Of Two Truck Simulators For Professional Driver Training, Table 7.2

- The fund was well supported by industry stakeholders and all the projects were generally well supported. The partnerships and lead bodies involved in delivering the individual projects were successful in promoting the projects to industry members.
- The fund also made some progress in helping to raise the profile of training practices within the road haulage industry although clearly there is a long way to go.
- Driver recruitment although no longer appearing to be an immediate concern will certainly be an issue in the future given the age structure of the industry. All four projects in raising the profile of the industry as well as in encouraging new entrants to the industry have helped to support driver recruitment and retention.

ANNEX A CONTENT OF SVQ LEVEL 2 DRIVING GOODS VEHICLES

Awarded by **The Scottish Qualifications Authority and Skills for Logistics**

Accredited from 19 July 2002 to 31 July 2007
Group award number: G6VA 22

Standards
This SVQ is based on standards developed by the Skills for Logistics SSC. Skills for Logistics membership is drawn from a wide variety of people working in a broad range of occupations within road haulage and distribution.

Structure of the SVQ
The way the SVQ is made up is shown below. The unit title appears in bold and the elements that make up each unit are listed under the unit title.

Mandatory units
Candidates must complete all of these units:

D91J 04
Monitoring the Loading of the Vehicle by Others
1 Prepare the vehicle for loading
2 Monitor the loading of the vehicle

D90Y 04
Complete Pre-driving Preparations
1 Identify vehicle instruments and controls
2 Complete vehicle and safety checks
3 Complete vehicle and loading documentation

D91H 04
Maintaining the Safety and the Security of the Load, Self and Property
1 Identify the Legal, Safety and Operating Requirements for the Vehicle and the Load
2 Protect the Vehicle and the Load from Security Risks

D91G 04
Maintaining Awareness of Driving Conditions
1 Assess the effects of driving conditions
2 Monitor the Load During Driving
3 Contribute to the Safety of Self, Vehicle, Load and other Road Users

D91L 04
Operating the Vehicle Systems
1 Operate and monitor vehicle instruments and controls
2 Ensure the efficient and careful use of the vehicle

D91D 04
Driving the Vehicle on Public Roads
1 Position the vehicle on the road

2 Control the speed of the vehicle
3 Overtake other vehicles
4 Brake the vehicle within a limited space
5 Control the vehicle in an emergency situation

D91C 04
Driving the Vehicle in Restricted Spaces
1 Select a space for Maneuvering the Vehicle
2 Maneuver the vehicle in restricted spaces

Additional units
Candidates can also choose to complete these freestanding units to complement the award, but they do not form part of the qualification:

D91N 04
Unloading the Vehicle
1 Comply with proof-of-delivery requirements
2 Assist the unloading of the vehicle

D91A 04
Coupling and Uncoupling the Vehicle
1 Couple the vehicle
2 Uncouple the vehicle

There may be publications available to support this SVQ. For more information, please contact:

Customer Contact Centre
The Scottish Qualifications Authority
The Optima Building
58 Robertson Street
GLASGOW
G2 8DQ

Tel: 0845-279-1000
Fax: 0845 213 5000
Email: customer@sqa.org.uk
Website: http://www.sqa.org.uk

ANNEX B STRUCTURE OF THE SCOTTISH ROAD HAULAGE INDUSTRY

Employment structure and conditions

B1 Skills for Logistics[18], drawing upon data from the 2003/04 Labour Force Survey, estimate that there are around 73,300 logistics sector employees in Scotland and of these around 30% (22,400) are employed in freight transport by road accounting for around 1% of Scottish jobs. These figures however exclude the many people engaged in logistics activities, but who work in organisations that are not classified under the Freight transport by road SIC code.

B2 Skills for Logistics estimates that there are 2,730 employers in the freight transport by road sector and of these 87% have less than 10 employees and 98% have less than 50 employees. This is likely be underestimate and the Scottish Traffic Commissioner's annual report for 2005-06 shows that there were 3,730 Standard National and 813 Standard International Operator Licences in currency together with 3,796 Restricted Licences.

B3 The structure of the industry is broadly similar to the structure for all industries in Scotland (table B1).

Table B1 – Employer size bands

Sector	0-9	10-49	50-249	250+	Total
Freight transport by road (6024)	2,055 (87%)	275 (12%)	35 (2%)	5 (0%)	2,370 (100%)
All Scottish industries[19]	264,660 (97%)		3,345 (1%)	2,240 (1%)	270,245 (100%)

B4 Possibly because of the preponderance of lower level jobs, the average weekly wage in logistics is £350, which is lower than the average for other sectors in Scotland (£393). 86% of employment is full-time, but there is more use of seasonal workers (33%, as against the all-sector average of 24%) and slightly more use of short-term contracts.

Employee Characteristics

B5 Skills for Logistics 2004 Sector Profile highlights the older age structure of the industry with 56% of road freight sector employees aged over 45 compared to 37% of the Scottish workforce as a whole. The road freight industry has a very small proportion of younger people in its workforce partly

[18] Skills for Logistics (November 2005) Right Skills, Right Place, Right Time! The sector skills agreement for the Logistics sector in Scotland. An assessment of Skills Needs and Current Provision in Scottish Logistics.

[19] Source: Scottish Executive. ONS (IDBR).

because of the age limits for driving LGVs. Females and BME groups are underrepresented.

Table B2 - Demographic profile of the Road Freight Industry (Scotland)

% Employees	Road freight (%)	All sectors (%)
Females	9	51
Black/ethnic minorities	0	2
Age 16-24	3	15
Age 25-34	20	21
Age 35-44	20	27
Age 45-54	28	22
Age 55 or over	28	15

Source: SfL Scotland *Logistics Sector Profile 2004*.

Skills and Training

B6 In 2005 Future Skills Scotland estimated that the proportion of skills shortage vacancies (SSVs), defined as occurring when an employer has a vacancy that is hard-to-fill because applicants lack the necessary skills, qualifications or experience is lower in logistics than in other sectors.

Table B3 - Skills shortages in Scotland

Skills shortage indicators	Logistics sector (%)	Other sectors (%)
SSVs as % of hard-to-fill vacancies	44	53
Work-places reporting SSVs	4	5
SSVs as % of all employees	0.4	0.9

Source: Future Skills Scotland, 2005.

B7 The most common reason given for not training staff was that it simply was not necessary (despite the presence of gaps). The difference between logistics and other sectors however was that while 83% of logistics employers quoted this as a reason, the proportion for other sectors was much lower, at 54%. Future Skills Scotland state that this may suggest a lack of awareness of the potential of training, as much as an objective absence of need.

B8 Skills for Logistics suggest that 'what is often referred to as a skills shortage is overlaid by the general shortage of labour in Scotland coming into the industry – especially drivers and front line managers. In other words, we are dealing not only with skills deficiencies but with a shortage of labour *per se*.'[20].

[20] Skills for Logistics (November 2005) Right Skills, Right Place, Right Time! The sector skills agreement for the Logistics sector in Scotland. An assessment of Skills Needs and Current Provision in Scottish Logistics.

Mandatory skills

B9 The skill requirements of the Road Haulage industry may be sub-divided into those which a mandatory and those which are non-mandatory.

B10 Mandatory skills include the licences to drive various classes of goods vehicles. From 1 January 1997 a **Category C** licence was required to drive a motor vehicle with a permissible maximum weight exceeding 3.5 tonnes; covering intermediate-sized vans and lorries on a rigid chassis.

B11 **Category C1** is a Sub-Category of C and is defined as motor vehicles with MAM exceeding 3.5 tonnes but not exceeding 7.5 tonnes; covering larger vehicles on a rigid chassis.

B12 **Category C+E** covers motor vehicle in category C plus a trailer with a MAM exceeding 750 kgs. This covers articulated vehicles and those towing trailers. Vehicles with a MAM in excess of 7.5 tonnes (articulated or rigid) are defined as 'large goods vehicles' (LGVs). A driver who wishes to hold a category C+E licence must first pass a category C test before going on to take the C+E test.

B13 In addition to the vehicle licence there is also European Legislation which road hauliers must comply with. Under European Union Directives EC74/561/EEC and EC89/438/EEC, holders of Standard Licences (those who wish to carry for hire and reward) have to be professionally competent. The operator himself or herself (or the relevant person employed by the operator) must have achieved certain standards and hold either a **Certificate of Professional Competence (CPC)** in Road Haulage Operations or some other qualification recognised by the authorities. Holding a CPC or equivalent is the pre-requisite for obtaining an Operators ('O') licence under Department for Transport regulations. Operators carrying their own goods (own account) may apply for a restricted licence and do not have to hold the qualification.

B14 In 2009 the EU Driver Training Directive will comes into force for truck drivers requiring all commercial vehicle drivers to require not only an LGV or PCV licence if they wish to find work, but also **a driver's CPC**. Existing licence holders will have up to five years to acquire the CPC through periodic training, amounting to 35 hours of instruction taken in blocks of at least seven hours each within a five year period. Thereafter, all drivers will have to continue to meet the 35 hours training requirement every five years to maintain their CPC. New drivers entering the industry will have to successfully complete an initial course to gain their CPC.

B15 **Digital tachographs** must be fitted to new goods vehicles which exceed 3.5 tonnes gross vehicle weight, used after August 2006. The introduction of these tachographs has had and will have significant training implications for drivers, as well as supervisory and management staff, because of the radically different way in which they operate from existing instruments, the information provided by them and the format in which the data is produced.

Non-Mandatory skills and training

B16 Non-mandatory skills comprise a wide range of training provision ranging from defensive driving techniques and Safe and Fuel-Efficient Driving (SaFED) to customer service and communication skills.

B17 Some technical knowledge is increasingly important for optimum use of sophisticated vehicles. **Manufacturers and dealers** have an interest in improved skills here, and some have already started to offer help to firms in training their employees. For example the vehicle manufacturer Scania has its own training school for buyers of new vehicles.

The Delivery of Training

Private training provision

B18 A survey of training providers and employers in 2005 by Skills for Logistics as part of their SSA preparation found that logistics organisations in Scotland tend to prefer private commercial companies for off-the-job training including the two principal trade bodies, the FTA and RHA. In addition a number of FE colleges provide the Certificate in Professional Competence required to satisfy the European Community Directives 561/74 and 438/89.

B19 The research concluded that for both the private training companies and FE colleges, market forces are a tough indicator of both process and outcome quality. SfL suggested that as a result firms will not pay for anything in greater depth; and second, they may be willing to pay only for training that is necessary for compliance with regulations with longer-term staff development being neglected.

B20 Nonetheless many larger employers are offering their own in house training and increasingly employers are making use of the training projects run by vehicle manufacturers.

Vocational qualifications

B21 The core vocational qualification for LGV drivers is Driving Goods Vehicles levels 2 and 3. The Level 2 Qualification is for goods vehicle drivers who can demonstrate a specified level of competence to conduct their job effectively. This involves a combination of driving skills and pre-driving preparation assessment. Level 3 develops these skills offering a broader assessment and is aimed at professional goods vehicle drivers.

B22 Prior to the introduction of the SYDS take up of the SVQ level 2 Driving Goods Vehicles was very low and in 2001 only two Approved Training Organisations (ATOs) were approved to deliver the SVQ in Driving Goods Vehicles. Skills for Logistics, in their report to the SRHMF on the operation of the SDTS and the SYDS, concluded that the core reason for this low take up was due to the fact that no public funding was available for trainees over 19 and for those not enrolled on the SYDS programme a minimum age of 21 applies for driving large goods vehicles.