

# **Annex C: Details of TfL responses to representations and objections received to the consultation**

## **Introduction**

This Annex contains TfL's consideration of representations and objections received from stakeholders and other organisations.

For the purpose of analysis, the representations have been categorised into broad 'themes' and 'sub-themes' according to the issues raised, and under each theme TfL offers its responses. This means that a representation from a respondent that commented on more than one issue has be split up accordingly and dealt with under the appropriate theme.

When analysing the representations and objections to the consultation, best endeavours were made to accurately record all issues raised.

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## THEME 1 THE PRINCIPLE OF A LOW EMISSION ZONE

No.	Sub theme	Respondent	Representation	TfL Response
1.01	Support need for a LEZ	The Royal Parks	Welcomes the tighter control of the vehicles that cause higher levels of pollution. The new low emissions Euro standards will overtime assist in this approach.	Transport for London (TfL) notes the support for the proposal.
1.02	Support need for a LEZ	The Royal Parks	Supports the focus of the LEZ on older diesel engined vehicles and those vehicles which cause the greatest level of pollution.	See consideration – 1.01.
1.03	Support need for a LEZ	London Borough of Bexley	Supports the overall proposal to establish a London wide LEZ in view of the health and environmental benefits this will bring.	See consideration – 1.01.
1.04	Support need for a LEZ	London Living Streets	Supports the current LEZ proposals.	See consideration – 1.01.
1.05	Support need for a LEZ	London Borough of Merton	Welcome and support any initiative aimed at tackling congestion and/or air pollution.	See consideration – 1.01.
1.06	Support need for a LEZ	London Borough of Hillingdon	Agrees there is a need to tackle emissions from road transport in order to improve local air quality. In Hillingdon, 52% of transport pollutant emissions within the borough can be attributed to HGVs, buses and coaches. Proposals that can be co-ordinated and implemented on a pan London basis are most likely to bring about emissions reductions and air quality improvements.	See consideration – 1.01.
1.07	Support need for a LEZ	BAA	Supports the principle of an LEZ in London, given that air quality in parts of the capital may breach EU limit values.	See consideration – 1.01.
1.08	Support need for a LEZ	Johnson Matthey	The LEZ will be good for London's air quality, for that of the UK as a whole, and also for the UK economy.	See consideration – 1.01.
1.09	Support need	London	Welcomes the stated objectives of the LEZ.	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
	for a LEZ	Borough of Camden		
1.10	Support need for a LEZ	Kensington Red Route Action Group	Supportive of the LEZ proposals, particularly as HGVs often divert down the Red Route Southbound if there is any hold up on the M25 and therefore any control of these vehicles would be most welcome.	See consideration – 1.01.
1.11	Support need for a LEZ	Transport 2000	Support the earliest possible introduction of the LEZ.	See consideration – 1.01.
1.12	Support need for a LEZ	UCL Institute for Human Health and Performance	Support very strongly any 'clean air' initiative, so long as it is serious and far reaching in its intent, and integrative in approach.	See consideration above.
1.13	Support need for a LEZ	London Borough of Hounslow	Continues to be generally supportive through the feasibility study and through this consultation. Agree that there is a need to tackle emissions from road transport in order to improve local air quality. Given that air quality is both a cross-discipline and a cross-boundary problem, schemes that can be co-ordinated and implemented on a regional London-wide basis are likely to be the most successful in bringing about emissions reductions and air quality improvements.	See consideration – 1.01.
1.14	Support need for a LEZ	City of Westminster	Commissioned a study in the late 1990s on how an LEZ could achieve air quality improvements in the city. Arising from this, promotion of an LEZ became central to Westminster's 'Air Quality Strategy and Action Plan'.	See consideration above.
1.15	Support need for a LEZ	London Borough of Islington	In general, supports the introduction of the LEZ for London to provide much needed air quality improvements in our city. Pleased to	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
			see that the LEZ scheme is flexible and can evolve over time to attain more air quality improvements.	
1.16	Support need for a LEZ	London Borough of Newham	Welcomes the public consultation on this issue and is supportive of both the principal of a LEZ and the general approach being taken to implement the scheme.	See consideration – 1.01.
1.17	Support need for a LEZ	London Borough of Greenwich	Supports the Mayor's aspirations for a London LEZ.	See consideration – 1.01.
1.18	Support need for a LEZ	Surrey County Council	Supports, in principle, the concept of the London LEZ.	See consideration – 1.01.
1.19	Support need for a LEZ	Asthma UK	Pleased that TfL is taking the initiative to reduce emission levels in London and fully supports the implementation of the LEZ proposed in the consultation.	See consideration – 1.01.
1.20	Support need for a LEZ	London Development Agency	Broadly welcomes the proposals as an important step in improving air quality in London.	See consideration – 1.01.
1.21	Support need for a LEZ	Tower Hamlets Primary Care Trust	Broadly welcomes the draft revisions to the Mayor's Transport and Air Quality Strategies.	See consideration – 1.01.
1.22	Support need for a LEZ	Association of International Courier and Express Services	Supports the underlying principle of a LEZ.	See consideration – 1.01.
1.23	Support need for a LEZ	London Cycling Campaign	Supports the current LEZ proposals.	See consideration – 1.01.
1.24	Support need for a LEZ	HM Revenue and Customs	Support any measures to reduce vehicle emissions, having seen benefits of own schemes to reduce emissions.	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
1.25	Support need for a LEZ	Energy Saving Trust	Strongly supports the LEZ proposal.	See consideration – 1.01.
1.26	Support need for a LEZ	Regional Public Health Group – London (Department of Health)	Supports the LEZ as it will have a largely positive impact on health.	See consideration – 1.01.
1.27	Support need for a LEZ	North East London Strategic Health Authority	Supports the LEZ in principle as it should have a positive impact on the health and well-being of residents.	See consideration – 1.01.
1.28	Support need for a LEZ	London TravelWatch	In principle, supports proposals to improve the air quality and travelling environment in London.	See consideration – 1.01.
1.29	Support need for a LEZ	Driving Standards Agency	Fully supports the London LEZ.	See consideration – 1.01.
1.30	Support need for a LEZ	Dartford Borough Council	Supports the Mayor of London's proposals with respect to the establishment of a London LEZ.	See consideration – 1.01.
1.31	Support need for a LEZ	London Borough of Lewisham	Air quality in many parts of London is unsatisfactory and action needs to be taken to secure an improvement as part of a wider range of measures to protect and improve the environment. Are fully supportive of the principle of the introduction of a LEZ.	See consideration – 1.01.
1.32	Support need for a LEZ	Liquefied Petroleum Gas Association	Support the introduction of the proposed LEZ to achieve the set objectives.	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
1.33	Support need for a LEZ	Masterlease	The initiative is to be supported, as the reduction in health-related costs and improvements in air quality should provide both financial and economic benefit.	See consideration – 1.01.
1.34	Support need for a LEZ	Eminox Ltd	A LEZ is the best approach to achieve air quality objectives in London with improved public health for resident and visitors alike.	See consideration – 1.01.
1.35	Support need for a LEZ	The Royal Marsden NHS Foundation Trust	In broad agreement with the principles of the proposed LEZ.	See consideration – 1.01.
1.36	Support need for a LEZ	London Borough of Croydon	Has long been a strong advocate for, and supporter of, the principle of a LEZ for London. Was the second London borough to publish an air quality action plan on measures aimed at meeting air quality objectives, the principal action of which is to work with other London boroughs, the GLA and Government to secure implementation of a London-wide LEZ.	See consideration – 1.01.
1.37	Support need for a LEZ	London Borough of Richmond upon Thames	Supports the air quality benefits for Greater London that will result from the introduction of the LEZ and supports the use of the LEZ as one of the mechanisms for improving air quality across the Borough.	See consideration – 1.01.
1.39	Support need for a LEZ	Kent County Council	In principle welcomes all action to reduce pollution and improve air quality for residents of Kent.	See consideration – 1.01.
1.40	Support need for a LEZ	London Borough of Ealing	Welcomes TfL's proposal to introduce a LEZ for London and the air quality benefits its introduction would bring about. Agree that it is probably the most effective option available for achieving reductions in the emissions of	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
			PM <sub>10</sub> and NO <sub>x</sub> in the short to medium term.	
1.41	Support need for a LEZ	London Borough of Southwark	Recognises the need to improve air quality across London and the implementation of a London wide LEZ is supported within Southwark's air quality improvement plan and consultation draft local implementation plan.	See consideration – 1.01.
1.42	Support need for a LEZ	London Borough of Tower Hamlets	Fully supports the proposal. Air pollution from transport sources is of primary concern and therefore welcome London-wide initiatives to tackle such issues. The entire borough has been declared an Air Quality Management Area (AQMA) for PM <sub>10</sub> and NO <sub>2</sub> . Current monitoring data at all roadside sites (continuous and non-continuous) indicates that Tower Hamlets has exceeded the 2005 objectives (annual objectives for PM <sub>10</sub> and NO <sub>2</sub> and hourly objective for NO <sub>2</sub> ). It is difficult to progress towards revoking the declaration as traffic is the major source of these pollutants in the borough, therefore for mitigation we currently rely on the introduction of stricter emissions standards for vehicles and, more broadly, the natural vehicle replacement cycle.	See consideration – 1.01.
1.43	Support need for a LEZ	English Heritage	Supports in principle the introduction of a LEZ as it will lead to significant improvements in air quality in the capital with related benefits for historic built environment.	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
1.44	Support need for a LEZ	Slough Borough Council	Welcomes any measures that will improve air quality in the region, and the associated health benefits. In particular, any improvements in annual mean concentrations of NO <sub>2</sub> in the region should help to address air quality problems in Slough's AQMAs.	See consideration – 1.01.
1.45	Support need for a LEZ	Thames Gateway London Partnership	Support the scheme and welcome the benefits to air quality of a London wide scheme. Had the scheme not been proposed, TGLP were proposing to implement a local LEZ for the proposed Thames Gateway Bridge.	See consideration – 1.01.
1.46	Support need for a LEZ	NSCA (National Society for Clean Air)	Welcomes the LEZ proposal as an important step to tackling air quality problems in the capital. The benefits presented in the consultation documents are considerable, conservative and in relative terms the costs reported are reasonable. There are significant non-quantitative benefits to be gained including the improvement of the attractiveness of London as a city to work and invest in.	See consideration – 1.01.
1.47	Support need for a LEZ	The Countryside Agency	If successful, the LEZ may have the potential to bring considerable environmental and air quality improvements, though in strict landscape terms these are unlikely to be significant. The LEZ may contribute to better enjoyment of the landscape and amenities.	See consideration – 1.01.
1.48	Support need for a LEZ	Sustrans	Clearly the emission of highly damaging NO <sub>x</sub> and particulates, as well as other pollutants, is a huge concern for the people of London and one of several serious consequences of our dependence on motor transport. Cyclists	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
			and pedestrians are particularly vulnerable to pollutants emitted by HGVs, buses and coaches. The proposals to cut these emissions, albeit modest in scope, are supported.	
1.49	Support need for a LEZ	Arriva	From a bus operator's point of view, the current proposal seems to strike the right balance between needing to push through changes to make a real difference to air quality without pushing these to the point where the changes are highly expensive and difficult to achieve in the timescales.	See consideration – 1.01.
1.50	Support need for a LEZ	Hampshire County Council	Supports the proposed introduction of the LEZ. Believes that vehicles fitted with higher standard engines to comply with the LEZ will operate elsewhere, including Hampshire. This should benefit air quality throughout Hampshire, particularly on strategic routes and in the existing AQMA on the M3. The benefits will outweigh the additional costs imposed on local transport operators, which will be marginal.	See consideration – 1.01.
1.51	Support need for a LEZ	Tandridge District Council	The concept of the LEZ is supported in principle, particularly in the expectation that there will be air quality and health benefits not only in Greater London but also outside.	See consideration – 1.01.
1.52	Support need for a LEZ	London Retail Consortium	Welcomes the principles driving the proposals for a LEZ in London and we support well considered, practical and financially viable attempts to improve the quality of air for Londoners. Not only are there obvious health benefits from improved air quality but the environmental benefits would no doubt attract	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
			more visitors to the capital as the trading environment improves, and residents of London would benefit from the justifiable expectations of the environment in which they live and work.	
1.53	Support need for a LEZ	Environmental Industries Commission	Welcomes the proposal by the Mayor to establish a LEZ. Agree that the evidence shows this to be an important measure to help achieve air quality objectives in London, with the clear benefit of improved public health for its residents and visitors alike.	See consideration – 1.01.
1.54	Support need for a LEZ	Sutton Transport and Air Quality Working Group	Welcome a London wide LEZ in principle. Appreciate that for the health of residents it is important to take action.	See consideration – 1.01.
1.55	Support need for a LEZ	Chartered Society of Physiotherapy	Welcomes the Mayor of London's proposal for a LEZ for London and believes implementation of the zone could bring major health benefits for people living, working and visiting the capital. The proposal could also help the government meet its air quality objectives. The health implications of doing nothing to curb emissions are of very serious concern. Have been calling on local authorities across the UK to adopt low emission practices, which have been enforced successfully in Tokyo and are also keen that motor vehicle manufacturers follow the example set by Mercedes-Benz, which has successfully fitted particulate filters on its diesel engines.	See consideration – 1.01.

No.	Sub theme	Respondent	Representation	TfL Response
1.56	Support need for a LEZ	London Sustainability Exchange	Supports the introduction of a LEZ for London and believes it would be a significant step towards improving air quality in London, have a positive impact on the health and quality of life of people who live and work in London and contribute to meeting London, national and EU air quality targets.	See consideration – 1.01.
1.57	Support need for a LEZ	EDF Energy	Supports the principle of the LEZ, the desire to reduce emissions and improve air quality and thereby we agree that the zone could play an important role in improving the quality of life for Londoners.	See consideration – 1.01.
1.58	Support need for a LEZ	London Borough of Bromley	In principle has no objection to revising the Mayor's Strategies to allow for a LEZ.	See consideration – 1.01.
1.59	Support need for a LEZ	London Ambulance Service NHS Trust	Supports the underlying principle of air quality improvement in London.	See consideration – 1.01.
1.60	Support need for a LEZ	Golden Boy Coaches	Supports the process of the LEZ in principle, but think the current proposals are not cost effective, have a disproportionate cost impact to industry and will be difficult to implement practically.	<p>TfL notes the support in principle for the proposal. TfL has assessed the costs and benefits of the most feasible LEZ alternative scenarios and none of the alternatives achieve the same magnitude of reduced emissions in terms of the balance between costs and benefits as the proposed scheme.</p> <p>The LEZ will only affect the most polluting vehicles: old diesel HGVs, buses and coaches, as well as heavier LGVs. Modelling suggests that only 34 per cent of HGVs and 42 per cent of coaches would not be compliant with the LEZ standard in 2008. These operators will, therefore, not have to pay the LEZ</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>daily charge to drive within London. The LEZ would not ban any vehicle from driving in London, but would allow operators to make an economic choice between modifying, replacing or upgrading their fleets and paying the daily charge.</p> <p>A Feasibility Study undertaken to examine methods of reducing traffic emissions in London concluded that a LEZ was the best approach to help achieve air quality objectives in London. In 2005 TfL completed a review of the findings of the Feasibility Study and concluded that there were no alternatives to the LEZ likely to achieve the same level of benefits in the same or shorter timeframe. In the absence of national initiatives, the proposed LEZ represents the most effective option to reduce harmful transport related emissions in London between 2008 and 2015.</p>
1.61	Support need for a LEZ	Dudleys Coaches	Supports LEZ in principle but is difficult to implement and not cost effective.	See consideration – 1.60.
1.62	Support need for a LEZ	Heyfordian Travel Limited	Support the process of the LEZ in principle, but think the current proposals are not cost effective, have a disproportionate cost impact to industry and will be difficult to implement practically.	See consideration – 1.60.
1.63	Support need for a LEZ	London Borough of Enfield	Conditionally supports the implementation of the first phase of the Core Scheme in 2008 subject to clarification on several issues (which are dealt with under individual themes).	TfL notes the support in principle for the proposal. Should the Mayor decide to publish the Strategy Revisions and proceed with the LEZ there would be a further round of public and stakeholder consultation on the details of the scheme starting in late 2006.
1.64	Support need for a LEZ	London Borough of Harrow	Support the LEZ in principle as it is a way of bringing forward predicted air quality improvements in PM <sub>10</sub> and NO <sub>2</sub> . However, the improvements to the air quality of Harrow, as	TfL notes the support in principle for the proposal. The estimates for air quality improvements are dependent on current levels of pollution and the types of roads in each borough. Air quality modelling is

No.	Sub theme	Respondent	Representation	TfL Response
			predicted by the TfL modelling, would be less than in other more central London boroughs.	being refined by TfL, and should the Mayor approve the Strategy Revisions, further modelling information would be made available at the time of any further consultation on the details of the scheme.
1.65	Support need for a LEZ	Tellings Golden Miller Group Plc	Recognise the need to have controls on emissions, so a LEZ is not unreasonable if implemented properly giving time for operators to make the necessary and cost effective changes to their fleets.	Given the significant concerns of operators regarding the original proposal to tighten the LEZ standard to Euro IV for PM <sub>10</sub> in 2010, TfL is recommending moving implementation of this standard back to 2012. Whilst this would lead to smaller air quality and health benefits resulting from a reduction in emissions from heavier vehicles, it would significantly reduce compliance costs to operators, and make the scheme more acceptable.
1.66	Support need for a LEZ	London Borough of Croydon	This is the single, most effective step that London can take to reduce air pollution and its impacts on the health and quality of life of Londoners.	See considerations – 1.01, 1.64 and 1.65
1.67	Support need for a LEZ	London Living Streets	Understand that some consultees have suggested that other means might be found to achieve the Projected Air Quality Benefits. Do not believe that such measures are likely to be found. If they are, would be willing to consider them on their merits.	See considerations – 1.64 and 1.65
1.68	Support need for a LEZ	City of Westminster	Support the case made in the TfL consultation document that an LEZ is the most effective of the options considered for achieving reductions (between 2008 and 2015) in the most harmful emissions generated by road transport.	See considerations – 1.64 and 1.65
1.69	Support need for a LEZ	London Borough of Brent	Generally supportive of the proposals for a London wide Low Emission Zone proposed for early 2008. Recognise that without further action, London will exceed the national	See considerations – 1.64 and 1.65

No.	Sub theme	Respondent	Representation	TfL Response
			<p>objective levels set for NO<sub>2</sub> and PM<sub>10</sub>. This regional approach is more likely to be effective and bring about lasting improvements in air quality.</p> <p>Alternatives to London LEZ have been considered such as higher taxation for more polluting vehicles, retrofitting abatement equipment and scrapping older vehicles. There has been little central government support for the options presented or they are otherwise difficult to implement. The LEZ option therefore seems to be the most feasible for achieving reductions in vehicle emissions in the short to medium term.</p>	
1.70	No need for a LEZ	Brewery Logistics Group	If no action is taken: health statistics are likely to continue to improve in line with ongoing trends; concentrations of nitrogen oxide will decrease as modern vehicles emit fewer pollutants than older vehicles; and a normal fleet replacement will be taking place and concentrations of small particles and oxides of nitrogen will continue to decline.	The introduction of the proposed LEZ would accelerate progress towards meeting London's air quality targets than would otherwise be achieved under the natural vehicle replacement cycle. The reduced emissions would improve the quality of life for many thousands of people who live, work and visit London, especially those already suffering from symptoms that restrict their daily activities. The LEZ would also reduce the number of premature deaths, the number of life years lost, respiratory hospital admissions and the need for medication for adults and children suffering from respiratory diseases.
1.71	No need for a LEZ	Royal Borough of Kensington and Chelsea	Would question whether the predicted improvements in air quality and health are proportionate to the associated costs of the proposed LEZ, given that there will be, on TfL's own figures, significant improvements to air quality without it.	See consideration – 1.70

No.	Sub theme	Respondent	Representation	TfL Response
1.72	No need for a LEZ	Road Haulage Association	<p>TfL's figures confirm that the freight lifted in London by road in 2002 was approximately 17% below the 1990 level and expected to continue to go down annually. In that same period, from 1990, emissions from commercial vehicles have reduced by 90%, due to technological advances in both vehicles and the products used by the sector. Therefore, if the proposed London LEZ was implemented in its present form it would target those carrying out deliveries and services throughout Greater London even though freight movements in the capital are naturally declining and the road transport fleet is voluntarily reducing levels of pollution by investment in vehicles and products that give environmental benefits, give greater efficiency and thereby reduced fuel consumption, as well as a continuous programme of driver training to ensure that those employed within the sector operate at optimum levels of service and efficiency. In the UK these initiatives are going on without government funding and without the threat of schemes imposing additional levels of compliance over and above those already budgeted for, such as the London LEZ.</p>	<p>TfL recognises the important voluntary efforts of transport operators in reducing pollution levels of their fleets but considers that more needs to be done to improve air quality in London and to move the capital closer towards achieving national and EU air quality targets. The introduction of the proposed LEZ would accelerate progress towards meeting London's air quality targets than would otherwise be achieved under the natural vehicle replacement cycle. The reduced PM<sub>10</sub> emissions would improve the quality of life for many thousands of people who live, work and visit London, especially those already suffering from symptoms that restrict their daily activities. The LEZ would also reduce the number of premature deaths, the number of life years lost, respiratory hospital admissions and the need for medication for adults and children suffering from respiratory diseases.</p>

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1.73	Political motivation	British Association of Removers	The proposals penalise truck and bus operators while the vast number of private cars and other light vehicle modes of transport will not be included in the scheme which smacks of an issue relating to 'political influence and fear of losing votes' rather than any aim to improve air quality.	<p>See consideration – 1.72.</p> <p>The LEZ is designed to discourage the use of the most polluting vehicles. These are older diesel-engined HGVs, buses, coaches as well as heavier LGVs. The introduction of the proposed LEZ would accelerate progress towards meeting London's air quality targets than would otherwise be achieved under the natural vehicle replacement cycle.</p> <p>TfL considers that a number of other initiatives within the Mayor's Transport and Air Quality Strategies, such as Congestion Charging and improved public transport provision help to address the environmental impacts of car transport in London. TfL does not therefore recommend extending the LEZ proposals to cars at this time, although it will continue to monitor the impacts of wider initiatives on vehicle emissions in London and will keep relevant policies under review. TfL considers that this is consistent with paragraph 4G.168 and 4C.43 of the Transport and Air Quality Strategy Revisions.</p>
1.74	Objective to raise revenues	Brewery Logistics Group	The LEZ must not be seen as yet another revenue earner against an already heavily burdened industry.	It is not anticipated that the LEZ would make any net revenues. Indeed, the more vehicles that are compliant with the LEZ standards, the less revenue TfL will make from the daily charge and penalty notices. The objective of the LEZ is to take steps towards meeting London's air quality objectives and limit values, and by so doing reduce exposure of people to excessive levels of PM <sub>10</sub> , and the illnesses these cause or exacerbate. This will be done by applying a substantial daily charge so that operators

No.	Sub theme	Respondent	Representation	TfL Response
				would make an economic decision whether or not to take their vehicles into the LEZ. The charge would be set at such a level as to encourage operators to modify or replace their vehicles, and so maximise the air quality and health benefits of the LEZ.
1.75	Objective to raise revenues	MARSHopper Ltd	The LEZ charge is probably just another tax to pay for London's new bus fleet.	See consideration – 1.74.
1.76	Objective to raise revenues	Constant Consultancy	Can find nothing in the Mayor's proposal that gives confidence that he will achieve his stated objective of improving local air quality. The proposal seems more about revenue raising than reducing pollution. To avoid this allegation, the Mayor must be unambiguous and only allow vehicles to enter the zone which comply with the requirements of the LEZ.	<p>See consideration – 1.74.</p> <p>On the balance of considering the Mayor's social and economic development objectives for London with his air quality objectives, the proposed LEZ is considered to be most cost effective way to provide the largest benefits in air quality for London.</p> <p>TfL has considered a range of options for implementation of the proposed London LEZ and has concluded that implementation via a Scheme Order is the most effective option. This would not ban non-compliant vehicles but would instead apply a substantial daily charge so that operators would make an economic decision whether or not to take their vehicles into the LEZ. The charge would be set at such a level as to encourage operators to modify or replace their vehicles and would, thereby, maximise the air quality benefits of the LEZ.</p>

No.	Sub theme	Respondent	Representation	TfL Response
1.77	Other principle issues	Pickfords	There is a suspicion that the introduction of the LEZ is yet another London-wide congestion charge for business under the guise of environmental compliance.	<p>The LEZ will only affect the most polluting vehicles: old diesel HGVs, buses and coaches, as well as heavier LGVs. Modelling suggests that only 34 per cent of HGVs and 42 per cent of coaches would not be compliant with the LEZ standard in 2008. These operators will have to pay the LEZ daily charge to drive within London.</p> <p>The introduction of the proposed LEZ would accelerate progress towards meeting London's air quality targets than would otherwise be achieved under the natural vehicle replacement cycle. The reduced emissions would improve the quality of life for many thousands of people who live, work and visit London, especially those already suffering from symptoms that restrict their daily activities. The LEZ would also reduce the number of premature deaths, the number of life years lost, respiratory hospital admissions and the need for medication for adults and children suffering from respiratory diseases.</p>
1.78	Other principle issues	Road Haulage Association	Scheme has evolved into its current form because the road haulage sector is seen as an "easy target".	The LEZ is designed to discourage the use of the most polluting vehicles. These are older diesel-engined HGVs, buses and coaches, as well as heavier LGVs.
1.79	Other principle issues	Friends of the Earth	It seems certain that the LEZ is not sufficient and that alternative additional measures are required to bring air quality to within EU limits. Where there are possible alternative measures, the ones which have the greatest impact on cutting pollution levels must be taken. The Mayor must put the LEZ in the context of a package of measures to be brought forward, spelling out how the	<p>Whilst the introduction of the LEZ would not enable London to meet all of its air quality objectives, it would reduce the areas of London that exceed these objectives, as road transport is responsible for around half of total emissions of PM<sub>10</sub> in London. The proposals would generate improvements in the health of the people that live and work in and visit London.</p> <p>Within the Mayor's Transport Strategy, a number of</p>

No.	Sub theme	Respondent	Representation	TfL Response
			<p>combined effect would achieve the air quality objectives. This should incorporate assessment of elements that could undermine progress, leading to possible reassessment of such elements. Where measures would be outside the Mayor's control, he should set out what the Government and/or other bodies would need to do to achieve the required improvements, and lobby for those measures to be put in place.</p>	<p>initiatives are concerned with mitigating the environmental impacts of transport in London. The Central London Congestion Charging Zone primarily aims to reduce traffic congestion, though it does have some small secondary benefits in reducing vehicle emissions. Initiatives to improve and encourage the use of public transport and other alternatives to private cars have also had a positive impact. However, no initiatives within the Transport Strategy directly target private vehicle emissions.</p> <p>Within the Mayor's Air Quality Strategy there are a number of initiatives that are being pursued to deliver reductions in emissions. These have aimed to accelerate the introduction of cleaner vehicles, and take advantage of the technological advances that reduce emissions of vehicles already on the road. Where possible, the GLA group has led by example. All London buses under contract to TfL met a minimum of Euro II emission standards for all pollutants by the end of 2005. Through the fitting of particulate traps on all Euro II and Euro III buses, the fleet also met a minimum of Euro IV emission standards for particulates by the end of 2005. Similarly, the Mayor's Taxi Emissions Strategy will require all London licensed taxis to meet Euro III emission standards for PM<sub>10</sub> by mid 2008. The London Fire and Emergency Planning Authority (LFEPA) also replaced half of their original fire engines by the end of 2005, and all their vehicles should meet Euro III emission standards for PM<sub>10</sub> by mid 2008.</p>
1.80	Other	Bromley	The only reason this scheme is being put	TfL currently has no plans to use the infrastructure

No.	Sub theme	Respondent	Representation	TfL Response
	principle issues	Borough Roads Action Group	forward now is because the infrastructure that will be created will no doubt be used for other purposes once its usefulness for emission control have long since vanished.	that will be put in place for the proposed LEZ for any other purposes other than for LEZ enforcement. This issue will be kept under review.
1.81	Other principle issues	Kent County Council	If implemented, the LEZ should be part of a package of measures to tackle the Capital's air quality problems, and money raised from this scheme should contribute to other measures including improvements to the transport system, incentives for cleaner vehicles, provision for pedestrians and cyclists and company and school travel plans.	The Mayor is already delivering on initiatives to discourage car use as well as other vehicles through the Central London Congestion Charging Scheme by improving the accessibility and reliability of London's public transport, and promoting walking and cycling. The objective of the LEZ is not to raise revenue but to take steps towards meeting London's air quality objectives and limit values, and by so doing reduce exposure of people to excessive levels of PM <sub>10</sub> , and the illnesses these cause or exacerbate.

## THEME 2 SUGGESTED ALTERNATIVES

No.	Sub theme	Respondent	Representation	TfL Response
2.01	Ban instead of a charging scheme	Association of London Government	<p>The implications of the Scheme Order approach are different from a TRO-based approach. The Scheme Order essentially allows operators to pay to pollute, albeit for a large sum – which further reduces the marginal benefits purported to come from the LEZ. The TRO option would on the other hand, ban polluting vehicles from Greater London, and as such, maximise the health benefits.</p>	<p>TfL has investigated a number of legal routes for implementing a LEZ in Greater London. Implementation via a Traffic Regulation Order (TRO) would ban non-compliant vehicles from entering the zone rather than charging them. TfL judges that it is sensible to allow non-compliant vehicles access on an exceptional basis albeit paying a charge to do so. The European Commission has also responded favourably to a charging based approach on the ground of flexibility for operators. Implementation under a TRO would require co-ordination of the input of up to 34 traffic authorities in London to sign up to a ‘joint arrangement’ agreement under section 101 of the Local Government Act 1972, and each borough would potentially have to hold a public inquiry into the proposals. TfL felt that the risks associated with this implementation approach would have a high probability of introducing significant delay to the programme. At this stage a TRO approach would also delay the implementation of LEZ by at least a year and probably longer as TfL would have to reconsult on the Transport and Air Quality Strategy amendments.</p> <p>The Scheme Order approach is more flexible in that it allows operators to make an economic choice as to whether they would pay the daily charge or not drive in London. To implement the proposal using a TRO would lead to higher operator compliance costs than implementation via a Scheme Order. So, for example, operators who drive rarely in London could still operate non-compliant vehicles in the Capital, albeit at a cost.</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>TfL has set the daily and penalty charges at a level such that the vast majority of non-compliant vehicles would choose to upgrade or replace their vehicles, rather than pay the charge, hence making the difference in air quality impacts between a ban and a charge insignificant.</p> <p>While the introduction of a LEZ by means of a Scheme Order under the GLA Act 1999 would restrict other authorities from implementing road user charging schemes, TfL would work with any authority that expressed an interest in doing so and would consider making an Order implementing such a scheme, as long as it was consistent with the Mayor's Transport Strategy.</p> <p>The LEZ would also be quicker to implement via a Scheme Order, as the process would be more straightforward and within TfL's control, and would thereby bring about health benefits sooner than under the TRO option.</p>
2.02	Ban instead of a charging scheme	Association of London Government	TfL's chosen legal mechanism for the LEZ is a Scheme Order under the GLA Act 1999. The Traffic Regulation Order (TRO) option has been rejected in the consultation document on the basis of complexity and the time it would take to implement. However, if this were to be done via the ALG Transport and Environment Committee rather than the individual boroughs, it need not be as complicated. There is, in any case, an established precedent in the London Lorry Control Scheme (LLCS) where the boroughs	<p>See consideration – 2.01.</p> <p>The option of a TRO implemented via the ALG would prove to be more complicated as it would require significant cross-borough co-ordination. There would also be the possibility that some boroughs may choose to opt out of the LEZ, thus reducing its potential to improve air quality and health as well as its cost-effectiveness.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			have delegated their responsibilities with respect to this TRO to the ALG.	
2.03	Ban instead of a charging scheme	Royal Borough of Kensington and Chelsea	Opposed to the method by which this scheme will be introduced because the scheme is based on charging non-compliant vehicles rather than excluding them from the zone. This is regrettable in that it suggests a level of tolerance, and owners of non-compliant vehicles may decide to pay the charge instead of complying; this would erode the air quality benefits.	See considerations – 2.01 and 2.02.
2.04	Ban instead of a charging scheme	Bromley Borough Roads Action Group	The consultation documents point out that there are alternative ways of achieving the same results. For example, in Sweden they introduced a system in some of the major cities by simply banning older vehicles from town centres.	<p>Low Emission Zones have been operating in the Swedish cities of Gothenburg, Lund, Malmo and Stockholm for a number of years. The cities banned diesel-engined HGVs from entering their boundaries if they were over eight years old and had not been fitted with appropriate pollution abatement equipment.</p> <p>TfL has considered a range of options for implementation of the proposed London LEZ and has concluded that implementation via a Scheme Order is the most effective option. This would not ban non-compliant vehicles but would instead apply a substantial daily charge so that operators would make an economic decision whether or not to take their vehicles into the LEZ. It is proposed that the charge be set at such a level as to encourage operators to modify or replace their vehicles and would, thereby, maximise the air quality and health benefits of the LEZ.</p>
2.05	Ban instead of a charging scheme	Constant Consultancy	Can find nothing in the Mayor's proposal that gives confidence that he will achieve his stated objective of improving local air quality. The proposal seems more about revenue	<p>See consideration – 2.01</p> <p>It is not anticipated that the LEZ would make any net revenues. Indeed, the more vehicles that are compliant</p>

No.	Sub theme	Respondent	Representation	TfL Response
			<p>raising than reducing pollution. To avoid this allegation, the Mayor must be unambiguous and only allow vehicles to enter the zone which comply with the requirements of the LEZ.</p>	<p>with the LEZ standards, the less revenue TfL would make from the daily charge and penalty charges. The objective of the LEZ is to move London closer to meeting its air quality objectives and limit values, and by so doing reduce exposure of people to excessive levels of harmful pollutants, and the illnesses these cause or exacerbate.</p>
2.06	Ban instead of a charging scheme	Kent County Council	<p>Rather than a blanket 24 hours a day, 365 days a year coverage there could be an opportunity for those vehicles that do not meet the Euro III standards to access the area at times when the risk of exposure to pollution is lower. Rather than implementing an LEZ perhaps London could follow other cities like Edinburgh, which have not declared a LEZ but have areas where there are certain restrictions.</p>	<p>As outlined above, TfL has investigated a range of options for implementation of the proposed London LEZ, including banning older vehicles. However, such a system in London would require a TRO which is a more complicated and less flexible option than implementing the proposed LEZ by a Scheme Order.</p> <p>The hours of operation are proposed to be 24 hours a day, 365 days a year. Suspending the LEZ during the night, on weekends or public holidays would erode the air quality and health benefits of the proposed scheme.</p> <p>TfL considers that the boundary of the proposed LEZ must be the GLA administrative boundary in order to maximise the health and air quality benefits of the LEZ and because this is the most feasible option to implement. Any smaller area would not address the substantial number of areas in London which are projected to exceed the air quality objectives.</p>
2.07	Use of road user charging incentives	London Borough of Camden	<p>Suggest further consideration be given to looking at additional actions, for example extending traffic reduction perhaps by road user charging to reduce congestion levels along major roads across the GLA area.</p>	<p>The proposed LEZ is just one of a number of initiatives in the Mayor's Transport and Air Quality Strategies which are concerned with mitigating the environmental impact of transport in London and delivering reductions in vehicle emissions. Planning for a national road user charging scheme is still in its infancy and there is still much debate to be had on its form and development.</p>

No.	Sub theme	Respondent	Representation	TfL Response
				TfL is undertaking trials of new charging technologies that could be used to improve the way the extended Congestion Charge zone operates and could assist the Government in developing a national road pricing scheme.
2.08	Use of road user charging incentives	Royal Borough of Kensington and Chelsea	Wish to know if any consideration has been given to re-designing the congestion charging scheme? One suggestion is that when the pricing structure is next reviewed, charges could be altered according to a vehicle's compliance with emissions standards.	TfL is currently considering ways in which the current alternative fuels discount for the Congestion Charge could be adjusted to increase the use of cleaner vehicles without detracting from the core objective of the scheme, which is reducing congestion in central London. Once proposals are finalised, TfL will consult on any changes.
2.09	Incentives for cleaner vehicles	Road Haulage Association	Would welcome some type of initiative for early take up of Euro V engined commercial vehicles, as per the Chancellor of the Exchequer's recent budget statement.	The Government announced, in the 2006 Budget Report, that it would be considering the case for incentivising the early uptake of Euro V standards through company car tax and other instruments, ahead of a formal requirement to fit Euro V standard technology. The Government is currently undertaking a consultation on the Review of the Air Quality Strategy for England, Wales and Scotland, including an option of incentives for cleaner vehicles. TfL is also considering incentives for the cleanest vehicles as part of a review of the Congestion Charging alternative fuel discount. Once proposals are finalised, TfL will consult on any changes.
2.10	Incentives for cleaner vehicles	London Retail Consortium	Would encourage a strategy supporting the early uptake of Euro V given the evident impact that previous Euro models have had and continue to have on a reduction in the concentration of pollutants in the air.	See consideration – 2.09.
2.11	Incentives for cleaner	British Vehicle Rental and	Concerned that the scheme is penal in nature and feel that as much as possible should be	TfL has reviewed alternative ways of addressing road transport related emissions at both the national and

No.	Sub theme	Respondent	Representation	TfL Response
	vehicles	Leasing Association (BVRLA)	<p>done to encourage people into the cleanest vehicles either through fiscal incentives, discounts from the congestion charge or other benefits. This is something we have lobbied the various Government department's on for some time now and feel the Mayor should not ignore this excellent opportunity to lead the way in offering incentives to drivers and owners of the cleanest vehicles. Our Members have suggested that perhaps the costs incurred would be better spent on fleet replacement incentives or fitting particulate traps to older vehicles, which would benefit the whole country not just vehicles travelling within London.</p>	<p>local level. In the absence of any national initiatives, the proposed LEZ represents the most effective option for achieving reductions of the most harmful road transport generated emissions in London between 2008 and 2015.</p> <p>TfL investigated the option of providing grants for retrofitting pollution abatement equipment to vehicles but EU rules limit any environment-related grant to 36 per cent of the capital cost of the equipment. Funding grants for operators to this level is unlikely to be cost-effective and TfL considers that it is unlikely to provide adequate incentives to operators to clean up their vehicles.</p> <p>The Government has recently announced that it is stopping its Air Quality Retrofit programme which gave grants to operators to fit pollution abatement equipment to vehicles. The Reduced Pollution Certificate (RPC) programme which gives VED discount incentives for cleaner vehicles has been successful in encouraging some bus and truck operators to clean up their vehicles but the incentives have not been great enough to have an impact on the lighter end of the HGV market.</p> <p>Incentives and grants for cleaner vehicles is a matter for the Government, not for TfL. However, TfL is currently considering ways in which the current Congestion Charging alternative fuels discount could be adjusted to increase the use of the cleanest vehicles without detracting from the core objective of the scheme, which is to reduce congestion in central London.</p>

No.	Sub theme	Respondent	Representation	TfL Response
2.12	Incentives for cleaner vehicles	The Society of Motor Manufacturers and Traders Ltd	At national level, grants should be given to encourage new, cleaner technology (eg. through VED rebates).	See consideration – 2.11.
2.13	Incentives for cleaner vehicles	Brimsgate Freight Quality Partnership	Vehicle operators would like to see some form of incentive in the scheme for Euro IV compliance and a low level of penalty in the first year of operation to ease the financial impact particularly on small businesses.	<p>See consideration – 2.11.</p> <p>TfL considers that a smaller penalty charge in the first year of operation of the proposed LEZ would lead to lower levels of compliance which would reduce the air quality and health benefits.</p> <p>TfL intends a staged implementation timetable. From early 2008 the LEZ would apply to the heaviest HGVs over 12 tonnes. From mid 2008 it would be extended to all HGVs, buses and coaches and from 2010 heavier LGVs would also be included. This should go some way to easing the financial impact of the proposed LEZ on business and TfL does not consider that there should be a smaller penalty in the first year of operation.</p>
2.14	Incentives for cleaner vehicles	The Society of Motor Manufacturers and Traders Ltd	Ensuring that vehicle fleets are as new as possible, and giving incentives for take up will continue to achieve greater national improvements in air quality than other measures, and are more cost effective than other measures, including low emission zones.	See consideration – 2.11.
2.15	Incentives for cleaner vehicles	London Retail Consortium	Believe that there are more cost effective alternatives that will ultimately produce the same benefits as the LEZ. Would support alternatives including incentivising the uptake of new technologies in order to achieve	See consideration – 2.11.

No.	Sub theme	Respondent	Representation	TfL Response
			national standards of air quality. This would provide a far more cost effective way of achieving the commendable objectives of improving London's air quality in order to improve the health of London's population and make the capital a better and more pleasant place to live, work and visit.	
2.16	Incentives for cleaner vehicles	Royal Borough of Kensington and Chelsea	It could be more cost effective to wait until 2010 to implement the LEZ and, if this is the case, financial incentives could be offered to operators with Euro IV, or Euro V engines by giving them a reduction in the congestion charge they must pay up until 2010. Offering incentives to meet Euro V standards would encourage operators to go beyond the standards set for the LEZ.	<p>The air quality and health benefits of the proposed LEZ would be reduced if implementation was postponed until 2010. However, TfL has taken into account feedback from operators and manufacturers that a Euro IV standard for PM<sub>10</sub> would be expensive and impractical for many operators to achieve. To address this issue, TfL proposes moving the proposed standard of Euro IV for PM<sub>10</sub> from 2010 to 2012. This will result in a reduction in the air quality and health benefits of the scheme but also in a reduction in compliance costs to operators and makes for a more achievable LEZ standard.</p> <p>The primary objective of the proposed LEZ is to reduce emissions of the most harmful pollutants to health across Greater London, whilst the Congestion Charge is primarily designed to reduce congestion in a particular area of Central London. At present, TfL does not consider that it is appropriate for vehicles which comply with the LEZ to have an exemption from the Congestion Charge. However, TfL is currently considering incentives for the cleanest vehicles as part of a review of the Congestion Charging alternative fuel discount.</p>

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2.17	Incentives for cleaner vehicles	Johnson Matthey	With regards to the proposal to introduce Euro IV NO <sub>x</sub> levels in 2010, support this aspiration, but would point out that the after-treatment technology available is unlikely to be as mature as DPF (diesel particulate filter) technology will be in 2008. This could make it difficult to mandate their use on heavy duty vehicles from 2010, but incentives should be provided to encourage their adoption.	<p>TfL acknowledges that NO<sub>x</sub> abatement technology is still evolving. Implementing a NO<sub>x</sub> emission standard is dependent on a certification mechanism, standards for the fitting and testing of retro-fit NO<sub>x</sub> abatement equipment and a register of retrofitted vehicles being in place - this is not yet the case. TfL is continuing to work with the pollution abatement industry and the DfT to determine the feasibility of implementing a NO<sub>x</sub> standard. Any proposed NO<sub>x</sub> standard, if implemented, would be subject to a full scheme order consultation and allow sufficient lead time for vehicle operators to comply with the standard.</p> <p>The Government is currently undertaking a consultation on the Review of the Air Quality Strategy for England, Wales and Scotland, including an option of incentives for cleaner vehicles. TfL is also considering incentives for the cleanest vehicles as part of a review of the Congestion Charging alternative fuel discount. Once proposals are finalised, TfL will consult on any changes.</p>
2.18	Incentives for cleaner vehicles	Volvo Truck and Bus Ltd	It is with some interest that the latest DEFRA consultation on air quality strategy would favour the introduction of incentives for modern fleet replacement rather than the introduction of LEZs and the retrofitment of particulate traps.	The aims of the proposed LEZ fit well with the objectives of the Defra Air Quality Strategy which is currently being consulted on. Indeed, the LEZ is included as an important measure that local authorities might pursue to significantly reduce air pollution, particularly in pollution hotspots such as Greater London. Furthermore, the proposed LEZ would assist and support the Government's commitment to move towards achieving the objectives for PM <sub>10</sub> across the UK.
2.19	Incentives for cleaner vehicles	London Recycling Ltd	The consultation document admits that the market and capacity for retro fitting particulate traps is neither extensive nor well developed.	TfL investigated the option of providing grants for retro-fitting pollution abatement equipment to vehicles but EU rules limit any environment-related grant to 36 per cent

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			Suggest ensuring there is a system of grants to help with the costs of adapting existing vehicles put in place well before the LEZ comes in to effect, particularly targeted at small and medium enterprises.	<p>of the capital cost of the equipment. The Government has also recently announced that it is stopping its Air Quality Retrofit programme which gave grants to operators to fit pollution abatement equipment to vehicles.</p> <p>TfL has considered carefully the capacity of the retrofit market and pollution abatement equipment suppliers and does not consider there is a capacity problem.</p>
2.20	Incentives for cleaner vehicles	London Retail Consortium	Restricting vehicle entry to the LEZ will shift the burden from London to other regions. TfL should work with central Government to develop fiscal initiatives which will encourage all vehicle operators (regardless of location) to improve vehicle efficiency.	The Government is currently consulting on the issue of incentives for cleaner vehicles through Defra's consultation on the Review of the Air Quality Strategy for England, Wales and Scotland. TfL has investigated providing grants for retro-fitting pollution abatement equipment to vehicles. However, there would be a number of problems in targeting financial assistance to the large number of UK vehicles that operate in London but are registered outside of London. In addition, EU rules limit any environment-related grant to 36 per cent of the capital cost of the equipment. TfL considers that funding grants for operators to this level is unlikely to be cost-effective and unlikely to provide adequate incentives to operators to clean up their vehicles.
2.21	Incentives for cleaner vehicles	Association of International Courier and Express Services	The scheme includes no positive measures to encourage reduced emissions but is wholly negative in its approach. It would be useful and beneficial if some positive measures could have been introduced to reduce emissions.	See consideration – 2.11.

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2.22	Incentives for cleaner vehicles	Association of London Government	Some boroughs will be unable to replace vehicles to make them compliant in time for the commencement of the LEZ due to the capital costs. TfL should consider the provision of grants, particularly for specialised vehicles, to assist boroughs in achieving compliance.	<p>See consideration – 2.20.</p> <p>TfL is aware that some organisations may find it difficult to upgrade their vehicles to comply with the proposed LEZ emission standards. However, TfL has no plans to provide grants to assist organisations in achieving compliance.</p> <p>The LEZ would not be the only measure encouraging the public sector to clean up their vehicle fleets. The European Commission recently proposed a Directive on the procurement of cleaner vehicles which would oblige public authorities to allocate a minimum quota of 25 per cent of their annual procurement of heavy-duty vehicles (over 3.5 tonnes) to those meeting 'enhanced environmentally friendly vehicle' (EEV) standards. At present, the Commission argues, the market is not well enough developed to encourage manufacturers to bring down the unit price of cleaner vehicles and to invest in new technology. This proposal would aim to create such a market.</p>
2.23	Incentives for cleaner vehicles	London Borough of Camden	The proposal may be more likely to gain wider support amongst businesses if there was some support for conversion in the form of a partial grant - a 'carrot and stick' approach rather than just a 'stick'.	<p>See consideration – 2.11.</p> <p>TfL is currently considering ways in which the current alternative fuels discount for the Congestion Charge could be adjusted to increase the use of cleaner vehicles without detracting from the core objective of the scheme, which is reducing congestion in central London. Once proposals are finalised, TfL will consult on any changes.</p>

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2.24	Incentives for cleaner vehicles	The Society of Motor Manufacturers and Traders Ltd	A technology neutral approach to support new products (eg. hybrid vehicles, alternative fuels) would be beneficial to improvements in air quality and reductions in CO <sub>2</sub> without distorting the market.	<p>The objectives of the proposed LEZ are two fold: to improve the health and quality of life of people who live and work in London through improving air quality and to move London closer to achieving its air quality objectives for 2010 for PM<sub>10</sub>. This can best be achieved by discouraging the oldest, most polluting diesel-engined vehicles from driving in London, which is what the LEZ aims to do.</p> <p>The proposed LEZ is technology neutral in that it does not stipulate what route operators should take in order to comply with the proposed emission standard, ie retrofit or newer vehicles.</p>
2.25	Incentives for cleaner vehicles	The Royal Parks	Support the promotion of vehicles using LPG or other less damaging fuel technologies. Would like ongoing pressure for vehicles making use of alternative fuels to be a priority.	See consideration – 2.24.
2.26	Incentives for cleaner vehicles	London Borough of Islington	Achieving compliance with the LEZ is likely to cost a huge amount for our contractor and in turn for Islington and its residents. TfL have provided information that there might be some grant availability from the EST for retrofit emission reducing equipment such as additional traps and even conversions to SCR (selective catalytic reduction) and EGR (exhaust gas recirculation) of up to 30% but not on new vehicles. Will be looking to invest in the latest Euro V vehicles, far less polluting than retro-fits, and will apparently not be financially aided for doing a greater service.	TfL and the Mayor have no plans to provide grants to assist boroughs in achieving compliance. TfL investigated the option of providing grants for retrofitting pollution abatement equipment to vehicles but EU rules limit any environment-related grant to 36 per cent of the capital cost of the equipment. Funding grants for operators to this level is unlikely to be cost-effective and TfL considers that it is unlikely to provide adequate incentives to operators to clean up their vehicles. Furthermore, fleet replacement is part of a longer-term financial strategy. Decisions regarding new fleet are made using a number of criteria, not just environmental factors. Therefore, it is not appropriate for TfL or the Mayor to provide grants for vehicle replacement as to do so would distort the new and second-hand vehicle

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				<p>market.</p> <p>The Government has recently announced that it is stopping its Air Quality Retrofit programme which gave grants to operators to fit pollution abatement equipment to vehicles.</p>
2.27	Incentives for cleaner vehicles	London Borough of Hammersmith and Fulham	<p>One of the alternatives to the LEZ assessed is a grants scheme for retro-fitting emissions reducing equipment to vehicles. However, this is rejected as “EU rules limit any environment-related grant to 30% of the capital cost of the equipment”. Funding grants for operators to this level is unlikely to be cost-effective and unlikely to provide adequate incentives to operators to clean up their vehicles”. This is probably the main alternative to the LEZ proposal, but it is unclear if a full study has been done of the implications. References to it being “unlikely to be cost-effective” and “unlikely to be enough of an incentive” for operators suggest that there is a possibility that it could be cost-effective. Has this option been fully assessed? If not, should this be investigated further?</p>	<p>See consideration – 2.26.</p> <p>The issue of grants was considered in the 2001 to 2003 Feasibility Study. TfL does not consider that the air quality outcomes of providing a system of incentives rather than the proposed LEZ merits further cost-effectiveness analysis.</p>
2.28	Incentives for cleaner vehicles	London Forum of Amenity and Civic Societies	<p>The rejection of the alternative approach of giving operators grants of up to 30% of capital cost (the maximum permissible under EU rules), on the grounds that this is unlikely to be cost-effective and unlikely to provide adequate incentives to operators to clean up their vehicles, seems to raise a question about the effectiveness of what is actually</p>	<p>See consideration – 2.26.</p> <p>TfL has reviewed alternative ways at both the national and local levels for addressing road transport related emissions. In the absence of national initiatives, the proposed LEZ therefore represents the most effective option for achieving reductions of the most harmful road transport generated emissions in London between 2008</p>

No.	Sub theme	Respondent	Representation	TfL Response
			being proposed. The key point presumably is that, as in the further alternative of a scrapping scheme, it would be difficult to target grants effectively on the large number of firms based outside London which operate vehicles within London, but to varying extents.	and 2015.
2.29	Central government initiatives	NSCA (National Society for Clean Air)	Passenger car emissions, which make a significant contribution to London's emissions, are not addressed by the scheme. In the absence of national measures, failure to address this sector is an environmental concern. Suggest that GLA work hard to influence central government to implement a fiscal regime, to accelerate the clean up of the UK fleet. At this time it is felt that national action provides the most appropriate mechanism for delivering these benefits and for addressing potential socio-economic impacts, such as those associated with the fact that the oldest (and hence potentially highest emitting) cars tend to be owned by the least advantaged sectors of the population.	The Government is currently undertaking a consultation on the Review of the Air Quality Strategy for England, Scotland and Wales and is seeking views on a number of additional policy measures, including a programme of incentives to phase out the most polluting cars, i.e. those built before Euro standards were enforced in 1992 and Euro I cars built until 1996.
2.30	Central government initiatives	London Borough of Wandsworth	If the LEZ does proceed, and the transport fleet is upgraded as predicted, then the gains will provide a national benefit. On this basis, and taking account of the high costs that Londoners will have to bear, there must be a case for the Government taking more responsibility for the scheme and contributing to the costs, thus reducing the burden on Londoners and also fleet operators.	See consideration – 2.26.  The Mayor has a statutory duty to take steps towards achieving Government air quality objectives for seven locally managed pollutants in London. The objective of the proposed LEZ is to move London closer to achieving the air quality objectives for 2010 and to improve the health and quality of life of Londoners. TfL has reviewed alternative ways, at both the national and

No.	Sub theme	Respondent	Representation	TfL Response
			<p>It is disappointing that retro-fitting schemes are limited to a 30% grant, which to date has been a disincentive to the upgrading of transport fleets. It is understood that the “Powershift” and “Cleanup” schemes are now closed, but they could, even with the limited grant levels, provide valuable assistance to fleet operators. If the LEZ is implemented, it will be essential that the Government reintroduce such schemes.</p>	<p>local levels for addressing road transport related emissions. In the absence of national initiatives the proposed LEZ represents the most effective option for achieving reductions of the most harmful road transport generated emissions in London between 2008 and 2015.</p>
2.31	Central government initiatives	Association of London Government	<p>The consultation includes a brief description of six alternatives that were considered by TfL. Since several of these would require action by the Government, a detailed cost-benefit analysis was not undertaken, as they are considered ‘non-starters’. However, if any of these measures were shown to result in significant improvements to air quality, then there would be sufficient evidence to press the Government into taking action. This could have been through introduction of National level initiatives or through Government paying for some of the costs that will instead fall solely on Londoners under the LEZ proposals.</p>	<p>The 2001 to 2003 Feasibility Study and Defra’s 2006 National Air Quality Strategy Review considered that a LEZ was the most effective policy available that could realistically move London significantly closer towards meeting its air quality objectives. Of the alternatives considered, none would be able to deliver the level of reductions in PM<sub>10</sub> within the timeframe that the LEZ would. Therefore, TfL considers that the proposed LEZ represents the most effective option for achieving reductions in the most harmful road transport generated emissions in London between 2008 and 2015.</p> <p>Furthermore, the Mayor has a statutory obligation to take steps towards achieving local air quality objectives across London and it would, therefore, be inappropriate for the Mayor to rely solely on central government initiatives.</p>
2.32	Central government initiatives	National Grid	<p>Whilst a charge for non-compliant HGVs will undoubtedly provide a financial incentive to improve, concerned about a different approach being taken in London from elsewhere. Any approach would need to</p>	<p>See considerations – 2.30 and 2.31.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			dovetail in with the UK Government's strategy for implementation of these requirements.	
2.33	Central government initiatives	Royal Borough of Kensington and Chelsea	If any measures that require action by the Government were shown to result in significant improvements to air quality, then TfL should press the Government into taking action.	See considerations – 2.30 and 2.31.
2.34	Encourage more sustainable modes of transport	London Forum of Amenity and Civic Societies	Suggests that further investigations be carried out into more radical measures for bringing about more thoroughgoing improvements in London's air quality. These might take the form either of more stringent restrictions on older vehicles operating in London or more attractive incentives to acquire and use less polluting new vehicles.	See considerations – 2.30 and 2.31.
2.35	Non transport-related alternatives	The Society of Motor Manufacturers and Traders Ltd	Managing local emissions from road transport can be part of a strategy to ensure local air quality standards are raised. However, it is important to recognise that road transport emissions as a share of emissions are declining, compared to other sources of poor air quality.	<p>Despite improvements in emissions from transport sources following the introduction of increasingly stricter Euro standards for vehicle manufacturers, road traffic still accounts for around half of the emissions of PM<sub>10</sub>, which is the most harmful pollutant to human health. Reducing emissions of PM<sub>10</sub> is the objective of the proposed LEZ.</p> <p>Although many of the Mayor's air quality initiatives focus on transport, as the largest single source of emissions in London, work is addressing other sources. The London Atmospheric Emissions Inventory is developed and updated each year, this underpins all Mayoral and borough work on air quality. The Mayor is working with the Functional Bodies to implement key measures, improve the sustainability of the GLA Group and lead by example. He ensures that the boroughs are</p>

No.	Sub theme	Respondent	Representation	TfL Response
				adequately assessing local polluted areas and identifying necessary actions through the Local Air Quality Management system. The Mayor also works through the planning system, including addressing air quality issues in the London Plan and developing Best Practice Guidance on Reducing Emissions from Construction and Demolition.
2.36	Other alternatives	Friends of the Earth	The key to a successful package of measures will be an integrated strategy with firm spatial development policy and control. Where development is likely to undermine the LEZ and lead to accumulative worsening of air quality, it should be resisted unless or until it can be demonstrated that objectives are not unnecessarily undermined. Development that would result in high trip generation by polluting modes, or the approval of development of unnecessarily including car parking provision (instead of developing car free), or that was unnecessarily heavy on parking provision, should be avoided.	<p>The LEZ proposal is just one of a number of initiatives within the Mayor's Transport and Air Quality Strategies being pursued to mitigate the environmental impacts of transport in London and to deliver reductions in emissions.</p> <p>The London Plan, through guidance to the London boroughs and guidance in relation to planning applications referred to the Mayor, ensures that air quality is taken into account at the planning application stage and that formal air quality assessments are undertaken where appropriate.</p>
2.37	Other alternatives	London Assembly Environment Committee	It is clear that action in addition to implementing the LEZ is needed. Recognise that supporting initiatives are in place but consider that a more wide-ranging approach is needed to address London's emissions problems. The Environment Committee's discussions highlighted a range of approaches. One example singled out the use of bus lanes. As a means of keeping vehicles on the move and reducing idling engines, some bus lanes in London accept lorries. Another suggestion we received	<p>The proposed LEZ is just one of a number of initiatives in the Mayor's Transport and Air Quality which seek to mitigate the environmental impacts of transport in London and deliver reductions in emissions. In addition, TfL's Freight Unit is working with the London Sustainable Distribution Partnership and the Freight Transport Association to develop a London Freight Plan which would aim to improve the efficiency of freight and servicing trips in London while minimising their impact on the environment and society.</p> <p>Giving further priority to freight by introducing HGVs</p>

No.	Sub theme	Respondent	Representation	TfL Response
			included working with commercial operators to encourage investment in higher efficiency products and driver training.	into bus lanes has been tried but there are significant safety concerns for cyclists and there is a real risk that a piecemeal approach to traffic management could confuse HGV drivers.
2.38	Other alternatives	Corporation of London	Given the costs and marginal benefits to air quality outlined in the consultation documents, are concerned that not enough has been done by the Mayor to consider alternative ways of reducing PM <sub>10</sub> concentrations across London.	A Feasibility Study undertaken to examine methods of reducing traffic emissions in London concluded that a LEZ was the best approach to help achieve air quality objectives in London. In 2005 TfL completed a review of the findings of the Feasibility Study and concluded that there were no alternatives to the LEZ likely to achieve the same level of benefits in the same or shorter timeframe. In the absence of national initiatives, the proposed LEZ represents the most effective option to reduce harmful transport related emissions in London between 2008 and 2015.
2.39	Other alternatives	London Borough of Hammersmith and Fulham	It is noted that no other sections of the Transport or Air Quality Strategies are being updated at this stage. Although the implementation of the LEZ would help move London towards the PM <sub>10</sub> and NO <sub>x</sub> objectives, there will still be large parts of London exceeding these objectives. Does the GLA/TfL believe that there is no need to update any other aspects of the Strategies, or are updates to be considered via another separate procedure?	<p>TfL considers that the proposed LEZ represents the most effective option for helping London work towards meeting its daily mean objective for PM<sub>10</sub> and make progress towards achieving its 2010 annual mean objective for PM<sub>10</sub>. Whilst TfL recognises that the introduction of the proposed LEZ would not enable London to meet the 2010 objectives in all locations, TfL's modelling indicates there would be an 14 per cent reduction in the area exceeding the annual mean PM<sub>10</sub> objective in 2012 and a 14 per cent reduction in the areas of London with critical exceedences of the daily PM<sub>10</sub> objective in 2012, thereby reducing exposure to this pollutant by people who live, work and visit London.</p> <p>Many of the Mayor's Air Quality Strategy targets were set for 2005. As yet, monitoring data is not available for all these targets. It is inappropriate to undertake a full revision of the Mayor's Air Quality Strategy until the</p>

No.	Sub theme	Respondent	Representation	TfL Response
				current draft European Thematic Strategy and Directive on air quality and the National Air Quality Strategy have been finalised.
2.40	Other alternatives	London TravelWatch	The Mayor should work with Network Rail and train operating and leasing companies to find ways either to reduce emissions from diesel train engines or to extend electrification on services operating to and from London.	TfL is studying information in the London Atmospheric Emissions Inventory about train operations in London and the resultant air pollutant emissions. This will provide a basis for discussions with the rail industry in the future.
2.41	Other alternatives	London First	The Transport for London proposal estimates that 40 (4%) of the 1,000 premature deaths per year associated with poor air quality could be prevented. A smaller zone would leave approximately £100 million for other projects to tackle the remaining 960 (96%) of premature deaths. For example, nearly 3 million trips are made each day on the Tube. Research has shown that up to 15 times more dust occurs in some underground stations than at street level, and as such we believe that considerable health benefits could be achieved by targeting these pollution hotspots.	<p>Road transport accounts for half of PM<sub>10</sub> emissions in London. London has high traffic volumes and low overall vehicle speeds which make road transport a more significant contributor to levels of these pollutants than in other UK cities. Emissions from road vehicles are emitted close to ground level and are often concentrated on streets lined with buildings, creating poor dispersion conditions which can further increase their impact and the exposure of people to excessive levels of these pollutants. TfL has investigated options for the boundary of the proposed LEZ and has concluded that the air quality and health benefits to be gained from a LEZ covering a smaller area of London, such as the Central London Congestion Charging zone, would be minor and would not address the substantial number of the areas in London which are projected to exceed air quality limits. Furthermore, in the absence of national initiatives, the LEZ is the most viable initiative to achieve air quality improvements.</p> <p>TfL has commissioned studies to address concerns about the dust levels on the Underground system. These have shown that the nature and levels of dust on the Underground is not harmful to health. Furthermore, the investigation of methods to improve air quality on</p>

No.	Sub theme	Respondent	Representation	TfL Response
				the Underground is an ongoing target in the Mayor's Air Quality Strategy.
2.42	Other alternatives	London Borough of Barnet	The existing LLCS, which the Council currently does not participate in, provides a model which could be followed for the introduction of the LEZ. Indeed, there are compelling reasons why it would be better to incorporate an air pollutant control scheme into a radically updated LLCS. Believes that such an approach could be achieved at far lower cost than the current proposals.	See considerations – 2.39 and 2.40.
2.43	Other alternatives	Royal Borough of Kensington and Chelsea	No consideration appears to be given to other scenarios, for example, the increasing demand for electric and hybrid vehicles, and the industry rumours that at least one major manufacturer is planning to fit hybrid technology as standard across its range. It is not clear from the consultation documents how far TfL has considered technological, policy and consumer trends in establishing the baseline scenarios.	<p>TfL has reviewed alternative ways at both the national and local levels for addressing road transport related emissions. In the absence of national initiatives, the proposed LEZ represents the most effective option for achieving reductions of the most harmful road transport generated emissions in London between 2008 and 2015.</p> <p>TfL has introduced a 100 per cent discount on the Congestion Charge for the cleanest alternative fuel vehicles and is currently considering incentives for cleaner vehicles as part of a review of the Congestion Charging alternative fuel discount.</p> <p>The models used by TfL forecast the impact of demand changes and changes in traffic (vehicle kilometres), speeds (kilometres/ hour) and congestion (excess time spent in queues per kilometre) for all vehicle types.</p>

No.	Sub theme	Respondent	Representation	TfL Response
2.44	Other alternatives	Friends of the Earth	The proposed Thames Gateway bridge in East London should be reassessed because it would generate considerable extra traffic and add to air quality breaches in the area when other policy and/or infrastructure options (such as a walk/cycle/public transport only option) that could achieve regeneration benefits, but without the adverse environmental effects that this scheme would, have not been properly considered. It would add to the area or number of homes affected by air quality breaching EU limits, and on the basis of ALG criteria, the scheme would result in "significant" increases in NO <sub>2</sub> for many people and would therefore set back Londoners' health and wellbeing. The Mayor should spell out the extent that this scheme would undermine the aims of the LEZ and other measures to improve air quality, as a basis for reassessment.	<p>The proposed LEZ would cover the whole of Greater London, including the London end of the Thames Gateway area and would therefore assist in limiting any additional emissions arising from road transport using the proposed bridge. Furthermore, in preparing the revisions to the Mayor's Transport and Air Quality Strategies to allow for a London LEZ, TfL has been mindful of the Mayor's other Strategies and legal obligations.</p> <p>The full range of the environmental impacts reported to the Public Inquiry will be taken into consideration in the decisions by the Secretary of State on the Thames Gateway Bridge scheme.</p>
2.45	Other alternatives	River Tram Transit Initiatives Limited	Suggests that River Tram Ferries be developed to carry HGVs and LGVs across and along the Thames reducing congestion on London's roads, and, since vehicle engines remain idle in transit by Ferry, automatically reducing noxious emissions.	Increased use of rail and water for moving freight in London to encourage modal shift away from road transport is an important element of the Mayor's Air Quality and Transport Strategies and TfL's Draft Freight Plan.
2.46	Other alternatives	Constant Consultancy	Another glaring omission is that there is no mention of alternative fuels within the proposal, including the EU Biofuels Directive 2003 which sets targets for biofuel use within Member States of 2% by 2005 (the UK has achieved a fraction of this) and 5.75% by 2010.	<p>The LEZ is designed to discourage the use of the most polluting vehicles. On the basis of grammes of pollutants emitted per km, these are diesel-engined HGVs, buses, coaches, as well as heavier LGVs.</p> <p>Other initiatives under the Mayor's Transport Strategy already focus on alternative fuels, such as the Central</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>London Congestion Charging Zone which provides a 100 per cent discount for vehicles using alternative fuels. TfL is currently considering further incentives as part of a review of the Congestion Charging alternative fuel discount.</p> <p>Although many of the Mayor's air quality initiatives focus on transport, as the largest single source of emissions in London, work is addressing other sources. The London Atmospheric Emissions Inventory is developed and updated each year, this underpins all Mayoral and borough work on air quality. The Mayor is working with the Functional Bodies to implement key measures, improve the sustainability of the GLA Group and lead by example. He ensures that the boroughs are adequately assessing local polluted areas and identifying necessary actions through the Local Air Quality Management system. The Mayor also works through the planning system, including addressing air quality issues in the London Plan and developing Best Practice Guidance on Reducing Emissions from Construction and Demolition.</p>
2.47	Other alternatives	London Borough of Barnet	Although a vehicle may be compliant when new or at the point of periodic testing, a lack of proper maintenance may result in a 'compliant' vehicle causing considerable pollution at other times. This is a serious flaw in the scheme and greater reductions in air pollution may be achieved by other means, such as focussing on roadside testing.	TfL has considered alternative methods to a LEZ for achieving road transport related emission reduction including roadside emission testing of vehicles. However, roadside emissions tests would only be able to identify the most polluting vehicles as the current tests are insensitive. Roadside testing also requires the involvement of Vehicle and Operator Services (VOSA) or the police to stop vehicles. It would also not be practicable to stop HGVs in many parts of London. Therefore TfL considers that as an approach for dealing with the emissions of HGVs, buses, coaches, roadside

No.	Sub theme	Respondent	Representation	TfL Response
				emissions testing would achieve very small reductions in emissions compared to those from the proposed LEZ.
2.48	Other alternatives	FirstGroup plc	More equitable still would be a system based on actual vehicular emissions, irrespective of the power source used in the vehicle. Enforcement of this could take the form of roadside testing, either random or targeted (or both) whereby fines would be imposed on poorly maintained vehicles to ensure that those guilty of excessive pollution pay a fine commensurate to the offence.	Roadside emissions tests would only be able to identify the most polluting vehicles as the current tests are reasonably insensitive, for example it would not be possible to demonstrate Euro standards. Roadside testing also requires the involvement of Vehicle and Operator Services Agency (VOSA) or the police to stop vehicles, and it would not be practical to stop HGVs, buses or coaches in many parts of London. As an approach for dealing with the emissions of HGVs, buses and coaches, roadside emissions testing would achieve very small reductions in emissions compared to those from the proposed LEZ.
2.49	Other alternatives	London Borough of Barking and Dagenham	Would like to see a London-wide commitment to retaining vehicle emissions testing checks. The condition of vehicles can deteriorate during their lifespan, dropping below EURO emissions standards.	See considerations – 2.47 and 2.48.
2.50	Other alternatives	National Grid	Suggest as an alternative requiring garages to fail an old vehicle after a set date if it did not meet the required standards (as part of the MOT process required for all vehicles over 3 years old). Given the Government's drive on better regulation, this would be much simpler and less bureaucratic, and much easier to implement. With sufficient advance publicity, businesses would be well aware and could plan this requirement in their phased vehicle replacement programme.	The MOT registration process is outside the remit of the Mayor and GLA. In the absence of national initiatives the proposed LEZ represents the most effective option for achieving reductions of the most harmful road transport generated emissions in London between 2008 and 2015.

No.	Sub theme	Respondent	Representation	TfL Response
2.51	Other alternatives	Central London Partnership	Concerned that, to comply with the London scheme, fleet owners will use compliant vehicles in the capital to the detriment of other urban areas therefore should consider this part of a national scheme.	Some 30-40 per cent of the national lorry fleet, and around half of the coach fleet, operate in London during any given year. As such, many of the vehicles that would be replaced or upgraded to meet the requirements of the London LEZ would contribute to reduced emissions outside London. Also, because PM <sub>10</sub> emissions migrate from London to other parts of the country, reductions in London also lead to improved regional air quality. A survey of possible operator responses to a London LEZ was undertaken for TfL in spring 2005. This indicated that a small proportion of vehicle operators would reorganise their fleet so that only compliant vehicles are used within London. However, the air quality benefits outside London due to vehicle replacement and modification are expected to outweigh the negative impacts of any fleet reorganisation. Introducing a LEZ on a UK-wide basis would be a matter for national Government, not TfL. It would be a far more complex and time-consuming exercise as it would require agreement and cooperation from all local authorities and could not be implemented within the London LEZ timeframe. There is a range of alternative measures that could reduce emissions in other parts of the UK that may be more appropriate for local conditions and TfL is working with other non-London authorities as well as central Government in developing local air quality management strategies.

## THEME 3 BUSINESS CASE

No.	Sub theme	Respondent	Representation	TfL Response
3.01	There is a good business case for LEZ	Energy Saving Trust	The air quality benefits justify the high forecast operating costs of the scheme.	TfL notes the support for the LEZ proposal.
3.02	There is a good business case for LEZ	Thames Gateway London Partnership	Understand that the benefits of the scheme could be greater than stated in the LEZ documents; recent research has suggested that particulates are a greater risk to health than previously thought. This heightens the case for the LEZ.	TfL recognises that research in this area is continually developing. TfL's modelling of the likely health benefits of the LEZ uses both the UK Committee on the Medical Effects of Air Pollutants (COMEAP) methodology and the EU Clean Air for Europe (CAFE) methodology for calculating the benefits of reduced air pollution. The EU method recognises a wider range of health impacts than the UK method which takes a more conservative approach. As these methodologies are developed, TfL will update its estimates of the proposed LEZ benefits. To help reflect uncertainties in the modelling of health benefits TfL quoted a range of likely outcomes in the draft Strategy Revisions.
3.03	There is a good business case for LEZ	Regional Public Health Group - London	The Committee on the Medical Effects of Air Pollutants (COMEAP) has recently published an interim statement suggesting that the effects of particles on life expectancy are greater than previously thought. This will improve the cost benefit analysis.	See consideration – 3.02.

No.	Sub theme	Respondent	Representation	TfL Response
3.04	Poor benefit/cost ratio	London Borough of Ealing	<p>Reservations regarding the overall cost effectiveness of the scheme. The range of figures supplied in terms of estimated health benefits, estimated implementation costs and costs to operators appear to be very broad. The best-case scenario for the core scheme alone, indicates an acceptable health benefit vs. cost trade off, however the worst-case scenario would suggest that costs would be prohibitively high for the minor health benefits achieved. It would appear that more work needs to be done to provide a clearer picture of what the true figures are likely to be.</p>	<p>The Mayor has a statutory obligation to take steps towards achieving air quality objectives. Failure to make steps could lead to the European Commission taking infraction proceedings against the UK Government and fines being imposed. In the absence of national initiatives, a LEZ that targets the most polluting vehicles has been identified as the most effective means of reducing the most harmful emissions from road transport.</p> <p>TfL provided a range of figures to illustrate that financial and health impacts of the proposed LEZ in the draft Strategy Revisions. This reflects uncertainty in how operators will respond to a LEZ, given the range of compliance options and also takes account of the different methods for calculating health benefits. TfL is undertaking a further operator survey to better understand how operators are likely to respond to the proposed LEZ.</p> <p>In determining the potential costs of the proposed LEZ, TfL has considered representations from operators regarding the costs of the scheme.</p>
3.05	Poor benefit/cost ratio	Road Haulage Association	<p>Have doubts regarding the cost-benefit analysis of the proposals, in terms of the vehicles to be included and the calculation of costs and benefits. Much of the cost benefit analysis cited in the consultation documentation is similar to that modelled by the consultants in the joint LEZ Feasibility Study from 2001-03, but again not verifiable. The original Feasibility Study and TfL's later review both stated that the impact on small</p>	<p>See consideration – 3.04.</p> <p>TfL has undertaken an analysis of the impact on employment and tourism in London, the executive summary of which is attached at Annex F to this Report.</p> <p>Should the Mayor confirm the revisions to his Transport and Air Quality Strategies, TfL would undertake a further public and stakeholder consultation</p>

No.	Sub theme	Respondent	Representation	TfL Response
			<p>businesses would need to be investigated further, but TfL have not been clear how or when this will be done. There are no survey results or evidence of any work being carried out that backs up the various statements made within the consultation documentation regarding the assertion that, generally, lorries are the worst polluters. No figures are available which can show how many commercial vehicles currently travelling within the proposed London LEZ would be compliant at the proposed levels for 2008.</p>	<p>in late 2006 on detailed proposed for a LEZ contained in a Scheme Order. An economic impact assessment of the LEZ would be undertaken to inform this consultation on a Scheme Order.</p> <p>TfL's calculation of the costs of a LEZ took account of the operator survey into likely responses to the proposed LEZ. This survey is currently being updated. TfL's modelling also incorporates depreciation factors and the costs of fitting and maintaining pollution abatement equipment.</p> <p>The London Atmospheric Emissions Inventory (LAEI) produced by the GLA provides information on the relative contribution of different vehicle types on overall particulate emissions and this was included in the draft Strategy Revisions document. This shows that HGVs and coaches are the worst polluters in terms of PM<sub>10</sub> emitted per km driven. HGVs emit 30 per cent of road transport generated PM<sub>10</sub> in Greater London but only account for 4 per cent of road vehicle kilometres travelled. Modelling suggests that only 34 per cent of HGVs and 42 per cent of coaches would not be compliant with the LEZ standard in 2008.</p>
3.06	Poor benefit/cost ratio	Dudleys Coaches	Supports LEZ in principle but is difficult to implement and not cost effective.	See considerations – 3.04 and 3.05.

No.	Sub theme	Respondent	Representation	TfL Response
3.07	Poor benefit/cost ratio	Royal Borough of Kensington and Chelsea	Meeting the Euro IV standards by 2010 is predicted to cost millions of pounds, and question whether the predicted improvements in air quality and health are proportionate to the associated costs of the proposed LEZ, given that there will be, on TfL's own figures, significant improvements to air quality without it.	See considerations – 3.04 and 3.05.
3.08	Poor benefit/cost ratio	Golden Boy Coaches	Support the process of the LEZ in principle, but think the current proposals are not cost effective.	See considerations – 3.04 and 3.05.
3.09	Poor benefit/cost ratio	London Borough of Harrow	The cost / benefits of the proposed LEZ scheme are difficult to assess in relation to other schemes as little information has been provided. The health benefits need to be maximised and the implementation costs reduced to present a more acceptable scheme.	See considerations – 3.04 and 3.05.  Information on the costs to TfL and vehicle operators and the projected monetised health benefits were provided in the consultation documentation. The LEZ should not be viewed in isolation – rather, it complements other initiatives contained in the Mayor's Transport and Air Quality Strategies, each of which focus on reducing emissions from particular road transport sources in the most cost effective way. This suite of initiatives will generate significant improvements in the health of people who live and work in Greater London through improving air quality.
3.10	Poor benefit/cost ratio	London Borough of Brent	If the LEZ is not implemented it is suggested that similar air quality and health benefits brought about by vehicle replacement and tighter emissions standards would not be achieved for 4-5 years. It is therefore important to determine whether the cost of implementing the scheme in 2008 outweighs the potential costs to health and infraction	See considerations – 3.04, 3.05 and 3.09.

No.	Sub theme	Respondent	Representation	TfL Response
			costs incurred for not meeting national air quality standards if the process is delayed. It is difficult, using the data provided to date, to make an accurate estimate of potential costs since the costing varies considerably.	
3.11	Poor benefit/cost ratio	Royal Mail Group plc	Believes that the proposed scheme, which it is estimated will cost almost half a billion pounds to set up and run, would require significant changes by operators of commercial vehicles and coaches to comply with the measures outlined. The limited vehicle life span of around eight years proposed under the LEZ mean that the compliance costs would be unreasonable.	<p>See consideration – 3.09.</p> <p>Under the proposed LEZ, operators will have the option of extending the life of their vehicles by fitting pollution abatement equipment. However, TfL has also recommended deferring implementation of the Euro IV standard for PM<sub>10</sub> until 2012 to reduce costs to operators.</p> <p>The costs to operators of the LEZ scheme as proposed, taking into account the delaying of the Euro IV standard for PM<sub>10</sub> to 2012 and the inclusion of heavier LGVs from 2010, is estimated to be £285 million to 2015/16. The costs incurred by individual vehicle operators depend on the action they take to comply, which may be vehicle replacement, retro-fitting pollution abatement equipment, re-engining or paying the daily charge. However overall, the average cost of retrofitting a coach is in the region of £5500.</p>
3.12	Poor benefit/cost ratio	The Society of Motor Manufacturers and Traders Ltd	In extreme weather events, pollution in London is generated overseas, and this is not included in cost/ benefit calculations. In addition, the costs of tracing Euro standards and enforcement will be more than anticipated. The air quality benefits of retrofit equipment are also overstated. For operators, the LEZ will impact on the resale value of vehicles.	<p>See consideration – 3.09 and 3.11.</p> <p>The Mayor has no jurisdiction outside of the Greater London area and he is therefore focusing on addressing the sources of emissions he can have a direct effect on. The business case includes the costs and benefits of the measures the Mayor can take.</p> <p>In determining the costs of the proposed LEZ, TfL has</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>estimated systems and operational costs of developing the enforcement infrastructure, including a database of compliant and non-compliant vehicles. In determining the benefits of the proposed LEZ, TfL has used industry recognised levels of particulate emissions reduction that is achieved through particulate traps, i.e. 95 per cent. In addition, the impact on the resale value of vehicles has been accounted for in the cost modelling.</p> <p>TfL acknowledges that pollution abatement equipment is likely to fail if it is not suitable for the particular vehicle or its drive cycle and is not routinely serviced. In response to these issues, the abatement industry has introduced measures to improve customer service and to ensure operators are aware of maintenance issues. TfL is strongly supportive of these measures and will work with the Environmental Industries Commission (EIC) and pollution abatement equipment manufacturers to ensure they become standard practice.</p>
3.13	Poor benefit/cost ratio	Thames Gateway London Partnership	<p>It is noted that the cost of setting up (£6-10 million) and running the scheme (£5-7 million/year) are in excess of the revenue likely to be generated (£1-4 million/year). Seek assurance that TfL have identified the scheme which provides the best value for money and that all costs have been included in the analysis, including costs to local businesses and residents.</p>	<p>See consideration – 3.11.</p> <p>The proposed LEZ is not designed to be a revenue generating scheme and revenues would not offset the costs of implementing and operating the scheme. Air quality improvements would be maximised by high levels of operator compliance and therefore low numbers of operators paying to bring their vehicles into the zone. TfL has built a comprehensive cost model of all the anticipated costs of implementing and running the scheme.</p>

No.	Sub theme	Respondent	Representation	TfL Response
3.14	Poor benefit/cost ratio	London Borough of Wandsworth	<p>In view of the small numbers of the population that would benefit, it must be questioned whether the costs of the scheme justify its implementation.</p> <p>The Consultation suggests that the scheme will cost £125-£130 million to implement and operate till 2015/16. Whilst there is likely to be some income from non-complying vehicles, it is presumed, that the costs will fall to London council tax payers. In addition the costs to operators are estimated between £195 and £270 million and it seems inevitable that these costs will be passed on. It is also noted that the effect of the LEZ will be to bring forward by 4 to 5 years the gains in air quality that would have arisen from natural upgrading of the transport fleet. Whilst this acceleration provides a positive benefit, it must be set against the estimated high costs of the scheme which are, in any event, based on a series of assumptions covering implementation costs as well as income streams, which may prove too inaccurate.</p>	See considerations – 3.11 and 3.13.
3.15	Poor benefit/cost ratio	Environmental Services Association	ESA considers that the proposals represent very poor value for money. TfL predicts that scheme will cost approximately £130 million to set up and run, but is unlikely to make a significant improvement to air quality when only 6% of London traffic will be subject to this scheme.	<p>See considerations – 3.11 and 3.13.</p> <p>By targeting the most individually polluting vehicles, substantial reductions in PM<sub>10</sub> emissions can be achieved. HGVs, buses and coaches contribute over 30 per cent of the PM<sub>10</sub> emissions generated by road traffic in London. The net present value health benefits within London resulting from the LEZ as proposed, taking into account the delaying of the Euro IV</p>

No.	Sub theme	Respondent	Representation	TfL Response
				standard for PM <sub>10</sub> to 2012 and the inclusion of heavier LGVs from 2010, have been quantified at between £101m and £162m between 2008 and 2015. Benefits outside London are estimated at between £70m and £100m over the same period.
3.16	Poor benefit/cost ratio	Golden Boy Coaches	Support the process of the LEZ in principle, but think the current proposals are not cost effective, have a disproportionate cost impact to industry and will be difficult to implement practically.	See consideration – 3.11, 3.13 and 3.15.
3.17	Poor benefit/cost ratio	Association of London Government	The costs and benefits in the modelling show a huge range of possible scenarios with costs to operators ranging from £113m to £452m depending on the LEZ 'standard' (i.e., Euro III, Euro IV etc.), the timeframe, the different breakdowns of the costs between the studies, and whether operators move directly to the Euro IV standard. It is therefore difficult to see how TfL consider that the benefits of the scheme outweigh the costs.	<p>See consideration – 3.11, 3.13 and 3.15.</p> <p>The costs to operators of the LEZ scheme as proposed, taking into account the delaying of the Euro IV standard for PM<sub>10</sub> to 2012 and the inclusion of heavier LGVs from 2010, is estimated to be £285 million to 2015/16. The costs incurred by individual vehicle operators depend on the action they take to comply, which may be vehicle replacement, retro-fitting pollution abatement equipment, re-engining or paying the daily charge. The impact on second-hand vehicle values and changes in operating costs are also taken into account when calculating overall costs to operators.</p> <p>TfL's modelling of the likely health benefits of the LEZ uses both the UK Committee on the Medical Effects of Air Pollutants (COMEAP) methodology and the EU Clean Air for Europe (CAFÉ) methodology for calculating the benefits of reduced air pollution. The EU method recognises a wider range of health impacts than the UK method which takes a more conservative approach. However, on the basis of this modelling, the</p>

No.	Sub theme	Respondent	Representation	TfL Response
				LEZ proposal, as consulted on would result in monetised health benefits of up to £180 million from 2008 to 2015. The health benefits from the proposed LEZ are likely to be wide-spread across the Greater London area and outside of London.
3.18	Poor benefit/cost ratio	Cleanaway	A scheme which is estimated will cost almost half a billion pounds to set up, run and for commercial vehicles and coach operators to comply with, but that has a life span of just 8 years, surely cannot be justified in any cost/benefit ratio.	See considerations – 3.11, 3.13 and 3.15.  The LEZ will be monitored and the proposed emission standards will be modified to take account of air quality targets and issues in the future, and possibly beyond the current lifespan. There is also an urgent requirement for the UK Government and local cities to take action towards meeting EU and national air quality targets.
3.19	Poor benefit/cost ratio	Brewery Logistics Group	Whilst it is important to improve air quality, this must be done in a way that is fair, economical, unbiased and will achieve end results. The current proposals will not do this. They represent very poor value for money, with high costs (£130 million) to set up only very small improvements in air quality (only 6% of vehicles operating in London will be included in the scheme).	See considerations – 3.11, 3.13 and 3.15.
3.20	Poor benefit/cost ratio	London Borough of Camden	London still will not meet the air quality objectives for 2010 in relation to PM <sub>10</sub> and NO <sub>2</sub> . We are aware that a range of options have been looked at with the aim of ensuring that London does meet the 2010 objectives and note that the LEZ is considered to be the best options. However, given the extremely high cost of the scheme, estimated to be between £125-130 million up to 2015/16, the actual improvements appear to be relatively	See considerations – 3.11, 3.13 and 3.15.

No.	Sub theme	Respondent	Representation	TfL Response
			marginal	
3.21	Poor benefit/cost ratio	London Borough of Hounslow	Without commissioning further research it is difficult to question the accuracy of the individual figures. However, the implementation costs are large under all scenarios, as are the health benefits modelled. It is therefore a very subjective decision to make as to whether the costs stated (with such wide variations) are worth the benefits gained. Despite this, any benefit to air quality and health is a significant step forward in the right direction and we rest our trust in the feasibility process for the LEZ.	See considerations – 3.11, 3.13 and 3.15.
3.22	Poor benefit/cost ratio	CBI London	The case for a LEZ is weak. With a cost to TfL of £130 million, plus an additional cost to industry ranging from £195-£390m for a limited time period (up to 2015/16) there is a real concern about whether the scheme is a worthwhile investment. In addition the camera infrastructure will become obsolete in a relatively short time period. We are not confident that all the costs to industry have been included such as the downtime costs, costs of maintenance of retrofitted equipment etc. There is no clear break down given in the consultation documents. A scheme that could cost around £500m with a very limited life span until 2015/16 raises fundamental questions in terms of its value for money.	See considerations – 3.11, 3.13 and 3.15.
3.23	Poor benefit/cost ratio	Royal Mail Group plc	Does not support the package of proposed measures within the London LEZ which are too expensive for the benefits they offer.	See considerations – 3.11, 3.13 and 3.15.

No.	Sub theme	Respondent	Representation	TfL Response
3.24	Poor benefit/cost ratio	Central London Partnership	Feel that the set-up costs for the LEZ are high at £125m to £130m but with current technology and the scale of the proposal these are unavoidable. There is more concern over the costs to business of £175m to £410m as these costs will deter business from operating in Central London or pass costs on to customers.	See considerations – 3.11, 3.13 and 3.15.
3.25	Poor benefit/cost ratio	The Society of Motor Manufacturers and Traders Ltd	Operating cost predictions appear to have risen from £5 to £7m. This is a cause for concern, as the estimated costs (up to the year 2015) of £125m are not insignificant, and any further increase in costs will negate the health benefits further.	See considerations – 3.11, 3.13 and 3.15.
3.26	Poor benefit/cost ratio	Musgrave Budgens - Londis	No one can deny the importance of improving air quality, however, we believe that the features of the proposed London LEZ are simply too expensive for the benefits they offer. A scheme which is estimated to cost almost half a billion pounds sterling, to set up, run and for commercial vehicles and coach operators to comply with, but has a life span of just 8 years, surely cannot be justified in any cost/benefit ratio.	See considerations – 3.11, 3.13 and 3.15.
3.27	Poor benefit/cost ratio	Bromley Borough Roads Action Group	In favour of measures to improve air quality in London but does not believe the claimed £130 to £180 million in health benefits over the years 2008 to 2015. There is no substantiation of these figures in the report and therefore do not believe them to be likely.	See considerations – 3.11, 3.13 and 3.15.

No.	Sub theme	Respondent	Representation	TfL Response
3.28	Poor benefit/cost ratio	Bromley Borough Roads Action Group	One remarkable comment in the TfL report is this: "Work undertaken by TfL estimates that the introduction of a London LEZ would bring forward by some 4-5 years reductions in PM <sub>10</sub> emissions in 2010 than would otherwise be achieved under the natural vehicle replacement cycle". In other words, this enormously expensive project will only expedite improved air quality by about 5 years, because it would improve anyway as older vehicles are replaced. New vehicles must conform to much tighter emission standards so the problem will be much reduced in a few years time.	See considerations – 3.11, 3.13 and 3.15.  It is the bringing forward of reductions in PM <sub>10</sub> emissions that generates the substantial levels of health benefits associated with the LEZ proposal. In the absence of the LEZ Londoners would remain subject to unacceptably high concentrations of PM <sub>10</sub> .  New vehicles do have to conform to tighter emissions standards, but the aim of the proposed LEZ is to accelerate the removal or upgrade of the older, more polluting vehicles and thereby maximise the health benefits.
3.29	Poor benefit/cost ratio	Association of London Government	The additional improvement offered by the LEZ, over and above what would happen anyway by 2010, is slight.	See consideration – 3.28.
3.30	Poor benefit/cost ratio	Kent County Council	We would question the need to undertake this action at all when business modernisation of fleets over a sensible timetable would achieve it anyway.	See consideration – 3.28.
3.31	Poor benefit/cost ratio	British Association of Removers	Concerned the LEZ represents poor value for money. The scheme will cost far more to set-up and run than it will generate in income. The huge deficit will have to be met by London taxpayers (business and private). Only a minute section (around 6%) of London traffic will be subject to the scheme. The cost of installing many more enforcement cameras throughout Greater London will be unrealistic, as unlike the Congestion Charge, the LEZ will cover the whole Metropolis, not just the relatively small central zone.	See considerations – 3.11, 3.13 and 3.15.  The proposed LEZ enforcement infrastructure of fixed cameras and mobile units deployed across London is necessary to achieve compliance with the scheme and delivery of the health benefits.

No.	Sub theme	Respondent	Representation	TfL Response
3.32	Poor benefit/cost ratio	TM Logistics	Believe that the features of the proposed London LEZ are simply too expensive for the benefits they offer. A scheme which is estimated to cost almost half a billion pounds to set up, run and for commercial vehicles and coach operators to comply with, but that has a life span of just 8 years surely cannot be justified in any cost/benefit ratio.	See considerations – 3.11, 3.13 and 3.15.
3.33	Poor benefit/cost ratio	AAH Pharmaceuticals Limited	Believe that the features of the proposed London LEZ are simply too expensive for the benefits they offer. A scheme which is estimated to cost almost half a billion pounds to set up, run and for commercial vehicles and coach operators to comply with, but that has a life span of just 8 years surely cannot be justified in any cost/benefit ratio.	See considerations – 3.11, 3.13 and 3.15.
3.34	Poor benefit/cost ratio	Federation of Small Business	Believe that great heed should be given by TfL to the Defra's own Air Quality Strategy 'Cost Benefit Analysis' which does not think that the benefits of the LEZ outweigh the costs.	In the absence of national initiatives, a LEZ has been identified as the most effective way to reduce the most harmful emissions from road transport. The Defra draft Air Quality Strategy (AQS) suggests that the London LEZ is a positive measure to take at a local level which would achieve significant reductions in pollution in a large urban pollution hotspot within a short timeframe. Comparing the LEZ with other national initiatives in the AQS is somewhat misleading as these are focused on achieving very large reductions throughout the UK over the long-term. The aim of the LEZ fits very well with the general theme of the AQS strategy of reducing exposure to particulates.
3.35	Poor benefit/cost ratio	British Vehicle Rental and Leasing Association	Have some concerns with regards to the costs involved with setting up the scheme compared with the improvements in air quality. Are not alone in concerns following	See consideration – 3.34.

No.	Sub theme	Respondent	Representation	TfL Response
		(BVRLA)	the recent comments in the Defra's consultation on air quality.	
3.36	Costs too high	Bromley Borough Roads Action Group	The costs of implementing this scheme, which all Londoners will have to pay for, is simply excessive when Londoners are already fed up with above-inflation increases in their council tax.	See considerations – 3.11, 3.13 and 3.15.
3.37	EU fines for non-compliance with Air Quality Directives	London Borough of Hounslow	Question whether the possibility of fines being imposed via the EU for non-compliance with the air quality directive been factored in?	<p>The Mayor has a statutory obligation to take steps towards achieving air quality objectives. Failure to make steps could lead to the European Commission taking infraction proceedings against the UK Government and fines being imposed. In the absence of national initiatives, a LEZ that targets the most polluting vehicles has been identified as the most effective means of reducing the most harmful emissions from road transport. Each year that the UK exceeds an EU limit value there is the risk of infraction proceedings and the UK potentially paying daily fines based on a percentage of GDP, although the EU would take into account any steps that have been taken towards achieving the targets and allow deferral of achievement of the target if satisfied that sufficient steps had been taken. The LEZ is a key initiative to demonstrate significant commitment to achievement of air quality objectives. In the absence of a LEZ, the risk that the EU would impose fines is significantly increased.</p> <p>The LEZ helps to mitigate the risk of the UK facing EU infraction proceedings. Monetising the reductions in risk would be essentially an arbitrary exercise and is best seen in terms of risk.</p>

No.	Sub theme	Respondent	Representation	TfL Response
3.38	EU fines for non-compliance with Air Quality Directives	Association of London Government	The cost-benefit analysis should make clear what would be the impact of punitive action from the EU should the UK not meet EU limit values.	See consideration – 3.37.
3.39	EU fines for non-compliance with Air Quality Directives	Association of London Government	The proposed Mayoral Strategy revisions also discuss the fact that the EU is considering the possibility of producing a new Directive that would allow the achievement of PM <sub>10</sub> and NO <sub>x</sub> targets to be deferred. Whilst it is agreed this is within the context of the fact that a Member State would need to have demonstrated that it has taken significant action to try to meet their limit values, it does show that the likelihood of EU penalties is reducing if anything, yet this does not appear to influence the figures within the cost: benefit scenarios provided. TfL needs to ensure that this LEZ scheme will not result in an unfair burden on London compared with other European cities.	See consideration – 3.37.
3.40	EU fines for non-compliance with Air Quality Directives	Constant Consultancy	Understand that TfL estimate that the scheme will cost taxpayers £130 million to set up and run, yet there appears to be no impact assessment of the likely outcome. Believe that such an assessment would show that the LEZ as proposed would fail to achieve the local air quality standards set by the EU. Consequently it would be left to London Council Tax payers in London to foot the bill for any sanctions imposed by the EU for failing to achieve air quality targets.	See consideration – 3.37.

No.	Sub theme	Respondent	Representation	TfL Response
			Therefore, before the Mayor proceeds with the LEZ he needs to be able to guarantee that it will achieve the EU's air quality targets.	
3.41	Other business case issues	London Borough of Hounslow	Question whether the value of the awareness raising regarding air quality issues has been considered?	Public surveys conducted by the Mayor and by TfL show that poor air quality is an issue for the vast majority of Londoners, and initiatives to improve air quality have wide support. TfL will continue to provide Londoners with information on the impacts of poor air quality and develop and consult on a range of initiatives to address the issue.
3.42	Other business case issues	London Borough of Newham	The benefits of the scheme extend beyond the finish date of the project. In considering the cost benefit analysis, unclear whether benefits were considered beyond the end of the scheme.	Benefits of the LEZ continue beyond 2015, although the majority of benefits accrue prior to this date. The business case for the LEZ only covers the period up to 2015.
3.43	Other business case issues	NSCA (National Society for Clean Air)	Recent work indicates that nearly 40,000 deaths are brought forward every year in the UK as a result of air pollution, equating to a loss of 8 months life expectancy across the population. In light of its considerable size and unique air quality problems a significant proportion of these impacts occur in London. Particles are responsible for the majority of these health effects. As a 'non-threshold' pollutant, any reductions – be these above or below the limit value deliver health benefits. The recent COMEAP statement on risk factors reinforces the need to take action to improve air quality and serves to more strongly align UK and EU thinking. It is easy to focus heavily on mortality effects, but it is also important to remember the range of health and quality of life impacts, which	TfL has also used the EU Clean Air for Europe (Café) Methodology to evaluate the health impacts of the LEZ. This methodology takes into account a wider range of health effects e.g. restricted activity days and respiratory symptoms, and increased use of medicines, whilst recognising the increased uncertainty of some of these estimates. While all people living and working in Greater London would experience health benefits from a LEZ, people for whom their health status or where they live and work makes them more susceptible or exposed to poor air quality will experience more substantial positive health impacts.

No.	Sub theme	Respondent	Representation	TfL Response
			underlie the headline mortality figures. Also that impacts are disproportionately suffered by the more sensitive individuals within the population. The COMEAP statement will add considerably to the benefit assessment.	

## THEME 4 TIMETABLE

No.	Sub theme	Respondent	Representation	TfL response
4.01	Proposed timetable is correct	London Borough of Croydon	Believes that the proposed emission standards of Euro III for PM <sub>10</sub> by 2008 and Euro IV for PM <sub>10</sub> from 2010 for HGVs, buses and coaches are appropriate.	TfL notes the support for this proposal.
4.02	Proposed timetable is correct	Friends of Capital Transport Campaign	Welcome the revised proposals and in particular the speedier timetable that is now envisaged.	See consideration – 4.01.
4.03	Proposed timetable is correct	Central London Partnership	As London has the poorest air quality in the country realise it needs to be improved at the earliest opportunity. Therefore support the implementation of a scheme in 2008, with further emission restrictions in 2010. This improves air quality whilst allowing business some time to become compliant.	See consideration – 4.01.
4.04	Proposed timetable is correct	London Borough of Lewisham	Fully acknowledge the concept of a LEZ for London as a means of bringing forward benefits earlier than would otherwise be the case if simply waited for new vehicle technology to be fully adopted. Councils require actions that will work in the medium term in an effort to meet the current objectives as key EU and UK legislation milestones are reached (There are proposals to tighten the PM <sub>10</sub> objective in 2010). Lewisham and many London Boroughs are not expected to meet the UK's air quality objectives for annual mean NO <sub>2</sub> (target date 2005) and annual/24 hr mean PM <sub>10</sub> (target date 2004). Therefore, subject to ratified data	See consideration – 4.01.

No.	Sub theme	Respondent	Representation	TfL response
			confirming these exceedences, a direct breach of UK regulations is likely to occur. The introduction of the LEZ is a key component in bringing forward improvements.	
4.05	Proposal is premature	London Borough of Hillingdon	Note that the likely start date of the scheme is February 2008. Considering that a draft Scheme Order would need to be prepared and consulted on, with the possibility of a Public Inquiry, the commencement date appears to be over optimistic.	London boroughs and the Mayor have legislative requirements to meet certain air quality objectives which are currently not being met. The earliest a LEZ could be introduced is early 2008. This date takes into account the time required to complete the legal processes, including consultation on a Scheme Order, as well as the time to put in place the required business systems and processes to publicise standards, and for vehicle operators to implement the necessary changes to their vehicle fleets.
4.06	Proposal is premature	London First	If the Mayor decides to go ahead with this proposal, urges him to mitigate the short implementation time scale by shadow operating the scheme for a 6 month period and introducing a phased approach to living fines by allowing an extended payment period for the first year of operation. Agree with the need to effectively deter drivers of vehicles that do not meet the necessary standards, but wish to highlight the importance of avoiding imposing a significant charge on drivers who haven't previously been made aware of the scheme. Believe that these two modifications to the proposal would better achieve both of these aims.	See consideration – 4.05.  Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006. Information on proposed vehicle exemptions would be set out in the Order and would be subject to public consultation. This would provide operators with details of the scheme proposals. Should the Mayor then confirm the Order, there would be an intensive operator information campaign in advance of the LEZ going live early in 2008.  The proposed LEZ would aim to reduce the harmful emissions from older diesel-engined vehicles. The health and air quality benefits of the LEZ would be eroded if there was a shadow operation used at the start of the scheme, as compliance levels would be expected to be significantly lower during that period.

No.	Sub theme	Respondent	Representation	TfL response
				<p>TfL would provide details of the payment system for the LEZ at the time of consultation on a Scheme Order, should the Mayor publish the Strategy Revisions.</p> <p>To take account of the short implementation time scale TfL intends a staged implementation timetable along the lines proposed. From early 2008 the LEZ would apply to the heaviest HGVs over 12 tonnes. From mid 2008 it would be extended to all HGVs, buses and coaches. Heavier LGVs would have until 2010 to comply with the proposed emission standards.</p>
4.07	Proposal is premature	London Borough of Islington	Operate some very specialised equipment that at present may take between 6 and 8 months from time of ordering to PDI and delivery. TfL have provided information that the period between final decision post consultation and implementation of the LEZ is likely to be as little as nine months. This simply does not leave any window for getting new vehicles in, a staggered replacement programme to prevent cost spikes and does not account for the increased demand on new vehicles that manufacturers may not be able to meet.	Should the Mayor confirm the Strategy Revisions and TfL make a LEZ Scheme Order the earliest that order could be confirmed would be spring 2007. The proposed vehicle emission standard for 2008 is Euro III for PM <sub>10</sub> . Euro III vehicles have been manufactured since 2000, and older vehicles can be modified to meet the standard. Modelling suggests that only a third of HGVs and some 40 per cent of coaches would need take any action to be compliant with the proposed standard in 2008. TfL does not consider that the introduction of the LEZ in 2008 would need to be delayed, and would urge operators to consider the possible implementation of the LEZ when developing and reviewing their fleet management plans.
4.08	Proposal is premature	Pickfords	Once the LEZ scheme is confirmed, businesses will have no more than a year to make their fleets compliant. This is unfair to London businesses.	See consideration – 4.07.
4.09	Proposal is premature	Association of International	The timing of the scheme will require many companies to change vehicles prematurely	See consideration – 4.07.

No.	Sub theme	Respondent	Representation	TfL response
		Courier and Express Services	and at considerable cost, to meet the requirements of the proposed Zone. Such a scheme would have been financially more prudent if the introduction had matched the natural phasing out of vehicles.	The intention of the LEZ is to bring forward air quality improvements that would otherwise happen through the natural vehicle replacement cycle.
4.10	Proposal is premature	British Vehicle Rental and Leasing Association (BVRLA)	Based on the current consultation timescales we would expect TfL to be able to announce their draft scheme order by the end of the year at the earliest which would have the normal consultation period. This therefore leaves industry less than one year to prepare for a 2008 introduction which is wholly unacceptable to us. Propose therefore that TfL introduce the scheme during 2008 starting with the heaviest vehicles first and adopt a light touch enforcement approach for the first few months of the scheme. A light touch approach is quite often used for new enforcement regimes as TfL is well aware and seems a reasonable approach to take given the uniqueness of the scheme. This should therefore give TfL and industry ample transitional time to be able to adapt to the scheme.	<p>See consideration – 4.07.</p> <p>TfL intends a staged implementation timetable along the lines proposed. From early 2008 the LEZ would apply to the heaviest HGVs over 12 tonnes. From mid 2008 it would be extended to all HGVs, buses and coaches. Heavier LGVs would have until 2010 to comply with the proposed emission standards.</p> <p>The proposed LEZ would aim to reduce the harmful emissions from older diesel-engined vehicles. The health and air quality benefits of the LEZ would be eroded if there was a light touch enforcement approach used at the start of the scheme.</p>
4.11	Proposal is premature	Confederation of Passenger Transport UK	Suggest postponement of two years based on current Euro requirements as the minimum period to allow the industry time to comply without huge financial burdens. This would enable a better understanding of the inclusion of NO <sub>x</sub> into the Euro IV standards and a longer lead in time for operators to plan. It would also give operators a more realistic	See considerations – 4.07 and 4.10.

No.	Sub theme	Respondent	Representation	TfL response
			time scale to phase out non compliant vehicles voluntarily.	
4.12	Proposal is premature	Johnsons Coach Travel	Concerned that the speed of the introduction of the LEZ will mean expense estimated at about £5000 per vehicle to fit particulate traps and 50% of our fleet cannot be modified.	<p>See considerations – 4.07 and 4.10.</p> <p>TfL is carefully considering issues relating to the availability of pollution abatement equipment for different vehicle types, including older vehicles.</p> <p>The start of the scheme for coaches buses and lighter HGVs is July 2008 rather than January 2008 to allow more time for pollution abatement solutions to be developed and fitted to these vehicles.</p> <p>TfL recognises that pollution abatement solutions are not as readily available yet for some vehicle types as they are for heavier HGVs. For this reason the proposed start of the scheme for buses, coaches and lighter HGVs is July 2008 rather than January 2008. This will allow operators of these vehicles more time to adjust their fleets and to work with engine and pollution abatement equipment manufacturers to develop solutions for their fleets.</p>
4.13	Proposal is premature	Royal Borough of Kensington and Chelsea	Would like to recommend that TfL consider carrying out a cost benefit analysis of introducing the LEZ in 2010 (with Euro IV standards), instead of in 2008. Only a slight improvement in air quality is predicted with the 2008 scheme. Removing the requirement to meet Euro III standards by 2008 may result in operators purchasing vehicles which comply with Euro IV standards earlier than they would have otherwise.	The scheme as proposed for 2008 would deliver significant air quality and consequently health benefits. The area exceeding the daily PM <sub>10</sub> limit would reduce by around 8 per cent. The 2008 proposal would not only allow newer vehicles to comply with the standards, but would enable compliance for older vehicles through vehicle modification. TfL therefore believes that introducing the LEZ in 2008, with the extension of the standard to Euro IV for PM <sub>10</sub> from 2012 rather than 2010 would result in significant health

No.	Sub theme	Respondent	Representation	TfL response
				and air quality benefits whilst also being reasonable to operators.
4.14	Proposal commences too late	London Forum of Amenity and Civic Societies	The LEZ is the most important component in the Mayor's Strategy for improving air quality. It is a matter of regret, therefore, that things have not moved more rapidly since discussions began in 2001.	<p>The Mayor's Transport Strategy includes a number of initiatives to, such as the Central London Congestion Charge, and to improve and encourage the use of public transport and other alternatives to private cars.</p> <p>The LEZ would be a significant administrative undertaking which would also have major implications for vehicle operators across the UK and beyond. It is therefore vital that the proposals are properly considered to ensure that they deliver the maximum benefits whilst not imposing undue burdens on operators. Since 2001, a large amount of work has been undertaken on the feasibility of implementing a LEZ in London, including the publication in 2003 of a detailed feasibility study and in 2005 a review of that feasibility study.</p> <p>In June 2005, the Mayor formally delegated to TfL responsibility for preparing and consulting upon revisions to his Transport and Air Quality Strategies, to include a revised proposal for a London LEZ which is a legal requirement. This public and stakeholder consultation ran from January 2006 until April 2006. Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006, which is also a legal requirement. The earliest any order could be confirmed would be spring 2007. Implementation of the LEZ would involve a considerable amount of publicity, technical and infrastructure work, and the earliest the LEZ could</p>

No.	Sub theme	Respondent	Representation	TfL response
				commence would be early 2008.
4.15	Confused over introduction dates	London Borough of Hammersmith and Fulham	The likely timeframe for the LEZ's introduction via the Scheme Order needs to be clarified.	Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006, which is a legal requirement. The earliest any Order could be confirmed would be spring 2007. Implementation of the LEZ would involve a considerable amount of publicity, technical and infrastructure work, and the earliest the LEZ could commence would be early 2008.
4.16	Confused over introduction dates	DJ Coaches	Needs clearer understanding and explanation on the new LEZ. Understanding is that from October 2006 only Euro III compliant vehicles can operate and travel inside the M25	<p>From early 2008, TfL proposes that the LEZ standard would be Euro III for PM<sub>10</sub> for HGVs over 12 tonnes. This would be extended to all HGVs, buses and coaches from mid 2008. From 2010, heavier LGVs would come within the scope of the LEZ. From 2012, the standard for HGVs, buses and coaches would become Euro IV for PM<sub>10</sub>. The heaviest LGVs would have until 2010 to comply with the proposed emission standards.</p> <p>The proposed LEZ will only operate within Greater London. TfL has no powers over roads outside Greater London and motorways within Greater London are maintained by the Highways Agency. TfL requires the consent of the Secretary of State to implement a LEZ on motorways within Greater London. TfL is not recommending that the M25 be included in the LEZ as it is an appropriate diversionary route for vehicles to use in order to avoid driving within Greater London.</p>
4.17	LEZ should be extended post 2015	City of Westminster	Supports TfL's proposed future reviews of emission standards with a view to including other pollutants in the LEZ beyond 2015.	TfL notes the support. The actual emission standard in place would remain subject to review, and could be broadened to include a standard for pollutants other than PM <sub>10</sub> beyond 2012. This would be determined in

No.	Sub theme	Respondent	Representation	TfL response
				light of the scheme's performance, and what national and EU air quality objectives were in place at the time.
4.18	LEZ should be extended post 2015	London Borough of Richmond upon Thames	It is assumed from a national perspective that all HGV's will have to comply with emissions standards from 2015, and as a result the charging mechanism should be revoked at that time, as it will no longer be required.	See consideration – 4.17.
4.19	Other timetable issues	London Borough of Greenwich	Focus on the proposed 2008 standard should not compromise the achievement of the proposed 2010 standard, which we feel should take priority.	See consideration – 4.17.
4.20	Other timetable issues	British Association of Removers	The professional removers industry faces a considerable amount of unfair competition by cowboy operators, usually using light vehicles. Starting the scheme at 7.5 tonnes threshold, allowing lighter vehicles a longer lead in period, will only serve to aggravate the situation even more, despite the fact that the professionals also need to use lighter vehicles from time to time.	TfL considers it necessary to stagger the introduction of the LEZ in 2008 so that more time is available for smaller HGV operators, buses and coaches to make their vehicles compliant. This is necessary because the pollution abatement equipment market for such vehicles is less well delivered compared with heavy HGVs. TfL proposes that the threshold for vehicles that are within the scope of the LEZ from early 2008 should be 12 tonnes rather than 7.5 tonnes, as this is better aligned with European vehicles definitions, which are proposed to be used for categorising vehicle types for the LEZ. TfL does not consider that the short delay before all HGVs come within the scope of the LEZ would give operators of smaller HGVs any significant commercial advantage.
4.21	Other timetable issues	Tower Hamlets Primary Care Trust	Given the health benefits of the LEZ (core) option, would urge the Mayor and TfL to implement the greatest emission restrictions possible (i.e. core plus NO <sub>x</sub> and LGVs) in as rapid a time frame as is practicable.	TfL acknowledges the urgency in the need to take action to improve air quality in London. However, the earliest the LEZ could be implemented would be early 2008. This date takes into account the time required to complete the legal processes, including consultation on a Scheme Order, as well as the time to put in place the

No.	Sub theme	Respondent	Representation	TfL response
				required business systems and processes to publicise standards, and for vehicle operators to implement the necessary changes to their vehicle fleets.

## THEME 5 VEHICLES TO BE INCLUDED

No.	Sub theme	Respondent	Representation	TfL Response
5.01	HGVs above 3.5 tonnes	Eminox Ltd	The focus of the LEZ on basis of impact and practicality must be on heavy duty diesel vehicles. Even though manufacturers of diesel vehicles have made great progress to reduce emissions, the inherent longevity of these vehicles means that the problems of pollution from older vehicles will remain for some years.	The LEZ seeks to move London closer to achieving its air quality objectives for 2010 by encouraging the upgrade or replacement of the most polluting diesel-engined vehicles to at least Euro III standard for PM <sub>10</sub> by 2008.
5.02	HGVs above 3.5 tonnes	National Express Limited	Concerned that by only targeting HGV's in the LEZ this will not only mean that air quality targets in London are not achieved but that this could create perverse incentives.	<p>See consideration – 5.01.</p> <p>The LEZ would seek to move London closer to achieving its air quality objectives and thereby improve the health and quality of life of Londoners by deterring the most polluting diesel-engined vehicles from the Greater London area. From 2008 the LEZ would target HGVs, buses and coaches based on their emission standards.</p> <p>The LEZ should not be viewed in isolation – rather, it complements other initiatives contained in the Mayor's Transport and Air Quality Strategies, each of which focus on reducing emissions from particular road transport sources in the most cost effective way. This suite of initiatives will generate significant improvements in the health of people who live and work in Greater London through improving air quality</p>

No.	Sub theme	Respondent	Representation	TfL Response
5.03	Do not include coaches/ buses	Confederation of Passenger Transport UK	<p>A report for DEFRA by Cambridge Environmental Research Consultants Ltd (CERC) based on evidence from 23 receptor sites and apportioned using the ADMS-urban model, confirms that buses and coaches are responsible for between 2 and 14% of NO<sub>x</sub> (2005) at the various sites, compared to 9 - 38% for cars. Even at the central London sites where buses and coaches are most dominant, their combined contribution to NO<sub>x</sub> emissions (10 - 14%) is exceeded by those of cars (12 -29%) and HGVs (13 - 28%). Buses and coaches also account for the smallest proportion of road vehicles for PM<sub>10</sub> emissions, ranging from 0.1 - 0.3% in outer London to 0.7 - 2.1% at central London sites in 2004. This compares with 2.3 - 8.6% for cars, up to 11.5% for taxis and 1.7 - 9% for HGVs. By demonstrating the low levels of the combined emissions of buses and coaches taken together, the CERC study confirms, even if it does not quantify, that the contribution made by coaches alone must be very small indeed.</p>	<p>Buses and coaches emit more PM<sub>10</sub> per vehicle km at average London speeds in Greater London than any other vehicle, except HGVs. Furthermore, the coach fleet also contains more of the most polluting Euro 0 vehicles (19 per cent) and Euro I vehicles (19 per cent) than the HGV, LGV or car fleet. Therefore, even taking into account the overall lower percentage of emissions relative to all other vehicle types, it is appropriate to target buses and coaches in the LEZ because the aim of the LEZ is to discourage the most polluting vehicles from driving within Greater London and thereby achieving reductions in the most harmful road transport generated emissions in London.</p> <p>In addition, the GLA Group has led by example by ensuring that all London buses under contract to TfL met a minimum of Euro II emission standards for all pollutants by the end of 2005. Through the fitting of particulate traps on all Euro II and Euro III buses, the fleet also met a minimum of Euro IV emission standards for PM<sub>10</sub> by the end of 2005.</p>

No.	Sub theme	Respondent	Representation	TfL Response
5.04	Do not include coaches/ buses	National Express Limited	When looking to apply the “polluter pays” principle to emissions from road transport, the most sensible metric relates to the emissions on a per passenger kilometre or per ton kilometre basis. Due to high passenger loadings coaches are significantly better performing than cars on a per passenger basis.	<p>The LEZ seeks to move London closer to achieving its air quality objectives for 2010 by encouraging the upgrade or replacement of the most polluting diesel-engined vehicles to at least Euro III for PM<sub>10</sub> standard by 2008. TfL is targeting HGVs, buses and coaches because these are, individually, the most polluting vehicles on the road.</p> <p>Newer vehicles have been manufactured to increasingly stricter Euro emission standards since 1990 which have reduced the amounts of carbon monoxide, hydrocarbons, and PM<sub>10</sub> that are emitted from vehicle engines. The LEZ would target only the oldest, most polluting diesel-engined vehicles, including older coaches, to encourage the upgrade or replacement of these vehicles to comply with the proposed emission standards and thereby improve air quality in London. Modelling carried out by TfL suggests that well over half the coach fleet will be compliant with the LEZ standards in 2008. TfL will monitor any impacts that the proposed LEZ has on displacement of passengers from buses and coaches to cars, especially in the school transport sector.</p> <p>The Mayor’s Transport Strategy includes a number of initiatives to discourage car usage, such as the Central London Congestion Charge, and to improve and encourage the use of public transport and other alternatives to private cars.</p>

No.	Sub theme	Respondent	Representation	TfL Response
5.05	Do not include coaches/ buses	Heyfordian Travel Limited	Although it could be broadly accepted that HGVs and coaches account for greater pollution per mile travelled, it ignores the fact that coaches are the lowest polluter if taken as mile per vehicle occupant. Coaches are used less intensively than HGVs. The life expectancy of a coach is between 15 to 20 years.	See consideration – 5.04.
5.06	Do not include coaches/ buses	Golden Boy Coaches	Although it could be broadly accepted that HGVs and coaches account for greater pollution per mile travelled, it ignores the fact that coaches are the lowest polluter if taken as mile per vehicle occupant. Coaches are used less intensively than HGVs. The life expectancy of a coach is between 15 to 20 years. As a result there will be a higher proportion of coaches will be affected by the LEZ.	See consideration – 5.04.
5.07	Do not include coaches/ buses	National Express Limited	Encouraging greater use of coach as an alternative to private cars has a positive impact on reducing impacts from transport. The LEZ should apply to LGVs and private cars in order to avoid perverse incentives.	Within the Mayor's Transport Strategy there are initiatives to improve and encourage the use public transport and alternatives to private cars, such as the Congestion Charge. Furthermore, the proposed LEZ seeks to improve air quality in London by encouraging the upgrade or replacement of the oldest, most polluting heavy diesel-engined vehicles. It does not seek to discourage the use of coaches but rather to ensure that all coaches driving within London reach a minimum of Euro III emission standards for PM <sub>10</sub> by 2008.
5.08	Do not include coaches/	Johnsons Coach Travel	Believe coaches are a soft target but this ignores that using a coach takes at least 20 cars off the road which already impacts on air	See consideration – 5.07.

No.	Sub theme	Respondent	Representation	TfL Response
5.09	buses LGVs	London Borough of Croydon	quality. Supports the principle of the LEZ being extended to cover LGVs over ten years old if it is demonstrated that it would be cost-effective and proportionate.	<p>TfL has considered both the costs to operators and the projected improvements in air quality of including LGVs in the LEZ. On the basis of this analysis TfL recommends that heavier LGVs be included in the LEZ from 2010. This takes into account the fact that the market for the retrofitting of pollution abatement equipment for smaller and lighter diesel vehicles is less well developed than that for larger, heavier vehicles, such as HGVs, buses and coaches.</p> <p>So-called 'car-derived vans' will be excluded at this stage, as TfL judges that it would be unfair to include such vehicles and not the cars they are derived from and because of the practicalities of identifying and enforcing against such vehicles. TfL considers that minibuses should be included within the LEZ at the same time as the most-polluting LGVs. Minibuses are the passenger equivalent of heavier LGVs, they use very similar chassis and engines to larger LGVs, and have similar emissions levels, and there are no technical reasons to exclude them from the scheme.</p> <p>If the Mayor decides to publish the revisions to his Transport and Air Quality Strategies, TfL will undertake a further economic assessment which will be made available to stakeholders and the public when TfL consults on the detail of the proposal.</p>
5.10	LGVs	London Borough of Brent	Support the inclusion of LGVs in the scheme from 2010 but have concerns about the potential socio-economic impacts particularly on small businesses and considered as part	See consideration – 5.09.

No.	Sub theme	Respondent	Representation	TfL Response
			of the Strategic Environmental Assessment of the entire scheme.	
5.11	LGVs	London Living Streets	Support the extension to LGVs from 2010.	See consideration – 5.09.
5.12	LGVs	London Borough of Hillingdon	As LGVs are also a source of pollutant emissions there is support for the inclusion of LGVs from 2010. The case for this, however, would need to be robust and any proposals would need to take into account the social/economic impacts of such a measure. However this option should only be taken forward, if the desired success is achieved with the proposed measures for HGVs.	See consideration – 5.09.
5.13	LGVs	Transport 2000	Support the proposal to extend the LEZ regulations to LGVs from 2010.	See consideration – 5.09.
5.14	LGVs	London Borough of Tower Hamlets	The phased extension of the scheme to LGV's will also help further in working towards meeting the air quality objectives within Tower Hamlets.	See consideration – 5.09.
5.15	LGVs	London Borough of Hounslow	The impact on PM <sub>10</sub> exceedance areas of the LGV and NO <sub>x</sub> options are not included for 2010. The benefit is unlikely to be large, but should be included. Support the inclusion of LGVs from 2010 – subject to the findings of further studies being carried out by TfL showing that this element of the LEZ scheme would not have adverse social/economic impacts.	See consideration – 5.09.
5.16	LGVs	City of Westminster	Welcome proposed further consultation on the application of emissions standards from 2010 for LGVs (vans), and recognise that, despite the issues that this may raise,	See consideration – 5.09.

No.	Sub theme	Respondent	Representation	TfL Response
			implementation of this is essential if emissions are to be reduced significantly towards meeting UK air quality objectives. Note that for LGVs, TfL has proposed an age-based approach (with ten years as the age-limit), which is welcome.	
5.17	LGVs	London Borough of Ealing	Would encourage TfL to include LGVs as part of the scheme at the earliest opportunity, subject to costs to small businesses not being too burdensome. Feels that since the scheme would already be in place, then the added health benefits resulting from this measure would outweigh the additional costs their introduction would incur.	See consideration – 5.09.
5.18	LGVs	Surrey County Council	Would appreciate further consultation, prior to the implementation of any proposal to extend the LEZ scheme to include LGVs	See consideration – 5.09.
5.19	LGVs	London Borough of Hammersmith and Fulham	The inclusion of LGVs in the LEZ scheme from 2010 is supported – subject to the findings of further studies being carried out by TfL showing that this element of the LEZ scheme would bring positive health benefits without causing adverse social/economic impacts. Given that the HGV-based LEZ scheme is due for introduction in 2008, the decision on whether or not LGVs are to be phased in by 2010 also needs to be made by this stage to allow fleet managers to make well informed decisions on LGV leases or purchases.	See consideration – 5.09.
5.20	LGVs	London Forum of Amenity and	Do not oppose the suggestion that LEZ charges should also apply to LGVs more than	See consideration – 5.09.

No.	Sub theme	Respondent	Representation	TfL Response
		Civic Societies	ten years old. However, we note that this will be subject to the outcome of further investigations, and will not in any case apply before 2010	
5.21	LGVs	London Cycling Campaign	Support the extension to LGVs from 2010.	See consideration – 5.09.
5.22	LGVs	NSCA (National Society for Clean Air)	The core scheme addresses only heavy vehicles, although it is possible that LGVs may be addressed in the future. Individually LGVs make only a small contribution to emissions but their relatively large numbers make this sector an important one. Supports inclusion of this sector in the scheme, though it is appreciated that there are socio-economic factors to consider. It is important to ensure that unfair burdens are not placed on vulnerable sectors of society.	See consideration – 5.09.
5.23	LGVs	Eminox Ltd	It is appropriate that the range of vehicles should be expanded to include Light Commercial Vehicles (or LGVs) and other vehicles as required to meet air quality limit values.	See consideration – 5.09.
5.24	LGVs	Energy Saving Trust	Support feasibility work on including LGVs as soon as possible.	See consideration – 5.09.
5.25	LGVs	Masterlease	For lighter commercial vehicles, the introduction of such vehicles into the LEZ in 2010 seems acceptable. The replacement programme for most operators is tending towards a 4 year period and as Euro IV vehicles become more readily available, this will fall within the timescale envisaged.	See consideration – 5.09.

No.	Sub theme	Respondent	Representation	TfL Response
5.26	LGVs	Asthma UK	Given the effect of both PM <sub>10</sub> and NO <sub>2</sub> emissions on asthma, we would like to see that the proposals for the LEZ to include the additional option of Euro IV for NO <sub>x</sub> in 2010, and to extend the LEZ to LGVs are achieved.	See consideration – 5.09.
5.27	LGVs	London Sustainability Exchange	Supports the application of the LEZ to lorries, buses, coaches and vans	See consideration – 5.09.
5.28	LGVs	London Borough of Merton	Concerned that the proposal is targeting only a very small percentage of the fleet in operation in London (excluding other vehicles, that despite being less polluting represent a much higher share of the journeys into central London e.g. white van etc).	See consideration – 5.09.
5.29	LGVs	Central London Partnership	The consultation documents show there is an improvement in air quality by including LGVs in the scheme. However, there are no clear estimates of the costs and knock on effects this will have on businesses. As central London has a high level of LGV activity need this information and further time to consider their introduction.	See consideration – 5.09.
5.30	LGVs	Liquefied Petroleum Gas Association	Propose LGVs are included at the outset. This would also be consistent with DfT policy as reflected in their current negotiations with the EC on grants for retrofitting all commercial vehicles with air quality improvements.	See consideration – 5.09.
5.31	LGVs	London Borough of Richmond upon Thames	Note the comments provided in paragraph 4G.171 on page 13 of the consultation document and agree that further assessment should be undertaken in relation to the	See consideration – 5.09.

No.	Sub theme	Respondent	Representation	TfL Response
			inclusion of LGVs into the LEZ.	
5.32	LGVs	London Borough of Southwark	Concerned that two vehicle types are omitted from the proposals at this stage, namely taxis and light goods vans. Southwark Council would support the application to light goods vans being brought forward to an earlier date than phase two of the implementation of the LEZ, on the understanding that 'greening of Taxis' is being addressed through their licensing process within a short timescale.	See consideration – 5.09.
5.33	LGVs	London Fire and Emergency Planning Authority	A concern is that TfL will increase the scope of the LEZ to apply to light vans or even cars by 2010. The Brigade is replacing the car fleet in 2006/2007 and these will be new technology, possibly alternative fuel vehicles. These cars will be in the fleet for five years before being replaced. The light van fleet has just been replaced with Euro IV diesel powered vehicles and these will be on the fleet for the next five to seven years.	See consideration – 5.09.
5.34	LGVs	Federation of British Historic Vehicle Clubs	Are grateful that there are no plans at present to apply the LEZ regulations to cars, motorcycles or light commercial vehicles, although the latter will be kept under review.	The LEZ is designed to discourage the use of the most polluting vehicles within Greater London thereby maximising improvements in air quality. The proposed LEZ would target the worst polluting HGVs, buses and coaches, based on their emission standards, and heavier LGVs. In this way the LEZ would accelerate the introduction of cleaner vehicles and reduce the numbers of more polluting vehicles driving within the Greater London area. See above for consideration of the inclusion of heavier LGVs in the proposed LEZ. Consideration of the issues relating to the inclusion of

No.	Sub theme	Respondent	Representation	TfL Response
5.35	LGVs	Federation of Small Business	<p>The FSB strongly opposes the option to include LGVs from 2010 as our survey found that 41% of respondents would face significantly increased costs if vans were included in the LEZ scheme from 2010. Believe that TfL have not adequately thought out their proposal for LGVs. At the London Assembly's Environment Committee hearing, TfL were unclear whether their proposal covered all LGVs or merely those over 3.5 tonnes. Since it does not appear possible for the DVLA to differentiate between car-derived vans and 3.5 tonne vehicles, it would be wrong to include the car-derived vans without also including diesel-engine cars which have the same specification as the car-derived vans. The FSB believes that it would be unfair to target LGVs in the LEZ and that the proposal should not be continued.</p>	<p>cars is presented below.</p> <p>TfL has carefully considered the merit and potential disadvantage to operators of including LGVs in the LEZ and has concluded that in order to maximise the potential health and air quality benefits of the proposed LEZ, the scheme should include heavier LGVs.</p> <p>TfL's modelling indicates that heavier LGVs are generally more polluting per kilometre driven than cars, though less so than HGVs and marginally less so than buses and coaches. By 2010 it is forecast that they will be responsible for 24 per cent of road transport emissions of PM<sub>10</sub> within London. This is a considerable percentage of PM<sub>10</sub> emissions relative to the other vehicle types and is due to the relatively large size of the LGV fleet.</p> <p>TfL estimates from the modelling undertaken on the LEZ proposal that including LGVs would increase the monetised health benefits of the core proposal by around £25m between 2010 and 2015.</p> <p>It should be noted that goods vehicles over 3.5 tonnes are classed as HGVs.</p>
5.36	LGVs	Road Haulage Association	<p>The inclusion of Light Goods Vehicles within the proposed scheme from 2010 is an area that, from what little information has been forthcoming from TfL, would lead to economic damage to the business sector within Greater London. What is also of concern is that the possible inclusion of LGV's is not shown as having been budgeted for in any of the figures</p>	<p>See consideration – 5.35.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			given within consultation documentation.	
5.37	LGVs	London Borough of Barnet	The inclusion of LGVs in the proposed scheme would have a disproportionately severe impact on small and medium sized businesses.	See consideration – 5.35.
5.38	LGVs	London Borough of Enfield	Oppose extending the LEZ to include LGVs. There is little merit and much potential disadvantage in the inclusion of LGVs in the restrictions in 2010.	See consideration – 5.35.
5.39	LGVs	Freight Transport Association	Including vans on a rolling 10-year age basis would seem to have little impact on large fleet operators who typically replace vans every 5 years or so. Those that do operate older vans are spread across the operating sectors, with higher proportions (as per the FTA's survey of members) tending to appear in the local/public authorities category.	The Mayor's Air Quality Strategy does already require boroughs to improve air quality at the local level, including pollution hotspots, through the Local Air Quality Management system. The Mayor is also encouraging boroughs to assess and improve their own vehicles, including LGVs and minibuses, and a number of boroughs have moved to incorporate alternative fuelled vehicles into their fleet, particularly less heavy vehicles such as LGVs.
5.40	LGVs	The Society of Motor Manufacturers and Traders Ltd	If LGVs are included from 2010, a ten-year criteria should be applied, though this will have a greater effect on private van and minibus operators, including small businesses and schools.	TfL has carefully considered the merit and potential disadvantage to operators of including LGVs in the LEZ and has concluded that in order to maximise the potential health and air quality benefits of the proposed LEZ, the scheme should include heavier LGVs from 2010.

No.	Sub theme	Respondent	Representation	TfL Response
5.41	LGVs	North East London Strategic Health Authority	<p>The NE London sector comprises some of the most deprived communities in London and in the UK. The local employment market is heavily dependant upon the large number of small and medium sized enterprises (SMEs). Many of these businesses operate on the margins of profitability and as such are likely to be disproportionately affected by the cost of compliance if the proposed timetable is implemented. Understand that the average life of LGVs used by SMEs is approximately six years. Assuming the scheme were to be formally announced in Spring 2007, SMEs would generally be in a position to have replaced half their fleet to compliant vehicles by 2010. SMEs would then still need to meet high retro-fit costs on their remaining fleet. The Mayor should consider phasing in compliance requirements over a longer period of time, perhaps agreeing a sliding percentage of vehicles to be complaint over a further three years, so as not to de-stabilise local employment.</p>	<p>TfL has considered the merit and potential disadvantage to operators of including LGVs in the LEZ and has concluded that in order to maximise the potential air quality and health benefits of the proposed LEZ, the scheme should include heavier LGVs.</p> <p>Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006.</p>

No.	Sub theme	Respondent	Representation	TfL Response
5.42	LGVs	City of Westminster	Support the case for further consultation being carried out about potential inclusion of LGVs from 2010, but consider that this consultation needs to take place sooner than seems to be intended. Early consultation is needed to enable the maximum lead-time for businesses to prepare for the scheme in the event that a decision is taken to include them in the LEZ, and to ensure that they will be ready for inclusion in the scheme by 2010. If this consultation were brought forward to early 2007, it would ensure that van operators should have enough time to plan for the transition, and manufacturers of pollutant reduction equipment would have more time to carry out development and testing work. Otherwise, it seems likely that the 2010 date for LGVs could not be met, and TfL modelling of air quality improvements would prove over-optimistic. Also recognise that there are some difficulties of definition of LGVs, at the boundaries, that need to be resolved at an early date to enable consultation to proceed.	See considerations – 5.35 and 5.41.
5.43	LGVs	Musgrave Budgens - Londis	Including vans needs much more investigation. The impact upon small businesses would be huge.	See considerations – 5.35 and 5.41.  Should the Mayor confirm the revisions to his Transport and Air Quality Strategies, TfL would undertake a further public and stakeholder consultation in late 2006 on detailed proposed for a LEZ contained in a Scheme Order. An economic impact assessment of the LEZ would be undertaken to inform this consultation on a Scheme Order.

No.	Sub theme	Respondent	Representation	TfL Response
5.44	LGVs	CBI London	The inclusion of LGVs has not been properly explored in the consultation and needs further investigation. Generally, larger firms do not keep vans / LGVs for more than 10 years. However, including LGVs could have a substantial impact on smaller firms which needs to be investigated more fully - the Consultation does not have sufficient details. What is worrying is that fundamental issues such as definitions remain unclear –eg - whether a car-derived van is an LGV. We note from the consultation document that TfL is undertaking further analysis into the implications of including LGVs. Consulting on an issue that is essentially not fully considered and defined makes it very difficult to make an assessment of the proposal.	See considerations – 5.35 and 5.41.
5.45	LGVs	TM Logistics	Including vans needs much more investigation. The impact upon small businesses would be huge.	See considerations – 5.35 and 5.41.
5.46	LGVs	AAH Pharmaceuticals Limited	Including vans needs much more investigation. The impact upon small businesses would be huge.	See considerations – 5.35 and 5.41.
5.47	LGVs	Community Transport Association	If the scope of the LEZ is widened to include minibuses, TfL will need to consider an information system for small unfunded organisations such as faith and scout groups.	TfL would run a comprehensive public information campaign in advance of heavier LGVs (including minibuses) coming within the scope of the LEZ in 2010. TfL would also make technical advice regarding which vehicles would be within the scope of the LEZ easily available.
5.48	Definition of LGVs needed	Federation of Small Business	TfL were unclear at the London Assembly environment committee hearing whether their proposal covered all LGVs or merely those	TfL has considered the merit and potential disadvantage to operators of including LGVs in the LEZ and has concluded that in order to maximise the

No.	Sub theme	Respondent	Representation	TfL Response
			over 3.5 tonnes. Since it does not appear possible for the DVLA to differentiate between car-derived vans and 3.5 tonne vehicles, it would be wrong to include the car-derived vans without also including diesel-engined cars which have the same specification as the car-derived vans.	potential health and air quality benefits of the proposed LEZ, the scheme should include heavier LGVs.  TfL does not intend including car-derived vans within the proposed LEZ at this stage.
5.49	Definition of LGVs needed	Association of London Government	The definition of LGVs needs to be tight enough to avoid for example, modifications that allow drivers to use loopholes to avoid payment. Many car derived vans are also used for private transport while companies will often use estate cars instead of vans. The inclusion of private car derived vans could result in a change to older, more polluting estate cars which would not be covered by the LEZ. Do not, therefore, consider that LGVs should be included within the LEZ without further analysis and consultation.	See consideration – 5.48.
5.50	Definition of LGVs needed	London Borough of Brent	A clear definition of LGV needs to be provided at the earliest opportunity, that is, the scheme should target the most polluting LGVs for inclusion and consider providing exemptions or reduced charges for less polluting LGVs. In any case the feasibility of including LGVs in the scheme needs to be further investigated.	See consideration – 5.48.
5.51	Definition of LGVs needed	London Borough of Hammersmith and Fulham	The issue of what types of vehicles are classified as LGVs should not be overlooked and TfL should carry out further investigation on how car-based vans might fit into the	See consideration – 5.48.

No.	Sub theme	Respondent	Representation	TfL Response
5.52	Definition of LGVs needed	London Borough of Lewisham	<p>scheme.</p> <p>There is a suggestion that the LEZ would be applied to vans but not to minibuses. Some small vans are car-derived and other larger vans are mechanically identical to minibuses. Smaller vans can be registered as private light goods. It is not clear whether any extension of the scheme to vans would artificially split this category. It can also be the case that car-derived vans are registered as goods vehicles and there is therefore the possibility that identical vehicles could be treated differently depending on how they were registered.</p>	TfL recommends that minibuses be included in the LEZ from 2010. This is because such vehicles share the same chassis, engine and emissions characteristics as heavier LGVs. Minibuses are the passenger carrying equivalent of heavier LGVs and as such there is no technical reason to exclude them from a scheme that includes heavier LGVs.
5.53	Definition of LGVs needed	CBI London	<p>The inclusion of LGVs has not been properly explored in the consultation and needs further investigation. Generally, larger firms do not keep vans / LGVs for more than 10 years. However, including LGVs could have a substantial impact on smaller firms which needs to be investigated more fully - the Consultation does not have sufficient details. What is worrying is that fundamental issues such as definitions remain unclear –eg - whether a car-derived van is an LGV. We note from the consultation document that TfL is undertaking further analysis into the implications of including LGVs. Consulting on an issue that is essentially not fully considered and defined makes it very difficult to make an assessment of the proposal.</p>	<p>See consideration – 5.48 and 5.52.</p> <p>Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006.</p>

No.	Sub theme	Respondent	Representation	TfL Response
5.54	Definition of LGVs needed	City of Westminster	Recognise that there are some difficulties of definition of LGVs, at the boundaries, that need to be resolved at an early date to enable consultation to proceed.	See considerations – 5.48 and 5.52.
5.55	Diesel-engined cars	City of Westminster	Recognise that the local air pollutant emissions from road transport that are most harmful to human health are from diesel engines. Whereas petrol is not an appropriate fuel for HGVs, buses and coaches, it is possible that an LEZ applied to diesel cars for domestic use might encourage some owners to switch to petrol cars, which would be undesirable because of its consequences of increasing the climate change gas CO <sub>2</sub> . Recognise that applying LEZ controls to private diesel cars would be impractical, given the complexity of administering and enforcing a scheme on such a scale in current circumstances. Therefore support TfL's proposal not to include domestic cars in the current proposal.	TfL notes the support for not including cars in the proposed LEZ. The Mayor is already delivering on incentives to discourage car use as well as other vehicles through the Central London Congestion Charging Scheme and Western Extension Zone by improving the accessibility and reliability of London's public transport and promoting walking and cycling.
5.56	Diesel-engined cars	The Society of Motor Manufacturers and Traders Ltd	Cars should not be included in the LEZ.	See consideration – 5.55

No.	Sub theme	Respondent	Representation	TfL Response
5.57	Diesel-engined cars	City of Westminster	Although support the case made in the TfL consultation, that diesel cars should not be subject to LEZ restrictions at this stage, they do contribute significantly to damaging air pollutants – 39% of road transport-related PM <sub>10</sub> by 2010, compared with 16% from HGVs. However, recognise that each vehicle emits far fewer grammes of PM <sub>10</sub> per km driven, and that the complexities of applying an LEZ to all cars, at this stage, are too much. Therefore suggest that TfL should consider a separate stream of activity to encourage car owners to achieve lower emissions from their cars. This could be done through guidance on a range of issues, from choice of vehicle to use of alternative transport, to driving techniques.	<p>The Mayor is already delivering on incentives to discourage car use as well as other vehicles through the Central London Congestion Charging Scheme and Western Extension by improving the accessibility and reliability of London's public transport and promoting walking and cycling.</p> <p>The Government is also currently undertaking a consultation on the Review of the Air Quality Strategy for England, Scotland and Wales and is seeking views on a number of additional policy measures, including a programme of incentives to phase out the most polluting cars, namely those built before Euro emission standards were enforced in 1992 and Euro I cars built until 1996.</p>
5.58	Diesel-engined cars	Road Haulage Association	It is stated that one of the primary contributors to pollution in London is road transport, accounting for approximately 47% of both NO <sub>x</sub> and PM <sub>10</sub> (based on information from the London Atmospheric Emissions Inventory 2002). However, this figure is for all forms of road transport, not just commercial vehicles, which TfL's own statistics show account for only 4% of traffic movements. Diesel-engined private cars are estimated to contribute around 39% of road transport-related PM <sub>10</sub> emissions in London in 2005, and nearly 32% of road transport-related NO <sub>x</sub> emissions, yet private cars are not to be included in the proposed London LEZ scheme. LEZ should	<p>TfL acknowledges that the combined kilometres driven by diesel-engined cars would contribute an estimated 39 per cent of PM<sub>10</sub> emissions in 2005. For this reason the inclusion of cars has been carefully considered.</p> <p>TfL considers that a number of other initiatives within the Mayor's Transport and Air Quality Strategies, such as Congestion Charging and improved public transport provision help to address the environmental impacts of car transport in London. TfL does not therefore recommend extending the LEZ proposals to cars at this time, although it will continue to monitor the impacts of wider initiatives on vehicle emissions in London and will keep relevant policies under review. TfL considers that this is consistent with paragraph</p>

No.	Sub theme	Respondent	Representation	TfL Response
			target all road users.	4G.168 and 4C.43 of the Transport and Air Quality Strategy Revisions.  In addition, TfL considers that at present the costs associated with administering and enforcing a scheme that included cars could be prohibitive at this stage.
5.59	Diesel-engined cars	London Borough of Lambeth	Consideration should also be given to progressively applying the LEZ to private diesel vehicles, as these account for some 39% of road transport-related PM <sub>10</sub> emissions and 32% of road transport-related NO <sub>x</sub> emissions. A progressively implemented scheme could avoid the need for mass retrofitting of abatement equipment, but would encourage the replacement of older vehicles at an early stage.	See consideration – 5.58.
5.60	Should include cars	Confederation of Passenger Transport UK	Road transport accounts for just 47% of all PM <sub>10</sub> and of that, bus and coach together accounts for just 2.1%. In the outer suburbs where older coaches are in wide use for various day-to-day activities, this figure is even lower. If road vehicles are to be targeted, aiming the LEZ at cars would have a greater effect.	See consideration – 5.58.
5.61	Should include cars	Pickfords	Since cars are not within the scope of the LEZ, the environmental benefits will be less than claimed.	See consideration – 5.58.

No.	Sub theme	Respondent	Representation	TfL Response
5.62	Should include cars	Road Haulage Association	A report put together for TfL estimated that private car trips carried out by central London residents amounted to between 50,000 – 60,000 a day (5% – 6.5% of total trips) and residents of Inner London made about one million trips a day. Traffic count data statistics for major roads in London show that private cars comprise over 80% of the total vehicle flow on major roads in London every day, which adds up to 11 million trips made daily in the capital by car or motorcycle, despite 40% of households in Greater London not having access to a car. (The national figure is 27%). Yet private cars are not to be considered as a type of vehicle that should be included within the proposed London LEZ.	See consideration – 5.58.
5.63	Should include cars	Association of International Courier and Express Services	The proposed scheme excludes ordinary cars from it and given that these vehicles constitute the biggest single environmentally damaging group it is not clear how this exclusion is compatible with delivering low emissions.	See consideration – 5.58.
5.64	Should include cars	Royal Mail Group plc	The proposed scheme unfairly targets just 6% of the London vehicle population. Cars make up 94% of London traffic but will not be included, despite being responsible for 39% of PM <sub>10</sub> emissions. Commercial vehicles over 3.5t are responsible for just 16% of road transport emissions of PM <sub>10</sub> . If a real improvement is sought by TfL, extending the proposed measures to include cars would be an obvious step and one which must be	See consideration – 5.58.

No.	Sub theme	Respondent	Representation	TfL Response
			considered.	
5.65	Should include cars	Cleanaway	The proposed scheme unfairly targets just 6% of the London vehicle population. Cars are not included, despite that fact that commercial vehicles over 3.5 tonnes are responsible for just 16% of emissions of PM <sub>10</sub> , whilst cars are responsible for 39%. Cars should be included.	See consideration – 5.58.
5.66	Should include cars	Transport 2000	Cars should also be covered by the LEZ and Transport 2000 would be likely to support proposals to effect this.	See consideration – 5.58.
5.67	Should include cars	Freight Transport Association	Clearly the scheme relies upon a clear perception of transparency and fairness - at present the exclusion of cars from the proposals is an issue of concern.	See consideration – 5.58.
5.68	Should include cars	London Cycling Campaign	For the longer term, urge consideration of the extension of the Mayor's proposals to passenger vehicles.	See consideration – 5.58.
5.69	Should include cars	London Living Streets	For the longer term, urge consideration of the extension of the Mayor's proposals to passenger vehicles.	See consideration – 5.58.
5.70	Should include cars	Constant Consultancy	Some of the most polluting vehicles in London are black cabs, minicabs, buses and old cars, which are not mentioned in the consultation.	See consideration – 5.58.
5.71	Should include cars	Masterlease	Heavier commercial vehicles do have higher emissions than cars per vehicle kilometre driven, but in proportion to the numbers involved, cars are responsible for around 40% of road transport emissions. It would therefore seem an appropriate course of action to include cars as part of the choice of	See consideration – 5.58.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>vehicles and have an approach that is consistent for all vehicles. The reduction in emission levels for cars would have a significant effect. Aware that the costs associated with this would be substantial, and that the opportunity for evasion is higher, as well as the costs for compliance being greater for those in greater economic need. However, TfL have already admitted that HGV operators are in the main already meeting the required standards so the impact of any actions undertaken will be minimal compared to that of any action enforced upon car drivers.</p>	
5.72	Should include cars	Musgrave Budgens - Londis	<p>The proposed scheme unfairly targets just 6% of the London vehicle population. The 94% consisting of cars will not be included despite the fact that as TfL clearly states in its consultation documents, commercial vehicles over 3.5tonnes are responsible for just 16% of road transport emissions of PM<sub>10</sub>, whilst cars create 39%! If TfL seeks real improvement, including cars is an obvious step and must be considered more fully.</p>	<p>See consideration – 5.58.</p> <p>Heavy duty diesel vehicles are the main source of PM<sub>10</sub> emissions. Therefore the LEZ is designed to discourage the use of the most individually polluting vehicles in Greater London by encouraging the upgrade or replacement of diesel-engined HGVs, buses and coaches to Euro III for PM<sub>10</sub> by 2008 and Euro IV for PM<sub>10</sub> by 2012, and the upgrade of heavier LGVs or vans by 2010.</p>
5.73	Should include cars	TM Logistics	<p>The proposed scheme unfairly targets just 6% of the London vehicle population - the 94% made up of cars will not be included despite the fact that, as is clearly stated in the TfL consultation documents, commercial vehicles over 3.5 tonnes are responsible for just 16% of road transport emissions of PM<sub>10</sub>, whilst cars create 39%! If a real improvement is</p>	<p>See consideration – 5.58.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			sought by TfL then including cars is an obvious step and must be considered more fully.	
5.74	Should include cars	AAH Pharmaceuticals Limited	The proposed scheme unfairly targets just 6% of the London vehicle population - the 94% made up of cars will not be included despite the fact that, as is clearly stated in the TfL consultation documents, commercial vehicles over 3.5 tonnes are responsible for just 16% of road transport emissions of PM <sub>10</sub> , whilst cars create 39%! If a real improvement is sought by TfL then including cars is an obvious step and must be considered more fully.	See consideration – 5.58.
5.75	Should include cars	Heyfordian Travel Limited	By TfL's own statistics, road transport accounts for just 47% of all particulates and of that, bus and coach together accounts for 2.1%. Other than in some high concentrated central London areas, this figure is even lower. There is therefore an argument that if road vehicles are to be targeted at all, aiming the LEZ at cars would have a greater effect.	See consideration – 5.58.
5.76	Should include cars	Golden Boy Coaches	By TfL's own statistics, road transport accounts for just 47% of all particulates and of that, bus and coach together accounts for 2.1%. Other than in some high concentrated central London areas, this figure is even lower. There is therefore an argument that if road vehicles are to be targeted at all, aiming the LEZ at cars would have a greater effect.	See consideration – 5.58..

No.	Sub theme	Respondent	Representation	TfL Response
5.77	Should include cars	Dudleys Coaches	By TfL's own statistics, road transport accounts for just 47% of all particulates and of that, bus and coach together accounts for 2.1%. Other than in some high concentrated central London areas, this figure is even lower. Therefore there is an argument that aiming the LEZ at cars would have a greater effect.	See consideration – 5.58.
5.78	Should include cars	National Express Limited	Encouraging greater use of coaches as an alternative to private cars has a positive impact on reducing impacts from transport. The LEZ should apply to LGVs and private cars in order to avoid perverse incentives.	See consideration – 5.58.
5.79	Should include cars	London Borough of Islington	Is concerned that the only reason for not including cars is for socio-economic reasons and therefore suggest instead levying a tax or restricting highly-polluting SUV's and sports cars with superchargers, etc.	See consideration – 5.58.
5.80	Should apply to all vehicles	Brewery Logistics Group	The LEZ should either apply to all vehicles (including cars) or none. Cars are far and away the largest number of vehicles operating in London (94%) and therefore create much more pollution overall than HGVs. Since most operators now reach Euro III, it is even more important that all vehicles, including cars, are included in the LEZ if we are really serious about reducing emissions.	See consideration – 5.58.  Heavy duty diesel vehicles are the main source of PM <sub>10</sub> emissions. Therefore the LEZ is designed to discourage the use of the most individually polluting vehicles in Greater London by encouraging the upgrade or replacement of diesel-engined HGVs, buses and coaches to Euro III for PM <sub>10</sub> by 2008 and Euro IV for PM <sub>10</sub> by 2012, and upgrade or replacement of heavier LGVs or vans by 2010.

No.	Sub theme	Respondent	Representation	TfL Response
5.81	Should apply to all vehicles	The Guild of British Coach Operators Ltd	Are concerned to see that any proposals create a level playing field. Whilst buses and coaches individually create more pollution than cars and light vans, what matters in terms of air quality is the total volume of pollution caused by road traffic. As TfL's figures show, cars and vans collectively are responsible for substantially more pollution than the bus/coach population, yet are not covered by the proposals. Indeed, considering the average number of passengers carried in each car as compared to each bus/coach, the pollution per passenger is dramatically higher for cars.	See consideration – 5.80.
5.82	Should apply to all vehicles	London First	Whilst other vehicle types not included in this scheme do not individually produce as much pollution as HGVs, buses and coaches, the mileage covered by them is considerable. Therefore, as improving air quality is the purpose of the scheme, all vehicles should fall within this scheme. This is especially important as the scheme fails to achieve EU targets for air quality in 2010.	See consideration – 5.80.
5.83	Should apply to all vehicles	Energy Saving Trust	In principle strongly support expanding the scheme to other vehicle types	See consideration – 5.80.
5.84	Should apply to all vehicles	London Retail Consortium	Commercial vehicles currently only represent 6% of London's vehicle population. Any initiatives (restrictive or incentive) should be applicable for all road going vehicles.	See consideration – 5.80.
5.85	Should apply to all vehicles	British Association of Removers	Any proposals for a London LEZ should apply to all modes of motorized vehicles, not just to commercial operators such as lorry and bus	See consideration – 5.80.

No.	Sub theme	Respondent	Representation	TfL Response
			operators.	
5.86	Should apply to all vehicles	The Kings Ferry Travel Group	The proposals do not create a level playing field, either within the bus/coach industry or between buses/coaches and other forms of road transport. In particular, by excluding cars and light vans from the proposals, they fail to deal with the single largest group of road vehicles contributing to pollution and poor air quality.	See consideration – 5.80.
5.87	Should apply to all vehicles	British Lung Foundation	Are in favour of reducing all air pollution in central London to the point where people with respiratory disease will be assisted in being able to live a normal life. Part of this should be ensuring that all buses are working to the lowest level of pollution in addition to lorries and cars.	See consideration – 5.80.
5.88	Should apply to all vehicles	Tellings Golden Miller Group Plc	If we are to have a LEZ, why not cover all vehicle types and not just those of industry. This would give a far better chance to reduce emission levels in real terms.	See consideration – 5.80.
5.89	Should apply to all vehicles	FirstGroup plc	It is only larger vehicles that will be subject to these standards, i.e. buses, coaches and goods vehicles. Car pollution is not being tackled, although light vans may be from 2010. Believe that this approach is disproportionate in that it singles out buses and lorries, even though these form a small proportion of the total vehicular traffic in Greater London. To single them out for pollution charging is not equitable. Even if such a charge was to be applied to all diesel-engined vehicles, the large numbers of vans,	See consideration – 5.80.

No.	Sub theme	Respondent	Representation	TfL Response
			cars and taxis powered by diesel engines contribute considerably more overall to airborne pollution and should also be subject to these proposed requirements.	
5.90	Should apply to all vehicles	London Assembly Environment Committee	The inclusion of other categories of vehicles will further assist London in working towards meeting the European objectives, and more importantly increase the number of lives saved or improved. Therefore would urge the Mayor to consider fully the viability of extending the scheme to include other vehicles.	See consideration – 5.80.
5.91	Should apply to all vehicles	London Borough of Tower Hamlets	HM Treasury's 2006 Budget identified that a small percentage of new cars are the most polluting – such as 4x4's and SUV's – and will thus be subject to higher vehicle excise duty. It is suggested that the Treasury's lead should be followed by the Mayor, with these vehicles also being made subject to LEZ charges.	The Chancellor announced in the 2006 Budget reforms to VED so that cars with higher carbon emissions would pay more and cars with lower carbon emissions would pay less. The LEZ focuses on emissions of PM <sub>10</sub> which is one of the pollutants most harmful to health and which the Mayor has a legal obligations to take steps to reduce.
5.92	Taxis	City of Westminster	The TfL LEZ consultation document proposes that taxis should not be included in the LEZ scheme – although at a previous stage it was envisaged that they would be part of the scheme. However it notes that they will be required to meet similar standards through the Mayor's 'Emissions Strategy for Licensed London Taxis'. Taxis are a substantial component of traffic in central London, so reductions in their emissions need to be achieved at a similar pace to that to be achieved through the LEZ for other vehicle	The Mayor's Taxi Emissions Strategy complements the LEZ and will require all black cabs operating in London to meet stringent emission standards. It is a phased approach, starting with the most polluting vehicles, and ending with all 20,000 taxis meeting Euro III emission standards for PM <sub>10</sub> by the end of June 2008. Euro III is the most stringent standard currently available for taxis, and this requirement has driven forward the market in innovative abatement technologies for taxis. The Mayor is working with TfL's Public Carriage Office and others to assess and demonstrate innovative cleaner taxi technologies and demonstrate their effect

No.	Sub theme	Respondent	Representation	TfL Response
			types.	<p>on London's streets.</p> <p>The Mayor's Taxi Emissions Strategy is administered and managed by the Public Carriage Office. Emissions standards for taxis are ensured through the licensing process. It is therefore appropriate that taxis are not covered by the LEZ</p>
5.93	Taxis	City of Westminster	<p>Recognise that considerable work has had to be done to develop and test equipment to enable each taxi type to meet the required standards. Understanding is that many of the difficulties and shortcomings experienced during this programme have now been resolved. It seems appropriate and equitable for these achievements to be recognised by including taxis as an explicit part of the LEZ scheme, rather than by continuing to treat them as a separate scheme. It should be possible to do this with the minimum of bureaucracy, managed by the Public Carriage Office (PCO). This should be referenced in the proposals sections of the alterations to the Mayor's Transport and Air Quality Strategies.</p>	See consideration – 5.92.
5.94	Taxis	Constant Consultancy	<p>Some of the most polluting vehicles in London are black cabs, minicabs, buses and old cars, which are not mentioned in the consultation.</p>	<p>See consideration – 5.92.</p> <p>The LEZ is designed to discourage the use of the most individually polluting vehicles within Greater London thereby maximising improvements in air quality. These are older HGVs, buses and coaches, as well as heavier LGVs.</p>

No.	Sub theme	Respondent	Representation	TfL Response
				TfL does not recommend extending the LEZ proposals to minicabs at this time, although it will continue to monitor the impacts of the wider initiatives on vehicle emissions in London and will keep relevant policies under review.
5.95	Taxis	MARSHopper Ltd	Why do the proposals not include non-low emission cars, taxis and vans? Why should the commercial operator again be penalised?	See consideration – 5.92.
5.96	Taxis	Southwark Council	Concerned that two vehicles types are omitted from the proposals at this stage, namely taxis and LGVs. Would support the application to LGVs being brought forward to an earlier date than phase two of the implementation of the LEZ, on the understanding that ‘greening of Taxis’ is being addressed through their licensing process within a short timescale.	See consideration – 5.92.
5.97	Taxis	NSCA (National Society for Clean Air)	One important commercial vehicle sector, which is not presently addressed by the scheme; or indeed other London Air quality policies, is the mini-cab fleet (licensed and otherwise). Concerned that emission performance of these high mileage vehicles tends to be low. Understand that a 10 year age limit was originally proposed as part of licensing conditions, though this appears to have been dropped. This initiative should be pursued. It would provide useful additional benefits and would help ensure that TfL and GLA lead by example, with regards to the vehicles they operate and regulate.	TfL does not recommend extending the LEZ proposals to minicabs at this time, although it will continue to monitor the impacts of the wider initiatives on vehicle emissions in London and will keep relevant policies under review.

No.	Sub theme	Respondent	Representation	TfL Response
5.98	Taxis	City of Westminster	Although Private Hire Vehicles (PHVs / 'minicabs') have been regulated by the PCO since 2004, there is no mention in the LEZ consultation proposals of either their inclusion in the scheme, or a separate scheme to reduce their emissions similar to the one for taxis. This would require improvement to a wide range of vehicle types, which may prove complex. However, these vehicles make a significant contribution to emissions and the nature of their use has similarities to that of taxis. Consider that the LEZ Strategy and revisions to the Mayor's Transport and Air Quality Strategies should include specific proposals to reduce emissions from PHVs / 'minicabs'.	See considerations – 5.92 and 5.97.
5.99	Taxis	Sadler Consultants	Not including mini-cabs is a missed opportunity, unfair for taxis and enables the accusation that TfL is not leading by example with the vehicles it operates. Mini-cabs should be included in the vehicles covered under the LEZ as there is a licensing mechanism to ensure compliance so that their inclusion would not impinge on the LEZ enforcement systems. While mini-cabs are car-type vehicles and therefore less polluting per vehicle, they do significant mileage, and are likely to have an affect on London's air quality disproportionate to their numbers. There was a 10 year age limit proposed as a licensing condition, which should be reconsidered, and implemented.	See considerations – 5.92 and 5.97.

No.	Sub theme	Respondent	Representation	TfL Response
5.100	Other issues	London Borough of Tower Hamlets	The implementation of the LEZ also has implications in terms of the use of construction vehicles and plant, which contribute towards high levels of PM and NO <sub>2</sub> within the borough.	<p>Mobile machinery, which falls within the scope of the EU Non-Road Mobile Machinery Directive 1997, is subject to different emissions limits set by that Directive and it is proposed that it be exempt from the LEZ. Furthermore, it is not currently possible to fit pollution abatement equipment to most off-road machinery.</p> <p>Construction vehicles which are taxed for road usage would be covered in the scope of the LEZ and would be subject to the daily charge if they did not comply with the proposed LEZ emission standards.</p>
5.101	Other issues	Johnson Matthey	In order to provide an example of best practice, the scheme should continue to press for leading environmental performance and improvements in air quality. In the short term, the focus on heavy diesel traffic will achieve this. However, it would be sensible to extend the scheme to include non-road machinery (marine, rail and construction) in order to continue these improvements. In the longer term, there may be significant local (and CO <sub>2</sub> ) emissions benefits from introducing fuel cell or conventional hydrogen vehicles. It is therefore important that such cutting edge technologies are supported and that the LEZ is considered as a long term policy.	<p>See consideration – 5.100.</p> <p>Incentives and grants for cleaner vehicles is a matter for the Government, not for TfL. However, TfL is currently considering ways in which the current Congestion Charging alternative fuels discount could be adjusted to increase the use of the cleanest vehicles without detracting from the core objective of the scheme, which is to reduce congestion in central London.</p>
5.102	Other issues	Sadler Consultants	Reference should be made to the proposed Mayor's Code of Construction Practice which is likely to cover non-road mobile machinery.	See consideration – 5.100.
5.103	Other issues	City of Westminster	There is a general public perception that motorcycles cause significantly less	The LEZ is designed to discourage the use of the most individually polluting vehicles within Greater London

No.	Sub theme	Respondent	Representation	TfL Response
			<p>emissions than cars and larger vehicles. Data provided in TfL's consultation document shows that motorcycles emit almost as many grammes of PM<sub>10</sub> per km driven as taxis (although motorcycle NO<sub>x</sub> emissions are lower). In view of this, it is surprising that there are no indications in the TfL consultation of planned actions to reduce these high levels. Recognise that data on motor bike emissions are not as available or as well understood as for other vehicles. Suggest that further work needs to be done on this. At the least, this should lead to publication and promotion of guidance on cleaner motorcycles, or possibly some disincentives for the most polluting motorbikes.</p>	<p>thereby maximising improvements in air quality. These are older HGVs, buses, coaches and from 2010, heavier LGVs.</p> <p>TfL does not recommend extending the LEZ proposals to motorbikes at this time, although it will continue to monitor the impacts of the wider initiatives on vehicle emissions in London and will keep relevant policies under review.</p>
5.104	Other issues	Constant Consultancy	<p>The London boroughs, health trusts, Ambulance Services, Fire and Rescue Service, Police, Government departments and youth groups run some of the oldest vehicles in the 3.5 tonne GVW category and above in London which, due to their age, must be more polluting than their more modern counterparts operated by commercial organisations. Therefore it would be wise for the Mayor to get the public sector's house in order first, before embarking on such an ill thought-out proposal as he has suggested.</p>	<p>In addition to the proposed LEZ, there are a number of initiatives within the Mayor's Air Quality Strategy that are being pursued to deliver reductions in emissions. The London Fire and Emergency Planning Authority replaced half of their original fire engines by the end of 2005 and all their vehicles should comply with the LEZ in 2008 by meeting the Euro III emission standards for PM<sub>10</sub>. Furthermore, the Mayor requires boroughs to improve air quality at a local level, including pollution hotspots, through the Local Air Quality Management system. The Mayor is encouraging local boroughs to assess and improve their own vehicles, including refuse collection and waste vehicles which would al be subject to the LEZ.</p>

No.	Sub theme	Respondent	Representation	TfL Response
5.105	Other issues	Constant Consultancy	Following 9/11 aircraft which would normally overfly London on the way to Heathrow were diverted elsewhere. Although there were perceivable benefits to London during this period, aircraft pollution is not mentioned in the Mayor's proposal. This omission needs to be rectified if the LEZ is to be credible.	The LEZ is designed to discourage the use of the most polluting vehicles within Greater London thereby maximising improvements in air quality. Vehicle emissions contributed 47 per cent of PM <sub>10</sub> emissions in London. The Mayor has no direct control over aircraft emission.
5.106	Other issues	Constant Consultancy	The Mayor's proposal is also silent on rail freight. Since the Mayor took office rail freight capacity over the capital's rail network has taken second place behind passenger traffic. It seems perverse to say that because "London has the worst air pollution in the UK and amongst the worst in Europe" it needs a LEZ and then force rail freight off London's rail network onto the roads with all the extra pollution that will be created.	The Mayor's London Plan aims to foster a progressive shift of freight from road to more sustainable modes such as rail. Furthermore, the London Plan is committed to reducing the environmental impact of road freight movements where possible and improving safety on London's roads. TfL considers that these aims could be addressed by facilitating more freight on rail in and around London.

## THEME 6 VEHICLE EMISSION STANDARDS

No.	Sub theme	Respondent	Representation	TfL Response
6.01	Agree with use of Euro standards	Environmental Industries Commission	The Consultation Document proposes minimum standards for vehicles. These standards can clearly be reached by the utilisation of vehicles which are homologated to the corresponding European standard (Euro III or Euro IV). Alternatively, older vehicles can be brought to that standard by retrofitting of appropriate abatement equipment, normally referred to as 'exhaust aftertreatment'. The proposed PM <sub>10</sub> levels are readily achieved for most older vehicles by fitting of a particulate trap, referred to generically as a DPF.	TfL notes the support for the LEZ proposal.
6.02	Agree with use of Euro standards	Masterlease	Would concur that the proposed emission standards are an appropriate means to ensure maximum compliance whilst considering all economic criteria (cost of compliance, cost of evasion, operating cost for LEZ, etc).	TfL notes the support for the proposed Euro standard.
6.03	Agree with use of Euro standards	London Sustainability Exchange	Supports the proposed emission standards (of Euro III for particulates PM by 2008 and Euro IV for PM from 2010) for HGVs, buses and coaches as appropriate targets.	See consideration – 6.02.
6.04	Agree with use of Euro standards	London Forum of Amenity and Civic Societies	Agree the criterion applied to vehicles in the LEZ should be the Euro standards for emissions, because this will allow operators to achieve compliance by retrofitting pollution control equipment as well as by vehicle replacement.	See consideration – 6.02.

No.	Sub theme	Respondent	Representation	TfL Response
6.05	Agree with use of Euro standards	Confederation of Passenger Transport UK	Less in favour of an age based scheme because of the longer period of use of coaches. Recognise that at least the current proposals, or a deferred option, offers operators a choice as to how to comply or upgrade, albeit at a cost.	See consideration – 6.02.
6.06	Agree with use of Euro standards	Energy Saving Trust	Support proposed standards. The standards for 2010 should be set as soon as possible to ensure market certainty.	See consideration – 6.02.
6.07	Disagree with use of Euro standards	Constant Consultancy	The application of Euro emission standards and abatement technology to the LEZ's entry criteria seems unduly complicated and would make it nigh impossible to include foreign vehicles in the scheme.	<p>TfL's view is that a LEZ based on Euro standards that allows the fitting of pollution abatement equipment best balances affordability, fairness and clarity for operators with air quality and health benefits. An age-based scheme could be regarded as unfair as vehicles of the same Euro class and emissions but of a different age would be treated differently. Such a scheme could also penalise early adopters of exhaust after-treatment systems, and those who had converted their vehicles to alternative fuels or re-engined their vehicles to a higher Euro standard.</p> <p>As Euro standards are applied to all vehicles registered in the EU, it would be possible to identify the emissions standards of the majority of foreign vehicles which are identified within the LEZ. It is proposed that where information cannot be obtained directly from the DVLA equivalent organisations in other Member States, operators of non-UK registered vehicles would need to pre-register with the LEZ. As such, the LEZ enforcement strategy for foreign vehicles is unaffected by the nature of the standard adopted.</p>

No.	Sub theme	Respondent	Representation	TfL Response
6.08	Propose age-based standard for all categories	The Society of Motor Manufacturers and Traders Ltd	Establishing the Euro standard of a vehicle could be a complex and costly process, and some records may be incomplete. Chassis and bodywork are often produced independently and there may be a significant time lag between engine production and vehicle registration. This would be especially difficult to establish for foreign-registered vehicles. For this reason, a simple age-based standard should be used.	<p>See consideration – 6.07.</p> <p>TfL is able to establish the Euro standard of vehicles using data that is already available from the DVLA. Registration from vehicles would be required if vehicle emission characteristics could not be determined from the data available. By supplementing this with information from foreign vehicle operators and other European certification mechanisms TfL’s database would be expanded to include foreign registered vehicles.</p> <p>Whilst manufacturing delays may cause some older, lower standard engines to enter the fleet after standards are introduced, volumes are low and subject to derogation controls by VCA.</p>
6.09	Propose age-based standard for all categories	British Vehicle Rental and Leasing Association (BVRLA)	Can see the benefits of using a Euro based standard for the scheme as it will allow those operators who have fitted abatement technology to register compliance with the scheme. However, question the levels of take up of abatement technology given the costs and therefore the benefits that will be brought to the scheme on this basis and the costs for TfL in checking a separate register to see whether abatement technology is present. In addition, as DVLA do not currently record the Euro standard of vehicles this adds complexities to the scheme.	<p>See consideration – 6.07 and 6.08.</p> <p>Information from the DVLA on vehicles that have qualified for an RPC would also be used to identify compliant vehicles fitted with certified pollution abatement equipment.</p>
6.10	Propose age-based standard for all categories	The Society of Motor Manufacturers and Traders	Some non UK registered vehicles may have been fitted with retrofit pollution control equipment. They would therefore be able to challenge a Euro-based standard zone that	<p>See consideration – 6.08 and 6.09.</p> <p>Non-UK registered vehicles fitted with retrofit pollution control equipment certified by competent certification</p>

No.	Sub theme	Respondent	Representation	TfL Response
		Ltd	does not give them exemption. Retrospective tracing of documentation may make it difficult to establish the Euro standard of foreign vehicles. Therefore a simple age-based criteria should be used.	authorities as meeting equivalent standards will be able to register with TfL and drive within the zone without charge.
6.11	Propose age-based standard for all categories	City of Westminster	Have noted that modelling commissioned by TfL indicates that implementation of their proposed standards would bring forward PM <sub>10</sub> reductions by four to five years. It is unfortunate that comparable information has not been provided on the alternative of an age-based scheme. Welcome the contribution that an LEZ would make to reducing damage to human health, but ask that further modelling work be done on an age-based scheme, as consider that this could well achieve comparable improvements at less overall cost and with simpler registration and control systems.	<p>See considerations – 6.08 and 6.09.</p> <p>TfL has examined the health and air quality benefits and compliance costs of 6, 8 and 10 year rolling age-based systems for HGVs and buses. This analysis has shown that a 10 year standard generates insufficient health and air quality benefits. The benefits of an age based scheme (either 6 or 8 years rolling) have been modelled and are less than those delivered by the proposed Euro standards based scheme. On average, compliance costs for operators associated with an age based standard are also slightly higher than for the proposed Euro standards based scheme.</p> <p>An age-based scheme could be regarded as unfair as vehicles of the same Euro class and emissions but of a different age would be treated differently. Such a scheme could also penalise early adopters of exhaust after-treatment systems, and those who had converted their vehicles to alternative fuels or re-engined their vehicles to a higher Euro standard.</p> <p>TfL is able to establish the Euro standard of vehicles using data that is already available from the DVLA. By supplementing this with information from foreign vehicle operators and other European certification mechanisms TfL's database would be expanded to include foreign registered vehicles. Registration from</p>

No.	Sub theme	Respondent	Representation	TfL Response
				vehicles would be required if vehicle emission characteristics could not be determined from the data available.
6.12	Propose age-based standard for all categories	The Society of Motor Manufacturers and Traders Ltd	Empirical evidence suggests that older vehicles of a certain Euro class will have higher emissions than younger vehicles within the same class, through degradation of emission abatement equipment (especially for older Euro II vehicles).	See consideration – 6.11.
6.13	Propose age-based standard for all categories	City of Westminster	Consider that an age-based system, by which older vehicles would be excluded, is preferable to TfL's proposed scheme based on Euro-vehicle standards. An age-based scheme would be less complex, would be seen to be fair, and could be less bureaucratic and less expensive to implement. In any case, we note that for the second stage, TfL proposes age-based criteria for LGVs. The City Council has previously promoted an age-based method to implement the Low Emission Zone and this was part of TfL's considerations at an earlier stage. TfL's LEZ consultation document has strengthened Westminster's view that this is the most appropriate way to develop the LEZ. TfL's proposed means to implement the LEZ would require excessive administration, and would be complex and costly to implement and enforce. It would also place considerable financial burdens on some vehicle operators.	See consideration – 6.11.  Compliance costs associated with each system differ for individual operators depending on the nature of their existing vehicle replacement schedule. On average, compliance costs associated with an age based standard are slightly higher than for the proposed Euro standards based scheme and fall disproportionately on smaller operators.

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6.14	Propose age-based standard for all categories	Central London Partnership	Using euro standards fits into the EU's emissions programme and older vehicles could achieve the levels by using abatement equipment. However, would like to see evidence to show if the Euro based proposal will be easier to implement and more cost effective than the "rolling vehicle age scheme" proposed by the Society of Motor Manufacturers and Tradesmen. Advantages given for the age based scheme include: no need to maintain a reduced pollution certificate scheme; easier to apply to foreign vehicles; more understandable for the operators. It could also allow the flexibility to introduce a stricter age in 2010 and could assign different ages for vehicles that have difficulty complying, e.g. coaches and fire engines.	<p>See consideration – 6.11.</p> <p>A fixed age-based scheme would give no incentive for early purchase of cleaner Euro V vehicles already available today.</p> <p>Many foreign operators will be familiar with Euro standards due to incentives offered in many countries, such as road toll discounts in Germany.</p>
6.15	Propose age-based standard for all categories	Freight Transport Association	By using a vehicle's age, rather than its Euro standard as the criterion for the scheme, there are also clear benefits in terms of simplicity and administration for both TfL and vehicle operators. A rolling age scheme offers stability and certainty for business, rather than the "big bang" effects of restricting vehicles by Euro standards. The proposal also reduces the redistribution effect – around a third of respondents to the FTA's survey indicated that they would manage the TfL proposal's impacts by redistributing their fleets – with the FTA proposal this is less necessary.	<p>See consideration – 6.11.</p> <p>TfL has examined the health and air quality benefits and compliance costs of 6, 8 and 10 year rolling age-based systems for HGVs and buses. This analysis has shown that a 10 year standard generates insufficient health and air quality benefits. The benefits of an age based scheme (either 6 or 8 years rolling) have been modelled and are less than those delivered by the proposed Euro standards based scheme.</p> <p>An age based scheme results in certainty but also a continuous cost to operators as vehicles are replaced. Redistributing fleets is an economic option for large operators, but still results in benefits both inside and</p>

No.	Sub theme	Respondent	Representation	TfL Response
				outside the LEZ overall.
6.16	Propose age-based standard for all categories	Brimsgate Freight Quality Partnership	Support in principle the FTA's proposal for a rolling vehicle age based scheme in place of the proposed four-year scheme.	See considerations – 6.11 and 6.15.
6.17	Propose age-based standard for all categories	The Society of Motor Manufacturers and Traders Ltd	An age-based standard would be easier for stakeholders to understand and is already tried and tested in other countries (eg. Sweden).	See considerations – 6.11 and 6.15.  Sweden is currently considering moving to a Euro standard based scheme.
6.18	Propose age-based standard for all categories	Cleanaway	The average life span of a lorry is between five and eight years. The 2010 LEZ standard would place a huge cost burden on operators as well as distorting vehicle sale and re-sale prices. Therefore support a rolling age-based standard rather than one based on Euro standards and abatement equipment.	See considerations – 6.11 and 6.15.  Setting an age based standard less than the average life of the vehicle would place a greater or equal burden on the operator, without the potential cheaper abatement option, whilst setting a longer age based standard would reduce the benefits of the LEZ.
6.19	Propose age-based standard for all categories	London Retail Consortium	An alternative is the introduction of an age-based system that works on the principle that the age of a vehicle rather than the current Euro specification would determine whether or not it could enter an emissions zone without penalty. Such a scheme would produce the same benefits to air quality as the current emissions zone scheme proposed, but far more cost effective and easier to administer. It would also be of advantage to smaller retailers, who would be given greater stability and certainty by having more time to financially plan and upgrade their vehicles accordingly, rather than the more immediate impact of having to adhere to the restrictions of the Euro standards.	See considerations – 6.11 and 6.15.  To achieve the same air quality benefits, an age based scheme would affect vehicles at the same time, or sooner, than a scheme using Euro standards. By planning ahead and buying the cleanest possible vehicles, operators could minimise the cost impact of the LEZ.

No.	Sub theme	Respondent	Representation	TfL Response
6.20	Propose age-based standard for all categories	Freight Transport Association	A major benefit of the rolling age-based proposal is that it would bring about a reduction in all of the harmful emissions, including NO <sub>x</sub> , PM <sub>10</sub> , Volatile Organic Compounds and Carbon Monoxide – not just the PM <sub>10</sub> that the current scheme focuses on. FTA's commitment to reductions in greenhouse gases and improved fuel efficiency and road safety through world class driver training and vehicle inspection programmes is already well established.	See considerations – 6.11 and 6.15.  The commitment of the FTA in these areas is noted.
6.21	Propose age-based standard for all categories	British Association of Removers	The scheme should be introduced on a 10-15 year rolling age-based period instead of a scheme based on Euro engine standards and retro-fitting of emission reduction equipment (which has often proved to be unreliable non-cost effective in the past).	See considerations – 6.11 and 6.15.
6.22	Propose age-based standard for all categories	Constant Consultancy	A much simpler and rational approach would be for vehicles to meet a rolling age criteria to enter the LEZ, say 8-10 years. This would be eminently sensible and much more effective at improving air quality in London.	See considerations – 6.11 and 6.15.
6.23	Propose age-based standard for all categories	The Society of Motor Manufacturers and Traders Ltd	An age-based standard would not require any future modification or new Scheme Order in the way that a scheme based on Euro standards would.	See considerations – 6.11 and 6.15.  It is proposed that the Scheme Order would set out the LEZ standards for 2008 and 2012. Any further changes to the standards would be consulted on.
6.24	Propose age-based standard for all categories	Kent County Council	With Euro IV standard to become mandatory, we believe the LEZ has a limited life-span and a much better approach would be the "rolling age" based scheme proposed by the British Vehicle Rental and Leasing Association and others which takes account	See considerations – 6.11 and 6.15.

No.	Sub theme	Respondent	Representation	TfL Response
			of the ongoing business need to upgrade transport fleets.	
6.25	8 year age-based scheme	City of Westminster	Instead of TfL's proposal, to apply specific Euro vehicle standards on HGVs, buses and coaches from 2008 and 2010, there should be a rolling age-based standard (for example, with an eight-year limit) that would incrementally remove older and more-polluting vehicles from London roads. This has an added advantage, as vehicles of a specific emissions standard do not necessarily maintain the designed emissions levels as they get older. It would also address some of the known problems of retrofitting of abatement equipment. Retrofitting can be costly, but is also not guaranteed to achieve the intended emission standards.	See considerations – 6.11 and 6.15.
6.26	8 year age-based scheme	Federation of Small Business	Would support an age-based system as a way of controlling emissions in the Zone. The system could be introduced in 2008 but it would need a staggered introduction so as to give the small business community time to adapt to the new LEZ system – this ensures that the impact on business can be properly managed. For small businesses, their vehicles are a significant capital outlay for which they may have to plan many years in advance. Therefore, a rolling programme would achieve significant environmental benefit within a four year time-frame and not drive hauliers out of London. Suggest instead, in 2008, all HGVs over 12 years old (registered before 1996) would need to pay	See considerations – 6.11 and 6.15.

No.	Sub theme	Respondent	Representation	TfL Response
			the daily charge; in 2010, all HGVs over 10 years old (registered before 2000) would be eligible for the charge; and in 2012, all HGVs over 8 years old (registered before 2004) would be eligible, with a rolling 8 year programme operating thereafter.	
6.27	8 year age-based scheme	CBI London	TfL has proposed the Euro-based scheme. However, the age-based scheme must be further investigated. The latter is dismissed in the consultation document without fully exploring the option. Our understanding is that the age-based approach offers certain advantages: there would be a closer fit with industry vehicle replacement patterns; the issue of abatement equipment, its reliability and questions about the industry's ability to meet demand would be less critical; the scheme would update itself and would be easier to administer. This would still demonstrate that steps are being taken to meet air quality requirements. The consultation document says TfL considered a six year age limit which was too restrictive while a ten year age limit would not deliver the air quality and health benefits. We urge an eight-year rolling age based scheme be considered thoroughly.	See considerations – 6.11 and 6.15.
6.28	8 year age-based scheme	Royal Mail Group plc	Would support an eight year rolling age-based scheme over one based on Euro standards and abatement technology. This would be far simpler to administer and would place a lower cost burden on operators whilst still improving air quality.	See considerations – 6.11 and 6.15.

No.	Sub theme	Respondent	Representation	TfL Response
6.29	8 year age-based scheme	Freight Transport Association	Propose a rolling age-based scheme, with an 8 year limit for HGVs and higher age limits for vans and for buses and coaches, which will take the most polluting vehicles out of circulation first - eventually cars should be included too. The results of FTA's survey of members indicate the vast majority of vehicles operated by respondents are under 8 years old, with many actually under 6 years old. This profile suggests that introducing a scheme based on an 8-year rolling age basis would have lower cost implications for industry whilst still tackling the oldest and most polluting lorries. In terms of the sectors operating older vehicles, recycling/waste have the highest usage of vehicles over 8 years and it is negligible in all other categories.	See considerations – 6.11 and 6.15.  TfL considers that emissions from cars are being targeted to some extent through other initiatives within the Mayor's Transport Strategy. While the Congestion Charge primarily aims to reduce traffic congestion, it does have some small secondary benefits in reducing vehicle emissions. Initiatives to improve and encourage the use of public transport and other alternatives to private cars have also had a positive impact. A decision could be taken at a later date on whether further action is required to address emissions from cars.
6.30	8 year age-based scheme	The Society of Motor Manufacturers and Traders Ltd	SMMT proposes an age limit of 8 years for HGVs and 14 years for coaches from 2008, reducing to 13 years in 2009. An alternative would be a limit of 8 years for coaches used on scheduled services, which would link with disability regulations.	See considerations – 6.11 and 6.15.
6.31	8 year age-based scheme	Environmental Services Association	ESA supports the proposed LEZ to be structured around a rolling 8 year age basis, which would deliver improvements in air quality, but with a much lower cost to both industry and Transport for London.	See considerations – 6.11 and 6.15.

No.	Sub theme	Respondent	Representation	TfL Response
6.32	8 year age-based scheme	Volvo Truck and Bus Ltd	<p>Urges the introduction of an eight-year rolling age based standard which would eliminate much older vehicles which have much higher emission levels. It would also:</p> <ul style="list-style-type: none"> <li>- be an easier scheme to implement and enforce,</li> <li>- allow operators a reasonable time to operate existing fleets and get a return on relatively expensive capital items,</li> <li>- avoid problems of retrofit equipment,</li> <li>- renew the fleet profile so that even the older vehicle is only two Euro steps behind the latest mandatory European exhaust emission level, which would have environmental and road safety benefits.</li> </ul>	See considerations – 6.11 and 6.15.
6.33	8 year age-based scheme	British Vehicle Rental and Leasing Association (BVRLA)	<p>Recommend that TfL give real consideration to a rolling age based scheme. We would suggest that a rolling age based scheme could be gradually introduced throughout 2008 with vehicles over 7/8 years old having to pay a daily charge to travel into central London and be fully operational for all vehicles over 3.5 tonnes by 2009. This scheme would not become obsolete therefore the costs of signage and cameras could be spread out over a longer period and easily expanded by area and vehicles if successful. The air quality benefits would still be achieved and enforcement of foreign hauliers would be more effective. We urge TfL to seriously consider this scheme which our Members would support as opposed to the EURO based scheme which as currently proposed</p>	See considerations – 6.11 and 6.15.

No.	Sub theme	Respondent	Representation	TfL Response
			we cannot support. Would suggest that an age based scheme is introduced initially for commercial vehicles over 3.5 tonnes and cars and light commercial vehicles could be introduced at a later date.	
6.34	8 year age-based scheme	Musgrave Budgens - Londis	Support instead an 8-year rolling age based scheme over one based on Euro standards and abatement technology. It would be far simpler to administer, and place a lower burden of cost on operators whilst still improving air quality. TfL has admitted that the LEZ scheme will not enable EU air quality targets to be met, but that it is obliged to take action - surely an age based system still demonstrates a clear commitment to air quality improvements?	See considerations – 6.11 and 6.15.  The LEZ on its own will allow London to meet its air quality objectives. However, it should be viewed in the context of a range of measures in the Mayor's Transport and Air Quality Strategies which are aimed at reducing pollution.
6.35	8 year age-based scheme	TM Logistics	Support instead an 8-year rolling age based scheme over one based on Euro standards and abatement technology. It would be far simpler to administer, and place a lower burden of cost on operators whilst still improving air quality. TfL has admitted that the LEZ scheme will not enable EU air quality targets to be met, but that it is obliged to take action - surely an age based system still demonstrates a clear commitment to air quality improvements?	See considerations – 6.11 and 6.15.
6.36	8 year age-based scheme	AAH Pharmaceuticals Limited	Support instead an 8-year rolling age based scheme over one based on Euro standards and abatement technology. It would be far simpler to administer, and place a lower burden of cost on operators whilst still improving air quality. TfL has admitted that	See considerations – 6.11 and 6.15.

No.	Sub theme	Respondent	Representation	TfL Response
			the LEZ scheme will not enable EU air quality targets to be met, but that it is obliged to take action - surely an age based system still demonstrates a clear commitment to air quality improvements?	
6.37	8 year age-based scheme	Constant Consultancy	A much simpler and rational approach would be for vehicles to meet a rolling age criteria to enter the LEZ, say 8-10 years. This coupled with the fact that all vehicles should be included in the scheme cars, taxis, vans, minibuses, buses, coaches and trucks, means that a rolling age based approach would be eminently sensible and much more effective at improving air quality in London.	See considerations – 6.11 and 6.15.
6.38	Disagree with age-based standard	Environmental Industries Commission	Using ‘full-filtration’ DPF retrofit for older vehicles (in which the DPF contains a wall-flow filter, giving a filtration efficiency of 90% or more) is much more effective way of reducing emissions and attaining the required Phase 1 and Phase 2 emissions standards than the alternative approach of an age based scheme where older vehicles are excluded from the LEZ. This is due to the fact that a DPF retrofitted vehicle has significant benefits over a newer vehicle, namely: a) better emissions reductions; b) lower levels of ultra fine particles; c) less cradle-to-grave CO2 emissions; d) less waste creation; e) encouragement of UK-based R&D; f) encouragement of UK-based manufacturing; g) cheaper for operators to comply.	TfL agrees that when fitted and maintained correctly, diesel particulate filter technologies can be a cost effective means of reducing harmful particulate emissions for some vehicles.

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6.39	Disagree with age-based standard	Heyfordian Travel Limited	Less in favour of an age based scheme because of the longer period of use for coaches and at least the scheme proposed allow coach operators to upgrade, albeit at a cost.	See considerations – 6.11 and 6.15.
6.40	Disagree with age-based standard	Golden Boy Coaches	Less in favour of an age based scheme because of the longer period of use for coaches and at least the scheme proposed allow coach operators to upgrade, albeit at a cost.	See considerations – 6.11 and 6.15.
6.41	Use of RPC (Reduced Pollution Certification)	The Society of Motor Manufacturers and Traders Ltd	The RPC scheme is only scheduled to last until October 2006. After this date, the benefits of the scheme in terms of VED may either change or be withdrawn.	The Government has indicated its intention to retain the RPC mechanism for operators who fit qualifying abatement technology to pre-October 2006 vehicles and DfT has expressed its support for the use of the existing RPC as an eligibility criterion for the LEZ's proposed PM <sub>10</sub> standard. TfL is now investigating with VOSA and the VCA (Vehicle Certification Agency) means of ensuring that the RPC scheme has the capacity to support the increased demand the proposed LEZ could create.
6.42	Use of RPC (Reduced Pollution Certification)	London Borough of Lewisham	TfL's technical advice seems to be somewhat confused. It is not clear how operators would register a compliant vehicle i.e. prove its emission levels. Simply fitting exhaust treatment to Euro 0, I, II engined vehicles would not reduce the PM <sub>10</sub> levels enough to obtain a RPC. Enquiries made with Cummins Engines, Eminox and Purimuffler confirm this. RPCs are issued by VOSA at the MOT test stations after the vehicle has been checked and tested on their emission equipment. It is an absolute pass or fail and there is no discretion. CRT equipment costs an average	See consideration – 6.41.  Information on a vehicle's RPC status would be provided to TfL by the relevant agencies. TfL acknowledges that abatement technology may not be available for certain older vehicles to allow them to meet LEZ standards, or that the effectiveness may be less than for newer ones, or that costs and maintenance requirements may be significantly higher, in which case vehicle replacement or re-engaging would be required. TfL is working with the abatement pollution abatement equipment manufacturing industry, VCA, operators and other third parties to ensure

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			<p>of £3500 - £5000 so there is potential for very costly mistakes if operators simply take TfL's word that such a certificate is forthcoming. It is understood that TfL has made enquires with the Treasury and the DfT regarding the future of the RPC scheme. It is clear that with the introduction of Euro IV from this October it will no longer be required and since it is a burden on VOSA to police and administer the scheme as well as for the operator who has to present vehicles for re-certification every 2 years, its future is not therefore certain. Lewisham has taken full advantage of the EST's Transport Action Grant Scheme which provided funds to operators to convert or purchase low emission vehicles and retrofit technology in order to reduce emissions, receiving over £250,000. This scheme has now been suspended due to lack of funds. The EST produced a buyers' guide at great cost which listed approved products, vehicles and manufacturers. In order to be in the guide the manufacturer had, at their own cost, to prove the product to EST against strict criteria. If the product did not work it would not appear in the guide and grants were only provided against products from the guide. Should the RPC route not prove an option, then TfL should produce guidance to operators in a similar form to the EST guide.</p>	<p>information on the effectiveness and maintenance requirements of pollution abatement equipment is widely available.</p>

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6.43	Use of RPC (Reduced Pollution Certification)	Eminox Ltd	The RPC scheme, suitably adapted, could be used as a certification process for the proposed LEZ. The certification process would logically be the test cycles currently required by the EST. The procedure for certification on an approved chassis dynamometer is well established.	See consideration – 6.41.  The RPC scheme is administered by VOSA. Only devices approved by VCA and fitted to specified engines are eligible to receive an RPC certificate.
6.44	Use of RPC (Reduced Pollution Certification)	Environmental Industries Commission	Supports the proposal to use the existing DfT Reduced Pollution Certificate scheme, suitably adapted, to support the approval and certification processes for the proposed LEZ in both 2008 and 2010.	See consideration – 6.41.
6.45	Use of RPC (Reduced Pollution Certification)	Timebus Travel	Vehicles with an RPC certificate should be automatically compliant with the LEZ; both at the LEZ introduction date and remaining compliant in future, irrespective of any more stringent phased LEZ requirements. RPC certificates are already only issued to vehicles adapted (or constructed) to achieve a considerably higher standard of particulate emission than that required by EU legislation at the time of manufacture.	See consideration – 6.41.  All vehicles with an RPC would be compliant with the proposed 2008 standard for the LEZ. In order to meet the proposed standard of Euro IV for PM <sub>10</sub> in 2012, vehicles would need either a Euro IV engine, or at least a Euro II engine, fitted with pollution abatement equipment and holding a valid RPC.
6.46	Implementation of Euro IV for PM <sub>10</sub> for coaches	The Guild of British Coach Operators Ltd	If operators are to invest substantial sums to upgrade existing vehicles to meet new, higher standards, they require certainty that those vehicles will continue to be allowed to operate freely within the LEZ area for the rest of their useful life. The two year gap between 2008 and 2010 is not sufficient to amortise such costs and we do not see operators investing in an upgrade in 2008 that will no longer meet the standards in 2010. Therefore, the standard to apply from 2010 must be one that	Feedback from operators and manufacturers is that the 2010 standard would be expensive and impractical for operators to achieve. For a range of reasons, including that many types of Euro IV vehicles are not yet available, operators are currently replacing their fleets with Euro III and there is a concern that under the proposed LEZ core scheme of Euro IV for PM <sub>10</sub> in 2010 they could potentially have only four years before they need to modify or replace their vehicles. To address this issue TfL is recommending moving implementation of the Euro IV standard for PM <sub>10</sub> back

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			is technically and economically feasible for operators to introduce in 2008. This should also encourage early adoption of the tougher standard, thus helping to achieve the air quality targets.	to 2012. Whilst this would lead to smaller air quality and health benefits resulting from a reduction in emissions from heavier vehicles, it would significantly reduce compliance costs to operators, and make the scheme more acceptable. TfL has also proposed delaying implementation of the Euro III standard for PM <sub>10</sub> for coaches and HGVs under 12 tonnes until mid-2008.
6.47	Implementation of Euro IV for PM <sub>10</sub> for coaches	London Retail Consortium	The LRC supports a call for separate requirements for coaches as well as a scheme based on a rolling age basis for commercial vehicles above and below 3.5 tonnes.	See consideration – 6.46.  TfL is not recommending different standards for coaches as this would erode many of the air quality and health benefits of the LEZ proposal.
6.48	Implementation of Euro IV for PM <sub>10</sub> for coaches	Confederation of Passenger Transport UK	If action in 2008 and 2010 is the only option that the Mayor is willing to entertain, suggest that Euro II in 2008 and Euro III (or Euro II + RPC) in 2010 would represent realistic but challenging targets for the coach sector.	See considerations – 6.46 and 6.47.
6.49	Implementation of Euro IV for PM <sub>10</sub> for coaches	Surrey County Council	Supports, in principle, the use of Euro Standards to define compliance, rather than vehicle age. However has a concern that the imposition of a requirement for the Euro IV standard in 2010 might result in significant additional costs to bus operators, in particular, which would adversely impact on the cost of subsidised bus services. The County Council would suggest that buses and coaches should be required to be to Euro IV standards by 2012, rather than 2010.	See consideration – 6.46 and 6.47.

No.	Sub theme	Respondent	Representation	TfL Response
6.50	Implementation of Euro IV for PM <sub>10</sub> for coaches	The Kings Ferry Travel Group	Normal fleet replacement cycles are progressively reducing pollution but we recognise that this is unlikely to happen fast enough to meet air quality targets. Hence we propose alternative standards for buses and coaches, as follows: a. From 2008: minimum Euro 2; b. From 2010: minimum of Euro III, or Euro 2 plus particulate trap.	See considerations – 6.46 and 6.47.
6.51	Implementation of Euro IV for PM <sub>10</sub> for coaches	The Guild of British Coach Operators Ltd	If operators are to make investment decisions about vehicle upgrading or replacement, they need certainty of the payback period for that investment. Hence believe there must be a system of grandfather rights, so that if a vehicle complies with the relevant standard at the point that it is introduced, that vehicle can remain in use for the rest of its economic life.	See considerations – 6.46 and 6.47.  Grandfather rights would be difficult to administer and would distort the market for the vehicles affected
6.52	Does not reflect bus/coach life cycles	The Guild of British Coach Operators Ltd	Normal fleet replacement cycles are progressively reducing pollution but we recognise that this is unlikely to happen fast enough to meet air quality targets. Hence we propose alternative standards for buses and coaches, as follows: a. From 2008: minimum Euro 2; b. From 2010: minimum of Euro III, or Euro 2 plus particulate trap. With Euro 2 having been mandatory since late 1996, by the time the LEZ is introduced, all vehicles of up to 11/12 years old will comply and thus we believe the impact will be manageable for operators, except those running the oldest fleets. Further, by 2008, vehicles under 7/8 years old will already be at Euro III level.	See considerations – 6.46 and 6.47.

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6.53	Does not reflect bus/coach life cycles	Confederation of Passenger Transport UK	Although it could be broadly accepted that HGVs and coaches account for greater pollution per mile travelled, it ignores that fact that coaches are the lowest polluter if taken as mile per vehicle occupant. Of all the types of transport to be included within the LEZ, coaches are expected to be the most seriously affected. This is because the intensity of use of coaches is typically lower than for buses and HGVs and the life-expectancy of a coach is longer, between 15 and 20 years. Thus a large number of 1997-2001 (Euro II) and pre-1997 (Euro 0 & I) manufactured coaches will still be in service after 2008 with consequently high cost implications for RPC certification.	See considerations – 6.46 and 6.47.
6.54	Does not reflect bus/coach life cycles	Federation of Small Business	It is widely recognised that coaches have a greater life span than other vehicles. It is imperative that the Low Emissions Zone does not penalise coach operators and this should be reflected by a 15 year age limit – so by 2013 all Coaches manufactured before 1998 will face penalty if in the likely event they do not meet emission standards. We entirely endorse the views on Coaches put out in the Consultation response by the Confederation of Passenger Transport.	See considerations – 6.46 and 6.47.
6.55	Does not reflect bus/coach life cycles	British Vehicle Rental and Leasing Association (BVRLA)	Understand from colleagues within the coach industry that their vehicle replacement cycle is much different to commercial vehicles and would therefore strongly recommend that TfL consider a different age based profile for these vehicles.	See considerations – 6.46 and 6.47.

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6.56	Does not reflect bus/coach life cycles	The Guild of British Coach Operators Ltd	Introduction of a LEZ must also reflect the life cycle for coaches, which is considerably longer than for HGVs, for example 15-20 years as they are cascaded down from front-line duties to contracts, local private hires, etc, and are financed over long periods. Across our membership, the average age of our coach fleet is 5.6 years but within individual fleets, there are coaches up to 17/18 years old.	See considerations – 6.46 and 6.47.
6.57	Does not reflect bus/coach life cycles	The Kings Ferry Travel Group	The proposals seriously underestimate the costs and technical issues involved in converting existing vehicles to comply and do not reflect the long replacement cycles for coaches & buses. For bus operators providing services outside the TfL network, the proposals place an unfair burden on the private sector as TfL operations are heavily subsidised. This is in direct contrast to commercial services which have to bear the full economic cost of operations and fleet replacement.	See considerations – 6.46 and 6.47.
6.58	Does not reflect bus/coach life cycles	Dudleys Coaches	Coaches are the lowest polluter per passenger mile and are used less intensively than HGVs. The life expectancy of a coach is between 15 to 20 years. As a result there will be a higher proportion of coaches will be affected by the LEZ.	See considerations – 6.46 and 6.47.
6.59	Does not reflect bus/coach life cycles	DJ Coaches	Appreciate what is trying to be achieved with the LEZ but feel that a 10 year plan would need to be put in place to help businesses actually save money to invest in their business and purchase vehicles that comply.	See considerations – 6.46 and 6.47.  As with HGV operators, pollution abatement equipment which qualifies for an RPC certificate receives a VED discount.

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			With the short deadline for the LEZ it is only the newer vehicles that comply and these are worth in excess of £100,000. What help is being provided for coach companies? Bus companies are getting everything.	
6.60	Euro IV for PM <sub>10</sub> in 2010 is premature	Heyfordian Travel Limited	Would agree to a delay of the process by two years to Euro III or equivalent in 2010, Euro IV or equivalent in 2012 for coaches. This would give operators a more realistic time scale to phase out non-compliant vehicles voluntarily.	See considerations – 6.46 and 6.47.
6.61	Euro IV for PM <sub>10</sub> in 2010 is premature	Golden Boy Coaches	Would agree to a delay of the process by two years to Euro III or equivalent in 2010, Euro IV or equivalent in 2012 for coaches. This would give operators a more realistic time scale to phase out non-compliant vehicles voluntarily.	See considerations – 6.46 and 6.47.
6.62	Euro IV for PM <sub>10</sub> in 2010 is premature	Surrey County Council's Passenger Transport Liaison Group	Concerned that the to move to Euro III by 2008 and Euro IV by 2010 is far too rapid and unsustainable. Feel that implementation should be more gradual, for example Euro I from 2008, Euro II with CRT traps from 2009/10 and then Euro III after.	See considerations – 6.46 and 6.47.
6.63	Euro IV for PM <sub>10</sub> in 2010 is premature	Dudleys Coaches	Would like to see Euro III or equivalent by 2010 and Euro IV or equivalent in 2012 for coaches.	See consideration – 6.46.
6.64	Euro IV for PM <sub>10</sub> in 2010 is premature	Volvo  Truck and Bus Ltd	The lead-times proposed for Euro IV emissions give only a four year life before a truck purchased in 2006 as Euro III can no longer operate in London, though the rules will not become clear until 2007. This places a massive cost burden on industry as the	See consideration – 6.46.

No.	Sub theme	Respondent	Representation	TfL Response
			residual value of trucks bought in 2006 may be worthless in 2010.	
6.65	Euro IV for PM <sub>10</sub> in 2010 is premature	London Fire and Emergency Planning Authority	At present, the initiatives on HGV do not go beyond 2010 with the introduction of the Euro IV standards for PMs and NO <sub>x</sub> . The life cycle of vehicles currently being replaced will extend well beyond 2010. There is a concern that more stringent emission standards will be introduced before the current fleet of heavy fire fighting vehicles reaches 'end-of-life'. The 2010 emission standard will impact on 267 heavy vehicles within the LFB fleet all of which will be powered by Euro III engines. All these vehicles will require a level of abatement equipment in order to comply with the Euro IV standard. This will have significant cost implications for the Authority in terms of initial equipment purchase, labour to fit the equipment and fleet downtime whilst the modifications are carried out. As with one of the proposed technical solutions for 2008 compliance (particulate filters for Pre-Euro and Euro I & II vehicles) there may also be increased maintenance costs levied on the Authority by our vehicles provider.	See consideration – 6.46.
6.66	Euro IV for PM <sub>10</sub> in 2010 is premature	London Borough of Tower Hamlets	2010 may be too early to bring in Euro IV compliance, as vehicles purchased early this year will be only four years old (approximately half their operational expectancy) and may require expensive emission reduction technology to bring them into line with the proposals for the LEZ.	See consideration – 6.46.

No.	Sub theme	Respondent	Representation	TfL Response
6.67	Euro IV for PM <sub>10</sub> in 2010 is premature	London Ambulance Service NHS Trust	In the last three years London Ambulance Service has acquired 260 new ambulances all of which meet Euro III. The last few are currently being delivered. It would be penalising to have to modify these vehicles in as short a time as 2010 to meet Euro IV. If there was any significant weight penalty with the modification then we could be faced with having to remove patient life saving medical equipment from these vehicles. London Ambulances tried to purchase Euro IV compliant vehicle for ambulance usage but they are not currently available.	See consideration – 6.46.
6.68	Euro IV for PM <sub>10</sub> in 2010 is premature	British Vehicle Rental and Leasing Association (BVRLA)	Having reviewed in detail the proposed Euro standards for the proposed schemes in 2008 and 2010 we cannot support the proposals being put forward for 2010. Our Members estimate that over 20% of their fleet would not be at Euro IV by 2010. There are many reasons for this, including the fact that the average contract duration on commercial vehicles is five years and many of the vehicles being signed into contracts this year are still Euro III. There is also uncertainty in the marketplace at the moment with regards to technologies to ensure compliance with Euro IV standards which is deterring operators from buying these vehicles. The costs of these technologies is also effecting the decision making process for buyers of new vehicles. The uncertainty surrounding the implementation date of the digital tachographs has also deterred vehicle buyers	See consideration – 6.46.

No.	Sub theme	Respondent	Representation	TfL Response
			from going forward with Euro IV vehicles and keeping their existing fleet longer.	
6.69	Euro IV for PM <sub>10</sub> in 2010 is premature	Royal Mail Group plc	The timescale proposed by TfL is also hugely problematic for commercial vehicle operators. The average life span of a truck is between five and eight years, and yet this scheme states that vehicles, which are just over four years old in 2010 will not be considered acceptable, placing a huge financial burden on operators and distorting vehicle sales as well as re-sale prices. The 2010 targets are unworkable.	See consideration – 6.46.
6.70	Euro IV for PM <sub>10</sub> in 2010 is premature	Thames Gateway London Partnership	Keen to see the greatest benefits from the scheme and seek reassurance that every effort will be made to encourage operators to meet the 2010 standards at the earliest opportunity. Would like to be assured that a mechanism will be in place to encourage operators to focus on the 2010 standard as opposed to the 2008 standard, particularly given the short time between the dates.	See consideration – 6.46.  TfL agrees that encouraging operators to meet the more advanced standard would both reduce overall operator costs whilst also maximising air quality benefits.
6.71	Euro IV for PM <sub>10</sub> in 2010 is premature	Calor Gas Limited	Proposes that the date which the exemption from the LEZ charge should apply only to Euro IV vehicles should be 2014 not 2010.	See consideration – 6.46.
6.72	Euro IV for PM <sub>10</sub> in 2010 is premature	Freight Transport Association	In 2008 levels of compliance amongst FTA members would be high whether the scheme were based on Euro / Euro plus RPC standards or rolling age as Euro III will have been in place for 7 years. However there is a clear spike in the purchasing trend, indicating that 2005 and 2006 were/will be key replacement years – as such there will be an equally big spike in non-compliance in 2010 if	See consideration – 6.46.

No.	Sub theme	Respondent	Representation	TfL Response
			the LEZ were to require Euro IV standards by that date. This is not a trend that cannot be easily, or inexpensively, turned around and as such believe the 2010 proposals are too much, too soon.	
6.73	Euro IV for PM <sub>10</sub> in 2010 is premature	CBI London	If the age-based scheme is not adopted, the current proposed timetable with a Euro-based approach needs to be deferred to 2013. The proposed Phase 2 i.e.: the Euro IV standard in 2010 for HGVs is unrealistic. Business needs more time to plan for this. If Phase 1 is introduced in 2008 that would have allowed about seven years since the introduction of Euro III. A similar and reasonable time frame is essential for Phase 2 which should therefore be deferred to 2013. But if a different approach was adopted – i.e. the rolling age based scheme – this issue would not arise.	See consideration – 6.46.
6.74	Euro IV for PM <sub>10</sub> in 2010 is premature	Constant Consultancy	The proposal to raise the standard in 2010 to Euro IV seems nonsensical when you consider that the standard will only become mandatory this October. Not only would such a requirement be unfair on operators, it may produce an own goal as most vehicles likely to be used for the construction of the Olympic facilities will probably not comply with Euro III let alone Euro IV.	See consideration – 6.46.  Vehicles used for high-profile construction projects such as the 2012 Olympics will be subject to the GLA Construction Code of Conduct, and will be required to meet Euro IV standards.
6.75	Euro IV for PM <sub>10</sub> in 2010 is premature	Stephensons of Essex Ltd	Appreciate the need to progressively reduce emissions and believe this is achievable without negative effects (excessive cost to the business and clients or demise of the business) by adopting following timescales:	See consideration – 6.46.

No.	Sub theme	Respondent	Representation	TfL Response
			Euro II in 2007 (in line with LSP), Euro III or equivalent in 2015 and Euro IV in 2015 (in line with DDA requirements). This counter proposal has synergy with both TfL's own current policy on LSPs and wider UK legislation on accessibility.	
6.76	Euro IV for PM <sub>10</sub> in 2010 is premature	Association of International Courier and Express Services	The timing of the scheme will require many companies to change vehicles prematurely and at considerable cost, to meet the requirements of the proposed Zone. Such a scheme would have been financially more prudent if the introduction had matched the natural phasing out of vehicles.	See consideration – 6.46.
6.77	Euro IV for PM <sub>10</sub> in 2010 is premature	Corporation of London	Are concerned about ability to comply with the requirement for Euro IV by 2010. Introducing a requirement for Euro IV, only two years after a requirement for Euro III, gives operators insufficient time to replace vehicles without incurring huge expenditure. Consequently, would like the Mayor to consider a rolling compliance limit to avoid the need for a mass replacement of vehicles in 2010.	See consideration – 6.46.
6.78	Euro IV for PM <sub>10</sub> in 2010 is premature	Calor Gas Limited	Sale of Euro III compliant vehicles will be legal until October 2006, though many operators will be choosing Euro IV now if vehicles are available which suit their company requirements. It would not be efficient to insist that all Euro III vehicles should be replaced by Euro IV vehicles by 2010. For most operators, the typical fleet replacement cycle is eight years. Even assuming that from October this year all new	See consideration – 6.46.  A scheme combining Euro standards with rolling compliance would be complex to administer.

No.	Sub theme	Respondent	Representation	TfL Response
			purchases were of Euro IV vehicles, in 2010, roughly half of most fleets would still be Euro III. What would fleet users do with Euro III vehicles which were viable, safe and relatively non-polluting? Clearly they will not scrap them. Replacing viable vehicles with newer ones entails massive unnecessary use of energy and raw materials in the construction process. This would appear to fly in the face of the Mayor's environment policies in general.	
6.79	Euro IV for PM <sub>10</sub> in 2010 is premature	London Recycling Ltd	By adopting a Euro III standard for the LEZ in 2008 it will mean that vehicles older than 6.5 years will either be forced off the road by heavy charges or face substantial costs in fitting particulate traps. From 2010 the adoption of Euro IV standards will mean that vehicles older than 3.5 years will be in the same position. Few vehicle fleets are able to operate with a vehicle operating life as short as this and it would have huge implications for business as a whole. Suggest extending the time scale for the adoption of Euro III and then Euro IV standards.	See consideration – 6.46.
6.80	Euro IV for PM <sub>10</sub> in 2010 is premature	Brewery Logistics Group	The standards are too severe over the timescale proposed	See consideration – 6.46.
6.81	Euro IV for PM <sub>10</sub> in 2010 is premature	The Society of Motor Manufacturers and Traders Ltd	Euro-based standards will distort market for new vehicles in London. Operators buying a new Euro III vehicle in 2006 may only be able to operate without charge in London for less than four years. The resale value of such a vehicle will thus be greatly reduced,	See consideration – 6.46.  TfL strongly encourages operators to buy the cleanest vehicles available.

No.	Sub theme	Respondent	Representation	TfL Response
			effectively adding a further cost to operators.	
6.82	Euro IV for PM <sub>10</sub> in 2010 is premature	London Retail Consortium	Believe that the proposed timescale will force fleet operators to unnecessarily replace vehicles well before their life expectancy. Vehicles that are just over three years old in 2010 would not be considered acceptable. In order for them to comply with the standards, operators would be forced to absorb huge costs, which in turn would create a market distortion and uncertainty of resale value.	See consideration – 6.46.
6.83	Euro IV for PM <sub>10</sub> in 2010 is premature	British Association of Removers	The short 2 year period being suggested for the tightening of standards, from Euro III to Euro IV and the possibility of also adding NO <sub>x</sub> standards, is unrealistic in relation to vehicle life/investment costs.	See consideration – 6.46.
6.84	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London Borough of Croydon	It is the Council's view that emission standards should be extended to cover emissions of NO <sub>x</sub> from 2010, should cost-effective abatement technology be widely commercially available from that date, which would allow Euro III vehicles (or older if technologically viable) to retrofit NO <sub>x</sub> abatement equipment, in order to achieve Euro IV NO <sub>x</sub> emissions standards.	<p>NO<sub>x</sub> abatement technology is still evolving and testing is also a complex process, requiring sophisticated on-board diagnostic equipment to be built into the vehicles. Implementing a NO<sub>x</sub> emission standard is dependent on a certification mechanism, standards for the fitting and testing of retro-fit NO<sub>x</sub> abatement equipment and a register of retrofitted vehicles being in place nationally - this is not yet the case. Whilst there has been some success in fitting NO<sub>x</sub> abatement equipment to London Buses and Black Cabs, there remain too many unresolved issues to include a NO<sub>x</sub> standard in the LEZ from 2010 for all HGVs, buses, coaches and heavier LGVs.</p> <p>TfL is continuing to work with the pollution abatement industry and the DfT to determine the feasibility of implementing a NO<sub>x</sub> standard, as consistent with proposal 4G.29 of the Transport and Air Quality</p>

No.	Sub theme	Respondent	Representation	TfL Response
				Strategy Revisions. Any proposed NO <sub>x</sub> standard, if implemented, would be subject to a full scheme order consultation and allow sufficient lead time for vehicle operators to comply with the standard.
6.85	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Tellings Golden Miller Group Plc	The cost to fit a particulate trap to a bus or coach to achieve Euro III or IV for PM <sub>10</sub> is quoted as being between £3,000 and £5,000 per vehicle. Thinks that this would be achievable for the Operator and the Industry if those buses and coaches could then be used for a period of at least five years from fitting the particulate trap. However, concerned that these buses and coaches would become obsolete in 2010, if TfL decide to bring NO <sub>x</sub> standards into Euro IV engines from 2010. This will bring added costs to both the Operator and the Industry because no one currently understands whether current Euro II or III engines can achieve the proposed NO <sub>x</sub> emission standards. The impact of imposing the NO <sub>x</sub> standard will have disastrous effects on the business and the Passenger Transport Industry as well. Suggest only invoking NO <sub>x</sub> standards on new buses and coaches from 2012.	See consideration – 6.84.  TfL is not recommending extending the proposed LEZ standards to NO <sub>x</sub> at this stage.
6.86	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	The Guild of British Coach Operators Ltd	Do not support the possibility of further (unspecified) NO <sub>x</sub> levels from 2010, except for brand new vehicles purchased after that date.	See considerations – 6.84 and 6.85.

No.	Sub theme	Respondent	Representation	TfL Response
6.87	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London Borough of Hillingdon	Given the predicted exceedences in Hillingdon for the pollutant nitrogen dioxide, there is support for the introduction of the NO <sub>x</sub> standard in 2010 providing a suitable method of assessing compliance is available.	See considerations – 6.84 and 6.85.
6.88	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London Borough of Hounslow	Support the introduction of the NO <sub>x</sub> standard in 2010 providing a suitable method of assessing compliance is available, however, due to the costs involved for councils and businesses in terms of retro-fitting, TfL need to be clear from the outset whether this will be introduced by 2010 or not, rather than remaining undecided on the issue.	See considerations – 6.84 and 6.85.
6.89	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London First	There is no current proven abatement technology available on the market to reduce NO <sub>x</sub> emissions. Therefore, it is inappropriate to consult on the detail of the scheme as insufficient information has been provided to reasonably allow vehicle operators to make investment decisions.	See considerations – 6.84 and 6.138.
6.90	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Ealing Council	Would encourage the introduction of a Euro IV standard for NO <sub>x</sub> in 2010. Feels that since the scheme would already be in place, then the added health benefits resulting from this measure would outweigh the additional costs their introduction would incur.	See consideration – 6.84.
6.91	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Slough Borough Council	Would support the inclusion of a standard of Euro IV for NO <sub>2</sub> as part of the LEZ scheme, even recognising the difficulties associated with developing certification and standards for the fitting and testing of retro-fit NO <sub>x</sub> abatement equipment.	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
6.92	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London Borough of Harrow	The introduction of the NO <sub>x</sub> standard by 2010 should only be considered if a suitable method of certification is available.	See consideration – 6.84.
6.93	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London Borough Newham	Do not know whether Euro III plus abatement for particulates will meet the Euro IV for NO <sub>x</sub> , if not then this standard becomes difficult to achieve. A decision will need to be made soon to allow adequate time for fleets to comply.	See consideration – 6.84.  A Euro III (or above) abatement device for particulate matter would not meet Euro IV standards for NO <sub>x</sub> , and an additional NO <sub>x</sub> abatement device would be required.
6.94	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Federation of Small Business	Very concerned about the proposals for NO <sub>x</sub> emissions in the consultation. In particular, there is no response to concerns which have been raised on: i) the lack of equipment available to measure the level of the emissions; ii) the system to register vehicles for NO <sub>x</sub> ; and iii) a method to adequately enable vehicles to be modified for the NO <sub>x</sub> standards.	See consideration – 6.84.
6.95	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	British Vehicle Rental and Leasing Association (BVRLA)	Concerned with the proposals to bring NO <sub>x</sub> levels into the scheme, especially given the fact there is no certification process to support a NO <sub>x</sub> emission standard and no abatement technology available. Our Members have strongly objected to this aspect of the proposals.	See consideration – 6.84.
6.96	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in	CBI London	NO <sub>x</sub> must be clearly left out of the LEZ scheme given that abatement and testing equipment is not available on the market. This must not be 'added on' subsequently as vehicle purchases are long term decisions.	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
	2010			
6.97	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Asthma UK	Traffic emissions now represent the largest emission source of NO <sub>2</sub> as well as being an important source of PM <sub>10</sub> . Traffic pollution is a major problem for people with asthma because NO <sub>2</sub> and PM <sub>10</sub> are known pollutants that trigger asthma attacks in some people with asthma - the pollutants' size enables them to penetrate the defence mechanisms of the nose and upper air passages, reaching the smaller passages normally affected by asthma. Given the effect of both PM <sub>10</sub> and NO <sub>2</sub> emissions on asthma, would like to see that the proposals for the LEZ to include the additional option of Euro IV for NO <sub>x</sub> in 2010 is achieved. Understand that these extensions to the proposals have some difficulties attached to their implementation that are outside of the control of TfL. Would like to add our voice to the campaign to encourage the Department for Transport to prioritise the development of NO <sub>x</sub> abatement technology and testing equipment, which would allow for the extensions to the proposals.	See consideration – 6.84.  Road transport was predicted to be responsible for 47 per cent of the emissions of NO <sub>x</sub> in London in 2005. NO <sub>x</sub> includes nitric oxide (NO) and NO <sub>2</sub> . NO <sub>2</sub> has been associated with impaired lung function, as well as increases in allergies and general deleterious effect on quality of life.
6.98	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London Borough of Hammersmith and Fulham	Support the introduction of the NO <sub>x</sub> standard in 2010 providing a suitable method of assessing compliance is available. The decision on whether or not NO <sub>x</sub> emissions are to be controlled by 2010 needs to be made at an early stage.	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
6.99	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Tower Hamlets PCT	As a minimum, given the wide availability of NO <sub>x</sub> abatement equipment and retrofit options, would press for the Mayor and TfL to strive to achieve NO <sub>x</sub> certification capability. This would enable a standard of Euro IV for PM <sub>10</sub> and NO <sub>x</sub> to be introduced at the soonest possible time.	See consideration – 6.84.
6.100	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Tellings Golden Miller Group Plc	Does not support a NO <sub>x</sub> standard.	See consideration – 6.84.
6.101	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Calor Gas Limited	Disturbed about the vague proposal that a standard for NO <sub>x</sub> might also be added. Clearly this could not be done if there were no vehicles which met the standard set. So this proposal should not proceed without close work with the manufacturers and fleet users to ensure that all vehicles will be able to meet the standard. Doubt whether the GLA alone has the technical expertise to set such a standard which would normally require detailed technical input from the EU, DfT, motor industry research bodies and vehicle manufacturers.	See consideration – 6.84.  TfL agrees that setting a technical standard for NO <sub>x</sub> abatement devices would require input from stakeholders, as well as support at national and EU level.
6.102	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Central London Partnership	In 2008 only particulate matter (PM <sub>10</sub> ) will be addressed whilst in 2010 there is an option for including oxides of nitrogen (NO <sub>x</sub> ). Can only endorse enforcement on PM <sub>10</sub> for both 2008 and 2010 as it is unclear that NO <sub>x</sub> emissions can be achieved through technology available now or in the near	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
			future.	
6.103	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	NSCA (National Society for Clean Air)	In light of the more serious health impacts, emphasis is understandably placed upon particle reduction. Also strongly support that action on NO <sub>x</sub> be pursued as far as possible. This reflects the schemes ability to move significantly towards compliance with EU limit values, and also to reduce the emission of precursors of secondary particles and to contribute towards the UK NECD emissions limits.	See consideration – 6.84.
6.104	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Arriva	Arriva buses already meet the proposed 2008 and 2010 emission standards for particulates. This would not be the case if the fleet had to meet Euro IV for oxides of nitrogen. Arriva understand that engine manufacturers had to make significant changes for Euro IV and there is no easy method for adopting Euro II and Euro III engines to meet this standard for NO <sub>x</sub> . The only option would be to re-engine the entire fleet, which would be expensive and unrealistic.	See consideration – 6.84.
6.105	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Eminox Ltd	Retrofit equipment to reduce emissions of NO <sub>x</sub> is currently being developed and tested, for example, on the London bus fleet. However, the technologies are at a very early stage of commercialisation. It is possible that suitable products will be available by Phase 2 of the proposed LEZ from 2010, if driven by appropriate regulation and incentives. In use compliance is difficult to control due to difficulties in measuring NO <sub>x</sub> under controlled conditions. However, a methodology is	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
			expected to be proven in the field by 2010.	
6.106	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Association of London Government	Due to the costs involved for boroughs and other vehicle operators in terms of retrofitting, purchasing or leasing, TfL need to be clear from the outset whether a NO <sub>x</sub> standard will be introduced as part of the 2010 LEZ proposals or not, rather than remaining undecided on the issue. 2010 is less than four years from now, so a decision on this part of the LEZ is required immediately, including how it will be implemented.	See consideration – 6.84.
6.107	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Cleanaway	It is unclear how the standard can be extended to NO <sub>x</sub> when no NO <sub>x</sub> abatement technology or abatement equipment is on the market. The impact on small businesses could also be huge.	See consideration – 6.84.
6.108	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Environmental Industries Commission	With regard to NO <sub>x</sub> abatement technologies, there are two options, namely SCR and EGR (Exhaust Gas Recirculation). Both of these technologies are used by various engine manufacturers to achieve the Euro IV standard and the international equivalents. Both SCR and EGR can be used in conjunction with a DPF. These composite technologies dramatically reduce both PM and NO <sub>x</sub> . They are used by various engine manufacturers to meet Euro V legislation, and the more stringent EEV (Enhanced Environmental Vehicle) standard.	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
6.109	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Musgrave Budgens - Londis	Including a NO <sub>x</sub> requirement needs much more investigation. The impact upon small businesses would be huge, and no NO <sub>x</sub> abatement technology or testing equipment is yet on the market.	See consideration – 6.84.
6.110	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	The Kings Ferry Travel Group	Do not support the possibility of further (unspecified) NO <sub>x</sub> levels from 2010, except for brand new vehicles purchased after that date.	See consideration – 6.84.
6.111	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London Sustainability Exchange	Believes that emission standards should be extended to cover emissions of NO <sub>x</sub> from 2010.	See consideration – 6.84.
6.112	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	National Express Limited	Recognise that reducing NO <sub>x</sub> is important but that the technology for retrofitting NO <sub>x</sub> abatement devises requires more work before this can be included in the scheme. Note that trials are on going in buses and would seek support to undertake similar trials on coaches.	See consideration – 6.84.
6.113	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Sadler Consultants	The NO <sub>x</sub> emissions standard should be pursued as far as possible due to its ability to move significantly towards the EU Limit Values, and also reduce primary PM and assist in meeting UK NECD emissions commitments. It would also reduce the issue of increased primary NO <sub>2</sub> , which is only a problem while the conversion of NO to NO <sub>2</sub> is	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
			ozone limited. The LEZ, particularly with the NO <sub>x</sub> emissions standard, will help reduce NO <sub>x</sub> emissions to a level where this can be achieved.	
6.114	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Asthma UK	Given the effect of both PM <sub>10</sub> and NO <sub>2</sub> emissions on asthma, we would like to see that the proposals for the LEZ to include the additional option of Euro IV for NO <sub>x</sub> in 2010, and to extend the LEZ to Light Goods Vehicles are achieved.	See consideration – 6.84.
6.115	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Volvo Truck and Bus Ltd	Retrofitted NO <sub>x</sub> abatement equipment will be even more unreliable than that for PM <sub>10</sub> .	See consideration – 6.84.
6.116	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	TM Logistics	Including a NO <sub>x</sub> requirement needs much more investigation. The impact upon small businesses would be huge, and no NO <sub>x</sub> abatement technology or testing equipment is yet on the market.	See consideration – 6.84.
6.117	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	AAH Pharmaceuticals Limited	Including a NO <sub>x</sub> requirement needs much more investigation. The impact upon small businesses would be huge, and no NO <sub>x</sub> abatement technology or testing equipment is yet on the market.	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
6.118	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	BAA	Evidence suggests that PM <sub>10</sub> and PM <sub>2.5</sub> have significantly greater health impacts than other pollutants, which understand is why the proposed LEZ focuses on particulate emissions. However, following publication of the European Commission's Thematic Strategy on Air Pollution, it is apparent that compliance with mandatory EU limit values will be more challenging for NO <sub>2</sub> than for PM <sub>10</sub> / PM <sub>2.5</sub> . In addition, the World Health Organisation recently recommended that its guideline NO <sub>2</sub> value of 40 microgrammes per cubic metre (the same as EU limit value) should be retained or lowered*. Therefore believe that any LEZ from 2010 must include NO <sub>x</sub> abatement, and that potential NO <sub>x</sub> and primary NO <sub>2</sub> impacts from particulate abatement technologies should be fully considered.	See consideration – 6.84.
6.119	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Johnson Matthey	With regards to the proposal to introduce Euro IV NO <sub>x</sub> levels in 2010, Johnson Matthey supports this aspiration, but would point out that the after-treatment technology available is unlikely to be as mature as DPF technology will be in 2008. This could make it difficult to mandate their use on heavy duty vehicles from 2010, but incentives should be provided to encourage their adoption.	See consideration – 6.84.

No.	Sub theme	Respondent	Representation	TfL Response
6.120	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	Royal Borough of Kensington and Chelsea	TfL must state from the outset whether a NO <sub>x</sub> based standard will be introduced in the future. Whilst the Council appreciates that the technology is still being developed, the costs associated with meeting these standards could be considerable, particularly if vehicles are replaced in order to comply with PM <sub>10</sub> standards, only for Council's/businesses to discover that different vehicles are needed to meet new NO <sub>x</sub> standards	See consideration – 6.84.
6.121	Extension to NO <sub>x</sub> (Nitrogen Oxides) standard in 2010	London Borough of Richmond upon Thames	In the case of NO <sub>x</sub> the gas of concern is NO <sub>2</sub> , and the reduction of this component of NO <sub>x</sub> is almost entirely responsible for the overall reduction in NO <sub>x</sub> . The technology works by introducing ammonium in the form of Urea to react with the NO <sub>2</sub> and lower the temperature at which catalytic combustion of carbon in the particulate will burn. Since we cannot achieve this lower temperature it follows that under these conditions the technology will not reduce NO <sub>x</sub> to any appreciable degree.	See consideration – 6.84.  Any scheme needs to be based on certified pollution abatement equipment which meets the required standard under the operating conditions of the vehicle to which the equipment is fitted.
6.122	Impacts on NO <sub>2</sub> levels	London Borough of Camden	Whilst PM <sub>10</sub> is a greater concern in health terms than NO <sub>2</sub> , Camden is concerned that the scheme is unable to tackle NO <sub>2</sub> as well because of the lack of a system for certification and standards for fitting and testing retro-fit NO <sub>x</sub> abatement equipment.	See consideration – 6.84.  Specific NO <sub>2</sub> standards would require pollution abatement equipment to be easily available and economically viable, which is not yet the case.
6.123	Impacts on NO <sub>2</sub> levels	Clean Diesel Technologies Inc	Concerns about the influence of the NO <sub>x</sub> option on NO <sub>2</sub> levels. If not correctly managed, the introduction of heavily catalysed filters could lead to an increase in NO <sub>2</sub> .	See consideration – 6.84.  There is evidence suggesting that newer diesel vehicles and vehicles fitted with some catalysed diesel particulate filters (CDPF) generate a higher proportion

No.	Sub theme	Respondent	Representation	TfL Response
				<p>of NO<sub>x</sub> as NO<sub>2</sub>. However, in terms of the key health-based objectives of the LEZ, reductions in PM<sub>10</sub> have a significantly greater impact on health than increasing the proportion of NO<sub>x</sub> emitted as NO<sub>2</sub>. The Committee on the Medical Effects of Air Pollution (COMEAP) does not consider the estimates of the health effects of NO<sub>2</sub> sufficiently robust for quantification. This approach is supported by the Government's Air Quality Expert Group's recommendations that a wider, more holistic approach to air quality management is more effective. It should be noted that total NO<sub>2</sub> emissions are expected to continue to decline.</p> <p>Whilst it is not feasible to introduce a NO<sub>x</sub> standard within the scope of the current LEZ proposals, TfL is continuing to work with pollution abatement equipment industry and the DfT to determine the feasibility of implementing a NO<sub>x</sub> standard. Any proposed NO<sub>x</sub> standard, if implemented, would be subject to a full scheme order consultation and allow sufficient lead time for vehicle operators to comply with the standard.</p>
6.124	Impacts on NO <sub>2</sub> levels	Clean Diesel Technologies Inc	A highly catalysed filter can increase the NO <sub>2</sub> portion of NO <sub>x</sub> and there is evidence to suggest that this is the reason for the high NO <sub>2</sub> levels in London. Without an NO <sub>2</sub> emission standard the LEZ could lead to increased NO <sub>2</sub> levels, particularly in the inner city where low vehicle exhaust temperatures may not be sufficient to reduce vehicle NO <sub>2</sub> emissions. This problem has already been seen in California and is being addressed by an amendment including NO <sub>2</sub> limits and preconditioning requirements for certain	<p>See considerations – 6.84 and 6.122.</p> <p>TfL is working with VCA and the pollution abatement equipment industry to ensure that robust standards are put in place.</p> <p>As mentioned above, TfL is continuing to work with pollution abatement equipment industry and the DfT to determine the feasibility of implementing a NO<sub>x</sub> standard. Any proposed NO<sub>x</sub> standard, if implemented, would be subject to a full scheme order consultation and allow sufficient lead time for vehicle operators to</p>

No.	Sub theme	Respondent	Representation	TfL Response
			diesel emission control systems.	comply with the standard.
6.125	Impacts on NO <sub>2</sub> levels	London Borough of Southwark	There is an unanswered question whether the emission clean up devices are emitting more direct NO <sub>2</sub> which dilutes the benefits of new technology. The council understands that the Government's Air Quality Expert Group has set up a special 'mini' probe into the issue.	See consideration – 6.123.
6.126	Impacts on NO <sub>2</sub> levels	Corporation of London	Concerned about roadside NO <sub>2</sub> concentrations that are being monitored across central London. Air quality data for the City indicates that current levels of NO <sub>2</sub> are higher than they were in 1999. They are now approaching, and in some cases above, 100µg/m <sup>3</sup> annual average (two and a half times the 2005 objective level). It has been put forward that one of the reasons for this increase is the use of particle traps. As more particle traps are used to comply with the LEZ, higher and higher roadside NO <sub>2</sub> levels are anticipated. Consequently, would seriously question the claims about reduced NO <sub>2</sub> concentrations brought about by a LEZ, unless a NO <sub>x</sub> emission standard is included. The argument in favour is that PM <sub>10</sub> is considered to be a worse pollutant than NO <sub>2</sub> , so the trade off is acceptable. However, the model results indicate that with a LEZ the	See considerations – 6.84 and 6.122.

No.	Sub theme	Respondent	Representation	TfL Response
			reduction in PM <sub>10</sub> by 2010 would be 0.5µg/m <sup>3</sup> at best (if LGVs were included). The predicted improvement in the City is less than this. This is a very small reduction in concentrations of PM <sub>10</sub> is one of the outcomes of the LEZ would be to take us further away from achieving the NO <sub>2</sub> objectives.	
6.127	Impacts on NO <sub>2</sub> levels	City of Westminster	Concerned at the growing evidence of sustained or increased levels of NO <sub>2</sub> in London, and that this appears to be connected to the photochemical oxidisation of primary NO emissions. It appears that the proposed approach to LEZ standards will not enable reductions in NO <sub>x</sub> and will not counter the unintended side effects of some emissions control systems designed to reduce other pollutants. However, recognise that the evidence for damage to health by PM <sub>10</sub> is significant, and therefore support the priority given by TfL to reductions of PM <sub>10</sub> at this stage.	See considerations – 6.84 and 6.122.
6.128	Impacts on NO <sub>2</sub> levels	London Retail Consortium	Abatement technology could present its own problems, following the conclusions of the Scott Wilson Environment Report. This found that it is possible that NO <sub>x</sub> emissions may actually increase as a result of particle traps fitted to control emissions of small particles. So, even if retailers were able to afford the significant cost of fitting and maintaining abatement technology for NO <sub>x</sub> , and indeed for particulates, is not an effective strategy for improving air quality. There needs to be	See considerations – 6.84 and 6.122.

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			further detailed investigations into these technologies, and indeed investment into further research and development in order to improve efficiency.	
6.129	Impacts on NO <sub>2</sub> levels	The Society of Motor Manufacturers and Traders Ltd	Equipment designed to reduce PM <sub>10</sub> particulates may lead to higher levels of NO <sub>x</sub> and NO <sub>2</sub> .	See considerations – 6.84 and 6.122.
6.130	Impacts on NO <sub>2</sub> levels	London Borough of Islington	Have concerns that the LEZ primarily reduces exposure to particulates, with some evidence suggesting that this may be at the expense of nitrogen oxide emissions. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, does not give priority to one pollutant species over any other and therefore TfL's actions could lead to inconsistencies with the work of the London boroughs through their Air Quality Action Plans.	See consideration – 6.84
6.131	Impacts on NO <sub>2</sub> levels	Volvo Truck and Bus Ltd	There is already practical experience that retrofit of particulate traps has not been as successful as had been hoped and suggested by various suppliers. In urban environments, the traffic conditions prevent filters from reaching the temperatures required for reliable internal regeneration. Furthermore, the operational design of particulate traps increases NO <sub>2</sub> emissions.	See considerations – 6.84, 6.122 and 6.138.
6.132	Impacts on NO <sub>2</sub> levels	Association of London Government	Several boroughs have raised the issue that the LEZ primarily reduces exposure to particulates, with some evidence suggesting	See consideration – 6.123.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>that this may be to the expense of NO<sub>x</sub> emissions. There is concern that some particulate traps, which will be used to meet the Euro Standards, are known to actually increase levels of NO<sub>x</sub>. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, which forms the basis of boroughs' work to improve air quality, does not give priority to one pollutant over any other, and therefore TfL's actions could lead to inconsistencies with the work of the boroughs through their Air Quality Action Plans. Again, the ALG would therefore prefer TfL to make its intentions clearer sooner, including how it will go about effectively implementing them, rather than leaving the more 'difficult' aspects of the proposed LEZ to a later date. Boroughs and vehicle operators need to know as soon as possible whether they need to look to meet NO<sub>x</sub> requirements, as this could have large cost implications. This would be for both those who decide to invest to meet the PM<sub>10</sub> requirements only, and then find they have to retrofit for NO<sub>x</sub> later, or conversely, for those who go ahead and invest in meeting both standards to find meeting NO<sub>x</sub> targets will not be required.</p>	

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6.133	Impacts on NO <sub>2</sub> levels	Johnson Matthey	A recent CARB review has demonstrated that the benefits diesel particulate filters (DPFs) offer to public health by removing PM is much greater than any harm caused by increases in direct NO <sub>2</sub> emissions. This study was used to inform a ruling setting out limits on NO <sub>2</sub> emissions from retrofit aftertreatment devices from 2007. The limits control NO <sub>2</sub> emissions without making the application of DPFs unfeasible. Johnson Matthey supports these limits and is committed to meeting them. Johnson Matthey would support the introduction of such reasonable limits for devices fitted to enable vehicles to comply with the LEZ requirements.	See consideration – 6.122.  TfL supports the setting of reasonable limits for NO <sub>2</sub> increases from DPF devices as part of the certification regime.
6.134	Impacts on NO <sub>2</sub> levels	London Borough of Camden	Whilst PM <sub>10</sub> is a greater concern in health terms than NO <sub>2</sub> , Camden is concerned that the scheme is unable to tackle NO <sub>2</sub> as well because of the lack of a system for certification and standards for fitting and testing retro-fit NO <sub>x</sub> abatement equipment.	See consideration – 6.122.
6.135	Impacts on NO <sub>2</sub> levels	Royal Borough of Kensington and Chelsea	Would question how the modelled improvement, a 20% reduction in NO <sub>x</sub> emitted by 2010, (even without an LEZ) would be achieved in the next four years. There is no indication of this being reflected in any monitoring data from roadside locations, (especially in the past five years), as these are not showing any downward trends, and in some cases are measuring increased annual mean levels. This is of some concern, particularly as some particulate traps, which will be used to meet the Euro Standards, (and	See consideration – 6.122.  The introduction over the next four years of Euro IV vehicles, which specifically reduce NO <sub>x</sub> emissions, accounts for the reduction in NO <sub>x</sub> levels in the modelling.

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			which the LEZ would therefore be encouraging) are known to increase direct emissions of NO <sub>2</sub> . It is not sufficient for TfL to say that it is more concerned with reducing levels of PM <sub>10</sub> than with NO <sub>2</sub> .	
6.136	Effectiveness of abatement equipment	Johnson Matthey	Johnson Matthey also supports the fitting of particulate emission abatement devices, and has firsthand experience of how these can operate effectively in cities to significantly reduce particulate emissions. By including the fitment of aftertreatment devices in the LEZ proposal rather than simply allowing vehicles below a certain age into the zone, particulate matter (PM) emissions will be significantly reduced and operators will be given the choice of buying a newer vehicle or retrofitting an approved device to the older vehicle.	TfL notes the support for the LEZ proposal.
6.137	Effectiveness of abatement equipment	Environmental Industries Commission	The emissions of ultrafines from a Euro IV vehicle fitted with SCR (Selective Catalytic Reduction) are often more in terms of mass, and in some cases 10 or 15 times more in number, than those from the Euro III equivalent with a full-filtration DPF. (Source: AKPF, Diesel Particulate Filter Manufacturers Task Force) This is very significant, as these emissions of 'ultrafine' particles are considered most damaging to health. This supports the argument that, where appropriate, retrofit of a suitable DPF is the most effective option to reduce harmful emissions in a LEZ.	At present there are no standards applicable to PM <sub>2.5</sub> reduction. Should the European Commission move towards a standard for ultra-fine particles or PM <sub>2.5</sub> TfL will consider incorporating this into the LEZ standards and would consult further before making any such change.
6.138	Effectiveness	London	What mechanisms are being considered to	Filters are likely to fail if they are not suitable for the

No.	Sub theme	Respondent	Representation	TfL Response
	of abatement equipment	Borough of Merton	put into place for certifying that an appropriate abatement device has been fitted and regularly inspected and correctly maintained.	<p>particular vehicle or its drive cycle and are not routinely serviced. TfL has identified a number of instances where inappropriate pollution abatement equipment has been fitted and routine maintenance has not been carried out and equipment has subsequently failed. It is the responsibility of both pollution abatement equipment manufacturers and vehicle operators to ensure a vehicle's specification, age and duty cycle are considered when fitting pollution abatement equipment and establishing maintenance procedures. In response to these issues, the abatement industry has introduced a number of measures to improve equipment efficiency, customer information and maintenance regimes.</p> <p>The main certification mechanism for retrofitted vehicles would be the RPC, which is issued by VOSA. This involves an initial inspection and test followed by annual retests. The scheme is technology neutral and will allow any certified device to meet the emission standard.</p>
6.139	Effectiveness of abatement equipment	Eminox Ltd	Availability of Particulate Abatement solutions: Active Regeneration options are being developed to promote controlled regeneration of the system for difficult applications and duty cycles	<p>See considerations – 6.137 and 6.138.</p> <p>TfL is supportive of the pollution abatement equipment industry's continued development of new technology to improve the effectiveness and reliability of filters.</p>

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6.140	Effectiveness of abatement equipment	Corporation of London	Have found that particulate traps do not work on refuse vehicles because of their work patterns, stop start driving in heavy traffic, interspersed with long periods of static running. It is impossible to keep them working effectively and retain the RPC status of the vehicles and consequently have abandoned use of particulate traps in these vehicles. The Mayor should ensure that an effective trap is available for this group of vehicles before the introduction of the LEZ otherwise such vehicles will have to be replaced prematurely.	See considerations – 6.137 and 6.138.  Pollution abatement equipment has been successfully fitted to thousands of vehicle fleets in a range of applications, including those with adverse duty cycles, ie urban low speed stop/start driving. Most notable is the successful installation of particulate traps on all London Buses. With careful design and if fitted and maintained properly, only a very small percentage of abatement systems will “fail” and can work in many different vehicle applications. There are already various approved technologies available that are suitable for various vehicle types and duty cycles, such as passive and active regeneration techniques which ‘burn off’ or oxidise the particulate matter (or soot) accumulating in the filtration devices. Oxidation catalysts or partial-flow filters are also available for particularly difficult applications.
6.141	Effectiveness of abatement equipment	London Borough of Richmond upon Thames	Concerned about the lack of clear evidence showing the effectiveness of retrofitted vehicles in reducing pollutants in certain 'use-based' situations (e.g. low speed vehicles). The Council's Fleet Manager is concerned that the lower speeds that some vehicles are required to operate at will not produce the necessary engine temperatures to make some retrofitting measures fully effective.	See consideration – 6.140.
6.142	Effectiveness of abatement equipment	London Borough of Richmond upon Thames	Are concerned that insufficient research has been undertaken on the technical aspects of the proposed reduction in respect of the fleets operated by Boroughs and other entirely local operations. Reliance is being placed on EU standards and testing that does not reflect the	See considerations – 6.138 and 6.140.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>operating conditions of the Boroughs own fleet. These operating conditions are almost exclusively light load conditions in heavily congested areas. It is not possible under these conditions to generate sufficient temperature for emissions reduction technology to work as designed. The technology in question is exclusively catalytic particulate traps either with Urea (or other additive) dosing or exhaust gas recirculation. Without Urea dosing the exhaust gas temperature required is in the order of 400oC, with Urea this can be reduced to in the order of 200oC, these temperatures are above the normal operating range of the vehicles in question. The technology is therefore not capable of meeting its design requirements. In the case of particulate matter the technology works by trapping particulates in fine filters and burning them off by catalytic action. The Council experiences show that this does not happen at these temperatures and where this technology is fitted the Council finds that it has to replace filters at regular intervals. Although these can be regenerated by the manufacturers this is an expensive and time consuming process adding to maintenance costs and downtime. A further concern is that as the filter becomes progressively blocked exhaust backpressure increases and consequently engine efficiency reduces.</p>	

No.	Sub theme	Respondent	Representation	TfL Response
6.143	Effectiveness of abatement equipment	London Borough of Richmond upon Thames	In some cases the nature of the vehicle and the type of service that it provides may mean that retrofitting would be ineffective in meeting a reduction in emissions standards.	See consideration – 6.140.
6.144	Effectiveness of abatement equipment	Pickfords	Concerned that retrofits to vehicles are not effective at reducing emissions, which will weaken the environmental impact of the LEZ.	See consideration – 6.140.
6.145	Effectiveness of abatement equipment	The Guild of British Coach Operators Ltd	The standards must also reflect the ability of older vehicles to be converted to meet higher standards. We have yet to see evidence that many older coaches are physically capable of upgrading to meet the proposed standards. Where conversion <i>is</i> possible, the costs of conversion need to be capable of being recouped over the vehicle's remaining life. We note that grants are no longer available or anticipated to help meet such costs.	See considerations – 6.138 and 6.140.  TfL acknowledges that abatement technology may not be available for certain older vehicles to allow them to meet LEZ standards. TfL also accepts that the effectiveness of pollution abatement equipment on certain older vehicles may sometimes not be as good as on newer vehicles and that that costs and maintenance requirements may be significantly higher. It is up to individual operators to make an economic decision between vehicle modification and vehicle replacement.
6.146	Effectiveness of abatement equipment	Thames Gateway London Partnership	A number of operators have reported problems with the use of CRT equipment. Such failures have been reported in local authority fleets which consist of short journeys followed by engine shut downs. As CRT costs an average of £3,500-5,000 it is essential that the certification process is clear to operators before they take action to meet the targets. The future of this RPC scheme is also uncertain once Euro IV engines are introduced.	See considerations – 6.138 and 6.140.  The Government has indicated its intention to retain the RPC mechanism for operators who fit qualifying abatement technology to pre-October 2006 vehicles and DfT has expressed its support for the use of the existing RPC as an eligibility criterion for the LEZ's proposed particulates standard. TfL is now investigating with VOSA and the VCA (Vehicle Certification Agency) means of ensuring that the RPC scheme has the capacity to support the increased demand the proposed LEZ could create.

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6.147	Effectiveness of abatement equipment	Freight Transport Association	Does not believe that the use of abatement equipment for particulates (PM <sub>10</sub> ) is an effective strategy for improving air quality in London. FTA members operating within the proposed LEZ area have reported repeated problems with retro-fitted particulate traps to the extent that they have been removed from some vehicles due to the extremely high maintenance costs which have been incurred. Even if particulate traps were reliable and low maintenance – which they are not – for many vehicles, the cost of fitting a particulate trap in order to obtain an RPC is out of proportion to the value of the vehicle, particularly at the lower weight categories. Concern has been raised by operators about the degradation of effectiveness of particulate traps in London operation. This has been supported by DEFRA which is concerned that this degradation is in fact leading to increased emission of oxides of nitrogen.	See considerations – 6.138 and 6.140.  For many vehicles, fitting and maintaining a particulate trap will represent the lowest cost option for compliance with the LEZ standards. A LEZ scheme that required non-compliant vehicles to be replaced or re-engined to operate in Greater London without paying a daily charge would involve unreasonably high costs on vehicle operators.
6.148	Effectiveness of abatement equipment	The Society of Motor Manufacturers and Traders Ltd	Anecdotal evidence suggests that the durability of abatement equipment may not be as good as suggested, eroding the health benefits.	See considerations – 6.138 and 6.140.
6.149	Effectiveness of abatement equipment	Eminox Ltd	The proposed PM <sub>10</sub> levels are readily achievable for most older vehicles by use of full-filtration particulate traps. This includes equipment allowing Euro III engines to meet Euro IV standards for particulates. Partial-filtration particulate traps are available and during tests they may be able to take PM <sub>10</sub>	See consideration – 6.140.

No.	Sub theme	Respondent	Representation	TfL Response
			levels from Euro II to Euro III. However, they are generally less effective across the range of operating conditions, particularly at low temperature or when fully loaded.	
6.150	Effectiveness of abatement equipment	Eminox Ltd	Considerable evidence suggests that a Euro II vehicle may emit less PM <sub>10</sub> than its equivalent Euro III vehicle. Similarly, the emission of ultrafine particles, which are most damaging to health, from a Euro IV vehicle fitted with SCR s is greater than from Euro III equivalent vehicles fitted with a full-filtration particulate traps. Therefore, the LEZ should encourage the retrofit of DPFs (diesel particulate filters) fitting of particulate traps to maximise PM <sub>10</sub> reductions.	See considerations – 6.138 and 6.140.
6.151	Effectiveness of abatement equipment	London Borough of Lewisham	A further concern is that in some vehicle applications which use CRT emission control equipment it has been found that the CRT will not function due to low exhaust gas temperatures and unfortunately these failures have occurred in Local Authority Fleets which predominately consist of short journeys followed by engine shut down when unloading.	See considerations – 6.138 and 6.140.
6.152	Effectiveness of abatement equipment	Eminox Ltd	Particulate filters are not a “fit and forget” solution. Filters have successfully been fitted and operate on city buses that represent the greatest challenge in terms of duty cycle. Eminox has first-hand knowledge of city bus operators with identical vehicles on similar routes with very different experiences of filter durability. This is related directly to frequency of filter servicing – i.e. ad hoc or scheduled	See considerations – 6.138 and 6.140.

No.	Sub theme	Respondent	Representation	TfL Response
			filter cleaning.	
6.153	Effectiveness of abatement equipment	Environmental Industries Commission	There are many retrofitted DPF systems available which will not only reduce PM <sub>10</sub> from an older vehicle to the Euro III particulate level, but will also allow it to meet the Euro IV level. This should act as reassurance to operators that they can be retrofit a technology for Phase 1 (2008) which will also enable them to meet the requirements of Phase 2 (2010) for particulate.	See considerations – 6.138 and 6.140.
6.154	Effectiveness of abatement equipment	Environmental Industries Commission	There is considerable evidence from chassis dynamometer testing of heavy duty vehicles to show that that on ‘real-world’ drive cycles a Euro II vehicle fitted with a filter will emit less PM <sub>10</sub> than its equivalent Euro III vehicle. Therefore, any LEZ scheme should positively encourage the retrofit of DPFs in order to maximise PM <sub>10</sub> reductions.	See considerations – 6.138 and 6.140.
6.155	Effectiveness of abatement equipment	Environmental Industries Commission	Over 100,000 DPFs have been fitted worldwide over the last 10 years. The industry has a great deal of experience of a wide variety of technologies, which continue to be developed and refined. This wide range of retrofit DPF technologies should allow the complete range of target vehicles to be retrofitted.	See considerations – 6.138 and 6.140.
6.156	Effectiveness of abatement equipment	Environmental Industries Commission	Many DPFs have been fitted on vehicles which operate in congested city centres, such as London and Paris. The technologies have therefore been proven for such applications. The success of retrofit DPF systems in the field depends on a number of factors: a) selecting the appropriate technology for the	See considerations – 6.138 and 6.140.

No.	Sub theme	Respondent	Representation	TfL Response
			particular application; b) correct installation; c) in-service monitoring by the operator; d) proper cleaning of the filter element to remove accumulated ash. Provided service contracts are in place exhaust after treatment suppliers are able to provide guarantees as to the performance of their products.	
6.157	Effectiveness of abatement equipment	London Recycling Ltd	The consultation document admits that the market and capacity for retro fitting particulate traps is neither extensive nor well developed.	See considerations – 6.138 and 6.140.
6.158	Effectiveness of abatement equipment	Sadler Consultants	The option of Euro II plus particulate trap to meet the 2008 standard is not mentioned sufficiently clearly. If operators comply in 2008 with Euro II plus particulate trap, this will be much more beneficial in terms of emissions reductions for both PM and NO <sub>x</sub> than complying with a second hand Euro II vehicles (due to the trap giving 95% emissions reduction) and also giving cheaper compliance costs. It is also not clearly stated that Euro II plus particulate trap would meet Euro IV PM emissions.	See considerations – 6.138 and 6.140.
6.159	Effectiveness of abatement equipment	Volvo Truck and Bus Ltd	There is already practical experience that retrofit of particulate traps has not been as successful as had been hoped and suggested by various suppliers. In urban environments, the traffic conditions prevent filters from reaching the temperatures required for reliable internal regeneration. Furthermore, the operational design of particulate traps increases NO <sub>2</sub> emissions.	See considerations – 6.138 and 6.140.

No.	Sub theme	Respondent	Representation	TfL Response
6.160	Effectiveness of abatement equipment	London Fire and Emergency Planning Authority	<p>The biggest issue with fitting particulate filters on the older Brigade vehicles is the inability to get them to the operating temperature required to burn off the trapped particulates. This is due to the work cycles of the vehicles and the short runs from stations to incidents. The fire service operation for heavy commercial vehicles is unique in London: heavy acceleration from cold when the engine fuel combustion is at its most inefficient. There is a risk that these types of problem could also manifest with the technology (not yet available) to convert Euro III engines to Euro IV emission standards.</p>	See considerations – 6.138 and 6.140.
6.161	Euro III vehicles now will be non compliant in 4 years	London Borough of Newham	<p>Although Euro IV vehicles are currently available, procurement policies, cost and possible restricted availability mean that many Euro III vehicles are still being purchased. These vehicles (i.e. Euro III) will require replacement or retro fitting in less than 4 years.</p>	<p>Feedback from operators and manufacturers is that the 2010 standard will be expensive and impractical for operators to achieve. For a range of reasons, including that many types of Euro IV vehicle are not yet available, operators are currently replacing their fleets with Euro III and there is a concern that under the proposed LEZ core scheme of Euro III for PM<sub>10</sub> in 2008 they would have a maximum of four years before they need to modify or replace their vehicles. To address this issue TfL is recommending moving implementation of the Euro IV standard for PM<sub>10</sub> back to 2012. Whilst this would lead to smaller air quality and health benefits resulting from a reduction in emissions from heavier vehicles, it would significantly reduce compliance costs to operators, and make the scheme more acceptable.</p>

No.	Sub theme	Respondent	Representation	TfL Response
6.162	Euro III vehicles now will be non compliant in 4 years	London Borough of Wandsworth	In 2010 with the introduction of Euro IV these vehicles will be non-compliant and at present retro fit exhaust suppliers are suggesting that they will be unable to meet the Euro IV standard as NO <sub>x</sub> emission control is also being introduced. This is over and above the particulate matter requirement, which they can control. This leaves the council or a contractor with a 3-year-old vehicle with no resale value and potentially heavy financial cost to carry on using it.	See consideration – 6.161.
6.163	Euro III vehicles now will be non compliant in 4 years	Road Haulage Association	TfL reviewed the Feasibility Study in 2004 to determine whether its recommendations still formed a viable basis for the implementation of a LEZ, but several additional and pertinent issues have arisen since then that have had a major influence on the road haulage and distribution sector and have resulted in most of the feasibility study findings becoming largely unrepresentative of the impact that the proposed scheme would have on both Greater London and vehicle operators and the additional cost it would generate. The mandatory implementation date for digital tachograph vehicle units, to be fitted into new in-scope vehicles put in use from 1 May 2006, has already persuaded many operators to re-visit their vehicle replacement plans, resulting in the registration of higher than anticipated numbers of non digital tachograph fitted Euro III engined vehicles being added to fleets in 2005/2006, thereby making compliance with the proposed scheme in 2010 a problem.	See considerations – 6.161 and 6.46.

No.	Sub theme	Respondent	Representation	TfL Response
			Furthermore, there has been a great deal of confusion and uncertainty regarding the operational costs of the new generation of Euro IV and V engines and this has further encouraged the take-up of Euro III vehicles.	
6.164	Euro III vehicles now will be non compliant in 4 years	TM Logistics	The timescale proposed by TFL is hugely problematic for commercial vehicle operators. The average lifespan of a lorry is between 5 and 8 years, yet this scheme states that vehicles just over 4 years old in 2010 will not be considered acceptable placing a huge cost burden on operators and distorting vehicle sales as well as re-sale values.	See consideration – 6.161.
6.165	Euro III vehicles now will be non compliant in 4 years	Musgrave Budgens - Londis	The timescale proposed by TFL is hugely problematic for all commercial vehicle operators. The average lifespan of a lorry is between 6-8 years, yet this scheme states that vehicles just over 4 years old in 2010 will not be considered acceptable, placing huge cost burden on operators and distorting vehicle sales as well as re-sale values.	See consideration – 6.161.
6.166	Euro III vehicles now will be non compliant in 4 years	AAH Pharmaceuticals Limited	The timescale proposed by TFL is hugely problematic for commercial vehicle operators. The average lifespan of a lorry is between 5 and 8 years, yet this scheme states that vehicles just over 4 years old in 2010 will not be considered acceptable placing a huge cost burden on operators and distorting vehicle sales as well as re-sale values.	See consideration – 6.161.

No.	Sub theme	Respondent	Representation	TfL Response
6.167	Euro III vehicles now will be non compliant in 4 years	Corporation of London	Are concerned about ability to comply with the requirement for Euro IV by 2010. Introducing a requirement for Euro IV, only two years after a requirement for Euro III, gives operators insufficient time to replace vehicles without incurring huge expenditure. Consequently, would like the Mayor to consider a rolling compliance limit to avoid the need for a mass replacement of vehicles in 2010.	See consideration – 6.161.
6.168	Euro III vehicles now will be non compliant in 4 years	Calor Gas Limited	Sale of Euro III compliant vehicles will be legal until October 2006, though many operators will be choosing Euro IV now if vehicles are available which suit their company requirements. It would not be efficient to insist that all Euro III vehicles should be replaced by Euro IV vehicles by 2010. For most operators, the typical fleet replacement cycle is eight years. Even assuming that from October this year all new purchases were of Euro IV vehicles, in 2010, roughly half of most fleets would still be Euro III. What would fleet users do with Euro III vehicles which were viable, safe and relatively non-polluting? Clearly they will not scrap them. Replacing viable vehicles with newer ones entails massive unnecessary use of energy and raw materials in the construction process. This would appear to fly in the face of the Mayor's environment policies in general.	See consideration – 6.161.

No.	Sub theme	Respondent	Representation	TfL Response
6.169	Euro III vehicles now will be non compliant in 4 years	London Recycling Ltd	By adopting a Euro III standard for the LEZ in 2008 it will mean that vehicles older than 6.5 years will either be forced off the road by heavy charges or face substantial costs in fitting particulate traps. From 2010 the adoption of Euro IV standards will mean that vehicles older than 3.5 years will be in the same position. Few vehicle fleets are able to operate with a vehicle operating life as short as this and it would have huge implications for business as a whole. Suggest extending the time scale for the adoption of Euro III and then Euro IV standards.	See consideration – 6.161.
6.170	Other vehicle emission issues	Road Haulage Association	Would welcome some type of initiative for early take up of Euro V engined commercial vehicles, as per the Chancellor of the Exchequer's recent budget statement.	TfL is currently considering environmental incentives as part of a review of the Congestion Charging cleaner vehicles discount. Defra is currently undertaking a consultation on the Review of the Air Quality Strategy for England, Scotland and Wales and is seeking views on a number of additional policy measures, including a programme of incentives to phase out the most polluting cars, those built before Euro standards were enforced in 1992 and Euro I cars built until 1996.
6.171	Other vehicle emission issues	London Retail Consortium	Would encourage a strategy supporting the early uptake of Euro V given the evident impact that previous Euro models have had and continue to have on a reduction in the concentration of pollutants in the air.	See consideration – 6.170.  TfL encourages operators to purchase the most environmentally friendly vehicles and Euro IV vehicles are already available for purchase. Greater take up of these vehicles would bring greater benefits and reduce long term operator costs.
6.172	Other vehicle emission issues	The Society of Motor Manufacturers and Traders	Euro V values and dates are already established and Euro VI is under discussion. An ongoing strategy should encourage early uptake of these vehicles.	See consideration – 6.171.

No.	Sub theme	Respondent	Representation	TfL Response
		Ltd		
6.173	Other vehicle emission issues	National Grid	Suggest that compliance via standards imposed on manufacturers for all new vehicles, coupled with a phase out of older vehicles which are non compliant would be possible without charges.	See consideration – 6.170.  The charging approach proposed by TfL would allow infrequent visitors to London with older vehicles to drive in the zone without having to modify their vehicles.
6.174	Other vehicle emission issues	Environmental Services Association	Concerned that the enforcement regime, which depends on automatic number plate recognition by camera being matched against existing records, would automatically assume the vast majority of vehicles are compliant if registered by a certain date, whether or not that emissions standard has been maintained throughout the life of the vehicle. Understands that there will be no roadside testing to detect actual emissions and as such it will be virtually impossible to predict how air quality might improve year on year.	TfL recognises this as a potential issue but considers that a LEZ based on Euro standards that allows the fitting of pollution abatement equipment best balances affordability, fairness and clarity for operators with air quality and health benefits. The impact of this issue on air quality monitoring is not expected to be significant enough to warrant review of the methodology. Roadside testing of vehicles has been considered but deemed impractical and expensive to implement.
6.175	Other vehicle emission issues	London Fire and Emergency Planning Authority	Additives for current fuels have given engine manufacturers a number of problems with warranty issues. Different schools of thought exist throughout the world on the effectiveness and long term wear effects on internal combustion engines utilising a 5% bio-diesel mix. There is a risk that the same confusion will surface with Adblue additives. The Authority's vehicle provider will be looking very closely at the reports into this additive as will the engine manufacturers. Should there be any doubt about the long term effects of its use, then the Authority could incur considerable costs for engine	Selective Catalytic Reduction (SCR) of NO <sub>x</sub> emissions, which utilises the Adblue additive, will result in less engine 'wear and tear' than the alternative technology - Exhaust Gas Recirculation (EGR). EGR increases 'sooting' of the lubrication oil and service intervals with EGR will be more frequent than with SCR emission control solutions. Adblue is a solution of urea in demineralised water which is not a toxic substance and if handled sensibly will not cause any significant problems. An additional tank is required for Adblue, but the consumption of Adblue is around 5 per cent of the diesel consumed so is much smaller than the fuel tank. EGR also adds some more weight with extra pipework and an EGR cooler. It should be noted that TfL is not

No.	Sub theme	Respondent	Representation	TfL Response
			<p>and/or fuel system repairs across the majority of the heavy vehicle fleet, for a period of up to fifteen years. Adblue additive (Urea) requires careful handling and will raise potential Health &amp; Safety concerns during use. Special tanks on vehicles will have to be fitted possibly at the expense of some other stowage; at present, operational equipment fully accounts for space and weight allowances on pumping appliances. If these tanks are of any notable size, some equipment may need to be sacrificed in order to fit them.</p>	<p>recommending including a NO<sub>x</sub> standard in the LEZ at this stage.</p> <p>TfL notes the concerns about new engine technology. However, Euro IV and V engines are being introduced in all new vehicles and vehicle manufacturers are obliged to meet durability requirements.</p> <p>TfL would require a national certification scheme for NO<sub>x</sub> abatement equipment before a NO<sub>x</sub> standard could be introduced.</p>
6.176	Other vehicle emission issues	London Borough of Richmond upon Thames	<p>It is understood that alternative fuels such as CNG run at a higher temperature than traditional fuels. This can result in engines burning out earlier than would be expected (than for example, diesel engines) and this means that these vehicles require replacement sooner. It is also the case that these vehicles carry a significantly reduced payload, which increases the number of vehicles required. Additionally there are concerns about other pollutants ignored by this project and for these and other reasons these fuels have not been successful. Has consideration been given to the impact that a shorter lifespan of fleet vehicles would have when offset with the improvements to air quality from using alternative fuels?</p>	<p>The proposed LEZ seeks to improve air quality by deterring the most polluting diesel-engined vehicles from the Greater London area. Vehicles which run on alternatives fuels are outside the scope of the proposed LEZ.</p> <p>TfL does not propose or promote any specific technology to meet the LEZ standards, and operators are best placed to judge which method is best suited to their vehicles.</p> <p>Whilst CNG vehicles certified as meeting emission standards would be allowed to drive in the LEZ without charge, the volumes of such vehicles are predicted as being too low to have been included in modelling.</p> <p>The negative impacts of reduced vehicle life have been considered, and this is one of the reasons that TfL proposes allowing vehicles which have been retrofitted to drive without charge in the LEZ.</p>

No.	Sub theme	Respondent	Representation	TfL Response
6.177	Other vehicle emission issues	The Guild of British Coach Operators Ltd	Whilst the proposed LEZ will be the largest such scheme in the UK, it will not be the only one and therefore the Government should establish common standards to apply to all such schemes, so that a vehicle compliant with the rules of one scheme, such as in London, could operate freely in any other town/city subject to an LEZ. Believe this is too important an issue to leave entirely to local authorities.	In the UK, local authorities are responsible for local air quality management, including reviewing and assessing air quality, and preparing action plans and schemes to remedy any local pollution hotspots, such as LEZs. The Low Emissions Strategy Group was established to facilitate the sharing of information, experiences and knowledge among local authorities in relation to the development and implementation of programmes to reduce road transport emissions. The Group is made up of English local authorities and government agencies including DfT, DVLA and DEFRA. The Group has agreed that if LEZs are implemented in other areas then they should have the same emissions standards.
6.178	Other vehicle emission issues	NSCA (National Society for Clean Air)	As this is the first LEZ in the UK it will inevitably influence future proposals for LEZs in other cities. Consequently, the standards chosen are likely to have wider impacts than just in London. As a number of other towns and cities are considering LEZs as a part of their Air Quality Action Plans (AQAPs) the standards finally adopted for the London LEZ should be sufficiently stringent so as to achieve their aims in London and to lead the way for the rest of the country. Adoption of a uniform standard across UK LEZ's has considerable benefits.	See consideration – 6.177.
6.179	Other vehicle emission issues	The Kings Ferry Travel Group	Whilst the proposed LEZ will be the largest such scheme in the UK, it will not be the only one and therefore the Government should establish common standards to apply to all such schemes. If a vehicle is compliant with the rules of one scheme, (in London, for	See consideration – 6.177.

No.	Sub theme	Respondent	Representation	TfL Response
			example), it could operate freely in any other town/city subject to an LEZ. Believe this is too important an issue to leave entirely to local authorities.	

## THEME 7 BOUNDARY

No.	Sub theme	Respondent	Representation	TfL Response
7.01	Proposed boundary is correct	London Borough of Lambeth	Welcome the proposal for the boundary of the LEZ to be the GLA administrative boundary. Consider that this is more equitable than other alternatives put forward. This will relieve administrative duties from boroughs which is also welcome.	TfL notes the support for the proposed boundary.
7.02	Proposed boundary is correct	London Borough of Barnet	The proposed boundary of the scheme at the Greater London boundary poses considerable problems on roads which cross the boundary. Drivers of non-compliant vehicles would be entitled to drive along these roads up to the boundary to make deliveries or collections outside the LEZ, but would have no opportunity to turn around to avoid entering the LEZ. The exempt route network of the London Lorry Control Scheme addressed this issue by providing routes HGV drivers could use to pass through the controlled area in order to perform a turn-back manoeuvre. This does, however, have implications in terms of boundary signage. As an outer London borough, the Council believes it is vital to consider the issue as part of the scheme.	In order to maximise the air quality and health benefits, the LEZ boundary must be as close to that of Greater London as possible. It is proposed that the boundary of the LEZ will be very similar to that of the LLCS, which covers almost all of Greater London. Deviations from the Greater London and LLCS boundary occur for reasons of practicality and to allow vehicles to exit the LEZ area without becoming liable for a charge.
7.03	Proposed boundary is correct	The Guild of British Coach Operators Ltd	The geographic scope of the proposed LEZ seems to us to be reasonable, given that a more logical boundary such as the M25 takes in significant areas not under the GLA's control.	TfL notes the support for the proposed boundary.
7.04	Proposed boundary is	London Borough of	The implementation of a London wide scheme is welcomed, as much of the	See consideration – 7.03.

No.	Sub theme	Respondent	Representation	TfL Response
	correct	Harrow	emissions from traffic are trans-boundary problems.	
7.05	Proposed boundary is correct	Eminox Ltd	A London-wide LEZ is the most effective option to produce the necessary benefits in the required timescale.	See consideration – 7.03.
7.06	Proposed boundary is correct	Environmental Industries Commission	Agree that a London-wide LEZ to cover the whole of the GLA area is the most effective option to produce the necessary benefits in the required timescale.	See consideration – 7.03.
7.07	Should cover Congestion Charging area only	London First	The London Air Quality Network demonstrates that the majority of pollution hotspots occur within central London. A smaller, more concentrated zone, covering the extended Congestion Charging Zone plus ring roads, gives good alignment with existing infrastructure and would target the most heavily polluted areas, with a considerably more effective scheme. This is particularly important as the benefit to cost ratio of this scheme is considerably lower than both Department for Transport guidelines and typical investment criteria for similar projects.	Modelling shows that a LEZ covering the existing Central London Congestion Charging Zone, or other restricted areas, would provide significantly fewer operators with an incentive to clean up their vehicles and as a consequence would not address a substantial number of the pollution hotspots in London that exceed air quality objectives. TfL modelling shows that the health benefits associated with a LEZ covering the existing Central London Congestion Charging Zone are less than 5 per cent of those for a LEZ covering all of Greater London. A LEZ covering an area less than Greater London could also lead to increased congestion from large vehicles on the perimeter of the zone, creating localised pollution and safety risks. Were the zone to include ring roads as well, there would be a danger of increased rat running on inappropriate roads.

No.	Sub theme	Respondent	Representation	TfL Response
7.08	Should cover Congestion Charging area only	British Association of Removers	The LEZ should be confined to the Congestion Charge area and to the same time periods in order to avoid confusion and unacceptable cost increases.	See consideration – 7.07.  The hours of operation are proposed to be 24 hours a day, Monday to Sunday, 365 days a year. Reducing the operational hours of the LEZ would significantly erode the air quality and health benefits of the proposed scheme as it would provide significantly fewer operators with an incentive to clean up their vehicles. Furthermore, air quality, unlike congestion, is a concern throughout the day.
7.09	Should cover Congestion Charging area only	British Vehicle Rental and Leasing Association (BVRLA)	Note the various options considered for where the LEZ should be applicable and are surprised that the results showed that a zone covering greater London was the best option. The maps which are included in the consultation and supplementary information seem to indicate that the highest levels of pollution are within central London and we would have thought a great deal of the costs in setting up the scheme are due to the size of the proposed zone. It would seem sensible to propose a zone that initially was central London only and then dependent on success expand it to other targeted parts of Greater London.	See consideration – 7.07 and 7.11.
7.10	Should cover Congestion Charging area only	Central London Partnership	There is an argument for restricting the scheme to the extended congestion charging area, as that will be a clearly demarcated area, and the existing street furniture used for congestion charging signage could be deployed.	See considerations – 7.07 and 7.11.  The aims of the congestion charge are different to those of the proposed LEZ. It would therefore be confusing to drivers if the same signage was used for both schemes.

No.	Sub theme	Respondent	Representation	TfL Response
7.11	Should cover Congestion Charging area only	London Retail Consortium	<p>The proposed geographical boundaries are too wide and thus will incur excessive monitoring and enforcement costs. Propose that the scheme be initially restricted to the Congestion Charging Zone (CCZ) where vehicle monitoring technology is already in operation. Evidence suggests that air pollution is clearly of primary concern in central London and Heathrow (which is clearly not part of the proposals currently) that alternatives, such as the North/ South circular boundary, or the CCZ boundary are considered.</p>	<p>See considerations – 7.07 and 7.10.</p> <p>The relatively modest additional costs associated with monitoring and enforcing a LEZ over all of Greater London are justified by the substantially greater increase in air quality and consequential health benefits that such a scheme would generate.</p> <p>TfL is in discussions with BAA about how the LEZ could work together with existing and planned policies for tackling emissions at Heathrow.</p> <p>The introduction of a low emission zone in central London up to the North/South Circular could lead to potential problems from vehicles switching to alternative routes around the LEZ. This could increase congestion on these routes and offset the air quality benefits of the LEZ, by increasing air pollution around the perimeter of the zone. The study has confirmed such effects would not be a problem for a London wide scheme, because most 'through trips' across London already use the M25 (because of current levels of traffic congestion in London).</p>
7.12	Other reduced area of LEZ	Royal Mail Group plc	<p>Pollution levels in London (excluding the area around Heathrow airport) divide between relatively low levels of pollution outside the North/South Circular area compared to the zone inside. Rather than a scheme that covers all of the London boroughs, Royal Mail would support a limited LEZ covering the area inside the North/South Circulars, not including</p>	<p>See consideration – 7.11.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			these roads themselves. This would reduce pollution in the worst affected areas at a reduced cost to both TfL and industry.	
7.13	Other reduced area of LEZ	The Society of Motor Manufacturers and Traders Ltd	A smaller zone focussed on zones of high concentrations (such as around Heathrow and the north and south Circulars) should be given greater consideration.	See consideration – 7.11.
7.14	Should also include motorways and trunk roads	City of Westminster	Recognise that the scheme needs to encompass all of London, to be fully effective and to limit the impacts of trans-boundary dispersion of pollutants. It would be even more effective if it covered all of the area including the M25, as this route is a significant source of emissions. Recognise that to do this would require the agreement of the Highways Agency and many other local authorities and that it is not feasible at this stage. But suggest that this should be reconsidered once there is sufficient evidence of the effectiveness of the London LEZ.	<p>TfL has no powers over roads outside Greater London and the M25 is managed by the Highways Agency. Extending the LEZ beyond the Greater London boundary would involve a considerable amount of extra resources, time and complexity, as well as the cooperation of a number of non-London highway authorities and the Secretary of State.</p> <p>TfL is not recommending that the M25 be included in the LEZ as it is an appropriate diversionary route for vehicles in order to avoid driving within the LEZ. However, TfL is currently in discussions with the Highways Agency about the feasibility of including other motorways (excluding the M25) that fall within the GLA area in the LEZ.</p>
7.15	Extend boundary	Constant Consultancy	Concerned about the geographical area that the LEZ will embrace. Just outside the LEZ is the M25 and as was seen so vividly during the Buncefield fire the weather can have a considerable influence on where and how pollution will affect the UK. Therefore, by excluding the M25 from the LEZ any reduction in pollution within the Capital could be adversely affected by pollution blown in	<p>See consideration – 7.14.</p> <p>A number of areas in outer London, including around Heathrow, town centres and main roads, experience poor air quality and would benefit significantly from the proposed LEZ.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			from the M25. The LEZ should encompass the whole of the M25 or be considerably reduced as there does not appear to be the same air quality problems in the outer London boroughs as there is within the inner area.	
7.16	Extend boundary	London Borough of Merton	Agree that the current Congestion Charging Zone and the western extension would be far too small an area to apply a scheme of such magnitude and that the benefits gained from such a scheme would be marginal. Fully support using the M25 as a boundary, not only for the scale of benefits but because it would be easier for people to be aware of the boundary and would significantly reduce the amount of signage needed. Believe that the GLA administrative boundary will be a difficult one for people to visualise.	See consideration – 7.14.  The GLA or TfL does not have the powers to extend the scope of the LEZ to the M25, most of which lies outside its area. For this reason the boundary signs will need to be located at or within the GLA boundary. Discussions are however taking place with the Highways Agency (the highway authority for motorways and sections of trunk road both within and outside London) and other highway authorities outside London with a view to negotiating the provision of advance informatory signing advising the drivers of non-compliant vehicles to use the M25 and other suitable roads to avoid reaching the GLA boundary.
7.17	Extend boundary	London Borough of Islington	Islington is happy to support the scheme to cover the whole of Greater London. However, if the scheme is a success, the Council would like TfL to investigate the possibility of expanding the LEZ to the M25 boundary, possibly by 2010, as it is a more clear and sensible boundary.	See considerations – 7.14 and 7.16.
7.18	Extend boundary	Slough Borough Council	The consultation documents propose a preferred option of an LEZ based on the GLA area. At present this does not include the westerly areas of Heathrow. It is not clear from the consultation documentation whether future extensions of the LEZ would be	See considerations – 7.14 and 7.16.  TfL is in discussions with BAA about how the LEZ could work together with existing and planned policies for tackling emissions at Heathrow.

No.	Sub theme	Respondent	Representation	TfL Response
			considered or would be feasible.	There are no current plans for the extension of the LEZ, but this will be kept under review.
7.19	Extend boundary	Surrey County Council	Understands the reasoning behind the selection of the favoured option of defining the LEZ according to the GLA administrative boundary. Notwithstanding this, the County Council, as the Transport Authority for the administrative County of Surrey, has a responsibility for addressing the problems of Air Quality Management Areas (AQMAs), where the principal contributor is road transport, and there are a small number of such AQMAs declared adjacent to the Surrey/London boundary. Consequently, the County Council wishes to request TfL to give favourable consideration to any future proposal that might be made by the Council and the relevant District Council to extend the boundary of the London LEZ to incorporate parts of Surrey (probably through the use of a separate TRO), where this is identified and agreed to be a worthwhile measure to address declared AQMAs.	See considerations – 7.14 and 7.16.
7.20	Extend boundary	Kent County Council	If implemented would welcome further consideration of the option for the LEZ to use the M25, boundary, which has been dismissed on the basis that it would be more difficult to implement and enforce. As all sections of the M25 within the County have been declared as AQMAs, the designation of the M25 as an LEZ could help reduce pollution levels in these areas.	See considerations – 7.14 and 7.16.

No.	Sub theme	Respondent	Representation	TfL Response
7.21	Signage issues	London Borough of Bromley	There is a concern that the primary and repeater signage and enforcement infrastructure may lead to visual intrusion and be uncoordinated with other street furniture. The Council would wish to be assured that it will be properly consulted on these installations on a site-by-site basis and that they will not simply be imposed by TfL. The Council also expects TfL to bear all costs of equipment or signage installed on borough roads, including meeting any local urban design requirements.	TfL would be careful to ensure signage is kept to a necessary minimum in order to avoid sign clutter, and would liaise with the relevant London boroughs, contiguous authorities and the Highways Agency to identify appropriate sign locations. Some signage will be required inside the LEZ as well as on the boundary. Should the Mayor approve the Strategy Revisions, this issue would be considered in a further Environmental Impact Assessment of the scheme, which would be made available at the time of any further consultation. All signage costs associated with the LEZ would be borne by TfL.
7.22	Signage issues	London Borough of Barnet	The LEZ could require the provision of more than 90,000 signs across London. The environmental impact of this (both in terms of streetscape and manufacture) would be a key determinant in the consideration of the net benefits of the proposed scheme.	See consideration – 7.21.  It is not expected that the scale of signage required by the LEZ would be on this scale.
7.23	Signage issues	London Borough of Merton	If a boundary other than the M25 is to be adopted, then reducing visual clutter should be a primary consideration.	See consideration – 7.21.
7.24	Signage issues	London Borough of Richmond upon Thames	Concerned about the potential visual impacts from signage associated with the LEZ, particularly at the boundary of the Borough, but also within the Borough. It is assumed that signage will be required within the LEZ area not just at the boundary, much like the Congestion Charging Zone. The volume of signage across Greater London has resulted in visual clutter and the Borough is keen to see careful consideration given to the location, size and content of signage	See consideration – 7.21.

No.	Sub theme	Respondent	Representation	TfL Response
			associated with the LEZ. In addition, the Borough has a Public Space Design Guideline, which it would expect any new signage to comply with. Consultation with the Borough would be expected.	
7.25	Signage issues	London Borough of Hillingdon	Concerned about the amount of signage that may be required. There is a lack of clarity as to whether this would be confined to boundary signs or whether there would be inter-zonal signs/repeater signs as in the Congestion Charging Zone. Boroughs do not support undue proliferation of signage on the road network.	See consideration – 7.21.  All entry points into the LEZ would be clearly signed and would show the classes of vehicle to which the emission controls apply to limit representations from drivers of non-compliant vehicles who receive a PCN because they were unaware that they had entered the zone. The zone boundary would be at locations where drivers of non-compliant vehicles can divert to other roads, although it is not proposed that these be individually signed. Advance warning signs would be erected to allow drivers to divert.
7.26	Signage issues	London Borough of Tower Hamlets	The impact of any LEZ signage on the streetscape is of potential concern with regards to not causing additional unnecessary street clutter to protect the visual environment. Is actively working to reduce street clutter, and would ask that signage be minimised in accordance with this policy.	See considerations – 7.21 and 7.25.
7.27	Signage issues	London Borough of Southwark	Concerned that the introduction of the LEZ would further impact upon Southwark's streetscape, albeit to a lesser extent than Congestion Charging, as the actual boundary would not be located in the borough. It is anticipated that following the precedent set by the congestion charging scheme, 'repeater'	See considerations – 7.21 and 7.25.

No.	Sub theme	Respondent	Representation	TfL Response
			signs would be installed within the zone (i.e. the whole of Greater London) to remind drivers of vehicles subject to the charge that they are driving within the zone and therefore would seek to ensure that such signage did not add to street “clutter” and was appropriate to its location.	
7.28	Signage issues	London Borough of Hounslow	The signage for the system will need to be on a very large number of roads across London. This will require a large amount of co-ordination with boroughs. The scale of the Congestion Charging Zone signage is large, and only covers a small area of London. As the LEZ would cover the whole of London, the scale and logistics for signing the LEZ would be complex. The colours etc. to be used will also need to be sufficiently different from the Congestion Charging Zone to avoid confusion. Adequate numbers of ‘escape’ routes for accidental entry also need to be worked out. Whilst much of this detail is operational, they are significant enough issues, if not co-coordinated and planned appropriately, to cause delays to the implementation of the LEZ and hence negate some of its purported benefits.	See consideration – 7.25.  TfL is in discussions with DfT and the Highways Agency over design of signage for the proposed LEZ.  It is proposed that the boundary of the LEZ will be very similar to that of the LLCS, which covers almost all of Greater London. Deviations from the Greater London and LLCS boundary occur for reasons of practicality and to allow vehicles to exit the LEZ area without becoming liable for a charge.
7.29	Signage issues	City of Westminster	Almost 80% of Westminster is covered by building Conservation Areas. To protect the visual qualities of all of the city, the City Council implements policies to control and reduce street ‘clutter’. Westminster is therefore strongly opposed to introduction of	See considerations – 7.21 and 7.28.

No.	Sub theme	Respondent	Representation	TfL Response
			any more street furniture, equipment and signage than is absolutely essential. Would like to be assured that no additional signage would be required for LEZ within or at the boundaries of Westminster.	
7.30	Signage issues	London Borough of Islington	Are concerned that intrusions on the landscape resulting from the LEZ infrastructure (including cameras and signs) need to be minimised. In developing any order, TfL should work to minimise street clutter by using existing street furniture such as street light columns, or consolidating existing street furniture onto new columns, etc.	See considerations – 7.21 and 7.28.
7.31	Signage issues	Slough Borough Council	Are concerned about the visual impact on the landscape and townscape of roadside signage and ANPR camera infrastructure at the boundary of the proposed LEZ, particularly in the Colnbrook area. We would welcome further information on proposed location of LEZ signage and ANPR cameras.	See considerations – 7.21, 7.25 and 7.28.  Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006. Information LEZ infrastructure and signage would be set out in the Order and would be subject to public consultation.
7.32	Signage issues	London Borough of Harrow	The addition of enforcement cameras at the borough boundary and associated signage could detract from the street scene.	See considerations – 7.21, 7.25 and 7.28.
7.33	Signage issues	Surrey County Council	Would wish to enter into detailed negotiations with TfL at the appropriate time in order to agree on the best location for signing, cameras and advance warning information, much of which it would be necessary to locate within Surrey. In this respect, the County Council would wish to avoid street clutter caused by the excessive or inappropriate	See considerations – 7.21, 7.25 and 7.28.

No.	Sub theme	Respondent	Representation	TfL Response
			locations of signs etc.	
7.34	Signage issues	London Borough of Hammersmith and Fulham	It is important that there is adequate signage for the scheme, particularly at the LEZ boundary to help drivers decide whether or not their vehicle will need to pay a LEZ admission charge or not. This could be particularly important where only a small stretch of a major road may be within the LEZ area. It is presumed that there would not be a need for signage in an inner London Borough such as Hammersmith & Fulham. It is also assumed that there will not be any need for fixed cameras to be installed for enforcement purposes, as these may be better placed at the boundary. Early confirmation from the GLA/TfL which boroughs would be expected to host such signage and enforcement cameras would be appreciated, as would confirmation that boroughs would not need to meet any associated installation costs.	See considerations – 7.21, 7.25 and 7.28.  Exact details on the infrastructure of the proposed LEZ have yet to be determined. However, it is likely that fixed cameras would be located within the LEZ as opposed to all on the boundary.  Boroughs would not be expected to meet any associated installation costs.
7.35	Signage issues	London Borough of Enfield	There must be the fullest consultation with all stake holders regarding the scheme order details such as signage and sites for enforcement cameras.	See consideration – 7.25, 7.28 and 7.33.
7.36	Other boundary issues	London Borough of Barking and Dagenham	Concerned that new signage and information boards might be required all over Greater London and would ask that signage be kept to a minimum, proposing that scheme publicity is sufficient to alert vehicle operators.	See consideration – 7.25, 7.28 and 7.33.
7.37	Other boundary issues	City of Westminster	It is not clear from the consultation documents what equipment and signage would need to be installed. Concerned that	All existing ANPR cameras used for enforcement of the Central London Congestion Charging Zone and those to be used for the Western Extension, would also be

No.	Sub theme	Respondent	Representation	TfL Response
			reference is made to use of ANPR (Automatic Number Plate Recognition) cameras “similar to those used for Congestion Charging”. Surprised that this appears to imply an intention to duplicate Congestion Charging (CC) cameras rather than doubling up use of the existing CC ones for the LEZ. Aside from the very real issue of duplication of costs, this suggests an unacceptable duplication of obtrusive street ‘clutter’.	used for LEZ enforcement. Enforcement would be complemented by additional fixed and mobile cameras outside the Congestion Charging zone. TfL will liaise with the relevant London boroughs when installing any additional enforcement cameras to ensure the visual impact of such equipment is adequately considered.
7.38	Other boundary issues	Royal Borough of Kensington and Chelsea	The Council are concerned about the numbers of additional enforcement cameras and associated signage that will be needed in the borough across London. Our experience of the congestion charging extension is that TfL has shown itself insensitive to the streetscape implications of its enforcement infrastructure, and we fear that the same mistakes will be made over a wider area for the LEZ, and the impact this will have on the appearance of the streetscape.	See consideration – 7.37
7.39	Other boundary issues	London Borough of Merton	In the absence of national initiatives for addressing road transport related emissions, would there be scope in the LEZ to include a complete ban on such vehicles near schools and/or hospitals or even in town centres?	TfL considers that it would be complex to implement a complete ban only on certain roads as it would be difficult to enforce and administer and may also have undesirable impacts on traffic flows. TfL's preferred option is to enact a London-wide LEZ via a Scheme Order as this would make for a simple scheme design, is administratively less complex than other options and has a lower risk of implementation delay. It would also allow operators of non-compliant vehicles who rarely drive in London to come into the LEZ, albeit at a cost. It is anticipated that the majority of vehicle operators

No.	Sub theme	Respondent	Representation	TfL Response
				would choose to upgrade or replace non-compliant vehicles - very few would continue to operate non-compliant vehicles and pay the daily charge.
7.40	Other boundary issues	London Borough of Lewisham	Boundaries of any zone present a problem, but the boundaries of Greater London were established in the 1960s as a result of political discussions and haggling. As a result they are not logical and in a number of cases routes linking two parts of a shire county run through London for a short distance. The potential for unsuitable vehicles running along inappropriate roads to avoid London suggest that a review of the boundary would be sensible. The more logical the boundary, the less sign clutter would be needed, and the less confusion would apply	TfL has looked in some detail at the appropriate location of the LEZ boundary to ensure that the zone boundary would be at locations where drivers of non-compliant vehicles that do not want to enter the LEZ can divert to other suitable roads. TfL has been careful to ensure that the location of the boundary does not increase the number of heavy vehicles using unsuitable roads, e.g. country lanes. Details of the boundary would be made available as part of the consultation on a Scheme Order, should the Mayor publish the Strategy Revisions.

## THEME 8 LEVEL OF CHARGE

No.	Sub theme	Respondent	Representation	TfL Response
8.01	Charge should be higher	Energy Saving Trust	Charge should be set at a high level to incentivise vehicle retrofit and replacement.	<p>The charge would be set at such a level so as to encourage operators to modify or replace their vehicles, thus maximising the air quality and health benefits of the LEZ. At the same time, it would allow infrequent visitors operating non-compliant vehicles to drive within the proposed LEZ, albeit at a cost. Should the daily charge be set at too high a level, it would be likely to encourage some occasional operators in London to risk not paying, or would effectively prevent them from operating in London, which is not the aim of the LEZ.</p> <p>TfL considers that a daily charge of between £100 to £200 and a penalty charge of between £500 and £1,000 would strike a balance between encouraging operators to upgrade their vehicles and maximising the air quality and health benefits of the proposed LEZ. The level of penalty charge for non-compliance would be proportionate to the level of charge, and both would remain subject to review.</p>
8.02	Charge should be higher	Sadler Consultants	The charges suggested seem quite low and seem likely to lead to significant levels of non compliance.	See consideration – 8.01.
8.03	Charge should be higher	NSCA (National Society for Clean Air)	Note that for many vehicles affected by the LEZ proposals currently operating in London, the proposed standards are already met. The main impact is therefore likely to be on non-London vehicles seeking to operate into London. Where these are upgraded to meet the LEZ standards there will be some “knock-	See consideration – 8.01.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>on” benefits outside London but there is also a risk that some operators will simply choose to pay the charge for occasional visits to London rather than upgrade their vehicles. It is important that the charge is set appropriately. It is questioned whether the levels proposed in the consultation documents are high enough. Careful analysis is required and charges should be scaled according to the environmental and health objectives of the scheme.</p>	
8.04	Charge should be lower	Freight Transport Association	<p>Respondents to the FTA's survey indicated that the higher the charge the less likely they would be to continue to serve London – it would effectively price them out of the market and the damage this could do to the economy requires further investigation by TfL.</p>	<p>See consideration – 8.01.</p> <p>The LEZ will only affect the most polluting vehicles: old diesel HGVs, buses and coaches, as well as heavier LGVs. Modelling suggests that only 34 per cent of HGVs and 42 per cent of coaches would not be compliant with the proposed LEZ emission standard in 2008. Those operators who are compliant with the proposed LEZ would not have to pay the daily charge to drive within London.</p> <p>TfL considers that if the daily charge is set at less than £100 and the penalty charge at less than £500 the anticipated health benefits and air quality improvements of the proposed LEZ would be severely eroded as operators would have more of an incentive to pay the daily charge rather than upgrade their vehicles.</p>
8.05	Charge should be lower	London Borough of Enfield	<p>The level of charges for non compliant vehicles and the penalty charges must not be drastic. Particularly in the first year of</p>	<p>See considerations – 8.01 and 8.04.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			operation of the LEZ, the charges must be modest and be simply adequate to provide an incentive to improve the vehicle fleet instead of being punitive.	
8.06	Charge should be lower	London Retail Consortium	The proposed penalties are far too prohibitive and should be significantly less, particularly in the first instance, and should reflect current Congestion Charging fees.	<p>See considerations – 8.01 and 8.04.</p> <p>A daily charge which reflected the current Congestion Charge would provide little incentive for operators to upgrade their vehicles and the resulting air quality and health benefits would be significantly reduced.</p>
8.07	Charge should be lower	British Association of Removers	The initial access fees for entry into the London LEZ for non-compliant vehicles are far too high and should be introduced on a sliding scale to allow for practical fleet replacement plans over a period of time.	<p>See considerations – 8.01 and 8.04.</p> <p>Given that TfL estimates that almost two thirds of vehicles would be compliant with the proposed 2008 LEZ emission standard for PM<sub>10</sub>, TfL does not consider that the timescales are unreasonable. Therefore, TfL does not feel that there is a need for a sliding scale to be introduced.</p>
8.08	Penalty charge is too low	Sadler Consultants	The difference between the cost to comply and the penalty notice does not appear high enough to encourage payment if a vehicle does not comply with the standards. This will depend on the level of enforcement, but it is unlikely that the level of enforcement across the LEZ would be at the same level as for the Congestion Charge. It is not clear whether non-compliance is considered in the modelling given.	<p>TfL proposes to set the penalty charge for non-payment of the daily charge between £500 and £1000. This range was chosen because it provides a direct economic incentive to all but the most infrequent visitors to the LEZ to make their vehicles compliant. The penalty charge needs to be set at a level which is proportional to the offence.</p> <p>TfL's modelling work included consideration of the number of non-compliant vehicles operating within Greater London, based on the results of the operator survey TfL undertook in 2005 which indicated that a very small percentage of operators would risk non-payment.</p>

No.	Sub theme	Respondent	Representation	TfL Response
8.09	Other charge level issues	Federation of Small Business	The FSB survey found that 60% of respondents would choose not to serve London with a daily non-compliance rate of between £50 and £200.	See considerations – 8.01 and 8.04.  Results from the operator survey TfL undertook in 2005 indicate that only 10 per cent of HGV operators would turn away work in London because of the proposed LEZ.

## THEME 9 ENFORCEMENT

No.	Sub theme	Respondent	Representation	TfL Response
9.01	Concerns with infrastructure and technology	Thames Gateway London Partnership	Concerned that the technology required to run the scheme could in time become redundant as older non-compliant vehicles reach the end of their working life. Seek assurance that every effort will be made to minimise the amount of investment in equipment which could in time become redundant whilst still delivering an effective scheme. Note that the proposal includes the use of existing congestion charging ANPR cameras.	<p>TfL will be using Automatic Number Plate Recognition (ANPR) cameras when the scheme is introduced in 2008. The ANPR system is the most viable technology currently available for enforcing the LEZ and has proved successful in the Central London Congestion Charging scheme. This would not preclude TfL from introducing new enforcement technology in the future.</p> <p>TfL is currently investigating the potential of tag and beacon and GPS technologies for road user charging and is continuing a series of trials to test how these systems could operate in a London environment. It should be noted that a microwave or infra red charging system would still require the use of a camera network for enforcement purposes, for example in cases where a vehicle operator's tag is tampered with and cannot be detected by the microwave beacon network. A camera based system is still required for vehicles without tags.</p>
9.02	Concerns with infrastructure and technology	City of Westminster	Aware that more sophisticated enforcement and charging schemes are in use in other places. For example, German road authorities have applied a satellite-based HGV charging scheme to 1,200 kilometres of autobahn. The infrastructure proposed for the London LEZ seems to be an expensive solution, while delivering far from comprehensive monitoring. Surprised that no indication has been made of plans to introduce more up-to-date monitoring technology and ask that further consideration	<p>See consideration – 9.01.</p> <p>The LEZ would be supported by a programme of impacts monitoring to understand the impacts of the various stages of the scheme which would commence in mid-2006 if the strategy revisions are agreed. Collection of data on air quality and emissions representing pre-LEZ conditions will be compared to data collected after implementation. There would be an associated programme of reporting throughout the life of the scheme.</p>

No.	Sub theme	Respondent	Representation	TfL Response
9.03	Concerns with infrastructure and technology	London Assembly Environment Committee	<p>be given to this.</p> <p>A further consideration that may help with the enforcement costs is the new 'tag and beacon' charging system currently being trialled in the London Borough of Southwark. Understand that if successful 'tag and beacon' will compliment the current congestion charge technology, and is likely to be introduced in 2009. There is scope to explore whether it would be feasible to incorporate 'tag and beacon' technology in the LEZ scheme, and also whether it would be possible to synergise the timings for implementation in both schemes. Would urge the Mayor to consider the practicality of incorporating the new 'tag and beacon' charging system in the LEZ, alongside its implementation in the congestion charging scheme.</p>	See consideration – 9.01.

No.	Sub theme	Respondent	Representation	TfL Response
9.04	Concerns with infrastructure and technology	North East London Strategic Health Authority	<p>The use of ANPR cameras for enforcement will prove to be an unwieldy, expensive and too ad hoc mechanism for identifying compliant and more importantly non-compliant vehicles. A national approach to achieving the targets would enable the burden of compliance monitoring to be significantly reduced to a DVLA based default system (like that for identifying non payment of vehicle excise duty) for UK registered vehicles and to ANPR or paper checks at ports for vehicles registered abroad. The Mayor should therefore use his considerable powers to lobby for a more coherent national approach to be brought forward and to review the cost benefit analysis of Greater London acting in isolation.</p>	<p>See consideration – 9.01.</p> <p>The 2001 to 2003 Feasibility Study considered that a LEZ was the most effective policy available to the Mayor that could realistically move London significantly closer towards meeting its air quality objectives. Of the alternatives considered, none would be able to deliver the level of reductions in PM<sub>10</sub> within the timeframe that the LEZ would. Therefore, TfL considers that the proposed LEZ represents the most effective option for achieving reductions in the most harmful road transport generated emissions in London between 2008 and 2015.</p> <p>Furthermore, the Mayor has a statutory obligation to take steps towards achieving local air quality objectives across London and it would, therefore, be inappropriate for the Mayor to rely solely on central government initiated national initiatives.</p> <p>TfL is working closely with DVLA and will be able to establish the Euro standard of vehicles using data that is already available from the DVLA. Registration from vehicles would be required if vehicle emission characteristics could not be determined from the data available. Information from the DVLA on vehicles that have qualified for an RPC would also be used to identify compliant vehicles fitted with certified pollution abatement equipment.</p>

No.	Sub theme	Respondent	Representation	TfL Response
9.05	Concerns with infrastructure and technology	British Association of Removers	Has concerns about the enforcement regime which depends on ANPR being matched against existing records.	<p>See consideration – 9.01.</p> <p>The ANPR cameras would monitor vehicles entering and exiting the LEZ and create individual records of each vehicle. TfL would maintain a database of compliant and non-compliant vehicles using data from licensing authorities such as the DVLA and VOSA. TfL will also use alternative certification mechanisms as well including the UK's Reduced Pollution Certification (RPC) scheme to expand the database. Registration for vehicles would be required if vehicle emission characteristics could not be determined from the data available. When operators drive their vehicles into the zone their vehicle records would be compared against the TfL vehicle compliance database and those that did not meet the proposed emission standards of the LEZ would be required to pay a substantial charge for each day of use.</p>
9.06	Concerns with infrastructure and technology	City of Westminster	The consultation documents provide very little information on the scale or locations of proposed camera infrastructure to enable enforcement. However, understand that fixed Automatic Number Plate Recognition (ANPR) cameras would be used primarily in central London and mobile patrol units would cover other areas. Westminster questions whether this will provide sufficient deterrence.	The LEZ enforcement infrastructure would be made up of a combination of the existing Congestion Charging cameras, cameras for the new Western Extension to the Congestion Charging zone, additional fixed cameras located across the Greater London area and mobile units also fitted with ANPR cameras. The exact scale of the camera network has yet to be decided. Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006. Information on the location of the proposed enforcement network would be set out in the Order and would be subject to public consultation.

No.	Sub theme	Respondent	Representation	TfL Response
9.07	Concerns with infrastructure and technology	London Borough of Richmond upon Thames	Would be interested to know how effective the level of proposed enforcement would be. It is understood that due to cost implications, it is not proposed to have large numbers of fixed cameras but to rely on mobile units. How effective is this approach anticipated to be? Is it proposed to use mobile cameras to begin with and then move to more fixed cameras if mobile enforcement is not a sufficient deterrent?	See consideration – 9.06.
9.08	Concerns with vehicles registered outside UK	London Borough of Southwark	Concerned about the mechanisms for enforcing the scheme on non-UK registered vehicles and would not wish to see local operators disproportionately affected. It is however noted that TfL is working with international partners to address this issue.	<p>It is estimated that only around 2 per cent of vehicles liable under the currently proposed LEZ standards would be registered overseas. The LEZ would apply in the same way to overseas operators as to UK based ones. Operators based outside the UK would have to pay to enter the LEZ if their vehicles were not compliant with the proposed emission standards. Vehicles for which registration data was not available from the country of origin would have to be registered with TfL in advance of driving within the LEZ. Information on date of first registration of the vehicle would be required, and would be used as a proxy for the Euro standard of the vehicle.</p> <p>TfL has arrangements in place with an experienced Europe-wide debt recovery agency to recover penalties incurred by non-UK registered vehicles. It is envisaged that at a minimum these procedures would be used for the enforcement of the LEZ. However, TfL currently has no legal powers available to it to enforce unpaid penalties incurred by operators based outside the UK.</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>TfL, together with the Association of London Government (ALG), has been lobbying the Government and EU institutions to improve enforcement of non-criminal traffic offences by non-UK residents. TfL is encouraging cross-Government action to create a plan to fill the apparent gap between the civil and criminal jurisdictions into which civil traffic enforcement falls. In the longer term, TfL would support action at EU level to develop law which would complement legislation already in place for criminal offences. Ideally, this would allow civil penalties issued in one Member State to be enforced in another.</p> <p>In the shorter term, TfL and the ALG are working to develop bilateral agreements on data sharing and enforcement with partners in other EU Member States. Such bilateral agreements would require changes to domestic legislation to allow effective data exchange, and TfL is lobbying for appropriate legislative amendments.</p>
9.09	Concerns with vehicles registered outside UK	London Borough of Hounslow	It is not overly clear how foreign vehicles will be dealt with in terms of compliance when matching to a UK database. Evidence from congestion charge zone enforcement shows non-compliance by foreign registered vehicles is common. Within TfL's Strategic Review, it was noted that foreign vehicle enforcement was problematic, but also that the number of times an individual vehicle would enter London would be low. However, collectively, their impact on London's air quality might still be significant.	See consideration – 9.08.

No.	Sub theme	Respondent	Representation	TfL Response
9.10	Concerns with vehicles registered outside UK	Confederation of Passenger Transport UK	Are concerned about enforcement of foreign operators and how 'upgraded' or modified vehicles would be dealt with.	See consideration – 9.08.  TfL would aim to make the registration process for vehicles registered outside the UK as straightforward as possible. It is intended that operators would only have to submit proof of date of vehicle registration, plus documentation relating to pollution abatement equipment in cases where the vehicle has been modified.
9.11	Concerns with vehicles registered outside UK	Federation of Small Business	Transport for London is still i) yet to prove that whatever system is introduced will not disadvantage British business and ii) to dispel the notion that Low Emissions Zone will not be enforced on foreign vehicles. What mechanism is there for enforcement? The FSB and British hauliers could not countenance a system which placed British vehicles at a significant disadvantage when compared with continental operators.	See considerations – 9.08 and 9.10.
9.12	Concerns with vehicles registered outside UK	CBI London	Need further confirmation that the scheme would effectively include foreign vehicles. Enforcement must be carried out in a fair and transparent way and inclusion of foreign vehicles is an important aspect of providing a level playing field.	See considerations – 9.08 and 9.10.
9.13	Concerns with vehicles registered outside UK	London Borough of Hammersmith and Fulham	It is not particularly clear how foreign vehicles will be dealt with in terms of compliance if a UK vehicle database is to be used. TfL should provide more details on how foreign-registered vehicles will be included within the enforcement of the LEZ.	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
9.14	Concerns with vehicles registered outside UK	Road Haulage Association	In its proposed form and from what information has been included in the consultation documentation that has been made available the RHA does not believe that effective enforcement could be at such a level that compliance by all those targeted, including foreign registered vehicles, could be ensured.	See considerations – 9.08 and 9.10.
9.15	Concerns with vehicles registered outside UK	Thames Gateway London Partnership	Seek clarification on how the scheme would cover foreign vehicles. It is not clear how foreign operators would register their vehicles as complaint and how non compliant vehicles would be dealt with. It is essential that a system is in place to ensure even handed treatment of both British and overseas vehicles.	See considerations – 9.08 and 9.10.
9.16	Concerns with vehicles registered outside UK	Freight Transport Association	Recognises that there are issues concerning the enforcement of any scheme on foreign registered vehicles. However, notwithstanding that these vehicles are likely to be subject to similar schemes in their home markets, believe that tackling such issues and ensuring parity between UK-registered and foreign-registered operators is of paramount importance. Proposes that this issue is best managed alongside existing enforcement initiatives in partnership with TfL and the ALG as well as ongoing industry initiatives.	See considerations – 9.08 and 9.10.
9.17	Concerns with vehicles registered outside UK	The Society of Motor Manufacturers and Traders	Evidence shows that enforcement against foreign operators is not currently possible and inter-governmental agreements within the EU (as well as primary legislation) will be needed.	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
		Ltd	TfL therefore need to outline more clearly how foreign-registered vehicles will be enforced in the LEZ, and why the effective exemption of foreign-registered vehicles will not result in unfair competition in favour of European haulage firms.	
9.18	Concerns with vehicles registered outside UK	Volvo Truck and Bus Ltd	The LEZ must be equally enforced for vehicles from any foreign country delivering into London. This requires a high level of enforcement on the boundaries of the LEZ and for this enforcement to be robust there needs to be a simple way to be able to check compliance or not. When travelling to foreign countries it is a requirement for a copy of the registration document to be with the vehicle and this will show the date of registration. Without suitable enforcement of foreign vehicles could encourage a widespread change in operators attitudes which has been a cause for concern of local operators working in the Environmental Zones established in Sweden.	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
9.19	Concerns with vehicles registered outside UK	Association of London Government	It is clear that the LEZ as proposed is wholly unenforceable with respect to foreign registered vehicles. Collectively, their impact on London's air quality might be significant. TfL therefore need to outline more clearly how foreign-registered vehicles will be included within the enforcement of the LEZ and how the effective exemption of foreign-registered vehicles will not result in unfair competition for haulage from European firms who may be at a competitive advantage if they do not have to comply with the LEZ.	See considerations – 9.08 and 9.10.
9.20	Concerns with vehicles registered outside UK	Cleanaway	TfL has failed to convince that enforcement against foreign vehicles will be as effective as against domestic vehicles. The consultation documents are unclear on how foreign vehicles will be required to register or be enforced for non-payment.	See considerations – 9.08 and 9.10.
9.21	Concerns with vehicles registered outside UK	Brewery Logistics Group	Who will ensure that foreign trucks are up to the required standard and what penalties will be administered and processed to a satisfactory conclusion?	See considerations – 9.08 and 9.10.
9.22	Concerns with vehicles registered outside UK	British Association of Removers	Concerns over infringements by foreign operators and that foreign operators will escape enforcement or that follow-up action will prove to be uneconomic and risky.	See considerations – 9.08 and 9.10.
9.23	Concerns with vehicles registered outside UK	MARSHopper Ltd	Concerned about how the charge would be paid by foreign operators because at the moment foreign drivers get away 'scot-free' with a variety of tolls, fees and speeding fines because once they are back on the ferry from Dover there is no machinery to collect unpaid	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
			fines. This could be viewed as racist as it penalises British operators whilst foreigners are allowed to get away with it.	
9.24	Concerns with vehicles registered outside UK	Musgrave Budgens – Londis	TfL has failed to convince industry that the enforcement of foreign vehicles will be as effective as for domestic vehicles. The UK has consistently failed to properly enforce foreign registered lorries across all types of regimes, and the consultation does not adequately state just how or where foreign vehicles will be required to register, enforced or chased for non-payment of charges or fines. This is not good enough! A level playing field is absolutely vital if London is to continue being the powerhouse of the UK economy.	See considerations – 9.08 and 9.10.
9.25	Concerns with vehicles registered outside UK	TM Logistics	TfL has failed to convince industry that the enforcement of foreign vehicles will be as effective as for domestic vehicles. The UK has consistently failed to properly enforce foreign registered lorries across all types of regimes, and the consultation does not adequately state just how or where foreign vehicles will be required to register, enforced or chased for non-payment of charges or fines. This is not good enough! A level playing field is absolutely vital if London is to continue being the powerhouse of the UK economy.	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
9.26	Concerns with vehicles registered outside UK	AAH Pharmaceuticals Limited	TfL has failed to convince industry that the enforcement of foreign vehicles will be as effective as for domestic vehicles. The UK has consistently failed to properly enforce foreign registered lorries across all types of regimes, and the consultation does not adequately state just how or where foreign vehicles will be required to register, enforced or chased for non-payment of charges or fines. This is not good enough! A level playing field is absolutely vital if London is to continue being the powerhouse of the UK economy.	See considerations – 9.08 and 9.10.
9.27	Concerns with vehicles registered outside UK	Heyfordian Travel Limited	Concerned about the enforcement of foreign operators and how upgraded or modified vehicles would be dealt with.	See considerations – 9.08 and 9.10.
9.28	Concerns with vehicles registered outside UK	Golden Boy Coaches	Concerned about the enforcement of foreign operators and how upgraded or modified vehicles would be dealt with.	See considerations – 9.08 and 9.10.
9.29	Concerns with vehicles registered outside UK	The Guild of British Coach Operators Ltd	Concerned that there will be no effective enforcement mechanism for foreign registered vehicles, so that British operators will face an unfair burden. The consultation documents have failed to demonstrate how enforcement for foreign coaches will work, specifically: i. how you will obtain access to any databases (if they exist - which we doubt in many countries) to establish the emissions level of any particular vehicle; ii. how you will obtain operator names and	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>addresses to serve penalty notices;</p> <p>iii. how you will legally be able to enforce those penalty charges (will they be recognised by foreign courts?) and to take legal action to recover unpaid charges/penalties.</p> <p>Do not believe that any effective system can be introduced to deal with foreign registered vehicles and therefore this will simply allow foreign operators to flout the LEZ restrictions, enabling them to operate more cheaply and to undercut compliant British operators.</p>	
9.30	Concerns with vehicles registered outside UK	London Borough of Lewisham	<p>Whilst TfL will be able to identify compliant British vehicles it is not clear how foreign vehicles will be covered. It is important that there is even handed treatment of UK and foreign vehicles. It is not clear as to how continental operators would register a compliant vehicle, or prove its emission levels.</p>	See considerations – 9.08 and 9.10.
9.31	Concerns with vehicles registered outside UK	London Borough of Wandsworth	<p>There is no indication of how the scheme would be enforced in relation to foreign vehicles, which visit London in significant numbers</p>	See considerations – 9.08 and 9.10.
9.32	Concerns with vehicles registered outside UK	The Kings Ferry Travel Group	<p>Believe the LEZ should not be introduced until TfL can demonstrate a practical, workable system of ensuring that foreign registered coaches will be subject to the same restrictions and penalties as British registered vehicles. The consultation paper does not explain how - or, indeed, if - this is possible.</p>	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
9.33	Concerns with vehicles registered outside UK	British Vehicle Rental and Leasing Association (BVRLA)	Concerned that, with a Euro based standard, enforcement against foreign vehicles will be very difficult and costly. Expecting foreign operators to register their vehicles prior to travel in the greater London area will be a non-starter and we fail to see how TfL will be able to enforce a fine once the vehicle has left the country. Whilst we are aware of the work TfL are doing under project SPARKS to target foreign vehicles we still feel the scheme as proposed will once again give the advantage to foreign hauliers who will be difficult to trace and fine.	See considerations – 9.08 and 9.10.
9.34	Concerns with vehicles registered outside UK	London Borough of Merton	How would the scheme address vehicles registered outside the UK? Are they also eligible for the charge? How would they be notified and pay for the charge? Can 'on the spot' fines be applied to non-UK registered vehicles?	See considerations – 9.08 and 9.10.
9.35	Concerns with vehicles registered outside UK	London Assembly Environment Committee	There will be practical difficulties in enforcing the charges and penalties that may arise from foreign registered vehicles contravening the scheme; a national approach could alleviate them. For example, it would seem sensible to register vehicles at their point of entry and securing a bond against the vehicle which could then be charged against any resulting penalty notice. Are aware that the Road Safety Bill currently before Parliament, would go some way to improving the remit and scope of enforcement authorities. Understand that TfL has made representations to	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
			Government and would urge that TfL work closely with the industry to lobby Government on the issue, and that it update the Assembly on its progress.	
9.36	Concerns with vehicles registered outside UK	London Assembly Environment Committee	A number of stakeholders have raised concerns about how the mechanisms for enforcing the scheme on non-UK registered vehicles will work. Would not wish to see UK operators disproportionately affected and appreciate the work that TfL is doing to broker agreements with international partners. Consider it vital that the enforcement of non-UK registered vehicles is fully addressed and that effective mechanisms are put in place prior to the implementation of the scheme. Believe that progress made to date in partnership with UK and European government agencies, the Association of London Government and London boroughs can be further enhanced by working with the UK industry, and its European counterparts.	See considerations – 9.08 and 9.10.
9.37	Concerns with vehicles registered outside UK	Kent County Council	As a county which has long endured the impact of through traffic from foreign lorries without appropriate recompense for our roads, we would also highlight the potential difficulty in enforcing a EURO based scheme on foreign operators who would be expected to register their vehicles prior to travel and, if they did not, the problems of subsequent enforcement action.	See considerations – 9.08 and 9.10.

No.	Sub theme	Respondent	Representation	TfL Response
9.38	Concerns with identifying non-compliant vehicles	Thames Gateway London Partnership	It is not clear how operators would register a compliant vehicle and prove its emission level. Enquiries made to vehicle manufacturers by London Borough of Lewisham confirmed that simply fitting exhaust treatment to Euro I and II vehicles would not reduce particulate levels enough to obtain a RPC.	<p>TfL proposes to use the RPC as the basis for identifying the majority of suitably retrofitted vehicles. The RPC status is recorded by DVLA for taxation purposes. Operators would register their vehicles as being compliant with the LEZ at a VOSA test centre under the RPC Scheme. This information would then be passed onto TfL for inclusion in the database of compliant vehicles for the LEZ.</p> <p>TfL acknowledges that abatement technology may not be available for certain older vehicles to allow them to meet the proposed LEZ emission standards, or that the effectiveness may be less than for newer ones. TfL is working with the pollution abatement equipment manufacturing industry, VCA, operators and other third parties to ensure information on the effectiveness and maintenance requirements of such equipment is widely available.</p>
9.39	Concerns with identifying non-compliant vehicles	London Borough of Wandsworth	The scheme makes the assumption that vehicles constructed to certain standards will reduce pollution but it takes no account of the impact of poorly maintained vehicles.	See consideration – 9.38.
9.40	Concerns with identifying non-compliant vehicles	London Borough of Newham	Roadside emission testing cannot target polluting vehicles, therefore significant time is spent testing compliant vehicles. Roadside testing of HGV's is very difficult with only a few suitable sites across London. Importantly roadside emission testing does not tackle the problem that older vehicles pollute more even if they are complying with the relevant	<p>See consideration – 9.38.</p> <p>TfL has considered using roadside emissions testing of vehicles as an alternative to the LEZ proposal. Roadside emissions tests would only be able to identify the most polluting vehicles as the current tests are reasonably insensitive and therefore, as an approach for dealing with the emissions of HGVs, buses,</p>

No.	Sub theme	Respondent	Representation	TfL Response
			emission standards. It will be important however to ensure that emission testing is continued to counter the argument that a defective Euro III HGV is allowed to enter the LEZ but a Euro II etc is not.	coaches and heavier LGVs such as option would only achieve very small reductions in emissions compared to those from the proposed LEZ.  However, under the RPC scheme vehicles are required to be tested each year to maintain their certification.
9.41	Concerns with identifying non-compliant vehicles	Brewery Logistics Group	New emission requirements will be met by the use of SCR technology which requires Ad Blue in a special tank. Since the LEZ will be based on a database of registration numbers and vehicle specifications, this will not highlight that a vehicles is using Ad Blue.	If the Selective Catalytic Reduction (SCR) technology being referred to is able to gain a RPC this would be compliant with the LEZ. If a SCR retrofitted vehicle does not have an RPC then TfL has no way of knowing that its emissions have really been reduced hence the burden of proof will be on the vehicle operator.
9.42	Concerns with identifying non-compliant vehicles	Dartford Borough Council	Wishes to emphasise that the success of such an initiative is highly dependent on the effectiveness of enforcement. For this reason, it is hoped that this aspect of the LEZ will be thoroughly considered and implemented.	Vehicles driving within the LEZ would be detected using fixed and mobile cameras. The LEZ enforcement infrastructure would be made up of a combination of the existing Congestion Charging cameras, additional fixed cameras located across the Greater London area and mobile units also fitted with ANPR cameras so that vehicle operators could not just rely on avoiding the fixed cameras. Cameras would be placed on strategic routes within London making it impractical for drivers of non-compliant vehicles to avoid these on an ongoing basis. TfL would maintain a database of compliant and non-compliant vehicles using data from licensing authorities such as the DVLA and VOSA. TfL would also use alternative certification mechanisms including the UK's Reduced Pollution Certification (RPC) scheme to expand the database. Registration for vehicles would be required if vehicle emission characteristics could not be determined from the data available. When operators drive their vehicles into the zone their vehicles records would be compared against

No.	Sub theme	Respondent	Representation	TfL Response
				the TfL vehicle compliance database and those that did not meet the emission standards of the LEZ would be required to pay a substantial charge for each day of use.
9.43	Concerns with identifying non-compliant vehicles	Brewery Logistics Group	There is the problem that the database used to identify non compliant vehicles may not be accurate.	The LEZ would be enforced using Automatic Number Plate Recognition (ANPR) cameras similar to those used successfully for Congestion Charging. Fixed cameras would be supplemented by mobile units fitted with ANPR cameras. The ANPR cameras would monitor vehicles entering and exiting the LEZ and create individual records of each vehicle. TfL would maintain a database of compliant and non-compliant vehicles using data from licensing authorities such as the DVLA and VOSA. TfL would also use alternative certification mechanisms including the UK's Reduced Pollution Certification (RPC) scheme to expand the database. Registration by operators would be required if vehicle emission characteristics could not be determined from the data available. When operators drive their vehicles into the zone their vehicles records would be compared against the TfL vehicle compliance database and those that did not meet the emission standards of the LEZ would be required to pay a substantial charge for each day of use.

No.	Sub theme	Respondent	Representation	TfL Response
9.44	Concerns with persistent evaders	City of Westminster	<p>Concerned that there is a real risk of the LEZ being less effective than it needs to be because enforcement may prove relatively ineffective in many areas of London. This may lead to some operators continuing to use more polluting vehicles in parts of London, because they perceive the risk of fines insufficient to deter them. In turn, this would undermine the value of the considerable investment that TfL propose to put into operating the scheme.</p>	<p>Vehicles driving within the LEZ would be detected using fixed and mobile cameras. The LEZ enforcement infrastructure would be made up of a combination of the existing Congestion Charging cameras, additional fixed cameras located across the Greater London area and mobile units also fitted with ANPR cameras so that vehicle operators could not just rely on avoiding the fixed cameras. Cameras would be placed on strategic routes within London making it impractical for drivers of non-compliant vehicles to avoid these on an ongoing basis.</p> <p>The proposed range of between £100 and £200 for the daily charge was chosen because it would encourage operators to modify or replace their vehicles, thus maximising the air quality and health benefits of the LEZ. At the same time, it would allow infrequent visitors operating non-compliant vehicles to drive within the proposed LEZ, albeit at a cost. The level of penalty charge for non-compliance would be proportionate to the level of charge, and both would remain subject to review.</p>

No.	Sub theme	Respondent	Representation	TfL Response
9.45	Drivers will learn to avoid fixed cameras	London Borough of Barking and Dagenham	Would like to see a commitment to a reliable enforcement mechanism, preventing vehicles rat-running down routes where there are no enforcement cameras for example. Vehicles should be monitored manually and automatically.	Vehicles driving within the LEZ would be detected using fixed and mobile cameras. The LEZ enforcement infrastructure would be made up of a combination of the existing Congestion Charging cameras, additional fixed cameras located across the Greater London area and mobile units also fitted with ANPR cameras so that vehicle operators could not just rely on avoiding the fixed cameras. Cameras would be placed on strategic routes within London making it impractical for drivers of non-compliant vehicles to avoid these on an ongoing basis. Mobile units would be able to target areas potentially at risk of rat-running.
9.46	Need roadside testing	Brewery Logistics Group	With no roadside testing to detect actual emissions it will be virtually impossible to monitor the scheme to a satisfactory level. Since only 6 per cent of vehicles are involved, there is no guarantee that it will reduce air pollution at all.	<p>Heavy duty diesel vehicles are the main source of PM<sub>10</sub> emissions. Therefore the LEZ is designed to discourage the use of the most individually polluting vehicles in Greater London by encouraging the upgrade or replacement of diesel-engined HGVs, buses, coaches and heavier LGVs. The net present value health benefits within London resulting from the proposed LEZ, taking into account the moving of the Euro IV standard for PM<sub>10</sub> back to 2012 and the inclusion of heavier LGVs from 2010, have been quantified at between £101m and £162m between 2008 and 2015. Benefits outside London are estimated at between £70m and £100m over the same period.</p> <p>The LEZ would be supported by a programme of impacts monitoring to understand the impacts of the various stages of the scheme which would commence in mid-2006 if the strategy revisions are agreed. The key element of the monitoring strategy is measuring</p>

No.	Sub theme	Respondent	Representation	TfL Response
				change in profiles of emission standards for vehicles within the scope of the proposed LEZ. This would then feed into complementary assessments designed to quantify air quality benefits.
9.47	Other enforcement issues	Pickfords	The significant costs for operators to comply with the 2008 and 2010 standards will lead to an increase in rogue traders operating unlicensed in London.	See consideration – 9.44.  As with the Central London Congestion Charge, vehicles which are identified as regular non-payers of the daily charge or the penalty charge would be liable to more severe penalties, which would be applied to persistent offenders.

## THEME 10 DISCOUNTS AND EXEMPTIONS

No.	Sub theme	Respondent	Representation	TfL Response
10.01	Congestion Charge discount	Freight Transport Association	Wish to see significant progress being made with regard to incentive programmes, such as reduced rates of Congestion Charge, for the purchase or use of new Euro IV or Euro 5 vehicles.	TfL is currently reviewing the Congestion Charging alternative fuel discount which is designed to provide an incentive for the cleanest vehicles. Once proposals are finalised, TfL will consult on any changes. Defra is also currently undertaking a consultation on the Review of the Air Quality Strategy for England, Scotland and Wales and is seeking views on a number of additional policy measures, including a programme of incentives to phase out the most polluting cars.
10.02	Congestion Charge discount	London Borough of Wandsworth	The LEZ scheme effectively puts in place an enforcement process which it is hoped will force improvements in vehicle fleet emissions. The LEZ does not offer any incentives to fleet operators to improve their vehicles beyond the minimum standard. The Mayor should consider what incentive options may be available. One such option would be to reduce the costs of the congestion charge to vehicles meeting particular standards, for example Euro V. This would be consistent with discounts applied to vehicles using alternative fuels in the congestion zone and may provide the incentive for fleet operators to upgrade their vehicles more quickly and to a higher standard than would be required to meet the 2008 criteria for the LEZ.	See consideration – 10.01.

No.	Sub theme	Respondent	Representation	TfL Response
10.03	Congestion Charge discount	Royal Mail Group plc	The reduction or removal of congestion charging should also be considered for those vehicles entering the charging zone which meet the agreed LEZ criteria.	See consideration – 10.01.  The primary objective of the proposed LEZ is to reduce emissions of the most harmful pollutants to health across Greater London, whilst the Congestion Charge is primarily designed to reduce traffic congestion in a particular area of Central London. It would therefore not be appropriate for vehicles which comply with the LEZ to have an exemption from the Congestion Charge.
10.04	Congestion Charge discount	London Retail Consortium	We believe that possible exemptions or discounts for the most environmentally friendly vehicles entering a low emissions zone, or indeed the current Congestion Charging Zone, should be considered further as far more cost effective than implementing and administering the LEZ in its current form as a way of improving London's air quality.	See consideration – 10.03.
10.05	Congestion Charge discount	British Association of Removers	Discounts on Congestion Charges, grants for vehicle upgrades, scrapping of the London Lorry Ban, tax allowances, and other incentives are needed to encourage realistic shift to early upgrade of vehicles.	See consideration – 10.03.  Coverage of incentives for cleaner vehicles in 'Theme 2 - Suggested Alternatives'. TfL appreciates the concerns of some operators regarding the London Lorry Control Scheme (LLCS), and accepts that lorries today are much quieter than when the scheme was introduced. However, TfL does not have the power to directly modify the scheme as the ALG controls it on behalf of highway authorities.
10.06	Congestion Charge discount	The Society of Motor Manufacturers and Traders	At a local level, operators of new technology should be given incentives such as exemptions from operating bans or Congestion Charging discounts.	TfL is currently reviewing the Congestion Charging alternative fuel discount which is designed to provide an incentive for the cleanest vehicles. Once proposals are finalised, TfL will consult on any changes.

No.	Sub theme	Respondent	Representation	TfL Response
		Ltd		
10.07	Congestion Charge discount	Brewery Logistics Group	Congestion charges should be reduced in return for a set of emission standards that will assist the freight industry.	See consideration – 10.06.
10.08	Exemption for heritage vehicles	Coulsdon Old Vehicle & Engineering Society	Vehicles classified by the DVLA as 'historic' and 'private HGV' do not represent major contributors to pollution due to their low level of usage and they should be exempted from the proposed scheme.	<p>The proposed LEZ would aim to reduce the most harmful emissions from older diesel-engined vehicles. The air quality and health benefits of the LEZ would be eroded if there were extensive range of exemptions. Consequently, it is proposed that there be a very limited number of exemptions from the LEZ. TfL's current view is that specialist vehicles for which the fitting of pollution abatement equipment is not even an option, historic vehicles, military vehicles, off-highway vehicles, and very limited use vehicles be exempt from the proposed LEZ, although this will be kept under review. The contribution of these vehicles to air pollution is minimal, due to the small numbers and infrequent use.</p> <p>TfL considers that as private HGVs emit the same level of pollutants as commercial HGVs there is no logic to exempt them from the proposed LEZ.</p>

No.	Sub theme	Respondent	Representation	TfL Response
10.09	Exemption for heritage vehicles	Coulsdon Old Vehicle & Engineering Society	Suggests specific exemptions for vehicles taxed as 'historic' and 'private HGV' and only including in the LEZ vehicles used for hire or reward. Although the majority of our vehicles would be exempted under the proposed scheme, there are some vehicles which would effectively be banned from the roads where they are stored. These are vehicles taxed as 'historic', such as classic buses or 'private HGV', such as modern flat-bed lorries used to transport light tracked vehicles. Classic buses require annual tests which usually take place at Mitcham testing station, within the proposed LEZ. The introduction of the LEZ would place a significant financial burden on the owners of these vehicles as they will be obliged to heavily modify them or replace them in order to comply. The LEZ should take into account the interests of owners of occasional-use vehicles based within the M25, where replacing them with more modern vehicles is not financially or historically viable and where contribution to pollution is insignificant. Such exemptions should include horse box owners and other similar large historic vehicles.	See consideration – 10.08.  Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006. Information on proposed vehicle exemptions would be set out in the Order and would be subject to public consultation.
10.10	Exemption for heritage vehicles	Federation of British Historic Vehicle Clubs	Older vehicles are usually unique survivors with engines long out of production, therefore modifying them to conform to modern technical requirements would be impossible and conversion would destroy the originality which is the whole reason for their retention	See considerations – 10.08 and 10.09.

No.	Sub theme	Respondent	Representation	TfL Response
			for heritage operation.	
10.11	Exemption for heritage vehicles	Purley Transport Preservation Group	Concerned that heritage vehicles in which the engine cannot be modified to conform to the minimum EU emission standards, and the many hundreds of other preserved and classic vehicles, be exempt from the LEZ proposals. The Purley Transport Preservation Group only enters or passes through the proposed zone two to three times a year as most of their activities are centred just inside or beyond the M25 motorway.	See considerations – 10.08 and 10.09.
10.12	Exemption for heritage vehicles	Train of Events	Concerned that heritage and museum vehicles be allowed to use the LEZ without penalty. Operators of historic vehicles already operate in financially onerous environment. Additional punitive charges would drive vintage vehicle operators away from London and create a gap in our heritage landscape. Historic vehicles play a role in tourism, promotion, education and regeneration.	See considerations – 10.08 and 10.09.
10.13	Exemption for heritage vehicles	Hertfordshire Steam Engine Preservation Society	Collects older HGVs to use as exhibits or to transport other old vehicles to exhibitions around the country. These vehicles are taxed as private HGVs or historic depending on their age and are not used for hire or reward, but only occasionally in a private capacity. Without an exemption, the proposed LEZ would result in these vehicles not being able to enter London or in exhibitors hiring modern compliant vehicles to transport the exhibits which would be financially crippling to the	See considerations – 10.08 and 10.09.

No.	Sub theme	Respondent	Representation	TfL Response
10.14	Exemption for heritage vehicles	Federation of British Historic Vehicle Clubs	<p>exhibitors or show organisers.</p> <p>Whilst the exemption of heritage commercial vehicles is welcomed, the Federation has concerns on how this will be achieved. In particular, it feels that the very few historic vehicles remaining in use for commercial heritage purposes should not be penalised. Understand that there is an intention to base exemptions (not just those for Heritage vehicles) on DVLA tax categories for Vehicle Excise Duty and body type. These categories and their associated codes are used to implement the Chancellor's fiscal policies and can be consolidated, removed, abolished &amp; amended without prior consultation: to rely on these categories, or their DVLA reference codes, without clear definition could lead to problems due to their susceptibility to instant change. Whilst the code was originally introduced on a 25 year rolling basis, the present government froze this in 1997 so tax code 88 only applies to pre-1973 vehicles, now at least 33 years old. The government's Transport Statistics Bulletin 2004 shows that virtually all "commercial vehicles" are taken out of service before reaching 20 years (Routemaster buses being a notable exception). Restored and preserved commercial vehicles manufactured from 1973 onwards are not eligible for tax code 88 and so have to licence under other tax codes, they are, none-the-less, heritage vehicles that</p>	See considerations – 10.08 and 10. 10.09.

No.	Sub theme	Respondent	Representation	TfL Response
			are being preserved for posterity and in use only occasionally for attending events of interest to the public at large.	
10.15	Exemption for heritage vehicles	The Guild of British Coach Operators Ltd	The LEZ also fails to make provision for the (limited) operation of historic, heritage vehicles that would not be capable of conversion to meet the LEZ standards (or where such conversion would damage the historical authenticity of such vehicles). The scheme should make provision for heritage vehicles to be able to operate within the LEZ area without payment, if necessary for a limited number of days per year. The actual number of vehicles involved is quite small and their contribution to overall pollution is insignificant. As presently structured, it would seem that if heritage vehicles are licensed as PSVs (so that they can legally be used for hire & reward operations) and hence pay road tax, they will be subject to the LEZ but if they are privately run as preserved vehicles (outside of the operator licensing system) and are hence tax exempt (by virtue of their age), they will not be subject to the LEZ. This is patently unfair.	See considerations – 10.08 and 10. 10.09.
10.16	Exemption for heritage vehicles	Federation of British Historic Vehicle Clubs	Any vehicle whose registration details show either a date of first registration or date of manufacture that is more than 25 years prior to the beginning of the calendar year should be exempt. Unless the suggestion above is adopted, the very small number of “Heritage Public Service Vehicles” (HPSV) would be	See considerations – 10.08 and 10.09.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>penalised because they also are ineligible for tax code 88 – they have to be licensed in the same way as modern Public Service Vehicles, however venerable they may be. The effect of imposing LEZ charges on such operations would be to stop them. Paragraph 4G.183/4C.58 recognises that modification to comply with modern emission standards is not an option for heritage vehicles. Heritage operations are few and generally run as a low-profit enterprise, often as a sideline. Imposition of the LEZ penalty would prevent such services operating within the GLA area, thus denying the public the opportunity to enjoy occasional rides within the LEZ on vehicles that are identical to the privately owned examples that could continue in use without such penalty.</p>	
10.17	Exemption for heritage vehicles	Routemaster Operators & Owners Association	<p>Understands that there is a proposed exemption for historic vehicles and would formally propose that this exemption is retained in the final LEZ. Propose and support a modification to this exemption so that it is extended to include all vehicles, regardless of taxation classification, over 35 years of age.</p>	See considerations – 10.08 and 10.09.
10.18	Exemption for heritage vehicles	Timebus Travel	<p>Concerned the LEZ may actually provide no exemption for heritage vehicles used commercially (due to a reference to DVLA tax categories). It would not be possible for the proposed system to distinguish whether a heritage vehicle in the LEZ is being used</p>	See considerations – 10.08 and 10.09.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>commercially. Reference to DVLA tax category would entail vehicles taxed as buses always being charged. There are occasions (such as vintage bus running days and rallies, free to the public) when heritage PSVs do not operate for hire or reward. On these occasions they are fulfilling the same role as privately owned (entirely non commercial) examples. TfL's argument for exempting heritage vehicles is based on infrequent use, but this is not necessarily the case. Suggest therefore a daily exemption for heritage vehicles (over 25 years old, and including PSVs), based on a fixed number of days (use in the LEZ area) and suggest 40 days per year would encompass the majority of vehicles. Further days beyond this could be charged as normal. This suggestion would encourage the modification of frequently used heritage PSVs to meet improved emission standards, whilst still allowing occasional commercial and non-commercial use. Know from experience that vehicles used less frequently than 40 days per year would never generate enough income to pay for fitment of particulate traps, for example. This suggestion would also discourage the use of heritage heavy goods vehicles commercially (which would otherwise be a potential loophole through the LEZ).</p>	

No.	Sub theme	Respondent	Representation	TfL Response
10.19	Exemption for heritage vehicles	Hertfordshire Steam Engine Preservation Society	Collect older HGVs to use as exhibits or to transport other old vehicles to exhibitions around the country. These vehicles are taxed as private HGVs or historic depending on their age and are not used for hire or reward, but only occasionally in a private capacity. Without an exemption, the proposed LEZ would result in these vehicles not being able to enter London or in exhibitors hiring modern compliant vehicles to transport the exhibits which would be financially crippling to the exhibitors or show organisers.	See considerations – 10.08 and 10.09.
10.20	Exemption for heritage vehicles	MARSHopper Ltd	Operate a number of vintage buses and coaches which, due to the age of the vehicles, are not feasible to fit with particulate traps or any other sort of device at a sensible price which would enable them to achieve Euro IV standards. It is our view that this is yet another unnecessary tax on people going about their legal lawful business. Customers already pay a premium to travel in historic buses as the insurance and running costs have to be met over one or two days a week and are not heavily subsidised like the TfL bus fleet. To expect them to meet this additional cost is unbelievable.	See considerations – 10.08 and 10.09.

No.	Sub theme	Respondent	Representation	TfL Response
10.21	Exemption for heritage vehicles	Constant Consultancy	There needs to be a licensing facility to allow heritage vehicles to enter the LEZ for special events and special vehicles such as cranes, generators, rescue equipment, etc for both pre-planned events and major disasters.	<p>See considerations – 10.08 and 10.09.</p> <p>Exemptions in the case of major incidents would be considered depending on the circumstances. Mobile machinery, which falls within the scope of the EU Non-Road Mobile Machinery Directive 1997, is subject to different emissions limits set by that Directive and it is proposed that it be exempt from the LEZ.</p> <p>Furthermore, it is not currently possible to fit pollution abatement equipment to most off-road machinery. However, TfL will continue to work with the retrofit industry and should such equipment be developed, TfL would consider bringing these vehicles within the scope of the LEZ.</p>
10.22	Biofuel/greener vehicles discount	National Grid	Suggests an exemption be offered for alternative fuels to encourage their wider take up. The best examples would be hybrid vehicles which by definition would use battery power mainly within the city limits, and those vehicles using a significant proportion of biofuels.	<p>The proposed LEZ would apply to diesel-engined vehicles only. Any older diesel-engined vehicle which had been modified in any way to reach the proposed LEZ standard would be allowed to drive in Greater London without charge.</p> <p>Vehicles which run on alternative fuels already receive a 100 per cent discount on Congestion Charging. For vehicles over 3.5 tonnes, these vehicles must already meet the Euro III standard to qualify for the discount which would in turn make them compliant with the proposed LEZ.</p>

No.	Sub theme	Respondent	Representation	TfL Response
10.23	Discounts/ exemptions for vehicles operated by public sector	London Borough of Bexley	Whilst the consultation document refers to certain exemptions, consider there should be exemptions for other low but emergency use vehicles such as council gritters, which are only used for a small proportion of the year and whose replacement could involve significant additional cost.	<p>The proposed LEZ would aim to reduce the most harmful emissions from older diesel-engined vehicles. The air quality and health benefits of the LEZ would be eroded if there were extensive range of exemptions. Consequently, it is proposed that there be a very limited number of exemptions from the LEZ. TfL's current view is that specialist vehicles for which the fitting of pollution abatement equipment is not even an option, historic vehicles, military vehicles, off-highway vehicles, and very limited use vehicles be exempt from the proposed LEZ, although this will be kept under review. The contribution of these vehicles to air pollution is minimal, due to the small numbers and infrequent use.</p> <p>TfL does not consider it appropriate to afford transport operators providing public services with an exemption or discount, as the aim of the LEZ is to encourage as many operators as possible to clean up their vehicles and hence provide the greatest air quality and health benefits. Such an exemption or discount would erode the benefits of the LEZ.</p>
10.24	Discounts/ exemptions for vehicles operated by public sector	London Borough of Greenwich	The proposed standards may prove challenging for borough fleets and derogations could be considered for certain low-use vehicle types, such as snow ploughs and gritters etc.	See consideration – 10.23.

No.	Sub theme	Respondent	Representation	TfL Response
10.25	Discounts/ exemptions for vehicles operated by public sector	The Royal Marsden NHS Foundation Trust	The arrangements for the London Congestion Charge Zone currently take into account the impact on healthcare organisations (via exemptions and reimbursement schemes) and this has a positive and beneficial impact. It would be helpful if the arrangements for the proposed London LEZ also took into account the impact on healthcare organisations in a similar manner.	See consideration – 10.23.
10.26	Discounts/ exemptions for vehicles operated by public sector	National Grid	Suggests that all emergency vehicles be exempt from charging to avoid any concerns that public safety is being put at risk. While this should by definition cover the emergency services, would also like to see consideration given to exempting National Grid's vehicles when they are responding in an emergency to a gas leak.	See consideration – 10.23.  TfL does not consider it appropriate to afford transport operators providing the services mentioned with an exemption or discount, as the aim of the LEZ is to encourage as many operators as possible to clean up their vehicles and hence provide the greatest air quality and health benefits. Such an exemption or discount would erode the benefits of the LEZ.
10.27	Discounts/ exemptions for vehicles operated by public sector	London Borough of Hammersmith and Fulham	On exemptions, understands that these would be limited to military vehicles, heritage vehicles and mobile machinery. It is difficult to think of any other types of vehicles that should be exempt, but consideration could be given to aligning the LEZ exemptions with the Congestion Charging Scheme exemptions (e.g. for emergency vehicles).	See consideration – 10.23.
10.28	Discounts/ exemptions for vehicles operated by public sector	MARSHopper Ltd	Note that vehicles used for rail replacement work will be exempt.	See consideration – 10.23.  It is not proposed that rail replacement vehicles be exempt from the LEZ.

No.	Sub theme	Respondent	Representation	TfL Response
10.29	Discounts/ exemptions for vehicles operated by public sector	Road Haulage Association	Many low mileage vehicles operated by SME's, the National Health Service, local Councils and all the service providers of road, rail, gas and electricity would be detrimentally affected. Huge numbers of specialised vehicles in areas such as construction (which will be particularly important as London prepares for the Olympics), recycling and reclaiming industries would be severely affected. And then of course we have the military forces plus the emergency services, Fire and Police especially. Many of their larger vehicles would fail to comply with the proposed scheme at both of its compliance levels.	The proposed LEZ would aim to reduce the most harmful emissions from older diesel-engined vehicles. The air quality and health benefits of the LEZ would be eroded if there were extensive range of exemptions. Consequently, it is proposed that there be a very limited number of exemptions from the LEZ. TfL's current view is that specialist vehicles for which the fitting of pollution abatement equipment is not even an option, historic vehicles, military vehicles, off-highway vehicles, and very limited use vehicles be exempt from the proposed LEZ, although this will be kept under review. The contribution of these vehicles to air pollution is minimal, due to the small numbers and infrequent use.
10.30	Discounts/ exemptions for vehicles operated by public sector	London Borough of Greenwich	Suggest that boroughs could be allowed to off-set a limited number of vehicles, for a certain period, where they do not meet the standard, against other similar vehicles that surpass the standard.	See consideration – 10.23.  A system of trade-offs within organisations would be complex to run. It would also discourage the replacement or upgrade of the most polluting older vehicles, which would reduce the air quality and health benefits of the LEZ.
10.31	Discounts/ exemptions for vehicles operated by public sector	North East London Strategic Health Authority	Increasingly facing problems balancing the provision of the most advanced life saving and appropriate patient handling equipment in their emergency vehicles with the requirement to comply with maximum loads. The high cost of a fully equipped emergency ambulance prohibits its early replacement. Indeed, since fully compliant vehicles are not yet in production, it is likely that the majority of emergency ambulances would need to be	See consideration – 10.23.  TfL does not consider it appropriate to afford transport operators providing emergency services with an exemption or discount, as the aim of the LEZ is to encourage as many operators as possible to clean up their vehicles and hence provide the greatest air quality and health benefits. Such an exemption or discount would erode the benefits of the LEZ.

No.	Sub theme	Respondent	Representation	TfL Response
			retro-fitted to ensure 2010 compliance. The additional weight of the retro-fit may compromise the London Ambulance Service ability to provide essential life saving equipment and increase risk to patient lives. The Mayor should therefore consider exempting emergency ambulances from the proposed scheme.	Feedback from operators and manufacturers is that the 2010 standard would be expensive and impractical for operators to achieve. For a range of reasons, including that many types of Euro IV vehicles are not yet available, operators are currently replacing their fleets with Euro III and there is a concern that under the proposed LEZ core scheme of Euro IV for PM <sub>10</sub> in 2010 they could potentially have only four years before they need to modify or replace their vehicles. To address this issue TfL is recommending moving implementation of the Euro IV standard for PM <sub>10</sub> back to 2012. Whilst this would lead to smaller air quality and health benefits resulting from a reduction in emissions from heavier vehicles, it would significantly reduce compliance costs to operators, and make the scheme more acceptable. TfL has also proposed delaying implementation of the Euro III standard for PM <sub>10</sub> for coaches and HGVs under 12 tonnes until mid-2008.
10.32	Discounts/ exemptions for vehicles operated by public sector	London Ambulance Service NHS Trust	An exception needs to be made for ambulances to have an extension for Euro IV compliance when the second phase in 2010 is proposed.	See consideration – 10.31.
10.33	Exemptions for vehicles for which retrofit equipment not possible	The Society of Motor Manufacturers and Traders Ltd	Work should continue to develop standards for off highway machinery.	Mobile Machinery, which falls within the scope of the European Union Non-Road Mobile Machinery (NRMM) Directive 1997 (which became effective from 1998), is subject to different emissions limits set by that Directive and would be exempt from the LEZ. Such vehicles include construction plant equipment, for example cement mixers.

No.	Sub theme	Respondent	Representation	TfL Response
10.34	Exemptions for vehicles for which retrofit equipment not possible	London Borough of Richmond upon Thames	Perhaps TfL could look more closely at the potential for an exemption for certain types of vehicle and for those vehicles where, by the very nature of the role they are intended for, retrofitting would not be a practical option.	<p>The LEZ aims to reduce the harmful emissions from older diesel-engined vehicles. The health and air quality benefits of the LEZ would be eroded if there were an extensive range of exemptions. Consequently, it is proposed that there be a limited number of exemptions from the LEZ, and these would only apply to those specialist vehicles for which the fitting of pollution abatement equipment is not an option, and where it would be unreasonable to require replacement.</p> <p>The proposed LEZ would aim to reduce the most harmful emissions from older diesel-engined vehicles. The air quality and health benefits of the LEZ would be eroded if there were extensive range of exemptions. Consequently, it is proposed that there be a very limited number of exemptions from the LEZ. TfL's current view is that specialist vehicles for which the fitting of pollution abatement equipment is not even an option, historic vehicles, military vehicles, off-highway vehicles, and very limited use vehicles be exempt from the proposed LEZ, although this will be kept under review. The contribution of these vehicles to air pollution is minimal, due to the small numbers and infrequent use.</p>
10.35	Clear list of exemptions needed	Association of London Government	It would be helpful if TfL could outline more clearly which vehicles currently operating in boroughs will be covered by exemptions, as this would help boroughs with forward planning for vehicle replacement requirements.	<p>See consideration – 10.08.</p> <p>Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006. Information on proposed vehicle exemptions would be set out in the Order and would be subject to public consultation.</p>

No.	Sub theme	Respondent	Representation	TfL Response
10.36	Clear list of exemptions needed	London Borough of Hounslow	It would be helpful if TfL could more clearly outline which vehicles are covered by the exemptions.	See considerations – 10.08 and 10.35.
10.37	Clear list of exemptions needed	City of Westminster	Westminster supports the TfL proposal to make a limited number of exemptions, particularly for those vehicles exempt from VOSA vehicle testing. Recognise that there are also other specialist vehicles for which abatement retrofit options are not practical. However, the consultation document does not indicate the range of vehicle types to which this would apply. Consider that a list of proposed exemptions should be published for consultation at an early stage, to provide sufficient time for operators to make informed consultation responses.	See considerations – 10.08 and 10.35.  The proposed LEZ would aim to reduce the most harmful emissions from older diesel-engined vehicles. The air quality and health benefits of the LEZ would be eroded if there were extensive range of exemptions. Consequently, it is proposed that there be a very limited number of exemptions from the LEZ. TfL's current view is that specialist vehicles for which the fitting of pollution abatement equipment is not even an option, historic vehicles, military vehicles, off-highway vehicles, and very limited use vehicles be exempt from the proposed LEZ, although this will be kept under review. The contribution of these vehicles to air pollution is minimal, due to the small numbers and infrequent use.
10.38	Clear list of exemptions needed	CBI London	There needs to be a much more extensive understanding of what kinds of vehicles should be made exempt. A number of businesses operate non-standard, specialist vehicles with specially fitted hi-tech equipment (eg utility companies). It would be extremely costly for these vehicles to meet the standards given the expense involved not only for the vehicle but for all the additional sophisticated equipment. For example, a number of companies operate cash secure vehicles that have specialist locking systems, are bullet proof etc. These must be made	See considerations – 10.08 and 10.35.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>exempt. A clear list of proposed exempt vehicles should have been published with the consultation document for feedback from business. This must be done at the earliest opportunity before any such scheme is implemented.</p>	
10.39	Clear list of exemptions needed	Freight Transport Association	<p>Acknowledges that, for reasons of specialisation and high cost, there are vehicles that would be disproportionately affected by an 8-year limit. Rather than supporting a daily access charge, which would undermine the efficacy of the scheme, FTA proposes that a sub-scheme for the issuing of a limited number of exemptions on a case-by-case basis be established.</p>	<p>See considerations – 10.08 and 10.35.</p> <p>The proposed LEZ would aim to reduce the most harmful emissions from older diesel-engined vehicles. The air quality and health benefits of the LEZ would be eroded if there were extensive range of exemptions. Consequently, it is proposed that there be a very limited number of exemptions from the LEZ. TfL's current view is that specialist vehicles for which the fitting of pollution abatement equipment is not even an option, historic vehicles, military vehicles, off-highway vehicles, and very limited use vehicles be exempt from the proposed LEZ, although this will be kept under review. The contribution of these vehicles to air pollution is minimal, due to the small numbers and infrequent use. TfL does not consider a system in which exemptions are granted on a case by case basis to be workable.</p>
10.40	Other discount and exemptions	National Grid	<p>Suggest that the LEZ is introduced with some flexibility, such that rather than an arbitrary introduction on certain dates, those businesses that can demonstrate an ongoing phased replacement of vehicles on a reasonable timeframe, are given a derogation for those few outstanding vehicles until such time that they are able to be replaced in line</p>	<p>The aim of the LEZ is to discourage the driving in London of the oldest, most polluting vehicles. TfL would therefore encourage organisations to develop fleet strategies that take into account the LEZ proposals. Vehicle replacement is not the only option for operators, as the LEZ would allow vehicles which have been upgraded or retrofitted to meet the LEZ standard to drive in London without a charge.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			with the company's existing replacement programme.	
10.41	Other discount and exemptions	The Kings Ferry Travel Group	If operators are to make investment decisions about vehicle upgrading or replacement, they need certainty of the payback period for that investment. Hence there must be a system of 'grandfather rights', so that if a vehicle complies with the relevant standard at the point that it is introduced, that vehicle can remain in use for the rest of its economic life.	The aim of the LEZ is to discourage the driving in London of the oldest, most polluting vehicles. Initially, from 2008, the LEZ standard would be Euro III for PM <sub>10</sub> . This would allow vehicles manufactured since 2001 to drive in the zone without a charge. If the standard were not to change throughout the lifetime of the LEZ, this would mean that in 2015, some 15 year old vehicles would still be able to drive in the zone, which would significantly reduce the air quality and health benefits of the scheme. That is why TfL proposes making Euro IV for PM <sub>10</sub> the standard in 2012 (see also considerations in Theme 6 under 'Euro IV for PM <sub>10</sub> in 2010 is premature'). Vehicle replacement is not the only option, and older vehicles could be upgraded or retrofitted to meet the LEZ standards.
10.42	Other discount and exemptions	EDF Energy	Would propose an exemption be granted to those vehicles where exhaust traps have been fitted as part of a phased introduction of the Euro IV standard from 2016 to reflect the high capital cost of early vehicle replacement. Note that TfL plans to offer a limited number of exemptions from the LEZ, applying to those specialist vehicles for which the fitting of abatement equipment is not an option, or where it would be unreasonable to require replacement and wish that our proposal be considered under these terms.	TfL is confident that retrofit technology is already available that would allow older vehicles to meet Euro IV standards for PM <sub>10</sub> . TfL would therefore not consider exemptions from the LEZ for vehicles that do not meet the standards, other than in the few cases mentioned above.

## THEME 11 IMPACTS ON BUSINESS AND PUBLIC SECTOR

No.	Sub theme	Respondent	Representation	TfL Response
11.01	Yet another charge on transport industry	Road Haulage Association	The implementation of the proposed London LEZ is set to cost industry up to £390 million. At present TfL offers a 100% discount for alternatively fuelled cars that enter the Congestion Charge Zone, but no incentive has ever been offered to commercial vehicles, to which there is no alternative if goods are to be delivered into Greater London. Yet, the accepted definition of the reason for introducing a congestion charge is to “encourage a shift to public transport”, not the imposition of an additional tax on business within Central London. Choosing the right congestion charging system involves consideration of efficiency, enforcement and billing, as well as the relative costs of any system. The proposed London LEZ would follow the path of the congestion charging scheme in unfairly penalising the essential road user.	The LEZ will only affect the most polluting vehicles: old diesel HGVs, buses, coaches and heavier LGVs. It is estimated that approximately two thirds of transport operators already have vehicles that comply with the proposed LEZ emission standards and this number will increase with natural replacement. These operators will, therefore, not have to pay the LEZ daily charge to drive within London. By reducing road transport emissions of PM <sub>10</sub> , the LEZ will improve the health and quality of life of Londoners and those visiting London. TfL recognises that the vast majority of journeys by commercial vehicles in London are essential to the capital's economy. The intention of the LEZ would not be to encourage modal shift, but to improve air quality and health in London. The LEZ would not ban any vehicle from driving in London, but would allow operators to make an economic choice between modifying, replacing or upgrading their fleets and paying the daily charge.
11.02	Yet another charge on transport industry	London Borough of Camden	There is a significant cost on businesses in complying with the scheme. It is noted that 60000 HGVs would have to be upgraded to meet the proposed 2008 standard and a further 100000 could be affected by the 2010 standard.	See consideration – 11.01.
11.03	Yet another charge on transport industry	London Borough of Camden	Camden has concerns that smaller operators of vehicles such as school buses or temporary bus services may be deterred from operating in London. The question would	See consideration – 11.01.

No.	Sub theme	Respondent	Representation	TfL Response
			then be whether there were enough complying operators to fill the gap or whether there might be a switch to less sustainable options such as more car usage.	
11.04	Should be tax incentives & loans to help convert vehicles	London Borough of Bexley	There appears to be no mention of assistance to either businesses or local authorities in meeting the additional costs. Serious consideration should be given to developing an appropriate grants scheme to assist in meeting the significant additional costs that are going to be involved.	TfL has considered a number of alternatives to the LEZ including tax incentives and loans to help convert vehicles. However, such financial schemes are dependent on central government support and the government has indicated it has no plans to support the introduction of differential vehicle excise duty (VED) rates depending on PM <sub>10</sub> emission levels. The LEZ represents the most effective mechanism available to the Mayor for reducing the most harmful vehicle emissions between 2008 and 2015. Government grant programmes are very unlikely to provide sufficient funding to clean up the HGV fleet to the level that would be achieved by a LEZ. In any case, European Union rules limit any environment-related grant to 36 per cent of the capital cost of the equipment. Funding grants for operators to this level is unlikely to be cost-effective, and alone is unlikely to provide adequate incentives to operators to clean up their vehicles.
11.05	Should be tax incentives & loans to help convert vehicles	London Borough of Richmond upon Thames	Given the likelihood that a large number of vehicles will need to be retrofitted to meet the required admission standards, has any thought been given to the availability of retrofit kits and the available resources to install them? The Borough would welcome TfL funding, for example through the Borough Spending Plan (BSP) process in order to assist Boroughs with retrofitting of non-	See consideration – 11.04.  Incentives and grants for cleaner vehicles is a matter for the Government, not for TfL. However, TfL is currently considering ways in which the current Congestion Charging alternative fuels discount could be adjusted to increase the use of the cleanest vehicles without detracting from the core objective of the scheme, which is to reduce congestion in central

No.	Sub theme	Respondent	Representation	TfL Response
			compliant fleet vehicles.	London.
11.06	Should be tax incentives & loans to help convert vehicles	Sutton Transport and Air Quality Working Group	Timescales for meeting Euro standards may be too short and grants should be considered for operators within LEZ to help with compliance.	<p>Modelling suggests that only 34 per cent of HGVs and 42 per cent of coaches would not be compliant with the LEZ standard in 2008. TfL does not therefore consider that the 2008 standard is premature.</p> <p>Feedback from operators and manufacturers is that the 2010 standard would be expensive and impractical for operators to achieve. For a range of reasons, including that many types of Euro IV vehicle are not yet available, operators are currently replacing their fleets with Euro III and there is a concern that under the proposed LEZ core scheme of Euro IV for PM<sub>10</sub> in 2010 they could potentially have only four years before they need to modify or replace their vehicles. To address this issue TfL is recommending moving implementation of the Euro IV standard for PM<sub>10</sub> back to 2012. Whilst this would lead to smaller air quality and health benefits resulting from a reduction in emissions from heavier vehicles, it would significantly reduce compliance costs to operators, and make the scheme more acceptable.</p>

No.	Sub theme	Respondent	Representation	TfL Response
11.07	Should be tax incentives & loans to help convert vehicles	City of Westminster	Understand that actions being taken to upgrade London Buses will enable full achievement of the LEZ standards, but do not know from data provided whether an age-based scheme would have any different impacts. However, some coach and specialist bus operators may have to replace or upgrade their vehicles sooner than would otherwise be the case. We wish to be assured that TfL and the Mayor will be taking other actions to assist operators to achieve the required standards.	<p>TfL estimates that only 42 per cent of coaches would not be compliant with the 2008 LEZ standard. It would be up to individual coach operators to decide whether to modify their vehicles, replace them with newer vehicles or redistribute their fleets so that only compliant vehicles operate within the LEZ.</p> <p>TfL has examined the health and air quality benefits and compliance costs of 6, 8 and 10 year rolling age-based systems for HGVs and buses. This analysis has shown that a 10 year standard generates insufficient health and air quality benefits. The benefits of an age based scheme (either 6 or 8 years rolling) have been modelled and are less than those delivered by the proposed Euro standards based scheme.</p> <p>TfL investigated the option of providing grants for retrofitting pollution abatement equipment to vehicles but EU rules limit any environment-related grant to 36 per cent of the capital cost of the equipment. Funding grants for operators to this level is unlikely to be cost-effective and TfL considers that it is unlikely to provide adequate incentives to operators to clean up their vehicles. Furthermore, there would be practical difficulties associated with targeting financial assistance only to London-based operators.</p>
11.08	Should be tax incentives & loans to help convert vehicles	British Association of Removers	Hitting operators with tax penalties while ignoring incentives to embrace cleaner engines is counter-productive. Many European States already give tax breaks for early uptake of new emission standards in order to encourage the move to more new,	See consideration – 11.07.

No.	Sub theme	Respondent	Representation	TfL Response
			cleaner vehicles on the roads.	
11.09	Should be tax incentives & loans to help convert vehicles	London Assembly Environment Committee	The Environment Committee was told that an incentive-based approach towards mitigating some of the substantial expenses commercial operators are likely to incur is needed. Therefore recommend that the consultation covers examining ways in which to incentivise business.	See consideration – 11.07.
11.10	Should be tax incentives & loans to help convert vehicles	London Borough of Barking and Dagenham	Would like to see a commitment from TfL/Central Government to distribute financial incentives/assistance, to offset significant negative impacts to small businesses in the Borough of Barking and Dagenham.	See consideration – 11.07.
11.11	Should be tax incentives & loans to help convert vehicles	National Express Limited	Consideration should be given to support a scheme for coach operators required to retrofit pollution abatement technology. New technology such as hybrid engines which, when available, will have great potential to bring about big improvements in both greenhouse gas emissions and exhaust pollutants need to be considered. There is a danger that if operators are required to invest in retrofitting vehicles this will divert capital away from investment that could be made in new technology. Would hope that, in addition to the measures outlined in the proposals, the Mayor considers some form of funding for coach operators to enable them to adopt hybrid vehicles quickly once these are available.	See considerations – 11.04 and 11.07.  TfL considers that it would be unlikely that the LEZ would significantly alter most companies' fleet management programmes. However, the LEZ is technology neutral, and any modification or upgrade that allowed a vehicle to meet the LEZ standards would result in that vehicle being able to drive in Greater London without charge.
11.12	Should be tax incentives &	British Association of	The scheme does not reflect the needs/use of vehicles by particular businesses. Removal	See considerations – 11.04 and 11.07.

No.	Sub theme	Respondent	Representation	TfL Response
	loans to help convert vehicles	Removers	company operators invest a huge cost into building specialist vehicles with expensive bodies. In the main these vehicles are very low-weight/low-mileage vehicles as the loads are by volume, not weight, and much of the time is spent parked outside a building/residence whilst loading, packing and unpacking takes place. Consequently, many operators tend to keep their vehicles for 10-15 years. Replacement within the next 2-3 years (before LEZ) would not be economic unless realistic incentives were to be put in place to offset the cost of earlier replacement.	Vehicle replacement is not the only option available to operators, who can also retrofit or upgrade their vehicles to meet the LEZ standards.
11.13	Should be tax incentives & loans to help convert vehicles	Volvo Truck and Bus Ltd	Many bus operators have found the full service exchange of the particulate filter to be necessary to do every 6 months and with additional costs of at least £160 per filter regeneration, has seriously added to operational costs. If a filter becomes clogged before the back pressure rises has been noticed, then this can give rise to an exothermic reaction which writes off the filter which adds a further charge of at least £900 for each wrecked filter. TfL have recognised these extra costs in setting the bus route rates. Freight operators do not have any subsidy for the fitment of items like CRTs let alone the significant extra costs in maintenance.	See considerations – 11.04 and 11.07.  Annual maintenance costs of pollution abatement equipment are highly variable. Some vehicles only require one filter clean per year at a cost of £200, whereas a few difficult applications may require three cleans per year, at a cost of £600. It would be up to individual operators to weigh up the economic implications of retrofitting a vehicle as opposed to purchasing or leasing a newer vehicle.

No.	Sub theme	Respondent	Representation	TfL Response
11.14	Costs of buying new vehicles	The Guild of British Coach Operators Ltd	Members are all privately owned companies. Therefore, the introduction of a LEZ must, as a matter of paramount importance, not place an unfair or excessive burden on these businesses and must not threaten the financial viability of private companies. The standards must not be set at such a high level that operators cannot afford to buy compliant vehicles and are forced out of business as a result.	The proposed LEZ would not oblige operators to buy new vehicles. Any vehicles which comply with Euro III for PM <sub>10</sub> from 2008 (vehicles manufactured since 2000), and Euro IV for PM <sub>10</sub> from 2012 (vehicles manufactured since 2006) will be able to drive without charge in the LEZ, as will vehicles which have had action taken to make them compliant with these standards, no matter how old they are.
11.15	Costs of buying new vehicles	The Guild of British Coach Operators Ltd	Most coach companies are only earning low profit margins and this clearly has a major impact on their ability to finance new and upgraded vehicles. Not only could our members not afford to replace substantial numbers of coaches in a short period of time, it is very doubtful if the manufacturing capacity exists to satisfy that demand.	See consideration – 11.14.
11.16	Costs of buying new vehicles	Stephensons of Essex Ltd	Compliance with the proposed LEZ would require substantial investment by Stephensons.	See consideration – 11.14.
11.17	Costs of buying new vehicles	BAA	Have some concerns that smaller operators and owners of specialist vehicles, who replace their vehicles less frequently than large operators, may have to bear significant additional costs.	See consideration – 11.14.
11.18	Costs of buying new vehicles	Pickfords	Most fleets operate on a replacement cycle of 8 to 10 years. It is therefore unlikely that any fleet in London will have a 2008 or a 2010 compliant fleet within its normal replacement cycle. This will lead to a hefty cost to industry in London.	See consideration – 11.14.

No.	Sub theme	Respondent	Representation	TfL Response
11.19	Costs of buying new vehicles	The Society of Motor Manufacturers and Traders Ltd	Logistics companies have vehicles specifically designed for operation in smaller, more restrictive London streets. Redeployment outside London of these vehicles cannot be economically justified, so replacement is the only option.	See consideration – 11.14.
11.20	Costs of buying new vehicles	Thames Gateway London Partnership	Where vehicles will reach the end of their useful life within a few years of the LEZ being implemented it will be difficult for operators to build a business case for CRT equipment. This might force acceleration in the replacement vehicles and will have financial impacts. Operators looking to make investment decisions in the short term will also face a dilemma. Vehicles purchased now with Euro III engines will not be compliant with the 2010 LEZ targets. Seek assurances that such issues have been fully considered during scheme development.	TfL accepts that the LEZ may increase costs for some companies due to the need for fitting and maintenance of pollution abatement equipment, bringing forward the replacement costs for non-compliant vehicles and lowering the recoupment values of second hand vehicles. However, TfL estimates that almost two thirds of vehicles on the roads in 2008 will be LEZ compliant. It would be for individual operators to decide whether to upgrade or retrofit their vehicles, but the deferral of the proposed Euro IV standard for PM <sub>10</sub> until 2012 may reduce the pressures on some companies.
11.21	Costs of buying new vehicles	Hertfordshire County Council	Concerned that the emission standards proposed under the Low Emission Zone could penalise small businesses who cannot afford to replace their vehicles or purchase the abatement equipment.	See considerations – 11.14 and 11.20.
11.22	Costs of buying new vehicles	Heyfordian Travel Limited	The type of work most coach operators undertake is highly price sensitive, often serving parts of the community who are not best equipped to deal with a substantial rise in rates. Fearful that much of this work could be lost to destinations other than London, or lost altogether as it becomes uneconomic.	See considerations – 11.14 and 11.20.

No.	Sub theme	Respondent	Representation	TfL Response
11.23	Costs of buying new vehicles	London Fire and Emergency Planning Authority	As with the HGV vehicles, the cost of complying with increased emission targets can be minimised if they can be introduced during the normal contractual vehicle replacement policy. Retro fitting to achieve emission reductions is always likely to represent a more costly exercise. This is particularly true for the Authority as the main fleet replacement cycle is longer than in other sectors.	See considerations – 11.14 and 11.20.
11.24	Costs of buying new vehicles	Pickfords	The extra constraints of the Euro IV standard from 2010 will make business in London less commercially viable and will give organisations outside London a commercial advantage.	See considerations – 11.14 and 11.20.  Businesses which are based outside London but which operate vehicles in the capital will also be liable to the LEZ.
11.25	Costs of retrofitting abatement equipment	London Borough of Richmond upon Thames	The Council is concerned about the cost and effectiveness of retrofitting vehicles to comply with the new emissions standards and with the potential need to do so subsequently again as new, tighter standards are introduced.	The LEZ will only affect the most individually polluting vehicles: old diesel HGVs, buses and coaches, as well as heavier LGVs. It is estimated that approximately two thirds of transport operators already have vehicles that comply with the proposed LEZ emission standards and this number will increase with natural replacement. Annual maintenance costs of pollution abatement equipment are highly variable. Some vehicles only require one filter clean per year at a cost of £200, whereas a few difficult applications may require three cleans per year, at a cost of £600. It would be up to individual operators to weigh up the economic implications of retrofitting a vehicle as opposed to purchasing or leasing a newer vehicle.

No.	Sub theme	Respondent	Representation	TfL Response
11.26	Costs of retrofitting abatement equipment	Confederation of Passenger Transport UK	<p>It would not be practicable for coach operators just to modify a small selection of non compliant coaches, as this would reduce operational flexibility to an unacceptable extent. For operators based within London, the option of adapting only a proportion of the fleet is not available, as every trip by every vehicle in the fleet will involve operation within the LEZ. To replace all non-compliant coaches by 2008, or even just the proportion of them that might be expected to operate regularly within the LEZ is not practical for economic and business reasons. Consideration should therefore be given to the cost and practicality of modifying vehicles. According to a survey of CPT members, it could conservatively be estimated that the coach industry's total bill would amount to over £300 million nationally.</p>	<p>See consideration – 11.25.</p> <p>TfL estimates that only 42 per cent of coaches would not be compliant with the 2008 LEZ standard. It would be up to individual coach operators to decide whether to modify their vehicles or whether to replace them with newer vehicles. Overall, the average cost of retrofitting a coach is in the region of £5500. However, the costs of retrofitting coaches varies greatly according to the age, make and model and emissions characteristics of the vehicle.</p>
11.27	Costs of retrofitting abatement equipment	The Guild of British Coach Operators Ltd	<p>Do not oppose the principle of a LEZ but believe the proposals as set out are unfair, unworkable and counter-productive. The proposals seriously under estimate the costs and technical issues involved in converting existing vehicles to comply and do not reflect the long replacement cycles for coaches &amp; buses. For bus operators providing services outside the TfL network, the proposals place an unfair burden on the private sector, since TfL operations are heavily subsidised whereas commercial services have to bear the full economic cost of operations and fleet</p>	<p>See consideration – 11.25.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			replacement.	
11.28	Costs of retrofitting abatement equipment	The Society of Motor Manufacturers and Traders Ltd	The development of Euro standards has required new engine, exhaust, emissions and systems hardware and software technology. This has become increasingly sophisticated from one Euro standard to the next. This makes any retrofit equipment for PM <sub>10</sub> or NO <sub>x</sub> much more challenging and costly to engineer.	See consideration – 11.25.
11.29	Costs of retrofitting abatement equipment	The Society of Motor Manufacturers and Traders Ltd	The cost of maintaining retrofit equipment is probably underestimated. A major London based retailer estimates that maintaining retrofit equipment can cost between £1k and £4.5k per occasion, greatly in excess of the original estimate. For coach operators in particular, the cost effectiveness of retrofit equipment to older stock would make this potentially uneconomic in relation to the capital value.	See consideration – 11.25.
11.30	Costs of retrofitting abatement equipment	British Association of Removers	The cost of modifying older engines is both expensive and risky.	See consideration – 11.25.
11.31	Costs of retrofitting abatement equipment	Volvo Truck and Bus Ltd	Many bus operators have found the full service exchange of the particulate filter to be necessary to do every 6 months and with additional costs of at least £160 per filter regeneration, has seriously added to operational costs. If a filter becomes clogged before the back pressure rises has been noticed, then this can give rise to an exothermic reaction which writes off the filter	See consideration – 11.25.  Annual maintenance costs of pollution abatement equipment are highly variable. Some vehicles only require one filter clean per year at a cost of £200, whereas a few difficult applications may require three cleans per year, at a cost of £600. It would be up to individual operators to weigh up the economic implications of retrofitting a vehicle as opposed to

No.	Sub theme	Respondent	Representation	TfL Response
			which adds a further charge of at least £900 for each wrecked filter. TfL have recognised these extra costs in setting the bus route rates. Freight operators do not have any subsidy for the fitment of items like CRTs let alone the significant extra costs in maintenance.	purchasing or leasing a newer vehicle.
11.32	Costs of retrofitting abatement equipment	Pickfords	The need to retrofit vehicles to meet the 2008 LEZ standard would impose considerable costs, which would be exacerbated by the further need to retrofit vehicles to meet the 2010 standards. If LGVs were brought within the scope of the LEZ, this would also impose significant costs.	See consideration – 11.25.  On the basis of economic and technical analysis TfL recommends that heavier LGVs be included in the proposed LEZ from 2010. In recommending the inclusion of heavier LGVs in the LEZ, TfL has taken into account that the market for the retrofitting of pollution abatement equipment for smaller and lighter diesel vehicles is less well developed than that for larger, heavier vehicles, such as HGVs, buses and coaches.
11.33	Costs of retrofitting abatement equipment	Confederation of Passenger Transport UK	In addition to costs associated with the fitting of abatement equipment, would expect to see additional costs through maintenance times and down time for fitment.	See consideration – 11.25.
11.34	Moving outside London	London Development Agency	Concerned that, rather than adapting or changing their vehicles, businesses could simply set up outside the London area which may have impacts on the local London economy.	The 2005 Operator Survey carried out on behalf of TfL showed that only a very small number of businesses would relocate outside London as a result of the LEZ. Whilst there may be an increase in costs for some companies, TfL considers that these are outweighed by the health and air quality improvements that would be brought about in London by the LEZ.

No.	Sub theme	Respondent	Representation	TfL Response
11.35	Moving outside London	Road Haulage Association	RHA members have been consulted and there is overwhelming evidence that, were the scheme to be implemented in its present form, there would be a reduction in small to medium sized goods vehicle operators prepared to operate within Greater London from 2008.	See consideration – 11.34.
11.36	Moving outside London	Confederation of Passenger Transport UK	The type of work most coach operators undertake is highly price sensitive, often serving parts of the community who are not best equipped to deal with a substantial rise in rates. Fearful that much of this work could be lost to destinations other than London, or lost altogether as it becomes uneconomic.	See consideration – 11.34.
11.37	Moving outside London	London Borough of Barnet	Although operators based outside London will have the flexibility to redeploy their fleets to ensure only compliant vehicles are used within London, operators based solely within London will not be able to do this, and will be placed at a competitive disadvantage. London-based operators may find it more attractive to move to sites immediately outside London rather than incurring the repeated costs of replacing or retrofitting their fleets. Since distribution of costs plays a key role in the North London economy, this is a matter the Council has serious concerns over.	See consideration – 11.34.
11.38	Moving outside London	Volvo Truck and Bus Ltd	Volvo Truck & Bus Ltd have four dealer locations within the proposed LEZ - Barking, Croydon, Enfield and Hayes. The last three are major dealer workshops whose location has been/had been devised to offer routine	TfL accepts that some businesses would be adversely affected by the LEZ, but overall these impacts are offset by the air quality and health benefits of the scheme. It would be up to individual operators of non-compliant vehicles to make an economic decision as to

No.	Sub theme	Respondent	Representation	TfL Response
			<p>and breakdown service for customers operating not only inside the M25 but also for a reasonable proportion of customers in neighbouring areas outside the M25. In addition their locations suit breakdown call outs and recovery of operators passing London on the M25. The imposition of a sizeable fee for non TfL LEZ compliant vehicles entering the LEZ (figures of the order of £200-300 per day have been quoted) make these locations totally inappropriate as no operator is going to pay £300 to come in one day for a service let alone another £300 for the possibility that a repair cannot be completed on the same day. To relocate such depots purposely designed as heavy duty vehicle workshops would be extremely expensive and it has been estimated that as well as costing in the order of £7 million to set up, the loss of business in just transferring to new locations outside the GLA, should such sites be available, would involve an operating loss in the order of £0.5 million for each of the 3 depots concerned. Moving these depots outside the LEZ would result in more mileage for the higher proportion of vehicles based inside the LEZ to reach the new depot locations, which will increase the emissions we are trying to limit.</p>	<p>whether to drive in Greater London and pay the daily charge, or to avoid driving in Greater London completely. It is TfL's intention for that daily charge to be set at a level to discourage all but the most occasional journeys into London of non-compliant vehicles.</p>

No.	Sub theme	Respondent	Representation	TfL Response
11.39	Impact on small businesses	London Development Agency	Concerned that there may be a disproportionate affect on small and medium size enterprises that can not afford to renew their distribution fleet as regularly as larger international firms. This could reduce competition in this sector and favour larger companies.	TfL recognises that those employed in small businesses are likely to be more vulnerable to the impact of LEZ as they are less likely to be able to meet the costs of compliance of LEZ. The proportion of those employed by small companies is not high in the road transport sector as a whole, but it is higher for non-scheduled coach and bus activities. The proposed LEZ would be just one of many factors which would influence the business planning of HGV, bus and coach operators. TfL estimates that the proposed LEZ would have no impact on more than two thirds of operators who drive in London as their vehicles would already be compliant with the proposed standards. The proposed LEZ entry criteria are based on emissions standards, rather than age, thereby enabling vehicle owners to choose from a range of options, including fitting abatement devices, which may be more economic for certain classes and ages of vehicle. TfL is trying to balance the objectives of improving air quality and health with affordability for the business community. The design of the scheme and the setting of emission standards is not intended to create a negative impact on the London economy. However, TfL will carefully monitor the effect of the LEZ on the business community should it be implemented, and would change the scheme should that be necessary.
11.40	Impact on small businesses	Hampshire County Council	Hampshire County Council hopes that TfL will work with them and local transport operators to monitor the impact of the LEZ on small and medium sized enterprises, who may be particularly affected by the need to retrofit their vehicles.	See consideration – 11.39.

No.	Sub theme	Respondent	Representation	TfL Response
11.41	Impact on small businesses	London Borough of Southwark	Concerned about the impact of the LEZ on small and specialist operators whom may be unable to bear the cost of upgrading vehicles. Southwark has approximately 10,800 small and medium size enterprises (SMEs) operating within the borough. 95% of the total business stock in Southwark are SMEs employing less than 50 people, and 83% of these are micro businesses employing 10 people or less and the impact on these businesses should be considered.	See consideration – 11.39.
11.42	Impact on small businesses	Kent County Council	Has major concerns at the potential impact on the haulage industry from the proposed LEZ, in particular the impact on small business, as well as the displacement effect on Kent's roads.	See consideration – 11.39.
11.43	Impact on small businesses	London Retail Consortium	Smaller retailers are more likely to use older vehicles and do not update their fleets as often as large retailers. They will therefore disproportionately high costs to comply. The LRC calls for a robust and transparent assessment of the impact of the finalised proposals on business, giving particular attention to the effect on small businesses.	See consideration – 11.39.  Should the Mayor confirm the revisions to his Transport and Air Quality Strategies, TfL would undertake a further public and stakeholder consultation in late 2006 on detailed proposed for a LEZ contained in a Scheme Order. An economic impact assessment of the LEZ would be undertaken to inform this consultation on a Scheme Order.
11.44	Impact on small businesses	Federation of Small Business	The current timeline which TfL is working towards implies a May 2008 introduction for the scheme. This will be extremely difficult for small businesses to meet as most will not be Euro III compliant by that date for simple cash-flow reasons – it would be financially crippling on small businesses to have to	Vehicle replacement is not the only option available to operators, who can also retrofit or upgrade their vehicles to meet the LEZ standards.

No.	Sub theme	Respondent	Representation	TfL Response
			change their vehicles in such a short time frame.	
11.45	Impact on small businesses	British Association of Removers	Operators based within the LEZ will face high increases in operation cost and vehicle replacement programmes - despite the fact their vehicles may, more often than not, be travelling to destinations outside the LEZ on many days.	For practical, cost and administrative reasons, it is intended that the LEZ would involve an area-based charge which would not take into account distance or direction of travel. The intention of the LEZ would be to encourage operators of older, more polluting vehicles in London to replace or upgrade their fleets no matter how often or how far they drive within the LEZ.
11.46	Impact on small businesses	Surrey County Council's Passenger Transport Liaison Group	Concerned about smaller bus operators, whose financing abilities are quite different to those of subsidiaries of the major groups who undertake scheduled bus service work within the London area. Small operators rely on income from local authorities for school transport contracts, supplemented off-peak and weekends by the ability to use the vehicles on private hire work (including into London) and on railway-replacement work on behalf of national rail operators. These fleets contain a proportion of more elderly, but well-maintained vehicles which are quite suitable for the lower-mileage work they undertake. Whilst various operators are actively improving the age and emission profile of buses used on contracted local bus services and are investing in better vehicles, this is against a background of extreme local authority budgetary pressure. Around London there simply is not the level of funding available to improve services and rolling stock to the same magnitude that is available to the	The LEZ would allow operators to meet the LEZ standards either through vehicle replacement or through vehicle adaptation. This would allow operators to manage their fleet budgets flexibly, according to their needs.

No.	Sub theme	Respondent	Representation	TfL Response
11.47	Impact on small businesses	Hillingdon PCT	<p>Mayor within Greater London.</p> <p>As noted in the Health Impact Assessment, the main potential negative impact of the proposed scheme on health is economic, i.e. possible reductions in profit margins, income and employment from HGV, bus, coach and potentially LGV operators. The introduction of this scheme should take account of these possible effects and should minimise any negative impacts - taking particular account of effects on deprived communities.</p>	<p>TfL considers that any small negative economic impacts of the LEZ would be more than offset by the health benefits for the entire community. Boroughs which would benefit from the greatest air quality improvements include are generally in central London, which includes some of the most deprived communities in London. Should the Mayor approve the Strategy Revisions, TfL would produce further impact assessments examining the impact of the LEZ on the London economy, and this would be made available at the time of any further public and stakeholder consultation. After the implementation of the LEZ, TfL would also monitor the impact on small businesses, and would make any alterations to the scheme should these be considered necessary.</p>
11.48	Passing costs onto clients	The Royal Marsden NHS Foundation Trust	<p>Does not run a fleet of vehicles and therefore would not be directly affected by the requirements of the proposed London LEZ. However, has contractual arrangements with service providers who would be directly affected, including non-emergency patient transport providers and non-clinical contractors (eg waste, linen, general deliveries, building contractors, etc). Would anticipate that the additional costs incurred by these contractors as a result of the proposed London LEZ would be passed on.</p>	<p>TfL acknowledges that the costs of compliance with LEZ will, to some extent, be passed on by operators to their customers and that these costs may then feed through to consumers in the form of higher prices. However, an economic impact assessment of the draft Strategy Revisions has indicated that any increase in the price level due to the proposed LEZ is likely to be comparatively small in terms of the UK economy as a whole. This is because any feed through to consumers is likely to be across the whole of the UK and not restricted to consumers in London, since many vehicle operators cover large parts of the UK and would pass any cost increases on as a generalised increase in costs. In addition the experience in Sweden was that many companies benefited from the competitive advantage that operating cleaner vehicles gave them.</p>

No.	Sub theme	Respondent	Representation	TfL Response
11.49	Passing costs onto clients	EDF Energy	Concerned that the LEZ will require the unanticipated early replacement of our specialist vehicles and that this will incur significant cost. These costs would fall on our business as an absolute cost much of which would ultimately pass onto our customers through increased prices.	See consideration – 11.48.
11.50	Passing costs onto clients	MARSHopper Ltd	Customers will be expected to foot the bill for the LEZ charge, or have no bus service at all and use their cars instead.	See consideration – 11.48.
11.51	Passing costs onto clients	Thames Gateway London Partnership	In the run up to the London 2012 Olympics will be major demands for construction vehicles. This may impact on local businesses and residents if there is a shortage of contractors within London to undertake work. Contractors based outside London may be reluctant to bring vehicles in or if they do so may pass the additional cost onto the customer. A similar issue might exist with bus operators passing additional costs on to passengers.	See consideration – 11.48.
11.52	Passing costs onto clients	Central London Partnership	London is already an expensive place to live, visit or do business – this additional cost could see businesses moving out of the capital or country altogether. Besides freight and commercial vehicles, leisure operators who bring visitors to attractions and theatres will also be affected, and the costs will likely be bourn by the visitor, making London an even more expensive destination.	See consideration – 11.48.
11.53	Passing costs	Calor Gas	Fleet operators will continue to use Euro III	See consideration – 11.48.

No.	Sub theme	Respondent	Representation	TfL Response
	onto clients	Limited	vehicles at an additional cost of £100-200 per day which will be passed from the purchasers of the goods conveyed on these vehicles to the GLA. This will be a tax-raising, rather than pollution-reducing measure.	The deferral of the introduction of the Euro IV standard for PM <sub>10</sub> from 2010 to 2012 would allow operators a longer period to replace their fleets or upgrade them. It is therefore anticipated that only 12 per cent of HGVs would not be compliant with the 2012 standard of Euro IV for PM <sub>10</sub> .
11.54	Impact on public and community sectors	London Borough of Lewisham	Private operators keep vehicles for varying time periods. Often older vehicles are used for home to school work in the areas surrounding London. These vehicles could not be used for school visits into Greater London without a significant surcharge on the cost to parents.	The proposed LEZ would aim to reduce the most harmful emissions from older diesel-engined vehicles. The air quality and health benefits of the LEZ would be eroded if there were extensive range of exemptions. Consequently It is not intended to offer exemptions to transport operators providing services to public institutions such as schools as the aim of the LEZ is to encourage as many operators as possible to clean up their vehicles and hence provide the greatest health and air quality benefits.
11.55	Impact on public and community sectors	Federation of Small Business	Believe that TfL needs to reassure both the business community and the London population of the impact of their proposals on the Fire and Ambulance services and on other public sector organisations.	See consideration – 11.54.
11.56	Impact on public and community sectors	Stephensons of Essex Ltd	To comply with the proposed LEZ emission standards would require substantial investment. Do not believe that either of the core markets (Southend to London coach service and coaches on contract to London schools) would be prepared to pay the level of increased prices to fund this sort of increase in cost, and the result would be a withdrawal of the operations. The effects of the proposals as they stand will be to cause	See consideration – 11.54.

No.	Sub theme	Respondent	Representation	TfL Response
			the demise of the Southend to London coach service and/or significantly increased costs for at least six London schools.	
11.57	Impact on public and community sectors	Johnsons Coach Travel	Believe the LEZ will add about £50 per hire of a coach (from the West Midlands) to London, or about a 12% increase in one hit. The customers most likely to be affected by increases in our charges for a day out to London are schools & colleges (85% fall in this category).	See consideration – 11.54.
11.58	Impact on public and community sectors	Dudleys Coaches	Concerned that a number of London journeys would be lost to other destinations as a high proportion of London coach visits are bringing in children for educational trips and this type of work is price sensitive.	See consideration – 11.54.
11.59	Impact on public and community sectors	London Development Agency	Many small operators provide local services for community groups that assist those people who are less mobile, elderly or disadvantaged. Any closure of small operators would have a negative impact on critical services for these groups.	See consideration – 11.54.
11.60	Impact on public and community sectors	Hertfordshire County Council	The requirement to meet a higher Euro III or IV standard will impose additional costs on either the operator or the funding authority and this may not be offset by increased fares and revenue. Consider that some services or parts of service may be withdrawn as a consequence, increasing car use in the area. For example a school bus service runs from South Oxhey to Northwood School. This is a discretionary provision and even though the route only goes once a day each way a short	See consideration – 11.54.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>distance over the border, the vehicle requirement will be the same as a more regular service. It is likely that under the LEZ proposals, this service carrying a large number of children would be withdrawn. Conclude that, in such circumstances, the operator may find that withdrawing from the London area is the only cost effective solution.</p>	
11.61	Impact on public and community sectors	London Fire and Emergency Planning Authority	<p>At present, the initiatives on HGV do not go beyond 2010 with the introduction of the Euro IV standards for PMs and NO<sub>x</sub>. The life cycle of vehicles currently being replaced will extend well beyond 2010. There is a concern that more stringent emission standards will be introduced before the current fleet of heavy firefighting vehicles reaches 'end-of-life'. The 2010 emission standard will impact on 267 heavy vehicles within the LFB fleet all of which will be powered by Euro III engines. All these vehicles will require a level of abatement equipment in order to comply with the Euro IV standard. This will have significant cost implications for the Authority in terms of initial equipment purchase, labour to fit the equipment and fleet downtime whilst the modifications are carried out. As with one of the proposed technical solutions for 2008 compliance (particulate filters for Pre-Euro and Euro I &amp; II vehicles) there may also be increased maintenance costs levied on the Authority by our vehicles provider.</p>	<p>See consideration – 11.54.</p> <p>It is expected that the deferral of the proposed Euro IV standard for PM<sub>10</sub> until 2012 would reduce the pressures on some organisations. In cases where vehicle purchase is bought forward, these costs could be partially off-set by increased fuel efficiency and lower overall maintenance costs from operating newer vehicles. Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006. Information on the details of the scheme would be set out in the Order and would be subject to public consultation. This would provide an opportunity to comment on the proposed standards. Should the Mayor then approve the Scheme Order, any amendment to the standards would require a further consultation.</p>

No.	Sub theme	Respondent	Representation	TfL Response
11.62	Impact on public and community sectors	The Guild of British Coach Operators Ltd	<p>Concerned that the proposals discriminate against operators running registered bus services outside of the TfL network, either wholly within Greater London or cross-boundary bus and coach services. Contractors on TfL services are paid contract prices to operate those services that include funding fully compliant vehicles and this represents a substantial subsidy (since the TfL network is not funded fully by commercial fares) which is not available to other operators. We believe the introduction of the LEZ could result in further loss of commercial, cross-border services that perform a valuable public service without TfL subsidy.</p>	See consideration – 11.54.
11.63	Impact on public and community sectors	London TravelWatch	<p>Concern that the LEZ could result in the withdrawal of marginal cross-boundary bus services currently provided on a commercial basis or under contract to an adjacent local authority. At present, many of these services use vehicles which would not be LEZ compliant. The operators and sponsoring authorities many not consider that the increased operating costs resulting from the LEZ would justify continuing these services, resulting possibly in modal shift to passenger cars. TfL should therefore consider measures to safeguard these cross-boundary services and to consider whether additional services may be justified in support for the LEZ.</p>	See consideration – 11.54.

No.	Sub theme	Respondent	Representation	TfL Response
11.64	Impact on public and community sectors	London Borough of Lewisham	<p>Like many local authorities, Lewisham tends to keep vehicles longer than the private sector. With some exceptions, Lewisham's vehicles have low annual mileages and this allows flexibility in planning vehicle replacement as needs change over time. Small vans for example may be kept for up to ten years. However, there is a particular issue for Lewisham with its larger welfare buses. These were re-engined to Euro II two to three years ago with the intention of the new engines having a life of up to six years - when replacement decisions would be taken based on the then planned implementation date of the LEZ. It is not financially worthwhile to fit CRT equipment for a couple of years life, so the LEZ, if introduced in its current proposed form, would accelerate the replacement programme. This would force decisions to be made which may not suit future needs, which are themselves changing.</p>	<p>TfL accepts that some organisations, including boroughs, would be obliged to alter their fleet management plans as a result of the introduction of the LEZ. However, this is the intention of the LEZ, as it would aim to discourage the most polluting older diesel engine vehicles from driving in Greater London. In 2008, the LEZ standard would be Euro III for PM<sub>10</sub>. Euro III vehicles has been the standard for manufacturing vehicles since 2000, so this means that in effect vehicles under the age of eight years would be compliant. Older vehicles could be retrofitted to meet the standard. TfL would urge organisations to consider the 2012 LEZ standard of Euro IV for PM<sub>10</sub> when upgrading their fleets.</p> <p>It is considered that the implementation of the LEZ would have no significant effect on London boroughs or contiguous authorities in terms of infrastructure or operational costs. However, TfL would consult with the boroughs on matters associated with infrastructure and signage.</p>
11.65	Impact on public and community sectors	Surrey County Council's Passenger Transport Liaison Group	<p>Concerned that local authorities will be obliged to pay higher prices for local bus services or school transport services which do not enter Greater London in order to support the increased vehicle and fuel costs of operators. Some bus companies may be forced to leave the market if they find it unsustainable to comply with the LEZ, and therefore be unable to operate in London. This will reduce the number of bidders for contracts in an already thin marketplace and</p>	<p>See consideration – 11.64.</p>

No.	Sub theme	Respondent	Representation	TfL Response
			could ultimately force up prices which the public purse will have difficulty to accommodate, leading to service withdrawals or reductions.	
11.66	Impact on public and community sectors	London Borough of Lewisham	As the emphasis on special needs school transport shifts towards more integration in mainstream schools and adult care moves to more personalised packages, the nature of transport is changing. It is not yet clear what the impact will be on future fleet needs and there is a real danger of purchase of the wrong type of vehicle. Furthermore, scrapping vehicles which are relatively less polluting and which have a useful residual life is not a good use of public funds and we do not believe that the benefits of bringing forward the implementation of the zone will balance this cost.	See consideration – 11.64.
11.67	Impact on public and community sectors	Hertfordshire County Council	Concerned about the effects of the proposed LEZ on cross boundary bus services. In addition to services which are provided direct by TfL, there are services provided under a London agreement or permit, either by commercial bus operators or under contract to County Councils such as Hertfordshire. The requirement to meet a higher Euro III or IV standard will impose additional costs on either the operator or the funding authority and this may not be offset by increased fares and revenue. Considers that some services or parts of service may be withdrawn as a consequence, increasing car use in the area.	See consideration – 11.64.

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11.68	Impact on public and community sectors	Hertfordshire County Council	Concerned about the effects of the proposed LEZ on cross boundary bus services. In addition to services which are provided direct by TfL, there are services provided under a London agreement or permit, either by commercial bus operators or under contract to County Councils such as Hertfordshire. The requirement to meet a higher Euro III or IV standard will impose additional costs on either the operator or the funding authority and this may not be offset by increased fares and revenue. Considers that some services or parts of service may be withdrawn as a consequence, increasing car use in the area.	See consideration – 11.64.
11.69	Impact on public and community sectors	London Borough of Barnet	Coaches used for school transport tend to be older vehicles and are less likely to be compliant with the LEZ. The Council is concerned that coach operators may find it uneconomic to continue providing school services and this could result in congestion and pollution associated with the school run if services are withdrawn.	See consideration – 11.64.  TfL considers that other measures such as Congestion Charging, improved public transport and free bus and tram travel for young people aged 16-17 will reduce congestion, including congestion related to the school run.
11.70	Impact on public and community sectors	London Borough of Hounslow	From discussions with some borough officers it is clear some boroughs may have issues with needing to replace some of their fleet vehicles.	See consideration – 11.64.
11.71	Impact on public and community sectors	London Borough of Hillingdon	As the LEZ covers the whole GLA area, and, therefore, all the vehicles operating within it, the proposal may have potential resource implications for council owned fleet and for future procurement of services. This will require all vehicles operated by and on behalf	See consideration – 11.64.

No.	Sub theme	Respondent	Representation	TfL Response
			of the Council to be at the appropriate emission standard by the start date of early 2008. Hillingdon would like to express its concern on this matter, and the financial impact this may have on boroughs. Any proposed scheme would need to be cost neutral for the boroughs.	
11.72	Impact on public and community sectors	London Borough of Richmond upon Thames	Regarding the economic impacts on the Borough and Greater London region from implementing these provisions earlier than other areas, it is noted that the health benefits may very well outweigh the economic costs. However it still presents a significant additional and previously unbudgeted cost to the Borough that will impact on other Council services. Also have concerns about the relatively short time frame to implement the changes to a fleet which is, in many cases, quite new and still has a long service life.	See consideration – 11.64.
11.73	Impact on public and community sectors	Sutton Transport and Air Quality Working Group	Appreciate that for the health of residents it is important to take action. However, small businesses such as Sutton Community Transport (a not-for-profit social enterprise) will feel a financial impact, and could be put out of business. There will also be financial impacts for Sutton Council.	See consideration – 11.64.
11.74	Impact on public and community sectors	London Borough of Bromley	Would experience high costs and difficulties in bringing some of its fleet to the required standard through replacement and retrofitting. This is because some of these vehicles get very little use in mileage terms and replacement cycles are very long. The	See consideration – 11.64.

No.	Sub theme	Respondent	Representation	TfL Response
			Council would therefore wish to be assured that no additional cost would fall on Bromley taxpayers as a result of the LEZ. Thus, supports a system of exemption or derogation to allow fleet replacement or modification to take place within normal budget cycles, or a guarantee from TfL to meet any additional fleet costs incurred. There is also a risk that Council contractors may seek to pass onto the Council any additional replacement or retrofitting costs, and that new contracts may have a higher cost to the Council because of the LEZ.	
11.75	Impact on public and community sectors	London Borough of Barnet	Although the Council runs a modern vehicle fleet, some vehicles will not meet the proposed 2008 threshold and will need to be replaced. TfL are proposing a tighter standard from 2010, but the exact standard has yet to be determined. Consequently, the number of Council vehicles affected and therefore the financial impact on the Council is unquantifiable at this time, which is of grave concern to the Council.	See consideration – 11.64.  The deferral of the introduction of the Euro IV standard for PM <sub>10</sub> from 2010 to 2012 would allow operators a longer period to replace their fleets or upgrade them. Should the Mayor approve the revisions to the Strategies, there would be a further consultation on the details of the scheme late in 2006.
11.76	Impact on public and community sectors	London Borough of Harrow	TfL has stated that the proposed LEZ would be cost neutral to the boroughs. This would only be true if there are no cost implications to up-grading the council fleet vehicles that would be affected in 2008 and 2010.	The proposed LEZ would aim to reduce the most harmful emissions from older diesel-engined vehicles. The air quality and health benefits of the LEZ would be eroded if there were extensive range of exemptions for different sectors. Consequently It is not intended to offer exemptions to transport operators providing services to public institutions as the aim of the LEZ is to encourage as many operators as possible to clean up their vehicles and hence provide the greatest health

No.	Sub theme	Respondent	Representation	TfL Response
				and air quality benefits.
11.77	Impact on public and community sectors	London Borough of Ealing	TfL are encouraged to ensure adequate funding is available via the Borough spending Plan process to not only ease the financial burden on local authorities, but to also enable them to work with local businesses and fleet operators to help them meet their requirements.	See consideration – 11.64.  TfL does not intend providing any assistance to organisations to help them meet the LEZ standards. Before the implementation of the LEZ, TfL would carry out a wide-ranging information campaign to make operators and businesses aware of the LEZ requirements, and this would not be the responsibility of boroughs.
11.78	Impact on public and community sectors	London Borough of Bexley	There are likely to be significant cost pressures for local authorities which need to be examined in more detail prior to a decision to proceed with the introduction of the scheme.	Should the Mayor confirm the Strategy Revisions, TfL would carry out further assessments to examine the potential impact of the LEZ on all areas of the economy, including the public sector. This assessment would be made available as part of any future public and stakeholder consultation.
11.79	Impact on public and community sectors	London Borough of Southwark	The borough faces significant levels of regeneration as well major transport improvement projects which bring significant levels of both demolition and construction, which can often include specialist vehicles. It is acknowledged that a significant proportion of these will be exempt from the LEZ, falling within the scope of the European Union Non Road Mobile Machinery (NRMM) Directive 1997, despite this there is potential for impact upon these projects that should be investigated further. In supporting this issue, we would draw your attention to the London Code of Construction Best Practice (recently published on ALG website), to which Southwark has been party, that addresses	See consideration – 11.64.  TfL notes the recent publication of the London Code of Construction Best Practice, and will continue to work with stakeholders on reducing emissions from construction vehicles.

No.	Sub theme	Respondent	Representation	TfL Response
			construction plant/vehicles emissions and dust controls and working with the industry on retrofit measures.	
11.80	Impact on public and community sectors	London Borough of Ealing	Would like clearer assurances that the introduction of a LEZ would not involve resource implications for local authorities in terms of implementation of the scheme nor in ongoing enforcement. This includes any reductions in funding to boroughs in order to make up shortfalls in LEZ spending.	It is considered that the implementation of the LEZ would have no significant effect on London boroughs or contiguous authorities in terms of infrastructure or operational costs. However, TfL would consult with the boroughs on matters associated with infrastructure and signage.
11.81	Impact on public and community sectors	London Borough of Hounslow	It is unclear from the new proposals put forward and from the additional information provided, what action, if any, the GLA/TfL expects from London Boroughs and other neighbouring authorities in support for the scheme both prior to its introduction and as part of its implementation. Clearer guidance on this, either as part of the Transport and Air Quality Strategies, or in separate guidance would be welcomed. We can see no significant financial implications for London Boroughs bar individual fleet issues. It would be good to have a specific statement directed at London Borough's on this issue to clarify this point.	See consideration – 11.64.
11.82	Impact on public and community sectors	London Borough of Barnet	The potential requirements for the provision of signs and enforcement cameras on borough roads will have an impact on the Council's ability to exercise its powers under the Highways Act 1980 and related legislation. The impact will include a financial cost in terms of increased maintenance costs,	See consideration – 11.80.

No.	Sub theme	Respondent	Representation	TfL Response
			even if the signage and cameras are provided and maintained by TfL.	
11.83	Impact on public and community sectors	London Borough of Brent	<p>TfL should clarify what will be required from Boroughs in terms of resource commitment when implementing the scheme. What is not clear is what action will be necessary if TfL are unable to get 100% buy-in from all Boroughs and the impacts of this on implementing the scheme.</p> <p>Resource commitment from boroughs may be required and it must be made clear what level of commitment is required from Boroughs at the outset so that adequate provision can be made.</p>	<p>See considerations – 11.64 and 11.80.</p> <p>TfL has investigated the different options for implementing the proposed LEZ and considers implementation via a Scheme Order under the GLA Act 1999 would achieve the best balance between the costs of the scheme and the health and air quality benefits. This avoids the primary risk associated with implementing the proposed LEZ by means of a Traffic Regulation Order (TRO) which is the requirement for all London boroughs to sign up to joint arrangements delegating these TRO-making powers to TfL.</p>
11.84	Impact on public and community sectors	London Borough of Hammersmith and Fulham	Some of the impacts of the LEZ are identified as requiring mitigation, some of which “...might be beyond the authority of TfL but quite straightforward for other bodies to achieve”. It is unclear if the Boroughs are considered to be amongst those ‘other bodies’. Clarification should be provided, along with further information on the mitigation measures TfL has in mind, especially if there are potential costs to the Boroughs.	The LEZ Environmental Report identified a few potential impacts of the LEZ which would require some mitigating actions. The Report also noted that some of these were outside TfL's control. Most of those actions identified concerned existing good practice in the areas of traffic management and local planning. None of these were specific to LEZ, and the LEZ would therefore not result in any additional cost pressures on boroughs. The Environmental Report also stated that some of the potential impacts would require further study. Should the Mayor approve the Strategy Revisions, TfL would carry out further impact assessments which would be made available as part of any future public and stakeholder consultation.

No.	Sub theme	Respondent	Representation	TfL Response
11.85	Impact on public and community sectors	London Borough of Bromley	In the shorter term, there may be an increase in traffic in the borough as businesses use a number of small vehicles to operate within the LEZ. Delivery patterns may also change in local centre, leading to the Council reconsidering local delivery arrangements such as direction signing and waiting and loading restrictions. The Council therefore seeks a guarantee from TfL that it will consider and where necessary fund any reasonable mitigation measures.	<p>See consideration – 11.80.</p> <p>The 2005 Operator Survey carried out on behalf of TfL showed that very few businesses would replace larger vehicles with smaller ones. This figure would actually be even smaller if heavier LGVs were included in the LEZ from 2010, as TfL proposes. Therefore, the LEZ should not result in any increase in traffic. Nor does TfL modelling suggest that there would be significant changes to traffic patterns as result of the introduction of the LEZ. However, these impacts would be carefully monitored following introduction of the LEZ, and TfL would alter the scheme should this prove necessary.</p>
11.86	Impact on public and community sectors	Community Transport Association	TfL applies the DVLA definition of buses as over 17 seats. If however the scope were to change and include minibuses in 2010, TfL would need to consider the financial impact of compliance on organisations meeting disability, access and inclusion objectives. Three possible options for dealing with this could be: (1) Have a concessionary rate system for certain categorized older vehicles and organisations meeting social inclusion objectives; (2) Include such vehicles under a category of exclusion similar to military and heritage vehicles; (3) Introduce a grant system to enable small voluntary organisations who were meeting certain inclusion disability and mobility objectives, to contribute towards the cost of compliance	<p>Minibuses use very similar chassis and engines to heavier LGVs, and have similar emissions levels. TfL therefore proposes that minibuses should be covered by the definition of LGVs, and that these vehicles are also included within the LEZ from 2010.</p> <p>TfL considers that including heavier LGVs is a reasonable proposal which should not impose undue burdens on operators and there are thus no proposals for exemptions or grants. See considerations above and also considerations under Theme 10.</p>

No.	Sub theme	Respondent	Representation	TfL Response
11.87	Impact/ additional costs to business	Calor Gas Limited	The 2010 Euro IV emission standard is unacceptable and will not contribute to lower emissions overall. No company can take decisions which could lead to additional costs until the detail of the Mayor's decision is known; it would be irresponsible to base purchasing decisions on the existence of a consultation process whose outcome, by definition, cannot be known. In so far as the LEZ is designed to influence businesses' decision making, it cannot start to do so until February 2008.	Should the Mayor confirm the Strategy Revisions, TfL would carry out a further public and stakeholder consultation on an Order confirming the scheme in late 2006. This would be a consultation on the detail of the scheme. The Mayor would then make a final decision on whether to implement the LEZ in spring 2007. This would provide operators with almost a year to make provisions to meet the 2008 standards and five years to plan for the 2012 standards. Given that TfL estimates that more than two thirds of vehicles will be compliant with the 2008 LEZ standards, TfL does not consider that the timescales are unreasonable. See also considerations under Theme 6 'Euro IV for PM <sub>10</sub> in 2010 is premature'.
11.88	Impact/ additional costs to business	London Assembly Environment Committee	Better liaison with industry is needed to encourage greater take-up of cleaner greener vehicles. Industry stakeholders have raised concerns about the financial impact on operators, particularly those with small and/or specialist fleets, and the extent to which business fleet planning requirements have been taken into account. Recognise that some consultation with business operators has occurred. However, given the relatively small sample of operators contacted would recommend more extensive consultation is undertaken.	See consideration – 11.87.

No.	Sub theme	Respondent	Representation	TfL Response
11.89	Impact/ additional costs to business	National Express Limited	The LEZ will result in increased costs for coach operators compared to the car. Will be required to replace coaches more frequently and anticipate that the resell price will drop dramatically. Also, new coaches with diesel engines that comply with the latest Euro IV engine specification are less fuel efficient than the older vehicles they replace and so fuel costs will increase. The reason for this is that the new cleaner engines are less efficient than the old engines.	Coaches have a longer lifespan than HGVs and heavier LGVs which means that older Euro 0 and Euro I vehicles have a much higher residual value than HGVs of the same standard. The proposed LEZ emission standards will allow pre-Euro coaches with pollution abatement equipment fitted to comply with the LEZ and therefore not have to pay the charge. The fuel efficiency of Euro IV versus an equivalent Euro III vehicle depends on the emission control system the Euro IV vehicle uses (i.e. Exhaust Gas Recirculation (EGR) or Selective Catalytic Reduction (SCR)). SCR is expected to lead to better fuel economy by between 5 and 10 per cent compared with equivalent Euro III vehicles. EGR vehicles are expected to have the same, or slightly poorer, fuel consumption as Euro III vehicles.
11.90	Affect residual values of non compliant vehicles	London Borough of Lewisham	Another concern is the major impact on residual values for non-compliant vehicles throughout South East England and probably across a wider part of the UK. Councils and operators rely on good residual values on disposal of vehicles in order to build funds for future replacement. If the LEZ creates a glut of non-compliant vehicles on the market it would have a serious financial impact. Effectively the South East would be removed as a potential market for such vehicles.	TfL accepts that the proposed LEZ may have an impact on the residual value of some vehicles, particularly those with shorter life-cycles. However, the aim of the LEZ is to discourage the use of the oldest, most polluting diesel-engined vehicles, or to encourage the modifications to them, and a small reduction in the residual value of non-compliant vehicles is an unavoidable consequence.

No.	Sub theme	Respondent	Representation	TfL Response
11.91	Affect residual values of non compliant vehicles	Federation of Small Business	Concerned that lessons learnt from recent regulatory changes to taxis are not being taken into consideration. The TfL Emissions Strategy for London Taxis in 2005 did not pay attention to the second-hand taxi market and we are concerned that the same could happen with non-compliant HGVs becoming worthless after the LEZ comes into force. A small business would be hit dramatically if the cost of a vehicle suddenly plummeted far greater than the rate of depreciation. We want assurance that a parallel situation would not occur.	See consideration – 11.90.
11.92	Affect residual values of non compliant vehicles	British Association of Removers	Resale values of older vehicles will be seriously affected as a result of any LEZ introduction.	See consideration – 11.90.
11.93	Affect residual values of non compliant vehicles	Confederation of Passenger Transport UK	There will be a reduction in residual values of coaches, as older vehicles would require expensive modifications before re-sale for further service. Expenditure to achieve LEZ compliance might match the otherwise-expected market price of the vehicle, reducing its effective residual value to zero.	See consideration – 11.90.
11.94	Affect residual values of non compliant vehicles	DJ Coaches	Concerned that when the LEZ is introduced it will effectively make every vehicle which doesn't comply to Euro III standards worthless (as who would want to buy a vehicle they could not use in London) and these are vehicles worth £15,000 to £55,000 each. Concerned that the LEZ will effectively	See consideration – 11.90.

No.	Sub theme	Respondent	Representation	TfL Response
11.95	Affect residual values of non compliant vehicles	London Borough of Lewisham	<p>put the small business man out of business.</p> <p>For operators who have leased vehicles, then early redemption charges and in the event of lower residual values, recovery by the leasing companies by aggressive charging for found damage, will be a significant extra cost.</p>	See consideration – 11.90.
11.96	Other business impacts	CBI London	<p>If some form of a LEZ is implemented, the administrative aspects of the scheme must be set up to minimise burdens on business. A 3-6 month trial to see how the scheme works would also be essential.</p>	<p>TfL does not consider that a trial of the proposed LEZ is required prior to implementation. The proposed LEZ would be enforced using Automatic Number Plate Recognition cameras, similar to those already used for the Central London Congestion Charging Zone and Western Extension. A database would be established to assist with the identification and matching process, using data from licensing authorities, such as DVLA, and from operators. TfL would only require registration from vehicles for which emission characteristics could not be determined from these records. In addition, an operator helpline would be available to assist operators in determining if their vehicle would comply with the proposed LEZ standards. Operators who do not comply with the LEZ emission standards and pay the daily charge to drive within Greater London will be provided with a number of options for paying the charge. TfL considers that the administration of the proposed LEZ will represent a minimal burden on businesses.</p>

## THEME 12 ECONOMIC IMPACTS

No.	Sub theme	Respondent	Representation	TfL Response
12.01	Bad for London's economy	Central London Partnership	Feel that the set-up costs for the LEZ are high at £125m to £130m but with current technology and the scale of the proposal these are unavoidable. There is more concern over the costs to business of £175m to £410m as these costs will deter business from operating in Central London or pass costs on to customers.	<p>The estimated cost to TfL of between £125 million and £130 million covers all development and implementation costs associated with the core scheme up to 2015/16. The costs to operators of the LEZ scheme as consulted on were estimated at between £195 million and £270 million to 2015/16. While the cost of compliance to some operators may be high, the overall economic impacts for London are not anticipated to be great in terms of loss of business and jobs.</p> <p>TfL is recommending as a result of this consultation moving implementation of the Euro IV standard for PM<sub>10</sub> back to 2012. Whilst this would lead to smaller air quality and health benefits resulting from a reduction in emissions from heavier vehicles, it would significantly reduce compliance costs to operators, and make the scheme more acceptable. The costs to operators of the LEZ scheme as now proposed, taking into account the delaying of the Euro IV standard for PM<sub>10</sub> to 2012 and the inclusion of heavier LGVs from 2010, is estimated to be £285 million to 2015/16.</p>
12.02	Bad for London's economy	Confederation of Passenger Transport UK	The type of work most coach operators undertake is highly price sensitive, often serving parts of the community who are not best equipped to deal with a substantial rise in rates. Fearful that much of this work could be lost to destinations other than London, or lost altogether as it becomes uneconomic.	<p>See consideration – 12.01.</p> <p>TfL notes that the LEZ could have a direct impact on the costs of providing certain community transport services. An initial Economic Impact Assessment of the LEZ undertaken has indicated that the overall impact on the economy is likely to be minimal. However, TfL notes that certain sectors of the</p>

No.	Sub theme	Respondent	Representation	TfL Response
				community may be particularly sensitive to price increases and will closely monitor the scheme impacts. TfL has also recommended deferring implementation of the Euro IV standard for PM <sub>10</sub> until 2012 to reduce costs to operators.
12.03	Bad for London's economy	London Borough of Lewisham	Private operators keep vehicles for varying time periods. Often older vehicles are used for home to school work in the areas surrounding London. These vehicles could not be used for school visits into Greater London without a significant surcharge on the cost to parents. This will impact on the number of visits to facilities in Greater London.	See consideration – 12.02.
12.04	Bad for London's economy	Constant Consultancy	Unlike car users, truck and coach operators do not use their vehicles for frivolous purposes and only enter London for sound commercial reasons. Therefore, it is vitally important in developing the LEZ that London's future prosperity is not jeopardised by unduly restricting the movement of goods, services and people, particularly tourists, into the Capital.	See consideration – 12.01.  The proposed scheme would still allow operators on non-compliant vehicles to enter Greater London by paying a daily charge.
12.05	Bad for London's economy	London Borough of Barking and Dagenham	Await publication of TfL's investigation into wider economic impacts of the LEZ	See consideration – 12.01.  Should the Mayor confirm the revisions to his Transport and Air Quality Strategies, TfL would undertake a further public and stakeholder consultation in late 2006 on detailed proposed for a LEZ contained in a Scheme Order. An economic impact assessment of the LEZ would be undertaken to inform this

No.	Sub theme	Respondent	Representation	TfL Response
				consultation on a Scheme Order.
12.06	Negative impact on tourism	Confederation of Passenger Transport UK	Are concerned that these proposals will have a detrimental effect on tourism in London.	See consideration – 12.01.  TfL's view is that the impact on tourism of the LEZ arising from coach operators passing any costs increases onto passengers, and flow on employment impacts of reduced visitor numbers and tourist spend, are modest. However, the LEZ could improve London's image as a "clean and green" city which would potentially improve it's desirability as a tourist destination, counterbalancing reductions in visitors due to cost increases.
12.07	Negative impact on tourism	London Development Agency	Understand that TfL has commissioned further work on the impact of the LEZ on tourism. The outcomes of this work will be useful in managing any potential impact on visitor numbers to London.	See considerations – 12.01 and 12.06.
12.08	Negative impact on tourism	The Society of Motor Manufacturers and Traders Ltd	Coach operators may be discouraged from operating in London for shopping or theatre trips. These lost revenues to the tourist industry are not fully evaluated by TfL.	See considerations – 12.01 and 12.06.
12.09	Negative impact on tourism	MARSHopper Ltd	Many smaller coach operators in the counties are running on a shoestring. Their school contract prices do not allow upgrades to new vehicles as they too do not have the benefit of massive subsidies given to London based operators. Private hire work, such as an evening trip to a London theatre provides the little profit they make. If the LEZ is	See considerations – 12.01 and 12.06.

No.	Sub theme	Respondent	Representation	TfL Response
			introduced, these evening trips will cease to the detriment of the operator and the London theatres, pubs, and eateries those 53 people may visit.	
12.10	Negative impact on tourism	London Retail Consortium	The LRC supports a call for separate requirements for coaches as well as a scheme based on a rolling age basis for commercial vehicles above and below 3.5 tonnes. The main concern is the possible reduction in the number of trips made into London from outside the GLA due to the likelihood that a proportion of the costs of compliance or charge to enter the zone would be passed onto customers. If coach ticket prices rise, clearly tourists will be discouraged from making trips into London to take advantage of the capital's first class leisure and shopping facilities. Indeed forcing up prices for non-compliant coaches could ultimately create a modal shift away from coaches, which are the least heavy polluters in terms of "mile per vehicle occupant", and into cars, which is clearly contrary to the Mayor's policy of encouraging greater use of alternative forms of transport.	See considerations – 12.01 and 12.06.  TfL's view is that the LEZ would not encourage a modal shift from coaches to private vehicles. Commuters have a range of alternatives available and a number of initiatives have been implemented that encourage use of the improved public transport system and discourage use of private cars.

No.	Sub theme	Respondent	Representation	TfL Response
12.11	Negative impact on tourism	The Guild of British Coach Operators Ltd	Believe that the proposals fail to recognise the value that coach tourism plays to the economy in London and how coaches enable large groups to use the congested road space in the most efficient way. Would TfL rather have one coach carrying 45-50 passengers or 10 or more cars carrying the same number? Yet the impact of the LEZ as proposed could be to reduce the number of coaches entering London, with the passengers using other, more polluting, forms of transport instead - clearly this would be counter-productive. This would be particularly unfortunate when London stages the Olympics as that event is predicated on the use of public transport in preference to private cars. If the LEZ standards are set at too high a level, then there will not be sufficient coaches able to operate into Greater London to take spectators to the Olympics.	See considerations – 12.01, 12.06 and 12.10.
12.12	Should link with other freight policies	Brewery Logistics Group	The night time/ weekend lorry ban should be removed. Currently it adds to pollution by increasing the miles that have to be run. Today's vehicles are quieter and more efficient and the ban is therefore alien to the basic principles of the LEZ.	The London Lorry Control Scheme (LLCS) is designed to reduce noise generated by heavy operating outside daytime hours and is not inconsistent with the proposed LEZ. The LLCS is operated by ALG so TfL is unable to make any decisions regarding the future of the scheme.
12.13	Should link with other freight policies	City of Westminster	Some HGV operators may react to a perceived excess of bureaucracy, because some are already required to hold registration documents for the London Evening and Weekend Lorry Ban scheme. Recognise that the purposes of the two schemes are very	See consideration – 12.12.  The LEZ would be enforced using ANPR camera infrastructure, similar to that already used for Congestion Charging, and there would be minimal additional registration requirements for operators of

No.	Sub theme	Respondent	Representation	TfL Response
			different; that the Lorry ban scheme applies to some vehicles and select routes only and is operated by a different body, the ALG. The administration for the two schemes should be streamlined wherever possible, to minimise administration as well as demands made of vehicle operators.	compliant vehicles.
12.14	Should link with other freight policies	Royal Mail Group plc	Would like the current London Lorry ban to be waived for all vehicles that meet the agreed criteria as diversions using more fuel create more pollution which is contrary to what the proposed LEZ is trying to achieve in air quality improvements.	See considerations – 12.12.
12.15	Should link with other freight policies	London Retail Consortium	Recommendations coming from the London Freight Plan will be important in ensuring policy driven by the need to improve air quality takes into account other initiatives that aim to alleviate the problems associated with movement of freight in London.	An aim of the Freight Plan would be to improve the efficiency of freight and servicing trips in London while minimising their impact on the environment and society. The LEZ would be entirely consistent with this objective.
12.16	Should link with other freight policies	Brimmsdown Freight Quality Partnership	Much discussion has taken place in relation to a Responsible Freight Operators Recognition Scheme. The LEZ could be included in such a scheme and provide focus for encouraging many other areas of best practice in freight operations.	The LEZ would be accompanied by a range of publicity material setting out how operators can comply with the LEZ. Wherever possible, linkages with existing initiatives will be capitalised on.
12.17	Should link with other freight policies	Port of London Authority	The LEZ charge should be at a level that encourages operators to investigate other modes of transport. The use of the river for freight transport would be in line with policy 4C.15 of the London Plan which seeks to increase use of the Blue Ribbon Network to transport freight and general goods.	The proposed range of between £100 and £200 for the daily charge was chosen because it encourages operators to modify or replace their vehicles, thus maximising the air quality and health benefits of the LEZ. At the same time, it would allow infrequent visitors operating non-compliant vehicles to drive within the proposed LEZ, albeit at a cost. TfL would support

No.	Sub theme	Respondent	Representation	TfL Response
				initiatives that encourage use of river, and other transport modes, where this can be shown to reduce emissions whilst taking into account any associated costs.
12.18	Should link with other freight policies	Covent Garden Market Authority	The urgent need to reduce emissions and improve air quality needs to be balanced with the need for London to be supplied on a daily basis with quality fresh produce. The Mayor has identified within his London Food Strategy the importance of the capital's 12,000 restaurants to London's vibrant food economy. New Covent Garden Market plays a key role in this supply chain. It is in a transitional phase and work is underway to shape the future size and focus of the Market. It is clear is that the Market has a key role as a distribution hub for quality fresh produce into London's hospitality sector. An important aspect of this role is as a valuable consolidation point for the distribution of local produce which would otherwise struggle to reach London's hospitality sector. By bringing local produce into the Market for consolidation by the catering distribution companies the need for additional journeys by the producers own vehicles can be eliminated.	See consideration – 12.17.
12.19	Should link with other freight policies	Environmental Industries Commission	Also mindful of the proposal for the GLA's Best Practice Guidance for Construction Sites. It is important that this is linked with the London LEZ scheme so that vehicles do not 'fall between the gap'.	Use of DVLA information and ANPR enforcement technology will ensure that the LEZ is enforced against all vehicles falling within the scope of the LEZ. Mobile machinery that falls within the scope of the European Union Non-Road Mobile Machinery (NRMM) Directive

No.	Sub theme	Respondent	Representation	TfL Response
				1997, is subject to different emissions limits set by that Directive and would be exempted from the scope of the LEZ.

## THEME 13 AIR QUALITY IMPACTS

No.	Sub theme	Respondent	Representation	TfL Response
13.01	Will fail to make progress towards PM <sub>10</sub> targets	British Association of Removers	Concerned the LEZ is inefficient. The scheme is only aimed at goods vehicles, buses and taxis. Reports indicate that EU air targets will not be met, even if cars were to also be included.	<p>A LEZ targeted at the most individually polluting vehicles has been identified as the most effective way of reducing the most harmful emissions from road transport. The health benefits of the proposed scheme within London, taking into account the delaying of the Euro IV standard for PM<sub>10</sub> to 2012 and the inclusion of heavier LGVs from 2010, have been quantified at between £101m and £162m between 2008 and 2015.</p> <p>The inclusion of cars in the current LEZ proposals has been carefully considered. TfL recommends that cars are not included in the current LEZ proposal. TfL considers that emissions from cars are being targeted through other initiatives within the Mayor's Transport Strategy, such as the Central London Congestion Charging Zone, and the Western Extension of the Zone. While the Congestion Charge primarily aims to reduce traffic congestion, it does have some small secondary benefits in reducing vehicle emissions. Initiatives to improve and encourage the use of public transport and other alternatives to private cars have also had a positive impact.</p> <p>The LEZ should not be viewed in isolation – rather, it complements other initiatives contained in the Mayor's Transport and Air Quality Strategies, each of which focus on reducing emissions from particular road transport sources in the most cost effective way. Even though the LEZ itself would not deliver air quality</p>

No.	Sub theme	Respondent	Representation	TfL Response
				targets, it will contribute to significant progress towards them
13.02	Will fail to make progress towards PM <sub>10</sub> targets	The Knightsbridge Association	Concerned that the LEZ proposals do not go far enough or fast enough to meet the UK objectives and EU limit values for PM <sub>10</sub> and NO <sub>2</sub> in the Knightsbridge area and suggest that if the proposals are insufficient for the Knightsbridge area that traffic management and other solutions are included to ensure that the legally binding targets are met.	See consideration – 13.01.  It should be noted that road transport contributes only around half of total emissions of PM <sub>10</sub> in London so achievement of air quality targets also needs to consider other sources, such as industry. The Mayor has very limited powers in relation to emissions of controlled pollutants from non-road transport sources and these are included in his Air Quality Strategy. He can only influence non-road transport emissions through, for example, review of London boroughs' air quality assessment reports and action plans, and review of referred planning applications where air quality is likely to be an issue. The Mayor is also working with Defra, other Government departments and the European Commission on various issues related to emissions from other sources, and with BAA to assist in reducing emissions from Heathrow Airport.
13.03	Will fail to make progress towards PM <sub>10</sub> targets	The Marylebone Association	The consultation information shows that the LEZ proposals are inadequate to bring air quality to within EU limits across London and it is not clear from the consultation documents that the measures will bring Marylebone to within those limits.	See considerations – 13.01 and 13.02.

No.	Sub theme	Respondent	Representation	TfL Response
13.04	Will fail to make progress towards PM <sub>10</sub> targets	Tower Hamlets PCT	Concerned that the LEZ is seen not as a mechanism to achieve 2010 annual mean objectives for PM <sub>10</sub> and NO <sub>2</sub> , but is declared to be a means of helping London 'make progress towards achieving' these objectives. Furthermore, should the EC directive on ambient air quality and cleaner air for Europe be adopted, there is scope for achievement of these objectives to be deferred where a Member State has demonstrated a significant effort to meet the values. The LEZ in this context would appear to be solely a means of demonstrating this effort. Given the convincing evidence of a causal link between a number of air pollutants and respiratory and cardiovascular morbidity and mortality, seek assurances that the Mayor, TfL and their Local Authority partners (through the Air Quality Management Area mechanism) are committed to achieving the NO <sub>2</sub> and PM <sub>10</sub> objectives as demanded by the Air Quality Framework Directive (96/62/EC).	See considerations – 13.01 and 13.02.  These initiatives are designed to meet the Mayor's statutory obligation to take steps towards achieving limit values for specified pollutants.
13.05	Will fail to make progress towards PM <sub>10</sub> targets	Central London Partnership	Disappointed the proposal does not meet the prescribed targets for NO <sub>x</sub> or PM <sub>10</sub> but acknowledges that TfL is restricted on what it can achieve.	See considerations – 13.01 and 13.02.

No.	Sub theme	Respondent	Representation	TfL Response
13.06	Will fail to make progress towards PM <sub>10</sub> targets	London Borough of Lambeth	Note that the proposed LEZ is designed to target NO <sub>x</sub> and PM <sub>10</sub> emissions, both of which are causal agents of respiratory disease. This is a significant concern within Lambeth, and a major reason behind the council's LPG policy for fleet vehicles. Note that the proposed scheme will not enable London to meet its targets for NO <sub>x</sub> and PM <sub>10</sub> emissions. Instead it will only reduce, by 32%, the number of times those targets are exceeded. Accordingly, believe that the LEZ should be applied to include light goods vehicles from its inception in 2008, and certainly from 2010.	See considerations – 13.01 and 13.02.
13.07	Will fail to make progress towards PM <sub>10</sub> targets	London Borough of Southwark	Whilst the LEZ represents a key initiative to improving air quality it does not represent a clear package of measures to enable London to meet the European Union objectives for particulate matter or nitrogen dioxide. It is felt that a clearer direction including an indication of when London expects to meet the European Union objectives is required. Considering this, alternatives in other sectors such as domestic, commercial and industrial should be considered.	See considerations – 13.01 and 13.02.
13.08	Will fail to make progress towards PM <sub>10</sub> targets	London Assembly Environment Committee	Any number of lives saved or quality of lives improved is of itself a significant benefit. It is in London's interests to ensure that the benefits are realised sooner rather than later. Are concerned that the LEZ as currently proposed will not enable London to meet the European Union objectives for particulate matter or nitrogen dioxide. We are further	See considerations – 13.01 and 13.02.

No.	Sub theme	Respondent	Representation	TfL Response
			concerned that at present there is no clear indication of when London might expect to meet the European Union objectives. Therefore recommend that the Mayor set a target date as a matter of priority.	
13.09	Will make progress towards PM <sub>10</sub> targets	London Borough of Croydon	Air quality is a very important issue for Croydon. Road traffic is estimated to create around 75 % of the total emissions of PM <sub>10</sub> and around 65 % of oxides of nitrogen in Croydon. The Council's research shows that over half of these NO <sub>x</sub> emissions originate from goods vehicles, buses and taxis. Welcome the fact that the proposed LEZ would bring forward reductions in PM <sub>10</sub> emissions (for which there are no safe levels) by some four to five years, with the consequent benefits for public health.	TfL notes the support for the LEZ proposal.
13.10	Will make progress towards PM <sub>10</sub> targets	London Borough of Tower Hamlets	The LEZ's restrictions on heavy polluting diesel engine vehicles will help us progress towards possibly meeting the 2010 objectives in the selected areas within the borough for PM and NO <sub>2</sub> .	See consideration – 13.09.
13.11	Will make progress towards PM <sub>10</sub> targets	London Forum of Amenity and Civic Societies	Note that, if the LEZ is put into effect and a further EC Directive now in draft is adopted, the UK could escape infraction proceedings by the EC for London's poor air quality because it would be able to demonstrate that it had taken significant action to try to achieve the limit values. Even if this is the outcome, however, it will be scant comfort to the several hundred thousand Londoners whose health would remain at risk from excessive	See consideration – 13.09.  TfL will monitor developments in relation to any new EC limit values and move to implement PM <sub>2.5</sub> standards if appropriate. TfL would consult further on any such proposal.

No.	Sub theme	Respondent	Representation	TfL Response
			concentrations of pollutants. The goal posts might also change if a new EU standard is set for PM <sub>2.5</sub> , but the draft Revisions to the Strategies do not claim that the LEZ would be sufficient to meet a standard of that nature either.	
13.12	Will fail to make progress towards NO <sub>2</sub> targets	Tower Hamlets PCT	Concerned that the LEZ is seen not as a mechanism to achieve 2010 annual mean objectives for PM <sub>10</sub> and NO <sub>2</sub> , but is declared to be a means of helping London 'make progress towards achieving' these objectives. Furthermore, should the EC directive on ambient air quality and cleaner air for Europe be adopted, there is scope for achievement of these objectives to be deferred where a Member State has demonstrated a significant effort to meet the values. The LEZ in this context would appear to be solely a means of demonstrating this effort. Given the convincing evidence of a causal link between a number of air pollutants and respiratory and cardiovascular morbidity and mortality, seek assurances that the Mayor, TfL and their Local Authority partners (through the Air Quality Management Area mechanism) are committed to achieving the NO <sub>2</sub> and PM <sub>10</sub> objectives as demanded by the Air Quality Framework Directive (96/62/EC).	See consideration – 13.01.  TfL acknowledges that NO <sub>x</sub> abatement technology is still evolving. Implementing a NO <sub>x</sub> emission standard is dependent on a certification mechanism, standards for the fitting and testing of retro-fit NO <sub>x</sub> abatement equipment and a register of retrofitted vehicles being in place - this is not yet the case. TfL is continuing to work with pollution abatement equipment industry and the DfT to determine the feasibility of implementing a NO <sub>x</sub> standard. Any proposed NO <sub>x</sub> standard, if implemented, would be subject to a full scheme order consultation and allow sufficient lead time for vehicle operators to comply with the standard.
13.13	Will fail to make progress towards NO <sub>2</sub>	Central London Partnership	Disappointed the proposal does not meet the prescribed targets for NO <sub>x</sub> or PM <sub>10</sub> but acknowledges that TfL is restricted on what it can achieve.	See considerations – 13.01 and 13.12.

No.	Sub theme	Respondent	Representation	TfL Response
	targets			
13.14	Will fail to make progress towards NO <sub>2</sub> targets	London Borough of Lambeth	Notes that the proposed LEZ is designed to target NO <sub>x</sub> and PM <sub>10</sub> emissions, both of which are causal agents of respiratory disease. This is a significant concern within Lambeth, and a major reason behind the council's LPG policy for fleet vehicles. Note that the proposed scheme will not enable London to meet its targets for NO <sub>x</sub> and PM <sub>10</sub> emissions. Instead it will only reduce, by 32%, the number of times those targets are exceeded. Accordingly, believe that the LEZ should be applied to include light goods vehicles from its inception in 2008, and certainly from 2010.	See considerations – 13.01 and 13.12.
13.15	Will fail to make progress towards NO <sub>2</sub> targets	London Borough of Southwark	Whilst the LEZ represents a key initiative to improving air quality it does not represent a clear package of measures to enable London to meet the European Union objectives for particulate matter or nitrogen dioxide. It is felt that a clearer direction including an indication of when London expects to meet the European Union objectives is required. Considering this, alternatives in other sectors such as domestic, commercial and industrial should be considered.	See considerations – 13.01 and 13.12.
13.16	Will fail to make progress towards NO <sub>2</sub> targets	British Association of Removers	Concerned the LEZ is inefficient. The scheme is only aimed at goods vehicles, buses and taxis. Reports indicate that EU air targets will not be met, even if cars were to also be included.	See considerations – 13.01 and 13.12.

No.	Sub theme	Respondent	Representation	TfL Response
13.17	Will fail to make progress towards NO <sub>2</sub> targets	The Knightsbridge Association	Concerned that the LEZ proposals do not go far enough or fast enough to meet the UK objectives and EU limit values for PM <sub>10</sub> and NO <sub>2</sub> in the Knightsbridge area and suggest that if the proposals are insufficient for the Knightsbridge area that traffic management and other solutions are included to ensure that the legally binding targets are met.	See considerations – 13.01 and 13.12.
13.18	Will fail to make progress towards NO <sub>2</sub> targets	The Marylebone Association	The consultation information shows that the LEZ proposals are inadequate to bring air quality to within EU limits across London and it is not clear from the consultation documents that the measures will bring Marylebone to within those limits.	See considerations – 13.01 and 13.12.
13.19	Will fail to make progress towards NO <sub>2</sub> targets	London Borough of Croydon	Air quality is a very important issue for Croydon. Road traffic is estimated to create around 75 % of the total emissions of PM <sub>10</sub> and around 65 % of oxides of nitrogen in Croydon. The Council's research shows that over half of these NO <sub>x</sub> emissions originate from goods vehicles, buses and taxis. Welcome the fact that the proposed LEZ would bring forward reductions in PM <sub>10</sub> emissions (for which there are no safe levels) by some four to five years, with the consequent benefits for public health.	See considerations – 13.01 and 13.12.  TfL notes the support for the LEZ proposal.
13.20	Will fail to make progress towards NO <sub>2</sub> targets	London Borough of Tower Hamlets	The LEZ's restrictions on heavy polluting diesel engine vehicles will help us progress towards possibly meeting the 2010 objectives in the selected areas within the borough for PM and NO <sub>2</sub> .	See considerations – 13.01 and 13.12.  TfL notes the support for the LEZ proposal.

No.	Sub theme	Respondent	Representation	TfL Response
13.21	Displacement will increase pollution outside London	Slough Borough Council	<p>Concerned about the potential negative local economic impact of the LEZ on HGV operators and businesses based in Slough. Operators may change their vehicle management/scheduling practices and simply switch and operate older vehicles outside the LEZ and utilise all newer vehicles in London. This clearly could have a significant negative local environmental impact. As a result we feel that whilst the air quality and wider impacts of the scheme have been considered at a London and national level, the local impacts in areas outside the boundary (also affected by poor air quality and accommodating significant trading estates) have not been adequately assessed. Therefore, anxious that these potential local impacts are properly assessed as part of the overall scheme evaluation. It is not clear from the consultation documents that this has taken place.</p>	<p>Some 30-40 per cent of the national lorry fleet, and around half of the coach fleet, operate in London during any given year. As such, many of the vehicles that would be replaced or upgraded to meet the requirements of the London LEZ would contribute to reduced emissions outside London. Also, because PM<sub>10</sub> emissions migrate from London to other parts of the country, reductions in London also lead to improved regional air quality. A survey of operator responses to a LEZ was undertaken in spring 2005 indicated that whilst some vehicle operators would reorganise their fleet so that non-compliant vehicles are used outside London, the air quality benefits outside London due to vehicle replacement and modification are expected to outweigh the negative impacts of this reorganisation. Estimating the benefits outside London is an extremely complex exercise as it requires detailed information on the regional distribution of mileage of vehicles and likely operator responses to a LEZ.</p>
13.22	Displacement will increase pollution outside London	Environmental Services Association	<p>ESA is concerned that the current proposals are likely to lead to the displacement of older vehicles from London to other parts of the UK.</p>	<p>See consideration – 13.21.</p> <p>Improving air quality is a priority in London, as the capital has some of the worst levels of air pollution in the country. Other regions of the UK are not so greatly in breach of the national and EU air quality targets.</p>
13.23	Displacement will increase pollution outside London	Brewery Logistics Group	<p>Where will dirty trucks end up if not in London?</p>	<p>See consideration – 13.21.</p>

No.	Sub theme	Respondent	Representation	TfL Response
13.24	Displacement will increase pollution outside London	London Retail Consortium	Redeployment of non-compliant vehicles will worsen air quality in other towns and cities.	See consideration – 13.21.
13.25	Displacement will increase pollution outside London	Masterlease	Concerned that there may be some transfer of vehicles out of London in order to ensure compliance, and this may have some implications for air quality in other areas.	See consideration – 13.21.
13.26	Displacement will increase pollution outside London	Musgrave Budgens - Londis	As a national operator, ensuring compliance to the scheme will not have an effect upon our overall corporate emissions; it will merely displace the older vehicles to other areas of the country. Why should the result be a delayed rate of emission improvement for the rest of the country to the benefit of just one area?	See consideration – 13.21.
13.27	Displacement will increase pollution outside London	Royal Borough of Kensington and Chelsea	Whilst improvements to air quality will occur inside the zone, TfL must consider the impact that the displaced vehicles unable to meet the LEZ requirements will have on areas outside the LEZ if they are to be used there. Currently, the consultation does not appear to consider this issue.	See consideration – 13.21.
13.28	Displacement will increase pollution outside London	London Borough of Barking and Dagenham	Would like to know whether Transport for London have considered the risk and consequences of non-compliant vehicle displacement to other locations within the UK, and the extent to which this may prove a problem.	See consideration – 13.21.

No.	Sub theme	Respondent	Representation	TfL Response
13.29	Displacement will increase pollution outside London	Hertfordshire County Council	Concerned there could be an increase in non-compliant HGVs changing their routes to avoid London, and passing through Hertfordshire. This would add to Hertfordshire's already congested road network and could create further AQMAs.	See consideration – 13.21.  Should the LEZ be implemented, TfL would work with contiguous authorities to monitor the effects of the LEZ on traffic levels outside London and would take any appropriate mitigating actions.
13.30	Displacement will increase pollution outside London	Calor Gas Limited	Fleet operators could replace vehicles operated in London with Euro IV vehicles. Viable, legal Euro III vehicles would then be moved - either within fleets or through sale - to other parts of the country. These vehicles would be used for their normal operating life, and the rate of introduction of Euro IV vehicles outside London would be slowed because viable legal Euro III vehicles would be available in numbers larger than would be otherwise the case. The effect of the Mayor's LEZ would be to export relatively more-polluting vehicles to areas outside London.	See consideration – 13.21.
13.31	Displacement will increase pollution outside London	Royal Mail Group plc	One reaction to the proposals might be a decision to move non-compliant vehicles out of London to other areas from 2008, leading to the deterioration of air quality in other parts of the country.	See consideration – 13.21.
13.32	Displacement will increase pollution outside London	Freight Transport Association	Respondents to the FTA's survey of members clearly feel that simply re-routing vehicles would not be an option no matter what level the charge is set at. No matter what level the charge around a third of operators will re-deploy "dirty" vehicles to other regions simply worsening air quality for other towns and cities.	See consideration – 13.21.

No.	Sub theme	Respondent	Representation	TfL Response
13.33	Displacement will increase pollution outside London	London Borough of Barnet	It is likely that non-compliant vehicles will continue to be used outside the proposed boundary after the implementation of the LEZ. In effect, London could be accused of moving the problem of pollution outside its own boundaries.	See consideration – 13.21.
13.34	Displacement will increase pollution outside London	Kent County Council	Concerned that HGVs that do not meet the Euro standards may try to find alternative routes to avoid the charge and this could lead to increased mileage and an increase in overall pollution levels.	See consideration – 13.21.
13.35	Will increase greenhouse gas emissions	Friends of the Earth	Has concerns that the proposed LEZ core option “will result in slightly higher greenhouse gas emissions than would otherwise be the case”. The Government and the Mayor have targets for reducing greenhouse gas emissions, and any measure that takes emissions in the wrong direction is of concern. The LEZ must deliver on air quality without undermining committed climate change responsibilities.	The effect of the LEZ on climate change and greenhouse gases is expected to be negligible.
13.36	Will increase greenhouse gas emissions	London Borough of Richmond upon Thames	Would be interested to hear more about how the LEZ fits in the context of other schemes to reduce pollution from different sources.	The LEZ primarily addresses emissions of PM <sub>10</sub> diesel engined vehicles. Other policies that aim to reduce emissions of these pollutants are the taxi and bus emissions strategies. The Congestion Charge has already delivered benefits in terms of transport-related emissions. Other sources of pollution are addressed through the Mayor’s Air Quality Strategy, and to a lesser extent through the Mayor’s Energy Strategy, Ambient Noise Strategy and London Plan.
13.37	Will increase greenhouse	London Borough of	Camden are concerned that some of the measures in the LEZ will lead to a small	See considerations – 13.35 and 13.36.

No.	Sub theme	Respondent	Representation	TfL Response
	gas emissions	Camden	increase in the emission of greenhouse gases, particularly CO <sub>2</sub> .	
13.38	Monitoring	London Borough of Enfield	The implementation of the second phase options , in 2010, must be evaluated in the light of proper monitoring of the air quality impact of the 2008 scheme and a study of the economic impact upon operators. Any possible cost implications likely to repose on operators , as a result of the need to upgrade to 2010 stipulated standards, must also be considered in the light of market conditions and costs obtained in the period prior to 2010	<p>The LEZ would be supported by a programme of impacts monitoring to understand the impacts of the various stages of the scheme which would commence in mid-2006 if the strategy revisions are agreed. Collection of data on air quality and emissions representing pre-LEZ conditions will be compared to data collected after implementation. There would be an associated programme of reporting throughout the life of the scheme.</p> <p>TfL has already considered in depth the impact of the LEZ proposal on operators in terms of costs and likely responses. Further assessment would be undertaken as part of development of a Scheme Order to implement a LEZ, and as part of the ongoing monitoring of the LEZ. TfL has considered this information in development of the LEZ to ensure the proposal appropriately balances the likely costs to operators against the health benefits that would be realised.</p>
13.39	Monitoring	British Lung Foundation	The monitoring proposals are of particular interest since they contain, on the human health side, proposals to judge mortality from bronchitis and emphysema, asthma and the number of admissions for respiratory disease. Whilst the first two of these proposals are good, by the time the proposals come into effect the latter one is likely to have been impacted by health policy. This is due to the fact that much is being done to reduce	<p>See consideration – 13.38.</p> <p>Monitoring the impact on health of the LEZ is partially based on the methodology used by Defra in its Air Quality Strategy and the EC's Clean Air For Europe (CAFE) methodology, which attempts to take into account a wide range of health effects of poor air quality, such as hospital admissions for respiratory disease. This methodology is under review and TfL will make use of the most up to date information to</p>

No.	Sub theme	Respondent	Representation	TfL Response
			<p>admissions to hospital for respiratory disease. This, whilst laudable and in the interests of the patient, could lead inadvertently to a conclusion being drawn that the improvements in air quality have led to a reduction in admissions rather than a change of practice for admitting patients with respiratory disease to hospital. It is possible to still use it but tailor it to changes in the provision of, say, hospital at home or the number/amount of effort going into avoidance of hospital admissions that is pertinent to the time of the work.</p>	<p>ensure health impact monitoring is as robust as possible, and attributable to the LEZ.</p> <p>A major focus of the monitoring strategy would be on changes to the vehicle fleet which could be identified. TfL recognise that attributing specific health benefits to the LEZ would be difficult as there would be practical problems in identifying the impacts of the LEZ as opposed to other factors. TfL would continue to work with health stakeholders on the development of a robust monitoring strategy for the health benefits of a LEZ.</p>
13.40	Monitoring	British Lung Foundation	<p>A further measure might be introduced which is to look at the incidence of asthma and COPD (chronic obstructive pulmonary disease) in central London and see how this is increasing or decreasing following the introduction of the LEZ. These measures should not be used for the under 5s where asthma is difficult, if not impossible, to diagnose with proper certainty. Do not claim that air quality is a cause of asthma but it is an exacerbating factor for both asthma and COPD so plotting the air quality against the impact on the people with these diseases is sensible and helpful as a quality of life measure.</p>	<p>See consideration – 13.38 and 13.39.</p>
13.41	Monitoring	Slough Borough Council	<p>Impacts monitoring needs to extend beyond the proposed LEZ area and into neighbouring authority areas such as Slough, particularly to consider: levels of HGV traffic diversion at the</p>	<p>See consideration – 13.38 and 13.39.</p> <p>TfL has modelled the expected health benefits of the LEZ that would accrue outside London as a result of</p>

No.	Sub theme	Respondent	Representation	TfL Response
			LEZ boundary; change in vehicle numbers and type and fleet composition, for example, changes in the 'Euro' profile of vehicles operating in areas just beyond the London boundary; local air quality impacts; local economic impacts.	vehicle operators based outside London upgrading their vehicles in order to operate in the capital. These estimates carry a greater degree of uncertainty than the London benefits due to the lack of monitoring sites outside London and rely on estimates of the response of non-London operators to the proposed LEZ and the journey patterns of their vehicles, which carry a large degree of uncertainty. TfL encourages local monitoring initiatives to supplement its own monitoring of the impacts of the LEZ.
13.42	Monitoring	London Borough of Harrow	The monitoring of the success of the proposed scheme using changes in fleet type; vehicle age etc. should be supplemented with the results of the continuous monitoring stations that boroughs operate.	See consideration – 13.38 and 13.39.
13.43	Monitoring	Asthma UK	Hope that the proposed LEZ will be able to show direct improvements to the health and economic impacts of asthma for people with asthma and for the NHS. However, it is important that indicators used fully reflect asthma's health and economic impacts and also that related initiatives to tackle these impacts are taken into account, such as the Department of Health's plan to reduce unnecessary emergency hospital admissions. To ensure that links are made between the LEZ and improvements in health and related economic impacts of asthma, the validity of the monitoring and assessment data supporting the LEZ is crucial therefore would encourage the involvement of voluntary organisations representing patients, such as	See consideration – 13.38 and 13.39.  TfL is keen work with other stakeholders in further development of its monitoring strategy.

No.	Sub theme	Respondent	Representation	TfL Response
			Asthma UK, in the process of setting appropriate health and economic impact indicators.	
13.44	Monitoring	London Borough of Hammersmith and Fulham	As part of the LEZ impacts monitoring scheme, only 5 sites across London are suggested for monitoring PM <sub>10</sub> and NO <sub>x</sub> levels. It is unclear why this is the case, when every Borough has at least 1 real-time monitoring station measuring these pollutants and these could easily be integrated into the LEZ monitoring scheme.	See consideration – 13.38 and 13.39.  TfL will have access to data from the entire network of LAQN monitoring sites in Greater London, but also plans to enhance a selection of these sites at key locations - for example to monitor PM <sub>2.5</sub> and ozone in addition to PM <sub>10</sub> and NO <sub>x</sub> . Trends in concentrations across all sites will be analysed as part of the LEZ monitoring programme and will be reported on over the lifetime of the scheme. The monitoring data will also be used to validate models to assess the impact on air quality of the LEZ.
13.45	Monitoring	Hampshire County Council	Hampshire County Council hopes that monitoring results will be made available to authorities outside London, so that they can learn from how the LEZ operates and its wider impact.	See consideration – 13.38 and 13.39.  There would be an associated programme of reporting throughout the life of the scheme.
13.46	Monitoring	Dartford Borough Council	As the proposal to monitor and assess the performance of the LEZ will provide invaluable information and guidance to other agencies/bodies considering the use of such zones, it is recommended that this information is shared, in full, with other local authorities, on request.	See consideration – 13.38 and 13.39.
13.47	Monitoring	Environmental Industries Commission	Note that other cities across the United Kingdom and elsewhere in Europe are monitoring the progress of the London LEZ proposals with great interest and therefore encourage the Mayor and his advisors to	TfL notes the support for the LEZ proposal.

No.	Sub theme	Respondent	Representation	TfL Response
			proceed with the Scheme to protect the health of people in London community and to set an example of best practice to the rest of Europe.	
13.48	Monitoring	The Knightsbridge Association	Concerned that the current pollution monitoring site configuration is likely to underestimate the air pollution in the Knightsbridge area and urge the Mayor to establish at least one additional monitoring site close to the worst pollution in the Knightsbridge area to track NO <sub>2</sub> and PM <sub>10</sub> air pollution (and perhaps other air pollutants).	TfL's monitoring priority for the proposed LEZ is to perform emission calculations based on observed changes in traffic but we will also have access to air quality monitoring data from the entire network of LAQN monitoring sites in Greater London, including the existing RBKC site at Knightsbridge. TfL also plans to enhance six monitoring sites to measure concentrations of pollutants in addition to PM <sub>10</sub> and NO <sub>x</sub> (e.g. PM <sub>2.5</sub> , particle counters and ozone) as well as install traffic monitoring equipment. These upgraded sites should allow TfL to better understanding detailed relationships between measured concentrations and composition of pollutants with changes in traffic and vehicle technology. These sites have been chosen in both inner and outer London and are adjacent to heavily-trafficked heavy goods vehicle routes.
13.49	Scheme needs to do more to improve air quality	Clean Diesel Technologies Inc	Expert Group thinks a more flexible and holistic approach to air quality management might deliver more effective control strategies.	The LEZ should not be viewed in isolation – rather, it complements other initiatives contained in the Mayor's Transport and Air Quality Strategies, each of which focus on reducing emissions from particular road transport sources in the most cost effective way. This suite of initiatives will generate significant improvements in the health of people who live and work in Greater London through improving air quality.
13.50	Scheme needs to do more to improve air	London Borough of Merton	Considers that that LEZ proposal is a good start to help achieve air quality objectives for 2010 and to improve the health and quality of life of people who live and work in London.	See consideration – 13.49.  It should be noted that road transport contributes around half of total emissions of PM <sub>10</sub> so achievement

No.	Sub theme	Respondent	Representation	TfL Response
	quality		However, believe that TfL should be looking at ways in which this scheme could actually achieve these targets. Suggest that TfL look at what could be done in the scheme to make it more successful and farther reaching.	of air quality targets also needs to consider these other sources. The Mayor and TfL have very limited powers in relation to emissions of controlled pollutants from non-road transport sources.
13.51	Scheme needs to do more to improve air quality	London Borough of Wandsworth	Considers the level of improvement somewhat disappointing. Although the original basis of the scheme was that it would allow air quality targets to be met, it is now accepted that this will not be the case. It is noted that the initial impact of the scheme as proposed in 2008 would be only a 12% reduction in the area of London exceeding the daily PM <sub>10</sub> limit. This is estimated to equate to 2,700 people being no longer exposed to excessive levels of PM <sub>10</sub> . More significant gains accrue from 2010 onwards when the scheme is upgraded but this will still only reduce the area affected by excessive levels by 17% to the benefit of a further 38,000 people. This represents, in total, less than 1% of the population of London.	See considerations – 13.49 and 13.50.
13.52	Scheme needs to do more to improve air quality	London Borough of Brent	<p>The scheme proposed should bring about a significant reduction in both NO<sub>x</sub> and PM<sub>10</sub> in some areas of London. What other initiatives will be implemented to ensure that other areas of London exceeding the objectives for NO<sub>x</sub> and PM<sub>10</sub> are addressed?</p> <p>What additional changes will be made to the Transport and the Air Quality Strategies to ensure that other measures are implemented</p>	See considerations – 13.49 and 13.50.

No.	Sub theme	Respondent	Representation	TfL Response
			to address exceedences across London?	
13.53	Scheme needs to do more to improve air quality	London Borough of Merton	Frustrated that the LEZ will be able to reduce the area of London exceeding the PM <sub>10</sub> annual mean objective, but still not robust enough to expect that the objective for 2010 would be met in some areas of London. The scheme still allows for vehicles to pollute provided that they pay.	See considerations – 13.49 and 13.50.  TfL has set the daily and penalty charges at a level such that the vast majority of non-compliant vehicles would choose to upgrade or replace their vehicles, rather than pay the charge.
13.54	Scheme needs to do more to improve air quality	London Borough of Islington	Have concerns that the computer modelling undertaken recently by Transport for London does not show that the air quality improvements with the LEZ in place are as great as previously believed. Our conditioned support for an LEZ for London was included as a high priority action in our Air Quality Action Plan of 2003 in line with the Mayor's Air Quality Strategy. Our concern is that if such an important action cannot be shown to have a bigger effect on air quality, then we will find it difficult to defend the high priority status of the action.	TfL continues to refine the modelling of the LEZ as further information becomes available and the scheme is refined. The introduction of the proposed LEZ would accelerate progress towards meeting London's air quality targets than would otherwise be achieved under the natural replacement cycle.
13.55	Scheme needs to do more to improve air quality	The Knightsbridge Association	Keen to understand, through a meeting or otherwise, whether TfL and the Mayor's office considers that the combination of the Congestion Charge Extension from February 2007 and TfL's currently proposed Low Emission Zone plans from early 2008 are likely to reduce actual air pollution levels sufficiently to meet official air pollution targets across the Knightsbridge area. Even if targets for NO <sub>2</sub> , PM <sub>10</sub> and other air pollutants are likely to be met over the next two years,	See considerations – 13.49 and 13.50.

No.	Sub theme	Respondent	Representation	TfL Response
			we are keen that air quality should be improved more quickly.	
13.56	Include other emissions	Transport 2000	Concerned that the proposals do not go far enough. Even when the LEZ is introduced standards for various emissions will still be exceeded in many parts of London. The LEZ will do nothing to reduce carbon emissions and may even increase them. Meanwhile it is clearly anomalous that TfL should be pursuing projects like the Thames Gateway Bridge which will lead to a deterioration of air quality at the very time that it is seeking to introduce the LEZ.	<p>There are many areas of Greater London that fail to meet annual mean targets for PM<sub>10</sub>, as well as areas that fail to meet daily mean targets for PM<sub>10</sub>. The LEZ has been identified as the most effective measure available to the Mayor to target emissions of these pollutants. Carbon emissions can best be addressed through road charging schemes or by encouraging alternative fuel vehicles.</p> <p>The Thames Gateway Bridge scheme has been subject to an extensive public inquiry spread over 11 months where evidence has been heard from TfL and other experts on many issues, including Air Quality. The Inquiry has enabled full debate and scrutiny to take place into the Thames Gateway Bridge scheme, including the air quality and other environmental impacts which are reported in the Environmental Statement and its addenda. These state that there would be an overall minor adverse impact on Air Quality. The full range of the environmental impacts reported to the Public Inquiry will be taken into consideration in the decisions by the Secretary of State on the Thames Gateway Bridge scheme.</p> <p>The proposed LEZ would cover the whole of Greater London, including the London end of the Thames Gateway area and would therefore assist in limiting any additional emissions arising from road transport using the proposed bridge. Furthermore, in preparing</p>

No.	Sub theme	Respondent	Representation	TfL Response
				the revisions to the Mayor's Transport and Air Quality Strategies to allow for a London LEZ, TfL has been mindful of the Mayor's other Strategies and legal obligations.
13.57	Include other emissions	NSCA (National Society for Clean Air)	The LEZ scheme provides opportunities for further management of transport. Options to include CO2 standards should be considered and developed alongside the progression of present proposals.	There are many areas of Greater London that fail to meet annual mean targets for PM <sub>10</sub> , as well as areas that fail to meet daily mean targets for PM <sub>10</sub> . The LEZ has been identified as the most effective measure available to the Mayor to target emissions of these pollutants. Other emissions can best be addressed through road charging schemes or by encouraging alternative fuel vehicles.
13.58	Include other emissions	London Borough of Lambeth	Notes that this scheme targets NO <sub>x</sub> and PM <sub>10</sub> emissions by diesel vehicles. In addition to our preference that the scheme include LGVs from inception, and consideration be given to the progressive application of the LEZ to private diesel vehicles, we would hope to see a range of complimentary measures taken to target other emissions in conformity with the London Air Quality Policy.	See consideration – 13.57.
13.59	Include other emissions	London Borough of Hillingdon	Given the growing importance of primary NO <sub>2</sub> emissions and climate change emissions, it is essential that these pollutants form part of the ongoing investigation into the impacts of the LEZ.	See consideration – 13.57.  The LEZ monitoring strategy will also consider any wider environmental impacts of the LEZ by updating any previous assessments with new data where available.
13.60	Include other emissions	Constant Consultancy	The only pollutants mentioned in the Mayor's proposal are PM <sub>10</sub> and NO <sub>x</sub> . Given the Government's commitment to the Kyoto climate change protocol which set targets to reduce greenhouse gas emissions this would	See consideration – 13.57.  The LEZ is likely to deliver modest benefits in terms of emissions of hydrocarbons and carbon monoxide as the fitting of CRTs to diesel-engined vehicles virtually

No.	Sub theme	Respondent	Representation	TfL Response
			seem an unethical and illogical approach. There is no mention of hydrocarbons, ozone or the increasing levels of benzene in London's atmosphere.	eliminates these emissions.
13.61	Other air quality impacts	The Royal Parks	Improvement in air quality will benefit human health, bio-diversity, and wildlife. The intention of the LEZ would appear to be a positive move and may help accelerate the process of improving air quality across the whole of London.	TfL notes the support for the LEZ proposal
13.62	Other air quality impacts	Hillingdon PCT	There is the need to tackle pollutants from road transport in order to help improve air quality locally. Schemes, such as those proposed in this document, that can be co-ordinated on a London-wide basis are likely to be the most successful in bringing about reductions in emissions and air quality improvements.	See consideration – 13.61.
13.63	Other air quality impacts	London Borough of Richmond upon Thames	Consider that the advantages of improved air quality will be greater than just those to health, and other benefits would include a reduction in the damage to the stonework of historic buildings and enhancing the image of London to visitors.	See consideration – 13.61.
13.64	Other air quality impacts	London Borough of Islington	Hope that TfL has looked at the whole-life environmental impacts of introducing an LEZ. More specifically, we are concerned that vehicles will be scrapped earlier, and an increased amount of vehicles will be manufactured as a result of the implementation of an LEZ scheme order. This could increase emissions resulting from the	There are a huge range of factors affects demand for and manufacture of new vehicles. TfL's view is that the impact of the LEZ on vehicle manufacture would be insignificant, that it would be impossible to attribute any environmental impact of increased vehicle manufacture to the LEZ. The European Commission has adopted a Proposal for a Directive which aims at making vehicle dismantling and recycling more environmentally

No.	Sub theme	Respondent	Representation	TfL Response
			manufacture of new compliant vehicles, and the decommissioning of old non-compliant vehicles. From the consultation materials that we have looked through, it does not appear that such an analysis has taken place.	friendly, sets clear quantified targets for reuse, recycling and recovery of vehicles and their components and pushes producers to manufacture new vehicles also with a view to their recyclability.
13.65	Other air quality impacts	London Borough of Richmond upon Thames	The cost of new fleet vehicles, coupled with the associated costs of recycling, and shorter life spans of vehicles could mean that an improvement in air quality is offset by problems in other areas such as the availability of raw materials. It is understood that approximately 50% of pollutants from a vehicle are from the manufacturing process and with a shorter lifespan, the level of pollution from manufacturing may increase relative to the pollution from the operational life of the vehicle.	See consideration – 13.64.
13.66	Other air quality impacts	London Borough of Lewisham	The premature scrapping of vehicles that would otherwise have a continuing useful life does represent a potential waste of natural resources - especially energy - and any decision to accelerate the previously published plans for a London LEZ needs to consider this balance carefully.	See consideration – 13.64.
13.67	Other air quality impacts	London Recycling Ltd	Believe it is preferable to run vehicles over a long period and maintain them rather than constantly replace them. This would be completely undermined by the short timescales envisaged in the LEZ. Whilst emissions measured in London may fall, overall emissions in the UK and the world are unlikely to do so because of the additional	See consideration – 13.64.

No.	Sub theme	Respondent	Representation	TfL Response
			emissions that will result from increased production of new vehicles to compensate.	
13.68	Other air quality impacts	Environmental Industries Commission	The current review of the National Air Quality Strategy concludes that particulate emissions reduced life expectancy in the UK by 8 months in 2005 at a cost of £9.1-21.4 billion p.a. Furthermore London suffers from the worst air quality in the country. It is therefore incumbent on the Mayor to take action to tackle this.	TfL notes the support for the LEZ proposal.

## THEME 14 HEALTH IMPACTS

No.	Sub theme	Respondent	Representation	TfL Response
14.01	Existing illnesses and allergies	Chartered Society of Physiotherapy	Every year, respiratory physiotherapists treat thousands of people whose respiratory problems are aggravated by fumes and particles pumped out by heavily polluting vehicles. Respiratory physiotherapists believe that current levels of PM <sub>10</sub> and NO <sub>2</sub> , in some areas of the UK, but predominantly the Capital, present significant risks to human health. For people with existing lung problems, like asthma, chronic bronchitis and emphysema, PM <sub>10</sub> especially can increase inflammation, predispose them to infection and irritate already uncomfortable symptoms. For these individuals, high concentrations of this type of air pollution can be deadly. Research now shows that air pollution can also cause a deterioration of lung function in healthy people too.	TfL notes the support for the scheme. The most significant health benefits to be achieved through the proposed London LEZ are associated with potential improvements in air quality throughout and beyond London. Such improvements would contribute to reductions in respiratory and cardiovascular disease. The LEZ would also reduce the number of premature deaths, the number of life years lost, respiratory hospital admissions and the need for medication for adults and children suffering from these diseases. It is estimated that every year some 1,000 premature deaths and a similar number of hospital admissions occur due to poor air quality in London.
14.02	Existing illnesses and allergies	Asthma UK	Air pollution and specifically traffic fumes are a concern for people with asthma and therefore it is a concern for Asthma UK. Research we have carried out this year shows that: 66% of people with asthma say that traffic fumes trigger their asthma symptoms; 86% of people with asthma are concerned about the affect that increasing; vehicle fumes will have on their own health, their family's and their children's health in the future. Traffic fumes discourage people with asthma from walking or shopping in	See consideration – 14.01.

No.	Sub theme	Respondent	Representation	TfL Response
			congested areas (42%), driving their car with the windows open (41%), getting exercise in the open air (33%), and cycling (21%). Air pollution is also a force of social exclusion, and air quality is worst in London's most deprived areas. Evidence shows that asthma prevalence is higher, and symptoms worst, amongst people that live in these areas.	
14.03	Existing illnesses and allergies	Asthma UK	Believe that people with asthma would be very supportive of the LEZ proposals because when people with asthma were asked how they felt about having more cars that emit fewer traffic fumes, such as hybrid cars, 89% felt that it would improve people's general health and well-being and 74% felt that it would improve their asthma. Given the problems faced by people with asthma because of traffic fumes, it is disappointing that 71% of people feel that the Government is not doing enough to reduce traffic fumes. Initiatives such as a LEZ are very important to show that air quality issues are being taken seriously and Asthma UK is keen to see this initiative put into action.	See consideration – 14.01.
14.04	Improve general quality of life/public health	British Lung Foundation	Are in favour of reducing all air pollution in central London to the point where people with respiratory disease will be assisted in being able to live a normal life.	Air pollution affects the quality of life of a large number of Londoners especially those with respiratory and cardiovascular conditions. The benefits arising from the LEZ are likely to be wide-spread across the Greater London area, and outside London. The reduced PM <sub>10</sub> emissions would improve the quality of life for many thousands of people who live in, work in and visit London, especially those already suffering

No.	Sub theme	Respondent	Representation	TfL Response
				from symptoms that restrict their daily activities. The LEZ would also reduce the number of premature deaths, the number of life years lost, respiratory hospital admissions and the need for medication for adults and children suffering from these diseases.
14.05	Improve general quality of life/public health	British Lung Foundation	For people with respiratory disease, it is difficult to adopt healthy walking and cycling due to the fact that they are so close to the pollution from vehicles.	See consideration – 14.04.
14.06	Improve general quality of life/public health	The Countryside Agency	If implemented, the LEZ would be likely to result in fewer vehicles which do not meet the specified emission standards in Greater London. It's unlikely that the absence of these vehicles in themselves would have any significant impact on the landscape. If the proposals result in a marked improvement in air quality, then there are likely to be positive impacts on the enjoyment of landscape and amenity, together with the potential for a general increase in the health of London residents.	See consideration – 14.04.
14.07	Improve general quality of life/public health	Camden PCT	Support the LEZ because it would help reduce emissions levels from construction traffic, given the predicted increase in construction in Camden from King's Cross Central and Crossrail, reduce emissions on those roads which already experience high levels of PM <sub>10</sub> , in particular Euston Road, and the predicted health benefits from the LEZ may benefit local communities in Camden, particularly those that experience health	See consideration – 14.04.

No.	Sub theme	Respondent	Representation	TfL Response
			inequalities and those living in close proximity to roads and areas with high levels of PM <sub>10</sub> .	
14.08	Improve general quality of life/public health	NSCA (National Society for Clean Air)	Recent work indicates that nearly 40,000 deaths are brought forward every year in the UK as a result of air pollution, equating to a loss of 8 months life expectancy across the population. In light of its considerable size and unique air quality problems a significant proportion of these impacts occur in London. Particles are responsible for the majority of these health effects. As a 'non-threshold' pollutant, any reductions – be these above or below the limit value deliver health benefits. The recent COMEAP statement on risk factors reinforces the need to take action to improve air quality and serves to more strongly align UK and EU thinking. It is easy to focus heavily on mortality effects, but it is also important to remember the range of health and quality of life impacts, which underlie the headline mortality figures. Also that impacts are disproportionately suffered by the more sensitive individuals within the population. The COMEAP statement will add considerably to the benefit assessment.	See consideration – 14.04.
14.09	Improve general quality of life/public health	London Assembly Environment Committee	Advised that there are some 1,000 premature deaths and a similar number of hospital admissions in London each year due to poor air quality and therefore commend the Mayor's attempts to address poor air quality in the capital and welcome the health benefits that are to be gained from the proposed LEZ.	See consideration – 14.04.

No.	Sub theme	Respondent	Representation	TfL Response
14.10	Economic and social impacts	London Sustainability Exchange	TfL do not currently assess how air quality changes impacts on health but there is anecdotal evidence from the London hospitals cited by the Royal Commission that there have already been benefits to Londoners' health as a result of the congestion charge. The LEZ looks likely to produce further beneficial results in terms of reductions in respiratory and cardiovascular disease and potentially a fall in hospital admissions.	TfL notes the support for the scheme.
14.11	Economic and social impacts	Masterlease	The initiative is to be supported, as the reduction in health-related costs and improvements in air quality should provide both financial and economic benefit.	See consideration – 14.10.
14.12	Economic and social impacts	Asthma UK	Air pollution is also a force of social exclusion, and air quality is worst in London's most deprived areas. Evidence shows that asthma prevalence is higher, and symptoms worst, amongst people that live in these areas.	The most significant health benefits to be achieved are associated with potential improvements in air quality throughout and beyond Greater London. Such improvements would contribute to reductions in respiratory and cardiovascular disease and contribute to a reduction in inequalities within relatively deprived communities.
14.13	Economic and social impacts	London Sustainability Exchange	Poor air quality is also a social justice issue. Implementing a LEZ would potentially contribute to a reduction in inequalities within relatively deprived communities.	See consideration – 14.12.
14.14	Other health impacts	Thames Gateway London Partnership	It is understood that the benefits of the scheme could be greater than stated in the LEZ documents; recent research has suggested that particulates are a greater risk to health than previously thought. This heightens the case for the LEZ.	Should the Mayor confirm the Strategy Revisions, TfL would consult on the details of the scheme later in 2006. TfL would produce impact assessments supporting this consultation process, which would take into account recent research.

No.	Sub theme	Respondent	Representation	TfL Response
14.15	Other health impacts	NSCA (National Society for Clean Air)	Recent work indicates that nearly 40,000 deaths are brought forward every year in the UK as a result of air pollution, equating to a loss of 8 months life expectancy across the population. In light of its considerable size and unique air quality problems a significant proportion of these impacts occur in London. Particles are responsible for the majority of these health effects. As a 'non-threshold' pollutant, any reductions – be these above or below the limit value deliver health benefits. The recent COMEAP statement on risk factors reinforces the need to take action to improve air quality and serves to more strongly align UK and EU thinking. It is easy to focus heavily on mortality effects, but it is also important to remember the range of health and quality of life impacts, which underlie the headline mortality figures. Also that impacts are disproportionately suffered by the more sensitive individuals within the population. The COMEAP statement will add considerably to the benefit assessment.	See considerations – 14.01 and 14.04.
14.16	Other health impacts	London Borough of Hammersmith and Fulham	Has the role of ozone been taken into account for the calculations of human health impacts?	The LEZ is not expected to have a significant impact on ozone levels.
14.17	Other health impacts	London Borough of Hammersmith and Fulham	Indirect impacts on health (some beneficial, some detrimental) are suggested as a result of the LEZ being introduced due to changing economic circumstances, but effects are not quantified. These issues should be looked at	Should the Mayor approve the Strategy Revisions, TfL would consult with the public and stakeholders on an Order in late 2006. This would provide more detailed information on the scheme, as well as an assessment of the health related economic impacts of the proposed

No.	Sub theme	Respondent	Representation	TfL Response
			as part of the 'LGV from 2010' scenario if possible.	scheme, including the economic impacts of including heavier LGVs within the scheme.
14.18	Other health impacts	Regional Public Health Group - London	Monitoring health benefits: The SEA (p16) suggests that the effects of the scheme could be monitored by examining mortality from bronchitis and emphysema, from asthma and from all circulatory diseases and by examining numbers of hospital admissions for respiratory diseases. This is unlikely to be informative as so many other factors influence these outcomes that it would be entirely possible, for example, for numbers of respiratory hospital admissions to increase despite the fact that air pollution associated respiratory hospital admissions had gone down. In addition, mortality from asthma is very rare. If some monitoring were to be done, morbidity outcomes for asthma would be a better measure.	TfL notes this advice and will feed this into the developing LEZ Monitoring Strategy. Should the Mayor confirm the Strategy Revisions, TfL will continue to work with stakeholders on the development of the LEZ.
14.19	Other health impacts	Regional Public Health Group - London	The Committee on the Medical Effects of Air Pollutants (COMEAP) has recently published an interim statement suggesting that the effects of particles on life expectancy are greater than previously thought. This will improve the cost benefit analysis.	TfL notes the statement from COMEAP and will consider its conclusions in future modelling for the LEZ, should the Mayor confirm the Strategy Revisions.
14.20	Other health impacts	London Borough of Wandsworth	Have received complaints from members of the public concerning more intrusive noise and vibration from Euro III buses compared with the previous Euro II buses. This is an issue that should be taken into consideration.	The proposed LEZ should have some small noise benefits as Euro III and Euro IV vehicles are quieter than older vehicles. While the improvements are not considered significant it is possible that people may notice a reduction in the peak noise level of 'pass by' events for individual vehicles

## THEME 15 IMPACTS ON TRAFFIC

No.	Sub theme	Respondent	Representation	TfL Response
15.01	Shift from HGVs to LGVs	London Forum of Amenity and Civic Societies	Suggest that the measures taken be designed in a way that will at the same time encourage a switch to smaller vehicles for making deliveries in the more congested areas of London.	It is not the intention of the LEZ to encourage operators to shift from larger to smaller vehicles. Having more smaller vehicles on the roads would actually negate some of the environmental benefits which would result from operators upgrading or replacing their larger vehicles. The problem of congestion in London is best addressed through other measures, including the Congestion Charge and promotion of public transport.
15.02	Shift from HGVs to LGVs	London Borough of Bromley	In the shorter term, there may be an increase in traffic in the borough as businesses use a number of small vehicles to operate within the LEZ.	The operator survey undertaken by TfL in 2005 produced little evidence of that freight operators planned switching from HGVs to LGVs. TfL considers it unlikely that many operators would do this as other overheads would be incurred such as additional drivers and larger fleets. The inclusion of heavier LGVs in the LEZ from 2010 would also discourage some operators from switching to older LGVs.
15.03	Shift from HGVs to LGVs	London Borough of Barnet	There is some concern that operators may choose to replace non-compliant lorries with vans, which will increase congestion and lead to greater pollution.	See consideration – 15.02.
15.04	Displaced traffic outside London	London Borough of Harrow	Any effect of freight deciding not to enter the scheme close to or at the boundary and causing congestion has not been considered. This could involve turning in the road or pulling up at the roadside and restricting further traffic flow. Therefore the impact of the scheme on congestion in the boundary area has not been fully considered.	Should the LEZ be implemented, TfL would work with contiguous authorities to monitor the effects of the LEZ on traffic levels outside London and would take any appropriate mitigating actions.
15.05	Displaced traffic outside	Hampshire County	As long as the LEZ excludes the M25, there will be little if any diversion of non-compliant	TfL is not recommending that the M25 be included in the LEZ as it is an appropriate diversionary route for

No.	Sub theme	Respondent	Representation	TfL Response
	London	Council	traffic onto Hampshire's roads.	vehicles to use in order to avoid driving within Greater London
15.06	Rat running to avoid cameras will cause congestion	London Borough of Harrow	As the projected number of enforcement cameras would only cover the main routes into London, operators who wanted to evade the charge would be encouraged to find alternative routes past the enforcement cameras. Harrow could therefore incur further costs in road engineering to prevent alternative roads being used.	There are no anticipated impacts on traffic levels or congestion, as the LEZ is expected to impact on fleet profiles rather than traffic volumes in and out of Greater London. The fixed cameras across London will be supplemented by mobile ANPR units, so that drivers could not rely on avoiding the fixed cameras.
15.07	Rat running to avoid cameras will cause congestion	London Borough of Harrow	The inappropriate use of alternative routes by freight could also lead to greater congestion with corresponding increases in traffic-related emissions in areas of the borough not covered by enforcement cameras. These would be matters to be considered more fully in future consultation on scheme design.	See consideration – 15.06.
15.08	Rat running to avoid cameras will cause congestion	Surrey County Council	Anxious to ensure that the creation of the London LEZ does not result in the creation of “rat running” by commercial vehicles and coaches on unsuitable roads in Surrey by those attempting to avoid paying the charges applicable to non-compliant vehicles.	See consideration – 15.06.  Should the LEZ be implemented, TfL would work with contiguous authorities to monitor the effects of the LEZ and would take any appropriate mitigating actions.
15.09	Modal shift	Confederation of Passenger Transport UK	Making coach travel less attractive financially encourages modal shift, arguably to cars, which add to pollution and with additional disbenefits in terms of health and safety. Car passengers are over 7 times more likely to be killed than people travelling in a coach.	TfL acknowledges that the costs of compliance with LEZ will, to some extent, be passed on by operators to their customers and that these costs may then feed through to end-consumers in the form of higher prices. However, it is likely that any price increases will be spread across the UK, rather than restricted to consumers in London since many vehicle operators cover large parts of the UK and would pass any cost increases on as a generalised increase in costs. The

No.	Sub theme	Respondent	Representation	TfL Response
				Mayor is already delivering on initiatives to discourage unnecessary car use through Congestion Charging, by improving the accessibility and reliability of London's public transport, and by promoting walking and cycling. Therefore, TfL considers that it is unlikely that there would be any significant modal shift from coach travel to car.
15.10	Modal shift	Heyfordian Travel Limited	Making coach travel less attractive financially encourages modal shift, arguably to cars which add to pollution and with additional disbenefits in terms of health and indeed safety. Car passengers are over 7 times more likely to be killed travelling in a car than a coach.	See consideration – 15.09.
15.11	Modal shift	Golden Boy Coaches	Making coach travel less attractive financially encourages modal shift, arguably to cars which add to pollution and with additional disbenefits in terms of health and indeed safety. Car passengers are over 7 times more likely to be killed travelling in a car than a coach.	See consideration – 15.09.
15.12	Modal shift	Stephensons of Essex Ltd	Do not believe core markets (Southend to London coach service and coaches on contract for London schools) would be prepared to pay the level of increased prices to fund the sort of increase in cost as would be required by upgrading coaches to comply with proposed LEZ emission standards. People on the Southend to London service would either switch to private cars, to the train service (where individuals can afford it) increasing overcrowding, or cease working in	See consideration – 15.09.

No.	Sub theme	Respondent	Representation	TfL Response
			London.	
15.13	Modal shift	The Kings Ferry Travel Group	The punitive standards suggested for the LEZ will result in fewer coaches being taken into the city and the knock on effect will result in alternative transportation such as cars being used.	See consideration – 15.09.
15.14	Modal shift	National Express Limited	Also encourage the Mayor to implement further road prioritisation measures to prevent modal shift from public transport.	See consideration – 15.09.
15.15	Modal shift	MARSHopper Ltd	Customers will be expected to foot the bill for the LEZ charge, or have no bus service at all and use their cars instead.	See consideration – 15.09.
15.16	Modal shift	Port of London Authority	The role of the river as a sustainable means of transport will have a key role to play in relation to the proposed LEZ, and that a charge should be set at a level that encourages operators to investigate other modes of transport such as the water for the transport of freight as this potentially could remove large numbers of vehicles from the highways network.	The LEZ would not aim to cause modal shift from HGVs to other forms of transport, but rather to encourage operators of the oldest, most polluting diesel engine road vehicles to upgrade or replace their vehicles to make them cleaner. TfL is committed to increasing the use of rail and water for shifting current and future traffic off the road, and is working with stakeholders to encourage and promote these modes wherever practically possible.

## THEME 16 CONSULTATION PROCESS/INFORMATION

No.	Sub theme	Respondent	Representation	TfL Response
16.01	Inadequate consultation	London Borough of Bexley	<p>Concern has been expressed by local haulage operators that they do not feel that they have been properly consulted. Consider that there should be an extension of the consultation period to enable the costs of the LEZ proposals to both local businesses and local authorities to be fully considered. Therefore request an extension of three months to be given to the consultation period.</p>	<p>TfL did not consider there was a need to extend the consultation process. Consultees had 12 weeks to respond to the consultation which as explained below was well advertised and accompanied by a range of materials setting out the costs and impacts of the proposals. The consultation was seeking public, business and stakeholder views on the draft revisions to the Mayor's Transport and Air Quality Strategies to allow for a London LEZ. It was primarily a consultation on the principle of the proposal. Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would carry out further consultation on the detail of the proposal.</p> <p>TfL considers that haulage operators were adequately involved in the consultation process. TfL prepared an information leaflet and questionnaire which was directly mailed to over 130,000 key personnel within transport businesses identified using a range of databases covering the road transport, bus and coach industries. TfL also took out a full page colour advert in 11 road freight transport, coach and bus industry publications. In addition, the information leaflet and questionnaire was made available to drivers of heavy goods vehicles and coaches and the public at major freight ports, service stations and transport cafes across the UK. TfL also advertised the consultation in national and local newspapers, on radio and on buses and bus shelters. Full details of the consultation are outlined in chapter 3</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>of this Report to the Mayor.</p> <p>In addition to the direct mailing TfL also distributed 2,000 information leaflets to each London borough to be placed in public places, such as libraries.</p>
16.02	Inadequate consultation	London Recycling Ltd	Many small businesses are hard to reach in terms of consultation and may not be aware of the potential impact the LEZ would have on their businesses. Small and medium enterprises may well not be properly represented in the responses TfL receives.	<p>See consideration – 16.01</p> <p>In addition TfL commissioned Ipsos MORI, a market research company, to undertake an attitudinal survey of businesses and the public to provide a representative sample of the opinions of Londoners, London businesses and transport operators who drive within Greater London.</p>
16.03	Inadequate consultation	Commission for Racial Equality	TfL should have arrangements in place for assessing and consulting on the likely impact of the proposed policies on the promotion of race equality.	<p>TfL undertook an initial high level equalities impact assessment of the draft Strategy Revisions to assess the extent to which racial groups would be affected by the LEZ proposal, in line with the requirements of TfL's Race Equality Scheme. This assessment showed that there would be no expected differential impacts on particular racial groups.</p> <p>Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would undertake a further equalities impact assessment before making a Scheme Order which would set out the detail of the proposed Scheme.</p>
16.04	Inadequate consultation	Musgrave Budgens - Londis	Do not consider that survey response documents are an appropriate method of response as the questions are too biased to obtain a measured response rather than a free and fair consideration of opinions.	<p>See consideration – 16.02</p> <p>TfL does not consider that the consultation questionnaire contained leading questions. For each question asked, respondents had a range of options to</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>choose from in order to best reflect their opinion. In addition, the questionnaire had two free-form text boxes for respondents to add any additional comments on the proposals and the leaflet also invited respondents to submit additional information to the free post address if they did not consider the free-form text boxes provided adequate space for their response.</p>
16.05	Inadequate consultation	London Borough of Barnet	<p>Disappointed that TfL failed to engage properly with the ALG in developing a London wide response to the problems of air pollution. There is a sense that TfL wish to take forward this scheme on their own rather than reaching consensus with all parties. TfL should place the current proposals on hold and enter into further discussions with the boroughs, the FTA, RHA and other interested parties to identify a way forward which will achieve consensus rather than division.</p>	<p>TfL has kept stakeholders closely informed throughout the development of the LEZ proposals, and has held regular meetings with stakeholders, including the Association of London Government, the Freight Transport Association and the Road Haulage Association, in addition to sending out the detailed consultation information to over 1,000 stakeholders. During the consultation TfL met with over 100 stakeholder groups. Views of stakeholders have been carefully considered, and will continue to be so in the future development of the LEZ should the Mayor approve the Strategy Revisions.</p>
16.06	Insufficient information	London Borough of Merton	<p>The consultation document does not cover the boundary/congestion effect that the LEZ may have, for instance, would vehicles not willing to pay the charge chose to drive around the boundaries to avoid being 'penalised' through the charge? How is this problem going to be addressed? Although with the Congestion Charge this problem did not significantly materialise, it nevertheless needs to be taken into account.</p>	<p>TfL has considered in depth an appropriate location for the LEZ boundary. This has been reviewed to ensure the zone boundary will be at locations where drivers of non-compliant vehicles that do not want to enter the LEZ could divert to other suitable roads. TfL has been careful to ensure that the location of the boundary does not increase the number of heavy vehicles using unsuitable roads, such as some country lanes.</p> <p>Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would consult on the detail of the proposal, including issues relating to the precise</p>

No.	Sub theme	Respondent	Representation	TfL Response
16.07	Insufficient information	London Development Agency	Further information would be needed to understand how the scheme will be applied to the small sections of the M25 that fall within Greater London and any impacts on local businesses.	location of the LEZ. No part of the M25 would fall within the proposed LEZ, as the M25 would be a major diversionary route for non-compliant vehicles avoiding the LEZ.
16.08	Insufficient information	London Borough of Hounslow	Would like to see more maps that compare like for like. The supplementary information provided compared reductions in exposures to reductions in concentrations, which do not necessarily correlate. Appreciate that 'before and after' concentration maps may not necessarily provide useful information, but would be useful to have exposure maps to compare reductions in exposures.	The maps provided in the Supplementary Information would not be expected to show a direct correlation as they show two different measures - the exposure reductions take account of both concentration reductions and population density.  Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would provide further information for stakeholders on the air quality impacts of the LEZ at Scheme Order stage.
16.09	Insufficient information	City of Westminster	Insufficient information was provided in the consultation documents on the specific assumptions on which air quality modelling was carried out, and on the range and types of outcome that might be expected from introduction of the LEZ. The maps are an incomplete series. For example, Figure 3 show the PM <sub>10</sub> and NO <sub>x</sub> situation without the proposed LEZ, but there are no maps, for comparison, showing the situation after introduction of an LEZ. Instead, there are maps in the 'Supplementary Information' document showing forecasts of reductions in PM <sub>10</sub> and NO <sub>2</sub> and others showing reductions in numbers of people exposed to objective	Annex A to the Supplementary Information showed comparisons of emissions, exceedences and population exposure with and without the proposed LEZ. TfL believes that this level of detail was appropriate for the consultation on the Strategy Revisions.  Should the Mayor decide publish revisions to the Transport and Air Quality Strategies, TfL would undertake further modelling of the air quality outcomes of the proposed LEZ, taking into account any modifications to the Strategy Revisions. TfL would consider the issues raised when developing a modelling strategy.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>levels. This has limited the usefulness of the information presented.</p> <p>There are three distinct issues: 1) emissions; 2) concentrations; 3) exposure. Whilst the LEZ is designed to reduce emissions, insufficient data has been made available as part of the consultation to enable us to understand the basis for the modelling of future concentrations of different air pollutants. It appears that the estimated numbers of people exposed to excess concentrations has been based on numbers of residents. In the Westminster context this is misleading, because residents are only a fifth of the number of people present in Westminster each day (c. 1,200,000). The consequence is that far more people will be exposed to excessive levels of air pollution in parts of Westminster than are indicated in TfL's modelling work.</p>	
16.10	Insufficient information	London Borough of Newham	It is not clear from the proposal what conditions need to be met to allow the scheme to go ahead and it is not clear from the proposal what conditions need to be met to adopt the additional controls for NO <sub>x</sub> and extending the LEZ to light goods vehicles	<p>The Mayor would make a decision on whether to proceed with the proposal for a LEZ in London, and this would be informed by the consultation on the Strategy Revisions and the technical impact assessments that have been carried out.</p> <p>TfL has considered both the costs to operators and the projected improvements in air quality of including the most polluting, heavier LGVs in the LEZ. On the basis of this analysis, TfL recommends that heavier LGVs be included in the LEZ from 2010.</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>NO<sub>x</sub> abatement technology is still evolving and testing is also a complex process, requiring sophisticated on-board diagnostic equipment to be built into the vehicles. Implementing a NO<sub>x</sub> emission standard is dependent on a certification mechanism, standards for the fitting and testing of retro-fit NO<sub>x</sub> abatement equipment and a register of retrofitted vehicles being in place nationally - this is not yet the case. TfL is continuing to work with pollution abatement equipment industry and the DfT to determine the feasibility of implementing a NO<sub>x</sub> standard. Any proposed NO<sub>x</sub> standard, if implemented, would be subject to a full scheme order consultation and allow sufficient lead time for vehicle operators to comply with the standard.</p> <p>Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies, TfL will further consult on the detail of the scheme, including on the vehicles to be included and the emission standards.</p>
16.11	Insufficient information	Federation of Small Business	TfL's approach is to implement a system whereby Heavy Goods Vehicles (HGVs) over 3.5 tonnes entering the 32 London Boroughs and the City of London, who did not meet emission level Euro III by 2008 and Euro IV by 2010, are penalised by way of a charge. The consultation fails to mention the exact level of the daily charge and the non-compliance fine.	<p>The possible range of levels of the daily charge and penalty charge were outlined in the Supplementary Information document, which was sent to all stakeholders along with the draft Strategy Revisions and the Executive Summary of the Strategic Environmental Assessment. This document was also available to the public and other organisations via TfL's website or by calling the operator helpline.</p> <p>The document made clear that TfL is considering a range of possible levels of charge and penalty charges. The proposed ranges are between £100 and £200 for</p>

No.	Sub theme	Respondent	Representation	TfL Response
				<p>the daily charge and between £500 and £1,000 for the penalty charge. These ranges were chosen because they provide a direct economic incentive to all but the most infrequent visitors to the LEZ to make their vehicles compliant.</p> <p>Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies, TfL will further consult on the detail of the scheme, including on the levels of the daily charge and the penalty charge.</p>
16.12	Insufficient information	Surrey County Council	Understand from the papers supplied that the proposed London LEZ would have a beneficial impact on NO <sub>x</sub> and PM <sub>10</sub> emissions in the areas surrounding London, such as Surrey, but would like to have sight of the detailed technical evidence that demonstrates this.	Analysis undertaken for TfL estimated that between 49,000 to 65,000 of the vehicles that operate in London would not meet the proposed emission standard for 2008. From the results of a survey of operators undertaken for TfL in 2005, it is estimated that in 2008, whilst around 13,000 non complaint vehicles would be displaced outside of London, some 16,000 cleaner vehicles would operate outside London which would not be cleaner without the proposed LEZ. This is a net benefit of around 3,000 cleaner vehicles being used outside of London.
16.13	Insufficient information	Kent County Council	The air quality modelling has been undertaken for the Greater London area, but not the neighbouring Counties this is particularly important due to its trans-boundary nature. Would like to see this modelling work undertaken over a wider area so the full impact can be assessed.	The modelling to inform the public and stakeholder consultation on the draft revisions to the Mayor's Transport and Air Quality Strategies focussed on the impact of the LEZ on emissions, exceedences and population exposure within Greater London. However, should the proposed LEZ be implemented, the monitoring of traffic and air quality would be both within London and outside of London, in order to isolate the LEZ from wider variations. The monitoring reports would be made available to the public and stakeholders.

No.	Sub theme	Respondent	Representation	TfL Response
16.14	Insufficient information	London Borough of Hammersmith and Fulham	Unfortunately, it is very difficult to assess the viability of the LEZ on the basis of the costs of implementation versus the health benefits achieved as these potential costs and benefits are spread over such a large range (with potential differences of more than £100 million for various cost and benefit scenarios). This makes it extremely difficult to fully endorse the proposed LEZ based on the information provided at this stage and it should therefore be a priority for TfL to consider further the various environmental, health, economic etc costs and benefits before the final decision of whether or not to proceed with a Scheme Order is made. For example, one issue that should be looked at is the estimated cost for vehicles owners in cleaning up existing or buy cleaner vehicles. It may be useful to break these figures down for assessment as, regardless of whether or not the LEZ is introduced, there will be costs incurred over the next 10 years through the purchase of new vehicles.	Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would undertake further environmental, health and economic impact assessments to inform the consultation on the detail of the scheme.
16.15	Insufficient information	Association of London Government	The range of possible costs to operators was not made clear in the public information leaflet, making it difficult for the public to respond from an informed position.	See consideration – 16.14.
16.16	Insufficient information	London Borough of Wandsworth	The consultation leaflet that has been produced, and will be the only document that most members of the public will read, omits any information on the costs of the scheme. Neither does the leaflet indicate that the same	See considerations above. TfL considers that the quality of information provided to stakeholders and the public in the Draft Strategy Revisions, the Supplementary Information, the consultation information leaflet, the Strategic Environmental

No.	Sub theme	Respondent	Representation	TfL Response
			<p>gains will be provided through the natural improvement of the transport fleet, albeit over a longer time period and, indeed, fails to quantify the disappointing level of the improvements or state that National Air Quality Standards will not be achieved. The general questions in the consultation invite a positive response as they in effect seek confirmation that there is a public desire for better air quality. They do not invite comments on whether the costs of the scheme justify its implementation. On this basis the consultation is flawed, as many respondents will not be provided with full information on which to base their judgements.</p>	<p>Assessment and the Health Impact Assessment, all of which were freely available on TfL's website, was of a high level and adequate enough to base an informed decision on the LEZ proposal.</p>
16.17	Insufficient information	London Borough of Hammersmith and Fulham	<p>The impact of the LEZ is an additional cost to make sure a higher emission standard is reached. It is possible that the additional costs are less than currently presented. Also, in terms of the cost-benefit assessments, has the possibility of fines being imposed via the EU for non-compliance with air quality objectives been factored in? If the health benefits could be maximised and the implementation costs (including costs for cleaning up vehicles) minimised, then the scheme would appear to be more acceptable.</p>	<p>The risk of EU fines is one of the drivers for the LEZ proposal. If pollutant limit values are not achieved within the specified timeframe, the EU would take into account any steps that have been taken towards achieving the targets and allow deferral of achievement of the target if satisfied that sufficient steps had been taken. The LEZ is a key initiative to demonstrate significant commitment to achievement of air quality objectives. In the absence of a LEZ, the risk that the EU would impose fines is significantly increased. It should also be noted that road transport contributes around half of total emissions of PM<sub>10</sub> so achievement of air quality targets also needs to consider these other sources. The Mayor has very limited powers in relation to emissions of controlled pollutants from non-road transport sources.</p>

No.	Sub theme	Respondent	Representation	TfL Response
16.18	Insufficient information	London Borough of Hammersmith and Fulham	It is unclear from the new proposals put forward and from the additional information provided, what action, if any, the GLA/TfL expects from London Boroughs and other neighbouring authorities in support for the scheme both prior to its introduction and as part of its implementation. Clearer guidance on this, either as part of the Transport and Air Quality Strategies, or in separate guidance would be welcomed.	<p>TfL considers that the most appropriate means of implementation for the proposed LEZ is by a Scheme Order under the GLA Act 1999. This approach would achieve the best balance between the costs of the scheme and health and air quality benefits and would be simpler to implement than by a TRO.</p> <p>TfL does not propose requiring any action from London boroughs or local authorities contiguous to London in relation to the implementation or enforcement of the proposed LEZ. The costs of setting up and enforcing the LEZ will be met entirely by TfL.</p> <p>It is proposed that the LEZ would be enforced using ANPR cameras, similar to those used for Congestion Charging, and that signs alerting drivers to the LEZ would be erected on roads at the boundary of Greater London. TfL would work with local authorities to ensure appropriate placement of signs and cameras so as not to negate the amenity of the local streetscape.</p>
16.19	Insufficient information	London Borough of Hammersmith and Fulham	The issue of the LEZ Scheme Order preventing any borough to introduce their own charging scheme to run at the same time is unlikely to impact on this borough and it is presumed that the levy of parking charges for on-street parking is not affected in any way. However, clarification from TfL of the possible implications in this respect would be welcomed.	Whilst the introduction of a LEZ by means of a Scheme Order would restrict other authorities from implementing road user charging schemes, TfL would work with any authority that expressed an interest in doing so, to ensure that any scheme would be consistent with the Mayor's Transport Strategy. TfL does not consider that implementing the proposed LEZ via a Scheme Order would have any effect on boroughs levying of parking charges for on-street parking.

No.	Sub theme	Respondent	Representation	TfL Response
16.20	Insufficient information	London Borough of Hammersmith and Fulham	It is unclear how socio-economic impacts have been considered as part of the Strategic Environmental Assessment (SEA). Air quality, health, climate, biodiversity, assets, landscape and culture are specified as being included, but how have social and economic impacts been assessed? This may need to be double-checked or made clearer.	Social and economic impacts of the LEZ were determined using community profiling undertaken as part of the Health Impact Assessment which was fed into the Strategic Environmental Assessment. Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategy to allow for a London LEZ, TfL would undertake further environmental, health and economic impact assessments to inform the consultation on the detail of the proposed scheme.
16.21	Insufficient information	London Borough of Hammersmith and Fulham	Different end points for the LEZ scheme are listed are various points in the documents, in some parts 2015 is given, other 2015/16 and elsewhere 2016. Does it make any difference to any of the calculations etc presented? A single end date should be identified and used throughout for consistency.	The consultation documents analysed the health and air quality impacts for a period up to the end of 2015. However, for analysis of costs, financial years have been used. TfL does not consider that this would affect the calculations used.
16.22	Insufficient information	Association of London Government	The predictions for reductions in the areas of exceedance and populations exposures appear to be very optimistic (for both with and without the LEZ) and they do not reflect the trends that some boroughs are seeing in their monitored data. It would be useful if TfL could supply the assumptions used to carry out the air quality modelling. For obvious reasons, it is critical that the assumptions and input data for the model are realistic.	In the absence of national initiatives, a LEZ covering all of Greater London has been identified as the most effective means of reducing the emissions most harmful to health from road transport. Modelling shows that a LEZ covering an area less than Greater London would not generate sufficient health benefits as there would be a lesser incentive for vehicle operators to upgrade non-compliant vehicles. Other options such as relying on the natural vehicle replacement cycle, higher levels of Vehicle Excise Duty (VED) for more polluting vehicles, national road user charging with higher charges for more polluting vehicles, grants for retrofitting pollution abatement equipment to vehicles, scrapping of older vehicles and roadside emission testing of vehicles were considered but none of these

No.	Sub theme	Respondent	Representation	TfL Response
				are able to deliver sufficient reductions in emissions within the necessary timeframe.
16.23	Insufficient information	Road Haulage Association	Do not believe that sufficient scientifically based and proven evidence has been made available to show that the implementation of the proposed London LEZ, solely targeted at the commercial road user, would produce quantifiable improvements to the existing levels of air quality before the 2015 deadline.	The 2001 to 2003 Feasibility Study considered that a LEZ was the most effective policy available to the Mayor that could move London significantly closer towards meeting its air quality objectives. In addition, TfL commissioned independent assessments of the environmental and health impacts of the LEZ as proposed in the Draft Strategy Revisions. The Strategic Environmental Assessment and the Health Impact Assessment were made available to stakeholders and the public on TfL's website and the executive summary of the SEA was provided to stakeholders.
16.24	Insufficient information	London Borough of Richmond upon Thames	<p>Manufacturers of emissions technology when discussing these aspect rely entirely on what is described in testing as the "light duty cycle", whilst this is designed to reproduce inner city operation, it is not designed to reproduce the normal working cycle of the type of vehicle used by local authorities within London and it is unsafe to rely upon it.</p> <p>Would like further information to support the claim that including vehicles on entirely inner city operations will have an effect on the reduction of the pollutants of concern.</p> <p>Would also like further comment on the economic justification to bring forward measures that will be necessary in any case to comply with European legislation. TfL</p>	<p>Pollution abatement equipment has been successfully fitted to thousands of vehicle fleets in a range of applications, including those with adverse duty cycles, i.e. urban low speed stop/start driving. Most notable is the successful installation of particulate traps on all London Buses. With careful design and if fitted and maintained properly, only a very small percentage of abatement systems will "fail" and can work in many different vehicle applications. There are already various approved technologies available that are suitable for various vehicle types and duty cycles, such as passive and active regeneration techniques which 'burn off' or oxidise the particulate matter (or soot) accumulating in the filtration devices. Oxidation catalysts or partial-flow filters are also available for particularly difficult applications.</p> <p>The forecasts of the proposed LEZ impacts are based</p>

No.	Sub theme	Respondent	Representation	TfL Response
			<p>officers have confirmed that whilst TfL has modelled the effects before and after introduction of a LEZ that it has not modelled what will happen from the introduction of Euro IV without any intervention. It seems essential that before TfL commits to the level of spending necessary that it should know what the additional measures would bring in benefit.</p>	<p>on UK fleets and their emissions profile. They take into account the natural fleet replacement cycle, including the introduction of Euro IV vehicles.</p> <p>Furthermore, a LEZ would not be the only measure encouraging the public sector to clean up their vehicle fleets. The European Commission recently proposed a Directive which would oblige public authorities to allocate a minimum quota of 25 per cent of their annual procurement of heavy-duty vehicles (over 3.5 tonnes) to those meeting 'enhanced environmentally friendly vehicle' (EEV) standards. At present, the Commission argues, the market is not well enough developed to encourage manufacturers to bring down the unit price of cleaner vehicles and to invest in new technology. This proposal would aim to create such a market."</p>
16.25	Insufficient information	Road Haulage Association	<p>London's air quality is said to be the worst in the UK and various figures have been published regarding levels of emissions and their content, although there has not been any verifiable medical studies cited which can substantiate the claims made within the London LEZ scheme promotional material.</p>	<p>TfL commissioned a Health Impact Assessment to accompany the consultation documents and the full HIA and an executive summary were available on the LEZ area of TfL's website. The HIA aimed to identify and examine the key health outcomes of the proposed LEZ on communities, according to certain key determinants of health, such as living and working conditions. The HIA identified four positive outcomes relating to the proposed LEZ, including that improvements in air quality would contribute to improvements in respiratory and cardiovascular disease and to reducing inequalities within relatively deprived communities.</p> <p>TfL's modelling estimated the monetised health benefits of the proposed LEZ using both the more</p>

No.	Sub theme	Respondent	Representation	TfL Response
				conservative DEFRA methodology (consistent guidance provided by COMEAP) and the EU Clean Air for Europe (CAFE) methodology which takes into account a wider range of health impacts.
16.26	Insufficient information	National Grid	The option to extend to LGVs requires clarification. The LEZ proposals do not sufficiently explain what groups of vehicles will be required to comply with Euro IV in 2010 as it suggests it may apply to vehicles between 3.5 and 7.5 tonnes or lower? Would be grateful if this could be explicitly clarified.	TfL has considered both the costs to operators and the projected improvements in air quality of including LGVs in the LEZ. On the basis of this analysis TfL recommends that heavier LGVs be included in the LEZ from 2010.  From 2012, it is proposed that HGVs over 3.5 tonnes, buses and coaches would be required to comply with Euro IV emission standards for PM <sub>10</sub> .
16.27	Insufficient information	Association of International Courier and Express Services	A rigorous cost-benefit analysis needs to be applied to the scheme's first phase before any extension is considered. In addition the proposal for extending the scheme is currently lacking in sufficient detail to allow for a proper evaluation.	TfL has undertaken a cost-benefit analysis of all aspects of the proposed LEZ, including the options associated with LGVs and a NO <sub>x</sub> standard from 2010. This information was set out in the Supplementary Information document which was made available during the consultation on the Strategy Revisions.
16.28	Insufficient information	London Forum of Amenity and Civic Societies	The wording of the draft Revisions implies that the proposed LEZ is not necessarily 'the most effective option' for making progress towards achieving either the 2010 objective for annual mean concentration of PM <sub>10</sub> or the 2010 objective for annual mean concentration of NO <sub>2</sub> . Clarification is needed on this point.	In early 2005, TfL completed a review of the findings of the 2003 Feasibility Study, and concluded that there were no alternatives to the LEZ likely to achieve the same level of benefits in the same or shorter timeframe. TfL considers that the draft Strategy Revisions adequately confirm that the LEZ proposal is the most effective option for moving London towards achieving its air quality objectives.
16.29	Insufficient information	London Forum of Amenity and Civic Societies	The proposals for operating a LEZ are sensible in principle, but it is not possible to reach a final judgement on their practicability and acceptability without more detail on, for example, the amount of the charge that would	Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would undertake further consultation on detailed proposals at Scheme Order stage.

No.	Sub theme	Respondent	Representation	TfL Response
			be imposed, the number of vehicles that would be required to register, and how easily and clearly that category of vehicles can be defined.	The Supplementary Information which accompanied the draft Strategy Revisions outlined the proposed range of the daily charge and penalty charge. It is proposed that the daily charge would be between £100 and £200 and the penalty charge would be between £500 and £1000. The Supplementary Information document also provided information about the proposed certification database of compliant and non-compliant vehicles.
16.30	Insufficient information	Central London Partnership	Has concerns regarding the quality of information provided with which to base an informed response.	<p>TfL considers that the quality of information provided to stakeholders and the public in the draft Strategy Revisions, the Supplementary Information, the consultation information leaflet, the Strategic Environmental Assessment and the Health Impact Assessment, all of which were available on TfL's website, was of a sufficiently high level to allow informed decisions on the LEZ proposal.</p> <p>Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would undertake further consultation on detailed proposals at Scheme Order stage.</p>
16.31	Insufficient information	Central London Partnership	Recognise that the Feasibility Study Phase 2 first suggested the Greater London area for the zone. However, changes in cost and air quality information lead to confusion as to whether this is still the case. Would appreciate clear cost benefit analysis to back up the size of the zone in the Scheme Order proposal.	TfL has undertaken a rigorous cost-benefit analysis of all aspects of the proposed LEZ, including the options which were to be further investigated. On the basis of this analysis and the responses to this consultation, TfL recommends that heavier LGVs are included from 2010 and that the Euro IV emission standard for PM <sub>10</sub> for HGVs, buses and coaches is deferred until 2012.

No.	Sub theme	Respondent	Representation	TfL Response
16.32	Insufficient information	Association of London Government	The consultation material does not make it sufficiently clear that LGVs are being seriously considered. Question whether stakeholders' opinions can be properly canvassed without a cost-benefit analysis to inform the debate, particularly around the economic impact of including these vehicles.	The consultation documents made it clear that TfL was considering extending the LEZ to LGVs, but that a final decision would be dependent on a further analysis of the impacts of doing so. TfL has considered both the costs to operators and the projected improvements in air quality of including LGVs in the LEZ. On the basis of this analysis TfL recommends that heavier LGVs be included in the LEZ from 2010.
16.33	Insufficient information	London Borough of Lewisham	Introducing an LEZ is likely to bring forward by approximately 5 years what could happen with fleet replacement anyway. Would like clarity on what benefits and costs have been taken into account in developing the LEZ, for example, are replacement costs for vehicles that would not meet the proposed LEZ standards included?	The forecasts of LEZ impacts are based on UK fleets and their emissions profile. They take into account the natural fleet replacement cycle, including the introduction of Euro IV vehicles.
16.34	Insufficient information	Bromley Borough Roads Action Group	In favour of measures to improve air quality in London but do not believe the claimed £130 to £180 million in health benefits over the years 2008 to 2015. There is no substantiation of these figures in the report and therefore do not believe them to be likely.	Modelling undertaken for TfL by independent experts calculated the monetised health benefits of the LEZ as consulted on as being between £130 - £180 million over the period 2008 to 2015. This calculation was made using the DEFRA methodology which is consistent with the guidance given by the Committee on the Medical Effects of Air Pollution (COMEAP).
16.35	Insufficient information	Sadler Consultants	The option of Euro II plus particulate trap to meet the 2008 standard is not mentioned sufficiently clearly. If operators comply in 2008 with Euro II plus particulate trap, this will be much more beneficial in terms of emissions reductions for both PM and NO <sub>x</sub> than complying with a second hand Euro II vehicles (due to the trap giving 95% emissions reduction) and also giving cheaper	The Supplementary Information, which accompanied the Draft Strategy Revisions, outlined that any pre-Euro III HGVs, buses and coaches would be permitted to operate in the LEZ from 2008 provided they took verifiable additional action to improve emissions performance to the proposed LEZ standard.  In addition, any pre-Euro IV HGVs, buses and coaches would be able to operate in the LEZ from 2012

No.	Sub theme	Respondent	Representation	TfL Response
			compliance costs. It is also not clearly stated that Euro II plus particulate trap would meet Euro IV PM emissions.	provided they took verifiable additional action to improve emissions performance to at least Euro IV.
16.36	Insufficient information	London Borough of Camden	Concerned about the enforceability of the LEZ. The proposal is to use the same method as for the Congestion Charging Scheme, using ANPR cameras. However, the GLA administrative area is much larger than the Congestion Charge Zone, and a huge number of cameras will be needed. Would like to see a lot more information on how the scheme will be enforced and the effectiveness of the proposed enforcement.	<p>The LEZ enforcement infrastructure would be made up of a combination of the existing Congestion Charging cameras, additional fixed cameras located across the Greater London area and mobile patrol units also fitted with ANPR cameras so that operators could not just rely on avoiding the fixed cameras. Cameras will be placed on strategic routes within London making it impractical for drivers of non-compliant vehicles to avoid these on an ongoing basis.</p> <p>Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL will further consult on the detail of the scheme in late 2006.</p>
16.37	Need for operator information	Association of London Government	Considering the amount of analysis and research that has already occurred with regard to the LEZ, to hold a public consultation without making definite conclusions as to whether LGVs are to be included is not sufficient. The economic impact on small businesses could be significant compared with larger HGV-based operations, since their vehicle turnover is generally lower. LGV owners and operators need to be given certainty as soon as possible to allow for future planning.	The consultation documents outlined that TfL would be undertaking further analysis of the implications of extending the LEZ proposal to include LGVs. TfL has considered both the costs to operators and the projected improvements in air quality of including LGVs in the LEZ. On the basis of this analysis TfL recommends that heavier LGVs be included in the LEZ from 2010.

No.	Sub theme	Respondent	Representation	TfL Response
16.38	Need for operator information	City of Westminster	Support the case for further consultation being carried out about potential inclusion of LGVs from 2010, but consider that this consultation needs to take place sooner than seems to be intended. Early consultation is needed to enable the maximum lead-time for businesses to prepare for the scheme in the event that a decision is taken to include them in the LEZ, and to ensure that they will be ready for inclusion in the scheme by 2010. If this consultation were brought forward to early 2007, it would ensure that van operators should have enough time to plan for the transition, and manufacturers of pollutant reduction equipment would have more time to carry out development and testing work. Otherwise, it seems likely that the 2010 date for LGVs could not be met, and TfL modelling of air quality improvements would prove over-optimistic. Also recognise that there are some difficulties of definition of LGVs, at the boundaries, that need to be resolved at an early date to enable consultation to proceed.	See consideration – 16.37.
16.39	Need for operator information	City of Westminster	It is clear that significant guidance is being given to Taxi operators to enable them to access suitable emission reduction equipment, and that a concerted programme of air quality improvements is being implemented for bus fleets. As it stands, HGV and coach operators do not have similar sources of objective advice and assistance. We suggest that implementation of the LEZ	Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would undertake an extensive operator information campaign to provide advice and information on the LEZ proposal.

No.	Sub theme	Respondent	Representation	TfL Response
			will progress more satisfactorily if the advice of a technical support team were to be offered to operators of these types of vehicle. The same team could also advise operators of LGVs keen to bring their fleets up to date, in advance of their possible inclusion in the scheme. We ask TfL to give serious consideration to how to achieve this. Without it, private vehicle operators would be disadvantaged in comparison to those overseen directly by TfL.	
16.40	Need for operator information	London Borough of Harrow	It is important that TfL should provide sufficient publicity and advice to operators both within London and those in the UK, affected by the scheme, to alert them to what they need to do to ensure compliance.	See consideration – 16.39
16.41	Need for operator information	Masterlease	As a leasing organisation have concerns as to future resale values. In order to ascertain future cashflows, a confirmed approach to be taken will need to be communicated as swiftly as possible.	See consideration – 16.39

No.	Sub theme	Respondent	Representation	TfL Response
16.42	Need for operator information	Association of London Government	<p>Several boroughs have raised the issue that the LEZ primarily reduces exposure to particulates, with some evidence suggesting that this may be to the expense of NO<sub>x</sub> emissions. There is concern that some particulate traps, which will be used to meet the Euro Standards, are known to actually increase levels of NO<sub>x</sub>. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, which forms the basis of boroughs' work to improve air quality, does not give priority to one pollutant over any other, and therefore TfL's actions could lead to inconsistencies with the work of the boroughs through their Air Quality Action Plans. Would therefore prefer TfL to make its intentions clearer sooner, including how it will go about effectively implementing them, rather than leaving the more 'difficult' aspects of the proposed LEZ to a later date.</p> <p>Boroughs and vehicle operators need to know as soon as possible whether they need to look to meet NO<sub>x</sub> requirements, as this could have large cost implications. This would be for both those who decide to invest to meet the PM<sub>10</sub> requirements only, and then find they have to retrofit for NO<sub>x</sub> later, or conversely, for those who go ahead and invest in meeting both standards to find meeting NO<sub>x</sub> targets will not be required.</p>	<p>NO<sub>x</sub> abatement technology is still evolving and testing is also a complex process, requiring sophisticated on-board diagnostic equipment to be built into the vehicles. Implementing a NO<sub>x</sub> emission standard is dependent on a certification mechanism, standards for the fitting and testing of retro-fit NO<sub>x</sub> abatement equipment and a register of retrofitted vehicles being in place - this is not yet the case. Whilst there has been some success in fitting NO<sub>x</sub> abatement equipment to London Buses and Black Cabs, there remain too many unresolved issues to consider a NO<sub>x</sub> standard in the LEZ at this stage.</p> <p>TfL is continuing to work with pollution abatement equipment industry and the DfT to determine the feasibility of implementing a NO<sub>x</sub> standard. Any proposed NO<sub>x</sub> standard, if implemented, would be subject to a full scheme order consultation and allow sufficient lead time for vehicle operators to comply with the standard.</p>

No.	Sub theme	Respondent	Representation	TfL Response
16.43	More research/modelling work needed	Regional Public Health Group - London	Should the LEZ proposal go forward, the economic impact on the health sector should be modelled to inform decisions about the impact of the proposal. The health sector in London is supported by a range of transport infrastructure, including ambulances, patient transport and service support transport.	Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would undertake further assessments of the impacts of the LEZ on the economy and health at Scheme Order stage.
16.44	More research/modelling work needed	Tower Hamlets PCT	Research commissioned by TfL around lives saved by the implementation of the LEZ is to be commended. Nonetheless, these figures should be considered to be conservative. DEFRA health benefit methodology relates only to major impacts of air pollution therefore would urge use of the EU Clean Air for Europe methodology, which attempts to capture some of the wider health benefits. Also, there is a need for research around a broad range of pollutants, for example fine and super fine particles, multi-pollutant models using NO <sub>x</sub> as a better marker for traffic generated pollutants than NO <sub>2</sub> , and epidemiological studies on susceptible population subgroups which would enable a more accurate picture of the effects of traffic emissions upon health.	TfL notes the issues raised.  Monitoring the impact on health of the LEZ is partially based on the methodology used by Defra in its Air Quality Strategy and the EC's Clean Air For Europe (CAFE) methodology, which attempts to take into account a wide range of health effects of poor air quality, such as hospital admissions for respiratory disease. This methodology is under review and TfL will make use of the most up to date information to ensure health impact monitoring is as robust as possible, and attributable to the LEZ.

No.	Sub theme	Respondent	Representation	TfL Response
16.45	Other consultation issues	The Guild of British Coach Operators Ltd	Believe that buses and coaches are being targeted unfairly, because they are seen as an easy target and a target that will appeal to the public rather than being a solution that looks at all transport related sources of pollution. This is confirmed by the thrust of the public consultation (including the advertising), which seems biased towards a particular answer. The provocative headline <i>"Hands up if you want to cut down pollution from heavy goods vehicles, buses and coaches"</i> is clearly going to generate an overwhelming "yes" (in the same way that turkeys would vote "no" in favour of Christmas) whereas an unbiased consultation would simply ask <i>"Hands up if you want to cut down pollution from traffic"</i> .	<p>TfL does not consider that the information leaflet or advertising used during the consultation on the draft Strategy Revisions was biased.</p> <p>In addition TfL commissioned Ipsos MORI, a market research company, to undertake an attitudinal survey of businesses and the public to provide a representative sample of the opinions of Londoners, London businesses and transport operators who drive within Greater London.</p>
16.46	Other consultation issues	London Borough of Enfield	All reasonable attempts must be made to address the key issues raised by the freight industry to the best possible extent and a detailed explanation should be provided where any of the industry's concerns cannot be accommodated in the process of implementation.	<p>TfL has met with and actively engaged the freight industry throughout the development of the LEZ proposals. Furthermore, as outlined in Chapter 3 of this document, TfL met with freight and road haulage representative organisations throughout the consultation period. TfL has carefully considered the concerns raised by the freight industry in their representations to this consultation and some modifications have been recommended as a result. Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL would make a Scheme Order setting out detailed scheme proposals. At that stage, there would be a further round of public and stakeholder consultation including both individual operators and</p>

No.	Sub theme	Respondent	Representation	TfL Response
				other representatives of the freight industry.
16.47	Other consultation issues	London Borough of Ealing	Concerned that indication is given by TfL on whether or not the LEZ will be extended to include LGVs and a NO <sub>x</sub> emission standard in 2010 early enough so that future vehicle purchasing and leasing decisions are properly informed.	TfL acknowledges that operators and businesses must be given adequate lead in time to prepare for the proposed LEZ. For this reason, based on the outcomes of this consultation and further consideration of the issues, TfL recommends that heavier LGVs be included in the scope of the LEZ from 2010. TfL also recommends that a NO <sub>x</sub> emission standard is deferred until a certification mechanism, standards for the fitting and testing of retro-fit NO <sub>x</sub> abatement equipment and a register of retrofitted vehicles are in place nationally.
16.48	Other consultation issues	British Association of Removers	Proposals for any further future developments need to be clearly defined now to allow operators to plan for future needs or maybe consider moving to different weight category vehicles. Understand, for example, that even higher standards (Enhanced Environmental Standards, tougher than Euro V) may apply to some public service vehicles.	Should the Mayor decide to publish the revisions to his Transport and Air Quality Strategies to allow for a London LEZ, TfL will further consult on the detail of the scheme in late 2006.
16.49	Other consultation issues	London Borough of Hammersmith and Fulham	In 2004, the ALG sponsored a fleet survey for each London Borough. Consideration should be given to launching another round of fleet audits.	TfL conducted a detailed operator survey in 2005, which is to be repeated in 2006. TfL would be interested in working with the ALG to explore the possibilities of running a borough fleet survey.

## THEME 17 OLYMPICS

No.	Sub theme	Respondent	Representation	TfL Response
17.01	Issues relating to 2012 Olympics	London Borough of Lewisham	With the coming of the London Olympics there will be major demand for construction vehicles including small vans and the early implementation of the LEZ may inhibit the ability of those businesses based outside London to come in to London to undertake work to be done. This may also impact on borough residents who need, for example, to have electrical work carried out if there is a shortage of electricians inside London but a contractor based in, say, Sevenoaks, cannot bring his van in.	<p>In terms of construction, the Olympic sites will be regulated by the London Code of Practice, which would require construction vehicles to meet certain emissions standards.</p> <p>The Mayor wants the London 2012 Olympics to be the cleanest ever. It would be possible for the large majority of coaches and HGVs to be fitted with pollution abatement equipment to enable LEZ compliance.</p>
17.02	Issues relating to 2012 Olympics	British Association of Removers	The timing of the introduction - during the lead up to the 2012 Olympic Games in the UK - will deny many operators the chance of obtaining part of the huge transport opportunities that will inevitably be created in the Capital.	See consideration – 17.01.
17.03	Issues relating to 2012 Olympics	The Guild of British Coach Operators Ltd	Believe that the proposals fail to recognise the value that coach tourism plays to the economy in London and how coaches enable large groups to use the congested road space in the most efficient way. Would TfL rather have one coach carrying 45-50 passengers or 10 or more cars carrying the same number? Yet the impact of the LEZ as proposed could be to reduce the number of coaches entering London, with the passengers using other, more polluting, forms of transport instead - clearly this would be counter-productive. This	See consideration – 17.01.

No.	Sub theme	Respondent	Representation	TfL Response
			<p>would be particularly unfortunate when London stages the Olympics as that event is predicated on the use of public transport in preference to private cars. If the LEZ standards are set at too high a level, then there will not be sufficient coaches able to operate into Greater London to take spectators to the Olympics.</p>	
17.04	Issues relating to 2012 Olympics	Constant Consultancy	<p>The proposal to raise the standard in 2010 to Euro IV seems nonsensical when you consider that the standard will only become mandatory this October. Not only would such a requirement be unfair on operators, it may produce an own goal as most vehicles likely to be used for the construction of the Olympic facilities will probably not comply with Euro III let alone Euro IV.</p>	<p>See consideration – 17.01.</p> <p>Feedback from operators and manufacturers is that the 2010 standard will be expensive and impractical for operators to achieve. For a range of reasons, including that many types of Euro IV vehicle are not yet available, operators are currently replacing their fleets with Euro III and there is a concern that under the proposed LEZ core scheme of Euro IV for PM<sub>10</sub> in 2010 they would have a maximum of four years before they need to modify or replace their vehicles. To address this issue TfL is recommending moving implementation of the Euro IV standard for PM<sub>10</sub> back to 2012. Whilst this would lead to smaller air quality and health benefits resulting from a reduction in emissions from heavier vehicles, it would significantly reduce compliance costs to operators, and make the scheme more acceptable. .</p> <p>Off-road vehicles would not be covered by the LEZ.</p>

## THEME 18 OTHER

No.	Sub theme	Respondent	Representation	TfL Response
18.01	Other Issues	London Borough of Lambeth	The GLA Act provides that 'a road shall not be subject to charges imposed by more than one charging authority at the same time'. Since the LEZ will cover the entire Greater London area, this would mean that only TfL could run additional charging scheme in future. It is unlikely that Lambeth would seek to set up a further charging scheme unilaterally.	While the introduction of a LEZ by means of a Scheme Order under the GLA Act 1999 would restrict other authorities from implementing road user charging schemes, TfL would work with any authority that expressed an interest in doing so and would consider making an Order implementing such a scheme, as long as it was consistent with the Mayor's Transport Strategy.
18.02	Other Issues	Association of London Government	Concerned that the GLA Act 1999 states under Clause 9 (4) of Schedule 23 that "A road shall not be subject to charges imposed by more than one charging authority at the same time", which means no borough can introduce a charging scheme in the future, should it want to (since the LEZ will cover the whole of Greater London). Would therefore prefer to see a TRO used as the legal mechanism for the proposed LEZ, which can be developed in partnership with the boroughs.	See consideration – 18.01.
18.03	Other Issues	London Borough of Hounslow	The GLA Act 1999 states under Clause 9 (4) of Schedule 23 that "A road shall not be subject to charges imposed by more than one charging authority at the same time". This means that no borough could introduce a charging scheme in the future, should it want to (since the LEZ will cover the whole of London and therefore only TfL could run any future schemes). This point needs to be	See consideration – 18.01.

No.	Sub theme	Respondent	Representation	TfL Response
			clarified.	
18.04	Other Issues	London Borough of Barnet	Are concerned by the proposal to implement the LEZ through a scheme order. This would preclude the possibility of the Council introducing its own schemes through the same mechanism.	See consideration – 18.01.
18.05	Other Issues	London Borough of Richmond upon Thames	It is understood that the GLA Act 1999 states under clause 9 (4) of Schedule 23 that 'A road shall not be subject to charges imposed by more than one charging authority at the same time', which will mean that no borough could introduce a charging scheme in the future, should it want to as the LEZ would apply to the whole of London. Considers that this clause places a fairly significant restriction on the ability of the Council to impose charges of its own, both now and in the future. Whilst the reality is that the Borough has no plans at present to introduce any form of road user charges, it does prevent the Borough from imposing alternative methods to fund road maintenance and improvement in the future should it see fit to do so. It is agreed that two charging authorities shouldn't be permitted to charge for the same type of scheme but it is debateable as to whether the GLA Act provisions should remove the ability of other authorities (e.g. Boroughs) to impose charges for different schemes (e.g. local congestion charging schemes). It is considered that thought needs to be given to a review of the	See consideration – 18.01.

No.	Sub theme	Respondent	Representation	TfL Response
			Act to enable road charging from different charging authorities.	
18.06	Other Issues	London Borough of Hammersmith and Fulham	It is unclear what would happen if one or more boroughs disagreed with the LEZ proposals. This could be problematic particularly if boroughs in strategically important locations opposed the LEZ. Is there a clear course of action that would be taken in such circumstances?	TfL proposes implementing the LEZ via a Scheme Order under the GLA Act 1999. This was considered to be a simpler and quicker way to implement the LEZ than other means such as by a Traffic Regulation Order jointly undertaken on behalf of the London boroughs and TfL. TfL is working closely with London boroughs and, should the Mayor decide to proceed with the next stage of the proposed LEZ, will consult further with London boroughs, other stakeholders and the public on the detail of the scheme. However, legally, there would be no obligation for boroughs to be involved in the implementation or running of the LEZ. Therefore, TfL does not consider it problematic should any borough oppose the LEZ.
18.07	Other Issues	Thames Gateway London Partnership	One implication of the LEZ could be the premature scrapping of older vehicles which could otherwise have continued in useful service. This presents a potential waste of resources, including energy.	<p>TfL has not considered this in its modelling to date as it is not expected to have a significant impact on results. It would also be extremely difficult to attribute any change associated with vehicle manufacture to the LEZ. The number of vehicles likely to be scrapped as a result of the LEZ is potentially very small.</p> <p>The European Commission has adopted a Proposal for a Directive which aims at making vehicle dismantling and recycling more environmentally friendly, sets clear quantified targets for reuse, recycling and recovery of vehicles and their components and pushes producers to manufacture new vehicles also with a view to their recyclability.</p>

No.	Sub theme	Respondent	Representation	TfL Response
18.08	Other Issues	MARSHopper Ltd	A few years ago there was a move by a central European country to impose an age limit of 10 years on coaches travelling to or through their country. This was deemed to be contrary to the EU Directive on the freedom of movement of people and goods throughout the EC. The proposed LEZ may also be viewed in the same light.	The proposed LEZ does not seek to ban vehicles from London but to impose a substantial charge on those diesel-engined vehicles which do not comply with the proposed emission standards, and, in doing so, provide an economic incentive to operators to upgrade their vehicles. Non-UK registered operators would also have to pay to enter the proposed LEZ if their vehicles did not comply with the proposed emission standards. TfL is also working closely with the EU to ensure that the LEZ falls within EU regulations. TfL does not consider that the proposed LEZ will be contrary to any EU Directive.