

## Local Bus Service Support – Options for Reform Low Carbon Vehicle Partnership Response

### Executive Summary

The Low Carbon Vehicle Partnership (LowCVP) is pleased to be able to comment on this consultation, as many of our members see BSOG as the biggest single obstacle to the successful marketing of low carbon buses. The Partnership notes that UK Government now recognizes this issue and we would endorse the point made in the document that: “(BSOG) is directly based upon fuel consumption, and so is poorly linked to environmental objectives, particularly climate change.”

However, the LowCVP are mindful of the fact that the primary objective of Bus Subsidy, and in particular BSOG, is to reduce the cost of public transport and hence to encourage modal shift. While the Partnership wishes to support bus services, we feel that BSOG in particular has the potential to be reformed in order to help deliver the Government’s policy objectives on climate change by encouraging both low carbon buses and modal shift.

BSOG is neither technology neutral or incentives technologies which reduce environmental impact, and represents a clear barrier to the achievement of recommendations in the King Review to introduce low carbon vehicle technologies. “Over the longer term, more substantial reductions in CO<sub>2</sub> emissions are likely to depend on the prevalence of electric or hydrogen vehicles, operated using clean power.” (A conclusion of the King review Pt 1)

We believe that bus travel is in itself low carbon and helps to reduce congestion. Your document acknowledges “On average, the carbon impact of bus travel is 57 per cent lower than for the same journey made by a single occupant in a private car.” We believe that with the wide scale adoption of low carbon buses, the carbon dioxide emissions could be reduced by up to 65%<sup>1</sup> which could reduce UK emissions by more than 25 tonnes of carbon dioxide per bus per year by 2012. In addition there would be substantial reductions in local pollutants such as NO<sub>X</sub> and PM<sub>10</sub><sup>2</sup>. However the relative cost of car ownership as opposed to bus travel is important. Across the UK as a whole the relative cost of car ownership has fallen in recent years, while the cost of public transport has increased. We note that one of the few areas to buck this trend is London where bus patronage has increased due to the congestion charge increasing the cost of car ownership for London commuters and making public transport a viable option.

We therefore believe that if bus travel is not to decline the prime requirement for any change to the aid package is that the overall amount of subsidy should ideally increase, but in any case not decline. Any change to the support for

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<sup>1</sup> LowCVP’s response to Putting Passengers First

<sup>2</sup> Economics of bus drive lines – Sciotech survey for Department for Transport 2003

bus services should therefore encourage modal shift as well as encourage the uptake of more efficient bus drive-lines<sup>3</sup> and the use of low carbon fuels; or at the very least be fuel neutral.

While recognizing that BSOG is not ideal we do acknowledge the relative simplicity of the scheme and would highlight that any revisions to BSOG should:

1. Avoid introducing undue complexity to the scheme in order to minimise overhead costs, avoid the likelihood of distorting local bus provision and reduce the potential for abuse.
2. Provide bus buyers with confidence in the viability of low carbon buses. Therefore, incentives need to be long-term and predictable to be effective. Any special BSOG rate for low carbon buses should apply for the life of the bus.

We note that while the need to keep things simple and keep administration costs down is recognized, the document talks about a package of reforms for both the medium and long term “The consultation document considers the case for change. The emphasis is on changes to BSOG as the key element of the bus support package in need of change in the shorter term. It sets out a proposed package of reforms to the existing arrangements for BSOG which could be implemented over the next 1-2 years.” Elsewhere however it also states that the various proposals are options: “The Department has considered the options available and this section seeks views on a number of preferred options.” Six options are listed together with five alternative options and three possible options for the longer term. While some of these options could be complimentary a number are mutually exclusive and the implementation of any combination would be likely to be extremely complex.

The Partnership believes reform of BSOG should be kept to a minimum and that the Department should be selective in which policy objectives it uses BSOG to promote.

In summary the Partnership’s recommendations are that:

1. The Partnership believes there is little merit in BSOG being capped at a minimum fuel efficiency, beyond providing an upper limit to BSOG support. Such a scheme would not provide an effective incentive to improve fuel consumption and would be complex to operate.
2. The Partnership believes that while the methodology is sound the current threshold defining a low carbon bus is no longer appropriate and does not recognise the potential role that close to market technologies could play in reducing CO2 emissions. The Partnership proposes that the definition of a low carbon bus be revised to require a 20% reduction in greenhouse gas

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<sup>3</sup> Transforming the market for electric vehicles for use in public transport Sciotech report to DTI October 2002

emissions compared to a standard diesel bus with the same seating capacity.

3. The Partnership is divided regarding the proposal to channel an equivalent amount to BSOG through local transport authorities where Quality Partnerships are established. This is due to concern primarily over the potential for the subsidy to get diverted and getting used elsewhere if the longer-term devolution option was implemented. Where funds are channelled through local transport authorities or devolved administrations this should be ring fenced for supporting public transport.
4. The Partnership believes that a single rate of BSOG for low carbon buses is inappropriate and that the rate of BSOG should reflect the green house gas savings achieved. The Partnership recommends tiered levels of BSOG based upon greenhouse gas emission reductions which would require the minimal amendment to the BSOG to be effective. The Partnership proposes five tiers as follows:
  1. 20% or more reduction in GHG receives the equivalent to 19 p/km
  2. 25% or more reduction in GHG receives the equivalent to 20 p/km
  3. 30% or more reduction in GHG receives the equivalent to 21 p/km
  4. 35% or more reduction in GHG receives the equivalent to 22 p/km
  5. 40% or more reduction in GHG receives the equivalent to 23 p/km
5. During demonstration and small fleet trials low carbon buses should receive grant support for the additional capital and maintenance cost of low carbon buses. This could be provided through either the Technology Strategy Board's Low Carbon Transport Innovation Platform or the DfT's Low Carbon Vehicle Procurement Programme.
6. The Partnership believes that the payment of BSOG in arrears would place an unfair cash flow burden on bus operators and that the issue of operators being in debt to the Department would be better addressed by withholding a proportion of the BSOG payments during the year and that the year end reconciliation be made from these withheld funds.

## **Introduction**

This submission has been prepared by the Low Carbon Vehicle Partnership (LowCVP), at the invitation of the DfT, to provide a response to the Local Bus Service Support – Options for Reform consultation paper published on the 13<sup>th</sup> March 2008.

The submission builds upon the LowCVP's response to Putting Passengers First strategy published in 2007 as part of the Bus Review. Our response stated that the LowCVP believes there is a good case for reforming bus subsidy, although it is important not to reduce the overall support for public transport in doing so. The LowCVP believes there is scope to use the bus

subsidy to ensure there is a direct link between support and a bus operator's performance and environmental impacts.

In developing this submission the LowCVP has held a workshop specifically on this issue, in addition to input from stakeholders across the LowCVP's membership and key external stakeholders including PTEG, various Passenger Transport Authorities, local government, manufacturers and bus operators.

## **Low Carbon Vehicle Partnership**

The LowCVP was established in 2003, as an outcome of the Powering Future Vehicle (PFV) strategy, to accelerate the shift to low carbon vehicles and fuels in the UK. It aims to help deliver carbon reduction targets and give commercial advantage to UK business. The Partnership is a multi-stakeholder forum with more than 280 members including many leading car manufacturers and fuel suppliers, major fleet operators, environmental and consumer groups, academics and government departments.

The Partnership undertakes activities to both encourage the supply and raise demand for low carbon vehicles and fuels. This includes providing guidance on the priorities to stimulate market development. Some of our recent key achievements and principal current activities include:

- Development of the full definition and methodology for accreditation of a low carbon bus, based upon the target for low carbon bus introduction set out by Government in the PFV strategy.
- Brokering a voluntary agreement with the UK motor industry to introduce colour-coded fuel economy labels in all new car showrooms. On-going studies are evaluating the effectiveness of the label through research into dealer and consumer attitudes and implementation rates.
- Input to the development of the Renewable Transport Fuels Obligation – focussed on the development of sustainability assurance and carbon certification.
- Oversight of the establishment of Cenex, a public-private centre of excellence for low carbon and fuel cell technologies. The LowCVP is represented on the Board of the company.

An important role of the LowCVP is to independently and constructively review and advise upon the various programmes and schemes run by Government to support market transformation as well as to highlight policy gaps and help ensure a coherent suite of interventions to accelerate the shift to low carbon vehicles in the UK. This submission has been prepared following extensive discussion throughout the Partnership and reflects the consensus view across the diverse membership.

## **Local Bus Service Support – Options for Reform**

As a result of the Bus Review the DfT has decided to introduce legislation enabling some changes to the way in which local authorities outside of London support bus services. The consultation makes clear that the DfT do not intend to go further in reforming the role of local authorities outside London, the level of support or how it is channelled to bus operators.

The consultation sets out preferred options for change in the short and medium term to the way in which bus services are supported through BSOG. The consultation also sets out alternative options including one of no change.

There are six preferred options which the Partnership has considered in depth. These proposals are;

1. BSOG rate capped at a minimum fuel efficiency level
2. New arrangements for Low Carbon Buses (LCBs)
3. Devolve BSOG payments to areas undertaking Quality Contracts including London
4. Tiered Rates of BSOG
5. Payment of BSOG in Arrears and e-submission of claims
6. Safe and Fuel Efficient Driving demonstration

The Partnership has also made response to the alternative options set out in the proposal relating to the continuation of the current approach and distance based payments. We have also made responses to the potential longer term options including; devolution of support for the bus industry and a move to a “Per Passenger Payment” mechanism.

The Partnership’s responses to each proposal made in the consultation are set out below.

### **Proposal 1: BSOG rate capped at a minimum fuel efficiency level**

The Partnership believes there is little merit in BSOG being capped at a minimum fuel efficiency, beyond providing an upper limit to BSOG support. Such a scheme would not provide an effective incentive to improve fuel consumption and would be complex to operate.

In the Partnership’s response to the Putting Passenger’s First we quoted a CPT survey of the typical fuel consumption it’s member companies experienced. This showed a significant variation of fuel consumption around the average by as much as -32% to +58%. The variation in fuel consumption appeared to be due to three primary causes:

- a) The make and model of bus makes a difference to the typical fuel consumption for a particular vehicle type. The amount seems to be between 4 and 8%.

- b) The euro level (Euro 1, 2, 3 or 4) makes a difference to the typical fuel consumption for a particular vehicle type. Evidence suggests that Euro 3 is worse than Euro 1 and 2 (by between 2.5% and 11%). Fitment of SCR to Euro 3 seems to improve the fuel consumption by about 10% (but limited trial).
- c) Theoretically the number of passengers makes a difference to the typical fuel consumption for a particular vehicle type. The amount is thought to be about 4% per tonne, but there was no evidence to support this.

The Partnership believes that to be fair the scheme would have to take into account bus size (seating/passenger capacity), utilisation (i.e. average weight carried) operating terrain (hilly) and traffic congestion. This would make the scheme unduly complicated.

Nor would a capped scheme provide an effective incentive to improve efficiency. Due to the number of factors influencing fuel consumption it remains difficult for bus operators specify explicitly low fuel consumption buses as part of their procurement process. However they are good at monitoring fuel consumption amongst a batch of similar vehicles and identifying rogue high fuel consumption vehicles and resolving the problem.

In addition the Partnership believes there already exists a very strong incentive for bus operators to seek to minimise the fuel consumption of their buses as it represents the largest cost of operating a bus apart from the cost of employing the driver. Consequently capping BSOG on the basis of minimum fuel consumption is unlikely to influence bus procurement or operation. The Partnership believes this could be better addressed through other policy instruments rather than BSOG.

## **Proposal 2: New arrangements for Low Carbon Buses (LCBs)**

The LowCVP is aware that the state of development of the technology employed in low carbon buses is immature and currently unit costs are high. If low carbon vehicle buses are to be incentivised then there must be additional support provided beyond that proposed in the consultation. This support would most effectively be provided through either the Technology Strategy Board's Low Carbon Vehicle Innovation Platform or the Department for Transport's Low Carbon Vehicle Procurement Programme both of which aim to support the market entry of new low carbon vehicle technologies.

Of the two reforms to BSOG payments to LCBs proposed by the Department, the LowCVP doesn't believe proposition (b) is a credible improvement on the status quo. In the LowCVP's response to "Putting Passengers First" we stated that this option would only be potentially effective if combined with a capital grant. The Partnership notes that this policy currently applies to gaseous fuelled buses and does not overcome the bias in BSOG payments to these vehicles.



The LowCVP supports the introduction of a distance based payment of BSOG to LCBs. However a rate equal to the average BSOG payment when calculated in the normal way i.e. 17.6 p/km<sup>4</sup> would not be sufficient to make low carbon buses cost effective once in series production let alone when produced in small batches during the early stages of market introduction.

**The LowCVP believes that low carbon buses should receive support, at least, equivalent to the average BSOG payment when calculated in the normal way, and that it is appropriate to provide additional support in recognition of the environmental benefit of low carbon buses (see Proposal 4).**

The Partnership believes that the current definition of a low carbon bus is no longer appropriate and does not recognize the potential role close to market technologies could play in reducing CO2 emissions.

The current definition of a low carbon bus dates from 2003 when the Government published its Powering Future Vehicles strategy. The Partnership further developed the definition as a means to provide clarity as to which vehicles could benefit from a proposed low carbon bus-purchasing subsidy which was developed between 2004 and 2006 but abandoned before being launched.

Since then work carried out by the LowCVP and others has shown that significant reductions in carbon emissions, but less than 30%, may be obtained from technologies that are less costly to implement than those currently proposed to meet the 30% target. For example mild hybrid technology may be able to offer a 20% reduction in CO2 at a third to a half the cost premium of a full hybrid solution.

While in favour of any measure that removes the market distorting effect of BSOG on bus whole life costs LowCVP would not like to see an arbitrary hurdle introduced that would prevent the introduction and gradual development of some promising new technologies. Therefore the LowCVP believes the definition of a low carbon bus should be relaxed but that the level of support available through BSOG be linked to the carbon dioxide emission reductions achieved but capped at a maximum of the equivalent of 23 p/km. This proposal is expanded upon under the LowCVP's response to proposal 4 "Tiered Rates of BSOG".

**The LowCVP proposes that the definition of a low carbon bus be re-defined as a bus which has 20% lower carbon dioxide emissions than a standard diesel bus of the same seat capacity. Where a "standard diesel bus" will mean a Euro 3 baseline as defined in LowCVP Bus Working Group document BWG-P-05-04 (February 2005) which is on a Well-To-Wheel basis**

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<sup>4</sup> This value is calculated assuming that the BSOG is equivalent to 37.8 p/litre and that the average fuel consumption is 50 litres/100 km. This value of BSOG applies to diesel buses whilst natural gas and other 'clean' fuel buses attract 100% BSOG which is 45p/litre

## Economies of scale for Low Carbon Buses

It is difficult to assess the extent of potential reductions in the cost of low carbon buses as volumes increase. Current examples of low carbon buses for which costs are known are all experimental vehicles built in small batches for demonstration purposes and small fleet trials. There are two main factors driving up the cost of experimental low carbon buses, which may be as much as 100% more expensive than equivalent diesel buses.

1. The cost of components. Most low carbon buses are more complicated and incorporate costly components.
2. Due to uncertainty of the market for low carbon buses, R&DD is being recovered over fewer vehicles.

While costs are currently high because of the experimental nature of the technology once production levels reach reasonable volumes of a single type, e.g. 100 buses, then costs will stabilize such that future product cost will be better known. In the bus industry, production runs of a 1,000 buses represents a large batch, there are limited economies of scale to be achieved unless they are driven by the truck market.

The cost of low carbon buses will also be dependent on the degree of fuel consumption and carbon dioxide emissions achieved.

The LowCVP expects there to be reductions in cost of low carbon buses once they are produced in series production. However, it is expected that low carbon buses will continue to command a significant cost premium.

## How robust are the CO<sub>2</sub> reductions from the current round of LCBs?

A number of buses have met the current definition of a low carbon bus based on the MLTB route 159 which requires a 30% reduction in carbon dioxide. However this will not necessarily translate into equal fuel saving in operation for the reasons discussed below. However what the performance against the MLTB test cycle demonstrates is the potential of these technologies on what is a real life test cycle.

Unlike a diesel bus the number of variables associated with a hybrid bus mean that the buses need to be tuned for each route. A key attribute of hybrid buses, is to be tuned to achieve the best performance possible against any given route. This includes; taking account of the topography, congestion, frequency of stops, average traffic speeds and daily range required of buses on each route.

However it has to be recognised that the current low carbon buses in operation are all experimental vehicles to some degree. Manufacturers and operators are still going through a learning curve, understanding how to optimise the technology and achieve the best results from it.



To date, other than in New York, which has demonstrated significant improvements in fuel consumption (but against very different benchmark to buses operated in the UK), there is insufficient in service data for actual fuel savings to be predicted.

### Encouraging alternative fuels and cleaner emissions

It is inevitable that in an attempt to reduce CO2 emissions buses will be developed which run on a wide range of fuels. The Partnership believes that incentives/subsidies should be technology neutral and reflect the state of development of the underlying technology. This is likely to be too complicated for a single incentive/subsidy to tackle effectively.

The Partnership believes that technologies being demonstrated in small fleet trials should benefit from additional support. Such as the Low Carbon Vehicle Procurement Programme run by the DfT rather than expecting BSOG to support these technologies solely.

Once product development has been successfully completed for a low carbon bus it should be supported by BSOG in a technology neutral manner. BSOG based upon passenger miles rather than fuel usage would fulfil a technology neutral approach in a simple manner. However, it should be set at higher than equivalent level for normal buses, in order to compensate for the fact that these buses will have higher capital costs, and major component replacements during their life than a normal diesel bus would expect.

For example in addition to higher capital costs the cost of running many hybrid buses includes occasional battery replacement. In effect some fuel savings have to be off set by battery costs. If we neglect this and just consider energy usage then the scheme will fund less than the equivalent additional cost of a low carbon bus.

### **Proposal 3: Devolve BSOG payments to areas undertaking Quality Contracts including London**

There is not a consensus in the Partnership with regard to the devolution of BSOG payments to areas undertaking Quality Contracts.

A number of LowCVP members feel that to ensure policies are effective in supporting the bus market and in order to establish conditions to encourage low carbon buses to be developed and procured, that a common policy should be followed across the UK. In addition, a particular concern of LowCVP members is that funds would be channelled into other policies rather than supporting bus travel. The Partnership would recommend that where BSOG payments are devolved to areas undertaking Quality Partnerships, that the funding is ring fenced for the purpose of supporting public transport.

It is noted that the Traffic Commissioner has the power to withhold BSOG payments in order to enforce performance improvements in services and that this would be undermined by the devolution of BSOG payments,

There are also a number of LowCVP members who support the proposal to devolve BSOG payments to areas undertaking Quality Contracts. Amongst this group the proposal to use the BSOG payments to be tailored to local requirements has merit and as in the example given it is easy to see how it would work in London. How it would work with a PTA can be envisaged but there would be obvious difficulties implementing the policy in those areas not currently covered by TfL or a PTA.

We note the comment that the subsidy could get diverted and would be particularly concerned over the risk of the funds getting used elsewhere if the longer-term devolution option was implemented.

### Targets

If the BSOG Payments are devolved to areas undertaking quality partnerships then the Partnership believes that there should be some targets imposed. This would limit the risk of funding being diverted to other policies and would ensure that key national priorities such as the environment are reflected in local decisions.

The Partnership are aware that the devolution of BSOG payments to areas undertaking Quality Partnerships would require bus operators to make multiple claims which would increase the administrative burden of claiming this support.

### **Proposal 4: Tiered Rates of BSOG**

The LowCVP believes that tiered rates of BSOG are only justified where there are significant benefits, which are associated with additional costs, which can be incentivised in addition to the primary goal of BSOG which is to reduce the cost of the provision of public transport. This is clearly the case for tiered BSOG rates with regard to greenhouse gases and in particular carbon dioxide. There may be a case with regard to emissions of regulated pollutants.

Beyond the examples of greenhouse gases and regulated pollutants the Partnership feels there are no other examples justified in developing tiered BSOG rates for. Other benefits could far more easily be handled through other mechanisms such as a capital grant, enhanced capital allowances or regulation.

### Greenhouse Gases

The range of technologies which might be employed to reduce carbon dioxide and fuel consumption in buses varies greatly in cost and effectiveness. A study commissioned by the LowCVP<sup>5</sup> recently set out the range of costs and

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<sup>5</sup> Low Carbon Bus Procurement Feasibility Study, STS Ltd

carbon reductions which could be expected from a range of technologies<sup>6</sup>. The key performance criteria are set out below:

Criteria		Diesel Bus	Low Carbon Bus	
		Average	Max	Min
Batch production	£	-	220,000	150,000
Series production	£	120,000	170,000	135,000
Maintenance	£	5,500	8,500	6,092
Fuel Con	l/km	0.435	0.261	0.348
CO2	g/km	1250	750	1000

Source: LowCVP

The LowCVP believes that technologies delivering more progressive reductions in fuel consumption and carbon dioxide emissions should receive more support as there are significant capital costs associated with the technologies delivering these benefits.

The scheme would need to clearly define which buses were eligible for the various rates and that this is clearly auditable. Eligibility should be on the basis of a certificate similar to Type Approval. The certificate would be issued by the bus manufacturer and would be evidenced by an independent witnessed test against the Millbrook-London transport Bus (MTLB) test cycle. The certificate would state the reduction in carbon dioxide emissions achieved against a standard bus of the same seating capacity, as defined in LowCVP Bus Working Group document BWG-P-05-04. The minimum acceptable reduction in carbon dioxide emissions would be a 20% reduction. The certificate would also guarantee that the vehicle would stay within the emission bands during the first 7 years of the vehicles life.

In determining the level of tiered BSOG rates the LowCVP believes that the support should allow low carbon buses to breakeven against standard buses within the first 7 years of operation. For the nearest to market technologies capable of delivering a 20% reduction in greenhouse gases, the available evidence suggests that the capital and maintenance costs might be recovered within a 7 year period with the equivalent of a BSOG rate of 19 p/km, while technologies capable of delivering up to 40% reductions in greenhouse gas emissions will require the equivalent of BSOG rate of 23 p/km. For simplicity and to avoid boundary issues the LowCVP would propose a system of five BSOG bands as follows:

#### Low Carbon Bus Bands

1. 20% or more reduction in GHG receives the equivalent to 19 p/km
2. 25% or more reduction in GHG receives the equivalent to 20 p/km
3. 30% or more reduction in GHG receives the equivalent to 21 p/km
4. 35% or more reduction in GHG receives the equivalent to 22 p/km

<sup>6</sup> These values are based on assumptions of large scale volume production and the evidence from TFL's trials of low carbon buses is that such savings have yet to be demonstrated with small scale batch production. So this level of support will have to be maintained during the life of these buses and into the foreseeable future to transform the market completely

5. 40% or more reduction in GHG receives the equivalent to 23 p/km

The information required to be provided to claim BSOG would be the eligible mileage done by the qualifying low carbon buses and the band the low carbon bus band, which would be based upon the certificate issued by the manufacturer. This would not require significant increase in the complexity of the system and would be auditable.

**The LowCVP proposes that all buses achieving the revised definition of a low carbon bus, set out above, should receive a flat rate BSOG payment greater than the average BSOG payment when calculated in the normal way i.e. equivalent to 17.6 p/km. The BSOG payment should reflect the greenhouse gas emission reductions of the low carbon bus and vary between 19 p/km and a maximum of 23 p/km over the life of the bus as the durability and maintenance of the new drive line technology has not yet been demonstrated.**

The Department's proposal to use of BSOG to drive changes such as the introduction of smartcards and GPS appears to be very secondary. In our opinion it would probably be simpler and easier to use another mechanism (e.g. a separate grant) to promote these changes.

#### **Proposal 5: Payment of BSOG in Arrears and e-submission of claims**

The Department's proposal to switch to payments of BSOG annual in arrears places an unfair cash flow burden on operators because the fuel duty is payable on a continuous basis. Fuel duty is paid via the fuel supplier when the fuel is delivered whereas BSOG is payable quarterly, half way through the calendar quarter. As a result the Department will always be in credit and have a cash flow advantage.

This has real financial implications and means in real terms, payments annually in arrears is equivalent to a reduction in rebate of 1.25 pence per litre (3.1%). This could have significant implications for marginal routes and is counter to the policy objective of reducing the cost of public transport to encourage modal shift.

The issue of operators being in debt to the Department could be resolved more easily by:-

- a) Maintaining quarterly payments based on estimates but distribute, say, 95% of the estimate.
- b) As above but withhold, say, 20% of the final quarter.

This would allow adjustments to payments made to be made from the proportion of payments withheld without placing a punitive cash flow on bus operators.

## **Proposal 6: Safe and Fuel Efficient Driving demonstration**

While the results of driver training schemes such as SAFED are impressive the LowCVP question if they are sustained. Cutting out excess idling is a simple matter but acceleration and braking are often dictated by traffic conditions and passenger comfort. The Partnership believes that to be effective bus operators need to have a ethic of continuous improvement, whether this can be encouraged through Government intervention is uncertain. However, the Department should promote and provide best practice guidance in this area.

### **Alternative Options**

The LowCVP believe that to retain the current approach to BSOG would be a missed opportunity to put the financial support of public transport on a more secure and appropriate footing. Beyond the fact that BSOG is simple to administer, there is little to commend it and it represents the single largest barrier to the introduction of environmentally more sustainable buses in the UK.

The Partnership believes however that the progressive change described in the consultation “Local bus service support – options for reform” is the correct approach. The stepwise approach provides a means of managing the risk inherent in changing important support mechanisms and will limit the potential for unintended consequences, while tackling the most significant short comings of the current system in the short term.

The Partnership believes the alternative option of moving to a distance based mechanism of claiming BSOG in the short term would not be necessary to tackle the most serious shortcomings, while it would be contentious and would run the risk of making marginal routes using existing buses unviable.

### **Potential Longer-Term Options**

In the longer term the Partnership believes that support and incentives should be technology neutral more closely linked to encouraging modal shift and environmental outcomes. This we feel could be best achieved with a “per passenger payment” however such a significant change would need to be clearly signalled to the bus industry well in advance to allow the industry time to prepare.

The LowCVP are aware that a move to a “per passenger payment” would have the potential to threaten bus routes which are important to provide access for communities to centres of economic activity, such as rural bus routes. However the Partnership feels these could be best support through other mechanisms such as the Rural Bus Subsidy Grant (RBSG) or by intervention by local transport authorities.

## **Conclusion**

In order to face the challenges of climate change, the LowCVP believes that, reductions in greenhouse gases are required from all sectors including the transport sector. While a modal shift from private to public transport will deliver significant reductions in greenhouse gases, bus operators should be encouraged to employ fuel efficient low carbon buses as part of a strategy to reduce emissions from transport.

There is no incentive or requirement for bus operators to currently change their procurement strategies which do not prioritise low carbon buses. A package of incentives is required to encourage them to reduce emissions from buses. The recommendations provided in this response provides a means to refine BSOG to provide these incentives while protecting BSOG.

Fundamentally buses consume energy to operate. In future this energy is likely to be come from a range of sources and possibly be converted and stored on the bus. BSOG currently protects public transport from the inflationary impact of fuel duty through a mechanism focused on operating costs only and is biased towards one fuel.

We believe that in the longer term it would be better to support the industry by incentivising bus usage directly; in that the more passenger miles an operator provided the more assistance they would receive. If this is seen as detrimental to rural bus services then the Rural Bus Subsidy Grant (RBSG) may have to be increased to maintain the balance.

Fuel duty could then be used to provide cost signals in a technology neutral manner and based upon environmental impact and in particular greenhouse gas emissions.

In the short term the LowCVP believes that BSOG should be reformed to be technology neutral and encourage environmentally beneficial technologies and fuels. The Partnership believes this could be achieved simply through a tiered BSOG rates based upon greenhouse gas reductions providing support above the average equivalent BSOG payment in terms of pence per kilometre, capped at the equivalent of 23 p/km.