

# GREATER LONDON AUTHORITY

## REQUEST FOR MAYORAL DECISION – MD2186

### Title: Commencement of the Central London Ultra Low Emission Zone in April 2019

#### Executive Summary:

TfL undertook a consultation between 4 April and 25 June 2017 on proposals to (i) bring forward the start date of the Ultra Low Emission Zone ("ULEZ") in central London to 8 April 2019, 17 months earlier than it was due to begin (ii) amend ULEZ emissions standards to include a standard for particulate matter emissions from diesel vehicles and (iii) provide a facility for customers to make payments by "App". TfL made a "Variation Order" on 30 March 2017 to implement these changes, which requires Mayoral confirmation to take effect. TfL has analysed the consultation responses and presented them in a Report for the Mayor's consideration, with the recommendation that it is confirmed with three modifications not covered by the consultation: (a) to strengthen the standard for TfL buses to Euro VI in line with other vehicles, (b) to allow TfL to specify accepted payment channels on its website, and (c) to provide for the advance purchase of licences ("the ULEZ charge") only after the start of the ULEZ on 8 April 2019, to allow for system testing. This Form asks the Mayor to decide whether or not to confirm the Variation Order (with or without modification).

#### Decision:

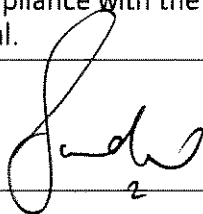
The Mayor:

- 1) Having considered the responses to the consultation proposals, including in particular those relating to the contents of the Variation Order (at Appendix A) and having regard to and taking into account the following: the Integrated Impact Assessment prepared in relation to the consultation proposals (contained within the Consultation & Information Document and Appendices, attached as part of Appendix B), the Variation Order; and TfL's Report to the Mayor on the consultation, contained at Appendix B, which includes TfL's consideration of the responses made, and the recommendations as to modifications to the Variation Order and responses (if any) that were received after TfL completed its report, and which have been provided to the Mayor;
- 2) Having considered the content of, and advice given in, this Form in particular, regarding the various matters for decision, including whether further information is required before making a decision and whether further consultation, or the holding of any inquiry, public or otherwise, is necessary or appropriate before making a decision; and being satisfied regarding these and other relevant matters;
- 3) Confirms the Greater London Low Emission Zone Charging (Variation and Transitional Provisions) Order 2017 with the modifications recommended by TfL in response to the consultation.

#### Mayor of London

I confirm that I do not have any disclosable pecuniary interests in the proposed decision, and take the decision in compliance with the Code of Conduct for elected Members of the Authority. The above request has my approval.

Signature:



Date:

2/11/17.

## PART I - NON-CONFIDENTIAL FACTS AND ADVICE TO THE MAYOR

### Decision required – supporting report

#### 1. Introduction and background

##### Introduction

London suffers from poor air quality and in some areas, it exceeds legal limits on concentrations of Nitrogen Dioxide (NO<sub>2</sub>). This Form concerns the third stage (Stage 3a) of consultation that took place between 4 April and 25 June 2017 on further intervention to help address the situation, which is part of a series of consultations on the Mayor's proposals to tackle London's poor air quality. The consultation concerned the Mayor's proposals ("the consultation proposals") for:

- introducing the central London "Ultra Low Emission Zone" ("ULEZ") on 8 April 2019, 17 months earlier than it was due to begin;
- An alteration to the transitional provisions to bring forward the end date of the sunset period for residents and disabled vehicles;
- amending the ULEZ emissions standards to include a standard for particulate matter (PM) emissions from diesel vehicles as currently the standards only relate to oxides of nitrogen (NOx) emissions; and
- providing a facility to pay the ULEZ and LEZ charges by "App", in line with payments for the Congestion Charge.

A Consultation and Information Document ("the C&I Document", included as part of **Appendix B**) was published by TfL on 4 April 2017. It contained detailed information on the above proposals as well as a Variation Order<sup>1</sup> (at **Appendix A**) to implement the necessary changes to the statutory Scheme Order that establishes the ULEZ<sup>2</sup>. The C&I Document contained an Integrated Impact Assessment (IIA) of the likely significant impacts if the above consultation proposals were to be implemented (this was Appendix H of the C&I Document). TfL has analysed the consultation responses, and other public and stakeholder engagement, and prepared a report for the Mayor's consideration ("the Report to the Mayor"/"RTM", attached as part of **Appendix B**).

The Stage 3a consultation ended on 25 June 2017. The purpose of this Form is to enable the Mayor to decide whether or not to confirm the Variation Order (with or without modifications) that will implement the consultation proposals. This Form should be read in conjunction with the C&I Document and the RTM.

A further stage of consultation (Stage 3b), is planned for November 2017 on proposals to apply ULEZ emissions standards and charges to heavy vehicles Londonwide in 2020 and to expand the geographical area of the Zone to Inner London in 2021 to cover all vehicles, by the addition of light vehicles in 2021.

##### Background

The objective of the Mayor's consultation proposals is to significantly improve air quality in London, in particular with regard to NO<sub>2</sub> and Particulate Matter (PM). Both pollutants have an adverse effect on human health. At high concentrations, NO<sub>2</sub> causes inflammation of the airways. Long-term exposure is associated with an increase in symptoms of bronchitis in asthmatic children and reduced lung function growth. Long term exposure to PM contributes to the risk of developing cardiovascular and respiratory diseases, as well as of lung cancer. Research shows that particles with a diameter of ten microns and smaller (PM<sub>10</sub>) are likely to be inhaled deep into the respiratory tract. The health impacts of particles with a diameter of two-and-a-half microns and smaller (PM<sub>2.5</sub>) are especially significant, as smaller particles can penetrate even deeper. Significant improvements have been made over recent years so that London is now broadly compliant with legal limit values for PM, however, ongoing reductions are needed (especially for PM<sub>2.5</sub>) to further protect (or improve) human health. It is estimated that road transport will be responsible for 38 per cent of NOx, which

---

<sup>1</sup>The Greater London Low Emission Zone Charging Scheme which is contained in the Schedule to the Greater London Low Emission Zone Charging (Variation and Transitional Provisions) Order 2017

<sup>2</sup> The Greater London Low Emission Zone Charging Order 2006 (as amended)

forms additional NO<sub>2</sub> (see below), and 22 per cent of PM<sub>10</sub> emissions in London in 2020 if no further intervention is made.

The extent of the negative effects of air pollution on health depends on an individual's level of exposure and other conditions they may be vulnerable to, or suffering from. Knowledge in this area is continually increasing as research progresses. As the C&I Document sets out, air pollution is one of the most significant challenges facing the Capital, with the equivalent of over 9,000 deaths per year attributed to air quality related illnesses in 2010. A baby born in London in 2010, who was exposed to 2010 air quality levels for its entire life, would see its life expectancy reduced by 2.2 years (if male) and two years (if female). In addition to the long-term impacts, NO<sub>2</sub> is proven to have a dramatic effect on the development and function of the lungs in the young. A six-year study found that children living in highly polluted parts of London have up to 10 per cent less lung capacity than normal.<sup>3</sup> Air pollution also causes birth defects. A 2013 study in California showed that, for women with the highest NO<sub>2</sub> exposure, the risk of having a pregnancy affected by an encephaly (where babies are born missing part of the brain and skull), was nearly three times greater than for women with the lowest exposure.<sup>4</sup> Further information about their health impacts is contained at Chapter 2 of the C&I Document.

London is now considered compliant for all but one air pollutant for which legal limit values are set: NO<sub>2</sub>. The vehicle exhaust emission that gives rise to NO<sub>2</sub> is NO<sub>x</sub>, which is made up of both Nitrogen Oxide (NO) and NO<sub>2</sub>. NO<sub>x</sub> forms additional NO<sub>2</sub> by reacting with Ozone (O<sub>3</sub>) in the atmosphere. Emissions from road transport are a major contributor to poor air quality in London. In 2013, they accounted for 51 per cent of all NO<sub>x</sub> sources in London<sup>5</sup>. All vehicles contribute to poor air quality, but the magnitude of this contribution varies by vehicle type, the fuel used and the mileage travelled. Another consideration is the number of vehicles in use. For example, cars emit less per vehicle than heavy goods vehicles, but are much more numerous. Diesel cars, TfL buses and taxis are significant contributors to NO<sub>x</sub> emissions. This is explained by their high mileage in central London and their use of diesel engines, which have higher NO<sub>x</sub> emissions than petrol equivalents.

Analysis carried out on behalf of the GLA and published in 2016<sup>6</sup> shows the health effects of air pollution are seen disproportionately in the most vulnerable and deprived communities. Among the top 10 per cent of London's most deprived areas, half have NO<sub>2</sub> levels exceeding legal limit values. For the 10 per cent least deprived areas, only one per cent experience illegal NO<sub>2</sub> concentrations.

In October 2017, new analysis was published indicating that every single Londoner lives in areas exceeding World Health Organization (WHO) guidelines for PM<sub>2.5</sub> concentrations and that roughly 95 per cent of Londoners live in areas exceeding this limit by 50 per cent<sup>7</sup>.

Therefore, although the Mayor has a duty to help achieve the legal limit values for air pollutants in Greater London, poor air quality should be tackled not simply for environmental reasons, but also for its public health benefits, and as a social justice issue for vulnerable people, particularly given the high number of schools, hospitals and care homes in areas most affected by air pollution.

### Legal limits and London's Air Quality

The Air Quality Standards Regulations 2010 set legal limits (called 'limit values') for concentrations of pollutants in outdoor air. These limits are based on European Union (EU) directives<sup>8</sup>, and will remain in force regardless of the UK leaving the EU as they also exist in UK regulations (unless later amended or repealed).

Table 3 in the C&I Document summarises the limit values for NO<sub>2</sub> and PM (PM<sub>2.5</sub> and PM<sub>10</sub>) and whether compliance has been achieved in London. The Department for Environment, Food and Rural Affairs (Defra)

<sup>3</sup> [sro.sussex.ac.uk/56496/](http://sro.sussex.ac.uk/56496/)

<sup>4</sup> [med.stanford.edu/news/all-news/2013/03/air-pollutants-linked-to-higher-risk-of-birth-defects-researchers-find.html](http://med.stanford.edu/news/all-news/2013/03/air-pollutants-linked-to-higher-risk-of-birth-defects-researchers-find.html)

<sup>5</sup> London Atmospheric Emissions Inventory (LAEI) 2013

<sup>6</sup> [www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/analysing-air-pollution-exposure-london](http://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/analysing-air-pollution-exposure-london)

<sup>7</sup> <https://data.london.gov.uk/dataset/pm2-5-map-and-exposure-data>

<sup>8</sup> Ambient Air Quality Directive (2008/50/EC) and Directive 2004/107/EC

has reported PM compliance limits for 2015 across England and Wales, with most 'non-reportable' sites<sup>9</sup> in London falling below the limit values. However, there are no safe limits for PM<sub>2.5</sub> which is more damaging to health than PM<sub>10</sub>. Health evidence suggests that further emissions reductions, will bring about improvements in health for Londoners. Without further action, there is the prospect of PM<sub>2.5</sub> emissions increasing if traffic levels rise. Crucially, large sections of the Capital continue to exceed both the annual mean and hourly limit values for NO<sub>2</sub> and this is likely to continue beyond 2020 without further intervention. Therefore, more action needs to be taken.

London is now broadly compliant with legal limits for PM. However, further reductions are needed (especially to PM<sub>2.5</sub> levels) to protect human health. Annual average PM<sub>10</sub> concentrations are considered within the legal limits, however modelling (Figure 9 in the C&I Document) still predicts some hotspot locations where the daily average value for PM<sub>10</sub> is exceeded (for example kerbside at some junctions in central London, or within the road space itself). Annual mean concentrations of PM<sub>2.5</sub> are also well within the legal limit value of 25µg/m<sup>3</sup>. Although compliance has officially been achieved, by reducing PM concentrations even more, the health benefits will be even greater.

In contrast, annual average NO<sub>2</sub> concentrations still exceed the legal limit across much of inner London, as well as in the vicinity of Heathrow and near major roads in outer London see (Figure 8 in the C&I Document). Meeting the NO<sub>2</sub> limit poses a huge challenge for many cities in the UK and across Europe. One of the key reasons why ambient levels of NO<sub>2</sub> remain higher than had been previously expected is driving conditions in urban areas, and concerns over the under-performance of the more recent Euro emissions standard, particularly for some diesel vehicles.

The Capital's air quality is expected to improve by 2020, although further and more urgent action is required (see Figure 8 in the C&I Document). Emissions from all sources are projected to decrease thanks to technological advances in vehicle design, as well as policies and legislation already in place to reduce emissions across London, the UK and Europe. Specifically, the roll out of a new Euro emission standard for vehicles (e.g. Euro 6/VI) is anticipated to be more successful at reducing pollutants in urban driving conditions, because on-road verification will eventually form part of the test to ensure these vehicles have reduced emissions under real world driving conditions. Testing as part of the previous Euro standards for light duty vehicles has been shown to result in higher than expected emissions in the real world because vehicles are optimised to meet emissions limits under the laboratory based testing conditions, but not in real world driving. For some vehicles, namely certain models of VW, it has become apparent that "defeat device" software has been installed to deliberately influence the test results. Evidence indicates that there are significant on road reductions in NO<sub>x</sub> in Heavy Euro VI engines, which are already subject to on-road verification as part of the test procedure. Evidence of the performance of Euro 6 light duty engines is also showing some reductions in NO<sub>x</sub> when compared to Euro 5 equivalents. The introduction of real world testing (the "RDE cycle") is anticipated to lead to further reductions in NO<sub>x</sub> from these vehicles. Although it is expected that PM emissions will remain within legal limits, levels of NO<sub>2</sub> will continue to exceed these limits in some areas, even with the ULEZ in place.

Further PM<sub>10</sub> and PM<sub>2.5</sub> reductions by 2020 will mean that annual average concentrations should remain below the legal limits. However, there is a strong case to continue cutting PM concentrations to ensure health benefits, and a compelling need to accelerate the pace of change to achieve this even sooner. The proportion of the Capital where annual average NO<sub>2</sub> concentrations exceed the legal limit is also expected to decrease by 2020, in part due to the introduction of the currently agreed ULEZ in that year. However, as mentioned, modelling indicates that if nothing further is done NO<sub>2</sub> concentrations will continue to exceed limits, as indicated above.

Since the close of the Stage 3a ULEZ consultation the Government has published a revised Air Quality Plan for NO<sub>2</sub> in the UK in July 2017 ("AQP") which includes plans for reducing roadside NO<sub>2</sub> concentrations. This

---

<sup>9</sup> 'Non-reportable sites' are air quality monitoring sites that are not part of the official monitoring used to determine compliance with legal limits values for air pollution

replaces the one originally published in 2015 which had been the subject of a number of legal challenges culminating in the new plan's publication this year. The measures included in the new Plan bring forward the projected date of compliance with NO<sub>2</sub> limit values to 2025 or sooner (from after 2030) in the Capital and to 2020 in the rest of the UK. The AQP includes a framework for Clean Air Zones to be implemented in several UK cities. In London, the AQP includes implementation of the ULEZ in 2019 (which is the broad equivalent of a Class D clean air zone in other areas) as a key measure to accelerate London's compliance to 2025 or sooner.

Irrespective of the AQP's timescales, the Mayor does not believe it is appropriate to wait until 2025 to reach NO<sub>2</sub> limit value compliance and action should be taken to bring this forward substantially. Strong measures in the Capital, including those set out in the consultation proposals, and decisive action at national Government level, are needed to secure compliance in the most effective way and in the shortest time possible, and to further reduce exposure in areas that are currently compliant to realise the health benefits associated with reduced exposure.

### Emissions Surcharge (T-Charge)

The T-Charge formally known as the Emissions Surcharge was introduced on 23 October 2017 and requires vehicles to meet a Euro 4/IV standard or pay a daily £10 surcharge to the Congestion Charge (£11.50 per day) which operates between 07:00 and 18:00, Monday to Friday. The T-Charge was introduced as a precursor to the ULEZ to take immediate action to discourage older, more polluting vehicles from travelling into central London at the busiest times. Payment of the T-Charge will be superseded for non-CCZ/ ULEZ residents (see further below) by the ULEZ charges which will set a stricter emissions standard, apply at all times and have significantly fewer discounts and exemptions.

## **2. Summary of proposals**

This section provides a summary of the consultation proposals, which are described in more detail in the C&I Document and RTM.

### **Confirmed ULEZ scheme**

The ULEZ scheme was confirmed in March 2015 to become operational in central London on 7 September 2020.

The scheme will apply 24 hours a day, every day of the year, including weekends and public holidays. It will require all vehicles<sup>10</sup> driving in the same area of central London as the Congestion Charge Zone to meet defined exhaust emissions standards (ULEZ standards) or pay a daily non-compliance charge (ULEZ charges). The daily ULEZ charge is £12.50 per day for light vehicles (cars, motorcycles, vans and mini-buses) and is £100 per day for heavy vehicles (including HGVs, buses and coaches). This is payable in addition to any Congestion Charge (all vehicles except motorcycles) or the London Low Emission Zone (LEZ) charges (heavy vehicles) that may also be payable. If a vehicle does not comply with the ULEZ standards and the daily ULEZ charge is not paid, a Penalty Charge Notice (PCN) will be issued. This penalty is payable by the vehicle's registered keeper or operator. For motorcycles, cars, vans and minibuses it is £130 (reduced to £65 if paid within 14 days) and for HGVs, coaches and buses it is £1,000 (reduced to £500 if paid within 14 days).

The following discounts and exemptions under the ULEZ scheme were approved in 2015:

---

<sup>10</sup> London taxis are outside the scope of the ULEZ scheme as their emissions are controlled by vehicle licensing requirements administered by TfL.

Specialist off-road vehicles, e.g. tractors and mobile cranes	Exempt	-
Vehicles with a historic tax class (40 years and older)	Exempt	-
Taxis	Exempt	-
Ministry of Defence vehicles	Exempt	-
Specially constructed or modified Showmans vehicles	100% discount	-
Disabled tax class vehicle or Disabled Passenger tax class vehicle	100% discount	Sunset period until September 2023
Residents living in the Congestion Charging zone or in a designated area next to the zone	100% discount	Sunset period until September 2023

## Commencing ULEZ in April 2019

The Stage 3a consultation proposed the ULEZ in central London starting 17 months earlier than planned, on the 8 April 2019, in recognition of the seriousness of London's continuing air quality problems and the contribution of vehicle emissions to NO<sub>2</sub> and PM levels. The basic framework of ULEZ emission standards (with the exception of including a standard for PM emissions from diesel vehicles), ULEZ charges and PCNs, discounts and exemptions are unaffected by the consultation proposals.

The reason for advancing the start date of the ULEZ from September 2020 to April 2019 is to bring its projected emissions and health impacts forward by 17 months in light of the continuing infraction of NO<sub>2</sub> limit values and the need to take urgent action to address this situation as soon and as effectively as possible. April 2019 is the earliest possible date that TfL will be operationally ready to introduce the ULEZ in central London.

The original ULEZ scheme was confirmed in March 2015 giving those affected a pre-compliance period of 5 years 5 months between confirmation and its start in September 2020 of which more than 2 ½ years has already passed by. Confirmation in early November 2017 and starting in April 2019 provides some 17 months advance notice. Combined with the notice of the possibility of the change, this is advance warning of the potential introduction of ULEZ standards of 4 years (48 months).

Advancing the ULEZ commencement date in central London to 8 April 2019 has an impact on the 3 year 100 per cent discount "sunset periods" (i.e. fixed periods) given to non-compliant vehicles (a) operated by residents of the CCZ/ ULEZ and (b) those with a disabled tax class.

### Sunset period for ULEZ residents' vehicles

Under approved arrangements, registered residents who live within the ULEZ,<sup>11</sup> and who have vehicles that are not compliant with the ULEZ emissions standards, are given the benefit of a three-year 100 per cent discount ('sunset period') on the ULEZ daily charge. At the end of that three-year period (from 7 September 2023) ULEZ residents will be liable for the full daily charge of £12.50 if they use a vehicle that does not meet the ULEZ emissions standards.

The consultation proposed not making any changes to this arrangement so that the residents' sunset period would remain at three years. Therefore, if the start of the ULEZ was brought forward to 8 April 2019, the end of the residents' sunset period would also be brought forward by 17 months and would similarly end on 11 April 2022. As a result, from 11 April 2022 ULEZ residents' vehicles would need to comply with the ULEZ emissions standards or pay the full £12.50 daily charge.

<sup>11</sup> The ULEZ residents' discount is available to registered residents within the zone and in designated areas next to the zone (which will be the same areas as applies to the Congestion Charge residents' discount). A resident who moves out of the ULEZ area would no longer be eligible for this discount.

### Interaction of ULEZ residents' discount and Emissions Surcharge (ES) residents' discount

Under the confirmed Emissions Surcharge arrangements registered residents of the Congestion Charging Zone (CCZ), which is the same area as the ULEZ, pay the ES at a discounted rate of 90 per cent (£1), on top of the Congestion Charge. The ES will generally expire when the ULEZ starts operation, except for residents of the CCZ/ ULEZ. They will continue to pay the 90 per cent discounted Emissions Surcharge (£1) during the three-year period they also receive the 100 per cent residents' discount from ULEZ charges. The consultation sought views as to whether it was appropriate to continue this same arrangement, so that if the start of the ULEZ was brought forward to 8 April 2019, residents of the Zone should continue to pay the ES at the 90 per cent discount until 11 April 2022, which is when their three-year 100 per cent ULEZ residents 'sunset period' discount for the ULEZ ends.

### Disabled tax class vehicles

The currently confirmed ULEZ scheme sets out that vehicles with a disabled tax class, which are exempt from Vehicle Excise Duty, can register to benefit from a fixed three-year 100 per cent discount sunset period from the operational start of the scheme. This includes vehicles used by a disabled person and disabled passenger vehicles. The criteria and eligibility for these tax classes is set by the Government. (This is not to be confused with Blue Badge holders, who will not be eligible for a discounted ULEZ charge.) In view of the limited alternative options for disabled tax class vehicles, which may have substantial and expensive modifications, the consultation proposed maintaining the end of the sunset period for vehicles with a disabled tax class at September 2023, meaning these vehicles will have a sunset period of approximately 4.5 years after which non-compliant vehicles would pay the £12.50 daily charge. The consultation sought views as to whether this approach was appropriate.

### **Revised ULEZ emission standards for diesel vehicles**

The emissions standards vehicles will need to meet to be compliant with the ULEZ vary depending on class of vehicle. Light vehicles will need to meet the Euro 4 standards for petrol vehicles or Euro 6 for diesel vehicles. Heavy vehicles will need to meet the Euro VI standards and L-category vehicles will need to meet the Euro 3 standard. The current approved ULEZ standards and charges are listed in the table below:

Vehicle type (includes hybrid vehicles)	Minimum emissions standards <sup>12</sup>	NO <sub>x</sub>	Date from which newly registered vehicles must meet the new emissions standards (usually a year earlier for earlier adopters – see Appendix A, C&I Document)	Daily charge if vehicle is not compliant with ULEZ standards <sup>13</sup>
Motorcycle, moped etc – Category L	Euro 3		From 1 July 2007	£12.50
Car and small van – Categories M1 and N1 (I)	Euro 4 (petrol)		From 1 January 2006	£12.50
	Euro 6 (diesel)		From 1 September 2015	
Large van and minibus – Categories N1 (II and III) and M2	Euro 4 (petrol)		From 1 January 2007	£12.50
	Euro 6 (diesel)		From 1 September 2016	
HGV – Categories N2 and N3	Euro VI		From 1 January 2014	£100
Bus/coach – Category M3	Euro VI		From 1 January 2014	£100

Under the current approved ULEZ scheme, diesel vehicles need only meet the equivalent NO<sub>x</sub> emissions standards for Euro 6/VI. The consultation proposed that in addition, diesel vehicles should meet the PM

<sup>12</sup> Euro standards for heavy duty diesel engines use Roman numerals (I–VI) and light duty vehicle standards use Arabic numerals (1–6). The current ULEZ standards only apply to the level of NO<sub>x</sub> emissions

<sup>13</sup> This is payable in addition to any applicable LEZ and/or Congestion Charge.

standard for Euro 6/VI. As described in the C&I Document, this would affect a limited number of Euro 3 and 4 diesel vehicles that meet the NO<sub>x</sub> limits but emit six times as much PM as permitted under Euro 6.

As described in Chapter 2 of the C&I Document, particulate matter (PM) is one of the pollutants of most concern in London. Older diesel vehicles emit significantly higher PM from exhausts, and the Euro 6 PM limit for diesel vehicles is 90 per cent lower than the equivalent at Euro 3.

The Euro 4 standard for petrol vehicles does not include limits for PM emissions and therefore petrol vehicles will not be affected by this change. PM limits for diesel vehicles were introduced for earlier diesel Euro standards than for petrol Euro standards, due to the higher PM emissions of early diesel vehicles.

Although London is compliant with legal limits for concentrations of PM, it is important that more is done to further reduce levels and bring about further health benefits. Changing the ULEZ emissions standards to cover both NO<sub>x</sub> and PM emissions limits is a clear indication that the Mayor is serious about improving air quality and wants the very cleanest diesel vehicles on London's roads.

The proposed change will align with the Government's proposed Clean Air Zone Framework, which forms part of the national AQP (see earlier) to meet legal limits for NO<sub>2</sub> concentrations and sets emissions standards for both NO<sub>x</sub> and PM. The proposed change will also align the ULEZ emissions standard with the Government's anticipated national Euro VI retrofit certification standard for heavy-duty vehicles, which requires diesel vehicles to meet both NO<sub>x</sub> and PM emissions standards in order to be certified. The national retrofit certification scheme will be used to certify retrofitted vehicles for ULEZ and would therefore mean certified vehicles already comply with Euro VI emissions limits for both NO<sub>x</sub> and PM.

Diesel vehicles that are type-approved as Euro 6/VI already meet the proposed ULEZ emissions standards for both pollutants and will not be affected by this change.

Diesel vehicles retrofitted to meet Euro VI standards for NO<sub>x</sub> will also need to demonstrate that they meet Euro VI PM standards. This is in line with government guidance on retrofit certification. Existing Euro 6/VI vehicles are unaffected by this proposal as they already meet both the NO<sub>x</sub> and PM standards.

### **"App payment" facility proposal**

The consultation proposed that the payment of the ULEZ and LEZ charges should be able to be made by "app", in line with payments for the Congestion Charge. A charge is paid by "app" if it is paid by credit or debit card through a software application provided for that purpose by TfL, for the use on an electronic device (e.g. smartphone). This is to provide a better service for ULEZ and LEZ customers.

## **3. Consultation process and summary of responses**

This consultation was the third stage (Stage 3a) of an ongoing series of consultations on proposals to improve air quality. In the summer of 2016, the Mayor undertook the first stage of consultation on a number of initiatives to improve the quality of the air and the health of Londoners. The second stage (Stage 2) ran from October to December 2016, focussing on the statutory consultation for the Emissions Surcharge, but also raising, at a very high level, broad proposals for a number of changes to accelerate and expand the ULEZ with the intention that if they were to be pursued they would be subject to further detailed and statutory consultation stages.

As stated above, the Stage 3a consultation ran between 4 April and 25 June 2017 and satisfied the legal requirement in the Greater London Authority Act 1999 ("GLA Act", as amended) that TfL consults on its proposed changes to the Scheme Order as set out in the Variation Order.

TfL used a variety of channels to raise awareness of the consultation. These are described in the RTM attached (RTM, **Appendix B**) and summarised below.

A marketing campaign was developed to raise awareness of the consultation and encourage those potentially affected to have their say:



- A press release was issued on 4 April to announce the start of the consultation. The consultation received media coverage from a number of outlets;
- Press adverts were featured in a variety of London media titles including Evening Standard, Metro and City AM. Adverts were also featured in specialist press titles and digital display adverts during the consultation;
- A notice was also published in the London Gazette;
- Social media activity included tweets that were sent from the @TfL Twitter feed throughout the consultation period;
- Detailed information about the scheme, supporting documents and an online questionnaire were available on TfL's consultation portal website at [tfl.gov.uk/airquality-consultation](http://tfl.gov.uk/airquality-consultation) and this was signposted with banners throughout the TfL website; and
- A radio advertisement notifying listeners of the Air Quality consultation ran for 5 weeks.

#### Targeted communications to registered Congestion Charge and other TfL customers

The central London ULEZ covers the same area as the Congestion Charging scheme. Therefore, on 7 April 2017, TfL sent an email to relevant registered Congestion Charging scheme customers, which includes residents of the area, using a customer relationship management system. Around 780,000 customers were emailed.

TfL engaged with stakeholders both in developing the proposals (prior to consultation) and during the Stage 3a consultation itself. It met a wide range of stakeholders through private briefings, workshops and third party events.

The Mayor first announced his intention to consider both accelerating and expanding the ULEZ in May 2016. Further information was provided for the Stage 1 consultation in July 2016. An online public survey was launched in July to gather feedback on these policies as well as a range of other policies. TfL supported this with an email to over 500 stakeholders promoting the survey.

Between the launch of the survey in July and the beginning of the consultation period in October 2016, TfL met a number of stakeholders from a range of sectors to gather feedback and help further define the proposals.

A stakeholder breakfast briefing was held on 18 October 2016 as part of the Stage 2 consultation on the proposed introduction of the Emissions Surcharge and was attended by 43 stakeholder organisations. Representatives of TfL and the GLA presented on the detail of the proposed Emissions Surcharge but also other ULEZ potential proposals and this provided an opportunity to ask questions about the schemes and ideas.

On April 3 2017, a briefing was held to which all London boroughs were invited to talk through the new draft air quality strategy, including the ULEZ proposals. On 16 June 2017, a briefing event was held for stakeholders from the freight and fleet sectors.

On 22 June 2017, all 33 London Boroughs were invited to a briefing on ULEZ, in which the development of the proposals was discussed, as well as ULEZ standards and charges potentially being applied to heavy vehicles Londonwide in September 2020 and expand the Zone's area up to the North and South Circular roads in 2021 for all vehicles, by the addition of light vehicles.

The TfL online consultation portal ([www.tfl.gov.uk/airquality-consultation](http://www.tfl.gov.uk/airquality-consultation)) hosted all the relevant information relating to the consultation. This included summary information on the proposals for the early introduction of ULEZ in central London, PM standard and the approach to residents' and disabled tax class sunset periods. This included supporting maps, diagrams and charts. The portal also included a link to the following documents which provided more detailed information on the proposals, including:

- Consultation and Information document;

- Integrated Impact Assessment; and
- A copy of the Variation Order to implement the proposed ULEZ changes (if confirmed).

Respondents were asked to complete and submit an online questionnaire to provide their feedback about the proposals. It included a number of open and closed questions providing the opportunity for respondents to indicate their views about each of the proposals and ideas as well as give additional comments and feedback.

In total, 18,126 responses were received to the consultation from the public and businesses. TfL offered a number of ways for respondents to comment on the consultation:

- Online – through the consultation portal;
- Email – comments emailed directly to TfL; and
- Post – by letter or return of hard copy questionnaire.

A detailed quantitative analysis of the public and business respondents is set out in Chapter Five of the RTM.

Throughout the consultation, TfL received a number of emails from members of the public as part of a campaign led by Greenpeace. It also received an online petition through Change.org and 38 Degrees. In addition to the public and business responses, TfL received 10,837 responses as part of the Greenpeace campaign. The Change.org petition attracted 80 signatures and the 38 Degrees petition attracted 1,196 signatures. Full details of these campaigns are set out in Chapter 6 of the RTM.

Responses were received from 115 stakeholder organisations. Details of this are set out in Chapter 7 of the RTM.

Chapters 8 and 9 of the RTM set out TfL's analysis of the responses received to the consultation by theme and its response to the comments, issues and recommendations contained in those responses. Comments from stakeholders and 'free text' responses from public/business consultation respondents have been attributed to the most pertinent aspect of the proposal. Within each theme, the 'issues raised' during the consultation that go to make up that theme have been identified and are listed at the start of each section, followed by TfL's response and any recommendation. Where issues are similar, these have been grouped together for a single TfL response. Comments that do not relate to a specific proposal have been addressed in 'Other'. Recommendations are addressed to the Mayor and TfL.

#### 2019 ULEZ commencement proposal

There was generally strong support for the earlier implementation of the ULEZ in April 2019. Of the responses received, 11,383 (63 per cent) supported or strongly supported earlier implementation.

There was moderate support for the proposal to maintain a three-year 100 per cent discount sunset period for residents, with 4,980 (28 per cent) supporting the proposal, 3,397 (19 per cent) believing it should be longer and 3,850 (45 per cent) wishing for a shorter or no sunset period. Amongst residents of the CCZ, there was little overall difference in the percentages with 30 per cent favouring the proposal as consulted, 20 per cent requesting a longer sunset period and 45 per cent indicating their preference for a reduced or no sunset period.

There was support for the proposal to maintain a 4.5-year 100 per cent discount sunset period sunset period for disabled vehicles with 6,704 (37 per cent) in favour, compared to 5,875 (32 per cent) who wanted a shorter or no sunset period and 3,429 (19 per cent) who wanted a longer period.

Issues raised by stakeholders in response to the early implementation of the ULEZ and TfL responses are set out in Chapter 8 of the RTM.

#### PM emissions standard proposal

The consultation asked questions about changes to the PM standard for Euro 6/VI. There was significant support for the inclusion of a PM standard, with 10,079 (69 per cent) supporting or strongly supporting this proposal.

### App payment facility proposal

No comments were made regarding the proposal to enable payment by app.

### **Matters not included in the consultation proposals**

Three matters arise that were not included in the consultation proposals

#### TfL Bus Emission Standards

The current scheme order sets an emissions standard for TfL buses at Euro V and emitting <2.05 g/km of NO<sub>x</sub> on the Milbrook test cycle, which is less stringent than the Euro VI requirements for similar vehicles. This was set to enable the Euro V New Routemasters to operate within the ULEZ without modification. This “New Routemaster clause” was raised by a stakeholder during the consultation process. TfL have confirmed their intention to ensure all New Routemaster buses are compliant with the Euro VI standard by the start of the scheme and have a replacement or retrofit programme in place to achieve this. As such we recommend that the emission standard for TfL buses is strengthened to Euro VI, in line with the standards for other vehicles.

#### Payment channels

The current Scheme Order for ULEZ and LEZ specifies the payment channels that TfL will accept for the payment of daily, weekly, monthly and annual licences, including the new consultation proposal to accept App based payments for all such licence periods. Although TfL is introducing the facility to accept App based payments, our service provider has advised that there are issues with authorising very high value transactions by this channel. For example, it would not be prudent or desirable to accept a payment of £36,500 for an annual ULEZ licence for a heavy vehicle via App. Listing the authorised ways of payments in the Scheme Order means that a formal Variation Order is required in order to introduce new methods of payment. It is proposed that the authorised payment channels listed are listed on TfL’s website rather than set out in the Scheme Order itself. This allows greater flexibility to speedily introduce new mechanisms to the benefit of customers. It also means TfL will not be required to accept unreasonable payment levels through inappropriate means.

#### Advance payments

The current Scheme Order states that advance payments for licences can be accepted up to 64 working days prior to travel. In order to ensure that TfL can undertake appropriate software and systems testing and delivery prior to implementation of the ULEZ in 2019 most efficiently and efficiently, it is recommended that such advance payments are only available from the start of the scheme from April 2019. This does not however prevent TfL from accepting payments prior to travel if it is able to do so.

TfL recommends the Mayor makes modifications to the published Variation Order to accommodate these recommendations. Although they were not formally consulted on the modification regarding TfL buses reflects current operational changes and the other two simply provide clarity and flexibility to the benefit of customers.

## **4. Recommended modifications to the Variation Order**

The ULEZ is established under the Greater London Low Emission Zone Scheme Order (“the Scheme Order”, as amended), which also originally established the London Low Emission Zone (“London LEZ”). TfL made the Variation Order – the Greater London Low Emission Zone Charging (Variation and Transitional Provisions) Order 2017- on 30 March 2017 to make changes to the Scheme Order to give effect to the consultation proposals. The Variation Order has no effect unless it is confirmed by the Mayor, with or without modification.

The Variation Order, as published for consultation, provided for the following:

- introducing the central London ULEZ on 8 April 2019;
- revising the ULEZ emissions standards to include a standard for particulate matter (PM) emissions from diesel vehicles; and
- enabling the payment of the ULEZ and LEZ charges by “App”; and

- an alteration to the transitional provisions to bring forward the end date of the sunset period for registered residents' vehicles

The following modifications to the Variation Order are recommended by officers.

- A change to allow TfL to specify accepted payment channels on its website that will include payment by post, call centre, app, on-line, Autopay and other acceptable means; and
- A change allowing the advance payment of ULEZ licences only after the commencement of the ULEZ on 8 April 2019.
- Strengthening the standard for TfL buses from Euro V emitting <2.05 g/km of NO<sub>x</sub> to Euro VI standard in line with other heavy vehicles.

An Instrument of Confirmation for the Variation Order is contained at **Appendix C**, which the Mayor is asked to sign and date.

If the Mayor decides to confirm the Variation Order, the changes would come into effect as follows:

- From 8 April 2019, all eligible vehicles in central London in the area of the CCZ would be required to meet the ULEZ emissions standards (24/7) or pay a daily ULEZ charge;
- The Emissions Surcharge, which was introduced on the 23 October 2017, will expire on 8 April 2019 for all except for registered residents of the CCZ / ULEZ area who will continue to pay the 90 per cent discounted Emissions Surcharge until 11 April 2022 during which period they will not be liable to pay the full ULEZ daily charge; and

The arrangements concerning registered disabled vehicles remains the same. The expiry of the ULEZ sunset period for disabled tax class vehicles remains in September 2023 so that registered owners of disabled tax class vehicles will only be liable to pay the full ULEZ daily charge after that point.

TfL has run a large-scale publicity campaign with operators and vehicle owners to date to make them aware of the requirements of the ULEZ scheme. These activities will continue so that in the remaining time, as far as practically possible, the maximum number of vehicle owners and operators are aware of the proposed new April 2019 ULEZ start date (if confirmed) and its associated ULEZ emission standards and daily charges, to provide the opportunity to take any necessary action to ensure their vehicles are compliant ahead of the scheme starting.

## 5. Objectives and expected outcomes

The ULEZ scheme aims to reduce air pollutant emissions from road transport, including those with the greatest health impacts (NO<sub>2</sub> and PM) and has associated impacts on carbon dioxide (CO<sub>2</sub>), accelerating compliance with limit values for NO<sub>2</sub> and further reducing other pollutants, bringing forward health benefits for Londoners by improving air quality generally, as well as promoting sustainable travel and stimulating the low emission vehicle economy.

An earlier commencement of the ULEZ would mean Londoners experience its emissions and health benefits sooner. As a result of implementing the ULEZ in central London sooner, road transport emissions in the area are expected to reduce by an additional 20 per cent in 2019 (this is in addition to reduction in emissions already forecast in the baseline for 2019 as a result of people pre-complying with the original ULEZ starting in 2020). Analysis by TfL has also concluded that:

- NO<sub>x</sub> emissions from HGVs are expected to reduce by nearly 50 per cent, whilst coach and non-TfL bus emissions will reduce by over a third;
- Emissions from cars and vans are expected to reduce by eight and 12 per cent respectively, and, whilst the reduction in emissions is smaller than for larger vehicles, their savings make up nearly one third of the emissions reductions of chargeable vehicles in central London. Emissions of PM<sub>10</sub> and PM<sub>2.5</sub> from

road transport are forecast to reduce by around three and six per cent respectively in central London, or around one to two per cent across London;

- The majority of the emissions reductions are from cars and vans as PM<sub>10</sub> standards come into force for Euro 5 and 6 petrol cars, alongside diesel cars; and
- Whilst the impacts on PM emissions of an earlier introduction of the ULEZ in 2019 are comparatively smaller than for NO<sub>2</sub>, any reductions in PM<sub>10</sub> and PM<sub>2.5</sub> emissions are important for bringing forward health benefits for Londoners by improving air quality and reducing exposure.

An earlier implementation of the ULEZ would see concentrations of NO<sub>2</sub> and PM reduce:

- The area of central London exceeding legal limit values for NO<sub>2</sub> would reduce from 30 per cent to 22 per cent. This is equivalent to a reduction in the area that is currently exceeding the limit value of nearly 30 per cent.
- The number of people living in areas exceeding the NO<sub>2</sub> limit value is projected to decrease across London, with the most dramatic effect seen in central London.
- Bringing the ULEZ forward to 2019 will mean that over 30,000 people in central London (a 40 per cent reduction), and 100,000 people across London, will no longer live in areas exceeding the NO<sub>2</sub> limit values (based on population weighted concentrations).

Whilst many vehicles will already be compliant, owing to natural fleet turnover and preparation for the 2020 ULEZ, confirmation of the proposal to commence the ULEZ in 2019 would accelerate this process. It also means that people upgrading their vehicles will on average be buying newer, and therefore more expensive, vehicles in order to comply.

Introducing an emissions requirement for vehicles is likely to deter a small proportion of trips. TfL estimate a 5 per cent reduction in car and van kilometres, a 4 per cent reduction in coach kilometres and a 2 per cent reduction in HGV kilometres. With a 2019 start date, these reductions could be increased by around one per cent to reflect the increased costs associated with compliance.

Further emissions savings have been estimated at a high level for the other suggestions for a future application of ULEZ emission standards and charges to heavy vehicles Londonwide in 2020 and expansion of the area of the Zone to Inner London in 2021 as described in the C&I Documents.

## **6. Equality comments**

Under section 149 of the Equality Act 2010, as public authorities, the Mayor and TfL are subject to a public sector equality duty and must have 'due regard' to the need to (i) eliminate unlawful discrimination, harassment and victimisation; (ii) advance equality of opportunity between people who share a relevant protected characteristic and those who do not; and (iii) foster good relations between people who share a relevant protected characteristic and those who do not. Protected characteristics under section 149 of the Equality Act are age, disability, gender re-assignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation, and marriage or civil partnership status (all except the last being "relevant" protected characteristics).

The public sector equality duty requires the identification and evaluation of the likely potential impacts, both positive and negative, of the decision on those with protected characteristics (age, disability, gender reassignment, pregnancy and maternity, race, gender, religion or belief, sexual orientation) and the setting out of how these duties are being addressed). Please refer to <http://intranet.london.gov.uk/pages/glas-equality-duty> for further guidance.

An Equality Impact Assessment (EqIA) of the proposed changes to the ULEZ start date (2019) and emissions standards to include PM for diesel vehicles was carried out as part of the IIA which the Mayor is referred to at

Appendix B. It was found that there are anticipated to be some short term additional impacts, both negative and positive, to some equality groups, however the proposed change to the implementation year of the ULEZ is not anticipated to result in any materially different long-term impacts to those previously reported in the IIA when the ULEZ was originally confirmed in 2015, namely:

- Positive long-term effect on school-age children, older people and pregnant women as consequence of a reduction in air pollution; and
- Potential minor negative short to medium term effects as a result of increased costs and/or limited availability of transport services or vehicle purchases where they do not comply with the ULEZ standards.

## **7. Other considerations**

### Risks

GLA officers consider that TfL has adopted sound project management techniques in making the changes to the ULEZ proposals (including those in the Variation Order) and that risks have been appropriately mitigated. Officers have taken the following steps to mitigate the risk:

- The proposals as a whole, including making of the Variation Order and the consultation on it which was encompassed in the public and stakeholder consultation, was conducted in accordance with relevant standards and the guidance issued by the Mayor as relevant (see the RTM);
- TfL prepared an impact assessment which considered the impacts of the proposals, including on targeted groups;
- TfL considered the consultation responses; and
- TfL officers sought legal advice throughout the development and implementation of the proposals.

### London's Emergency Services' vehicles

The vehicles of London's Emergency Services (City of London Police, Metropolitan Police Service, British Transport Police, London Fire Brigade and London Ambulance Service) are subject to the ULEZ scheme and will be subject to its emission standards and charges in central London from April 2019, rather than September 2020, if the Mayor confirms the Variation Order. The organisations operate a wide range of vehicles covering a wide range of operational needs and so a blanket exemption for all their vehicles is not considered appropriate. The London Fire Brigade and Metropolitan Police Service vehicles form part of the wider GLA family fleet and it is important that these vehicles set an example in reducing pollution. GLA officers are in discussions with each organisation to better understand the impact of bringing the ULEZ forward by 17 months on their fleets. There will be acceleration in fleet replacement in response to the ULEZ. Given the relatively small size of the central London Zone there is opportunity for the Emergency Services to manage their fleets so that compliant vehicles are based within the Zone. As the air pollution problems are most severe in central London this is an appropriate approach.

It is acknowledged, however, that it is not always possible to predict which emergency vehicles will be required to enter specific geographic areas and that specific incidents will require support from vehicles based across Greater London and even from outside it. Some flexibility would therefore be appropriate and Government guidance on the implementation of Clean Air Zones suggests a memorandum of understanding (MoU) between the charging authority and the emergency service organisations as an appropriate approach.

TfL are in discussions to agree a bespoke MoU with each regarding their plans to accelerate their fleets' ULEZ compliance and the treatment of non-compliant vehicles in central London from April 2019. Although their vehicles will not be formally exempted from the ULEZ scheme TfL has the legal and administrative powers to suspend or waive the ULEZ charges in respect of any non-compliant vehicles where appropriate. Vehicles responding to emergencies or other operationally critical events in areas outside of their usual location will have their ULEZ charges waived. The MoU approach will make clear that emergency service vehicles are those that would only be used in emergency response or similar. The organisations will be asked to supply details

of such vehicles so that any not compliant with ULEZ emissions standards are not charged. The MoUs will propose different timescales for achieving compliant fleets tailored as much as possible to each individual emergency services organisation. Therefore it is expected that the arrangements will be time limited akin to the sunset period offered to residents and disabled vehicles. Officers therefore recommend this issue is dealt with by way of MoU with the organisations involved rather than by means of a formal modification to the Variation Order to provide a blanket legal exemption for such vehicles.

The MoUs will be published later in 2017

## Links to strategies

### *London Environment Strategy*

Under the GLA Act the Mayor of London has legal responsibility for preparing policies and proposals for the purpose of securing the achievement of air quality standards or objectives (the applicable limit values under the Air Quality Directives), and leads on the implementation of measures in that area to tackle pollution emissions, reduce exposure, raise awareness and integrate air quality and public health. These air quality policies and proposals are contained in the Mayor's Air Quality Strategy, which was last published in December 2010 ("the 2010 MAQS") and as a result of the Localism Act 2011 is now amalgamated with the policies and proposals in five other statutory strategies into a single strategy - the London Environment Strategy ("LES") - together with any others the Mayor considers of importance to London's environment.<sup>14</sup> The Mayor and TfL must have regard to them when exercising their functions.

The Environment Act 1995 requires London boroughs (including the City Corporation) to designate and develop an action plan for areas where it appears that any air quality standards or objectives are not being achieved. They are also under a duty to have regard to the policies and proposals of the 2010 MAQS (to be replaced by the LES) when exercising their local air quality management functions under the 1995 Act. The Mayor has a statutory responsibility to oversee this process, including reviewing Local Authority reports and Action Plans, and has issued guidance and has powers to direct them to take necessary action.

Since the Stage 3a ULEZ consultation ended in June the Mayor has published for consultation a new draft LES ("Consultation Draft LES 2017") which contains provisions relating to air quality which will replace the 2010 MAQS and the other strategies kept in force. This was published for consultation on 11 August 2017 with the final version due to be published in 2018<sup>15</sup>. Notwithstanding the LES has yet to complete its statutory revision processes it is relevant to note that the proposals that were the subject of the Stage 3a consultation are consistent with the following policies and proposals in the Consultation Draft LES 2017:

- Policy 4.2.1 Reduce emissions from London's road transport network by phasing out fossil fuelled vehicles, prioritising action on diesel, and enabling Londoners to switch to more sustainable forms of transport;
- Proposal 4.2.1d The Mayor aims to reduce emissions from private and commercial vehicles by phasing out and restricting the use of fossil fuels, prioritising action on diesel; and
- The Draft LES makes specific reference to the ULEZ proposals under Proposal 4.2.1d.

The 2010 MAQS outlines the policies and proposals that were considered sufficient then to improve air quality in London, alongside future proposals to meet the EU limit values and improve public health in London. The proposals are wide ranging, covering 'softer measures', such as education and awareness campaigns to encourage sustainable travel behaviour, and 'harder measures', such as Low Emission Zones which were developed into the Ultra Low Emission Zone scheme for central London.

The 2010 MAQS identified the scale of air pollution reduction then required. The impacts of the measures set out in MAQS were modelled and it was predicted that some locations would still exceed limit values for NO<sub>2</sub> and further action would be required.

---

<sup>14</sup> The 2010 MAQS was kept in force as part of the current LES, amalgamated alongside the existing strategies forming the LES at the time the relevant provisions of the Localism Act 2011 came into force.

<sup>15</sup> Publication is subject to the London Assembly's ability to reject a strategy under section 42B of the GLA Act

As explained in the Background section to this Form (above) large sections of the Capital continue to exceed both the annual mean and hourly limit values for NO<sub>2</sub> and this is likely to continue beyond 2020 without further intervention. As stated, modelling indicates that, if nothing further is done, concentrations will continue to exceed the limit in central and inner London, in the vicinity of Heathrow Airport and near construction sites and major roads in outer London. This situation is reflected in the Consultation Draft LES 2017 which identifies the scale of the current air pollution problem. The LES analysis showed that overall, that air quality is improving in London. However, the NO<sub>2</sub> EU annual mean limit value of 40 µg m<sup>3</sup> is being exceeded in many places and the PM health based guidelines are far from being met. The Mayor wants London to achieve compliance with legal limit values as soon as possible and then wants London to go beyond these limits to deliver further improvements in public health.

Measures within the LES help contribute to achieving these objectives, although the LES recognises that further national led action is needed to bring forward compliance.

Emission reductions from earlier implementation of the ULEZ would bring health benefits to Londoners. However, the earlier introduction of the current ULEZ in central London will not by itself ensure that London achieves compliance with the limit values for NO<sub>2</sub> but is a necessary component to doing so. Further action to reduce air pollutant emissions from transport sources are set out in the Consultation Draft LES 2017 as well as in the consultation draft of the new Mayor's Transport Strategy (MTS) – see below – which is also due to be published in final form in early 2018.

The C&I Document contained suggested further alterations to the ULEZ, including the application of the scheme's emissions standards and charges to heavy vehicles Londonwide and expansion of the Zone's area to Inner London to cover all vehicles will bring about further reductions in emissions and in concentrations of NO<sub>2</sub>. Detailed proposals will be consulted on in November 2017 in the Stage 3b consultation.

Whilst London can and is taking significant action to reduce emissions, Government and EU action is also required to tackle the issue and resolve the current infraction of NO<sub>2</sub> limit values.

### *The 2017 Air Quality Plan*

The consultation proposals are consistent with the Government's Air Quality Plan for NO<sub>2</sub> in the UK (2017). That states that launching an Ultra Low Emission Zone (ULEZ) in April 2019, subject to consultation, and extending it London-wide for heavy vehicles (HGVs, buses and coaches) and to the North and South Circular roads for all vehicles is one of a number of measures, including the introduction of the Emissions Surcharge, to be undertaken in London by the Mayor and TfL to achieve compliance by 2025 or sooner<sup>16</sup>.

### *Road user charging*

The GLA Act provides that changes or variations to a road user charging scheme must be desirable or expedient for the purpose of directly or indirectly facilitating achievement of proposals in the MTS and must be in conformity with the MTS.

The Mayor recently launched a draft version of the revised MTS for consultation (the Consultation Draft MTS 2017). That consultation ended on 2 October 2017. The draft strategy contains a number of policies related to future plans for road user charging and further improvements to air quality in London, including specific proposals for changes to the ULEZ. These include the following:

- Proposal 22<sup>17</sup> states that the Mayor, through TfL, will seek to introduce the central London Ultra Low Emission Zone standards and charges in 2019. It also states that the zone would be expanded London-wide for heavy vehicles by 2020 and to inner London for all other vehicles.

---

<sup>16</sup> See the Detailed Plan at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/633270/air-quality-plan-detail.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633270/air-quality-plan-detail.pdf)

<sup>17</sup> Proposal 22 is on page 45 of the MTS



Also of relevance here is draft MTS Policy 6<sup>18</sup> which set out that the Mayor, through TfL and the boroughs, and working with other transport operators, will seek to make London's transport network zero carbon by 2050. This is supported by Proposals 27, 28 and 29<sup>19</sup> which introduce measures to reduce emissions from buses, taxis and PHVs, through the transition to zero emission and zero emission capable vehicles. Proposals 30, 31 and 32<sup>20</sup> support these changes in public transport by encouraging the uptake of ultra low emission vehicles through funding improvements in charging infrastructure, incentivising ownership and the GLA family leading by example in the uptake of ultra low emission vehicles. Policy 5<sup>21</sup> focuses on taking action to reduce emissions from vehicles to reach compliance with the UK and EU legal limits as soon as possible and adds further support to the above proposals.

However, until the final strategy is published, the current MTS (published in 2010) is the document the Mayor and TfL must have regard to when exercising their functions. The 2010 MTS contains policies and proposals to tackle poor air quality resulting from transport, and to permit vehicle charging based on exhaust emissions. One of its six goals is to 'enhance the quality of life for all Londoners' with the associated outcome of 'reducing air pollutant emissions from ground-based transport, contributing to EU air quality targets'.

The ULEZ scheme and the changes set out in the Variation Order, including with the recommended modifications, fulfil these requirements and are in conformity with and implements (directly or indirectly) the following 2010 MTS policies:

- Policy 15 states that the Mayor, through TfL, will seek to reduce emissions of air pollutants from transport. This policy is carried forward through (among others) proposal 95 of the MTS.
- Proposal 95<sup>22</sup> which, in addition to setting out that the Mayor will continue to operate the existing LEZ with potential further phases, will also '...d) if necessary, the Mayor will consider introducing minimum requirements for other vehicles or tighter standards in particular locations in London...'

Also of relevance are 2010 MTS Proposals 92 and 93<sup>23</sup> which set out that the Mayor, through TfL and working with London boroughs, transport operators and other stakeholders will introduce measures to reduce emissions from buses, taxis and PHVs, and support the uptake of low emission vehicles. Proposal 94 states that there could also be '...targeted local measures at poor air quality priority locations to reduce emissions and improve local air quality.'

In preparing the Variation Order, TfL, in consultation with GLA officers, has had regard to the consistency with other relevant Mayoral strategies, including the current Economic Development Strategy, the London Plan and, as kept in force under the current LES, the 2010 MAQS and Climate Change Mitigation and Energy Strategy. No inconsistencies have been identified and none are identified in relation to the new developing strategies (including the consultation draft environment and transport strategies) that will replace them. The Mayor is advised that the consultation proposals (as set out in the published Variation Order) and TfL's recommended modifications to it, are desirable and/ or expedient for the purposed of directly or indirectly facilitating achievement of the 2010 MTS policies and proposals identified above as well as those in the Consultation Draft MTS 2017.

### *A City for All Londoners*

A City for All Londoners (published 1 October 2016), the Mayor's vision for London, includes a vision for air quality as part of a healthy, resilient green and fair city. Specific reference is made to the implementation of the ULEZ, and the suggested ideas for future changes to the ULEZ.

### Integrated Impact Assessment

---

<sup>18</sup> Policy 6 is on page 47 of the MTS

<sup>19</sup> Proposals 27, 28 and 29 are on page 49 of the MTS

<sup>20</sup> Proposals 30, 31 and 32 are on page 50 of the MTS

<sup>21</sup> Policy 5 is on page 44 of the MTS

<sup>22</sup> Proposal 95 is on page 234 of the 2010 MTS

<sup>23</sup> Proposals 92 & 93 are on page 231 of the 2010 MTS

The consultation proposals, and making or confirmation of a Variation Order to implement them, is not a plan or programme within the scope of the Environmental Assessment of Plans and Programmes Regulations 2004 (as amended) and EU Directive 2001/42/EC, nor a project within the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended) and EU Directive 85/337/EEC (as amended). Nonetheless, it was considered prudent to undertake an Integrated Impact Assessment to ascertain the likely significant environmental, equality, economic and other relevant impacts or effects (if any) arising from the consultation proposals which as far as possible and relevant conform to the strategic environmental assessment requirements of the 2001 Directive and 2004 Regulations.

An IIA was been carried out to examine the likely significant impacts of the consultation proposals, particularly bringing forward the commencement of the ULEZ to April 2019 from September 2020, on the environment, health, equalities and the economy. Rather than repeat a full IIA, the impacts identified in the IIA for the ULEZ in 2020 have been considered in terms of whether they have changed as a result of commencing the ULEZ in central London 17 months earlier in April 2019. Consideration was also given to whether there are further, additional impacts owing to the earlier introduction.

The full assessment is provided in Appendix B as part of the C&I Document. It concluded that the proposed change to the implementation date of the ULEZ from autumn 2020 to spring 2019 is anticipated to result in short term additional impacts:

- Moderate air quality benefits London-wide due to reduced NO<sub>2</sub> concentrations in 2019
- Health benefits associated with an additional year of air quality benefits
- Minor adverse impacts on commuter coaches, tourist coaches and sightseeing bus operators entering London and tradespeople, market traders and some independent retailers due to costs associated with either complying earlier with ULEZ or paying the charge
- Minor beneficial impacts associated with an earlier reduction in the average exposure to NO<sub>2</sub> in deprived areas
- Moderate beneficial impacts associated with an earlier reduction in the number of school age children, older people and pregnant women exposed to exceedences of legal limits for NO<sub>2</sub> concentrations
- Minor adverse impacts on some equality groups due to increased costs including:
  - BAME retail and wholesale industry businesses regularly using vans (light goods vehicles) in central London
  - School children from low income families due to the increased cost of school trips by coach
  - BAME drivers of PHVs who are self-employed
  - Groups reliant on charitable or voluntary minibus services (eg disabled, older people, faith groups)

Whilst there will be additional impacts between the period Spring 2019 and Autumn 2020, the proposed change to the implementation year of the ULEZ is not anticipated to result in any materially different long-term impacts to those previously reported in the 2014/2015 IIA when the proposals for the original ULEZ scheme were consulted on in 2014. These were as follows:

#### Environmental Impacts

- Positive, major long-term effects from a decrease in NO<sub>2</sub> concentrations and the reduction of the number of residents living in areas of NO<sub>2</sub> exceedence. There would be a minor positive effect from the decrease in PM<sub>10</sub> emissions.
- For noise and biodiversity, there are moderate and minor positive short and medium-term effects, and positive long-term effects for cultural heritage due to reductions in emissions impacting buildings and flora and fauna, and a slight reduction in traffic. The impact for climate change is minor positive due to a slight reduction in CO<sub>2</sub> emissions.

- For landscape and urban realm, however, there is potential for minor negative impact if associated cameras and signage are not mitigated and managed well. A neutral effect on material resources and waste was identified as a result of phasing out of vehicle fleets.

#### Health impacts

- Major, long-term positive effects for personal health and wellbeing, mainly as a consequence of improved air quality but also due to the potential for an, increased use of public transport, walking and cycling and a decrease in private car usage.
- Minor positive impact from any noise reduction associated with reductions in road traffic
- Neutral impact on crime reduction and community safety.

#### Equalities impacts

- Positive long-term effect on school-age children, older people and pregnant women as consequence of a reduction in air pollution.
- Potential minor negative short to medium term effects as a result to increased costs and/or limited availability of transport services or vehicle purchase where vehicles do not comply with the ULEZ standards.

#### Economic impacts

- Minor positive impacts on London's economic competitiveness arising from improvements to air quality as a result of the proposal.
- Minor negative impacts in the short term as a result of compliance costs for vehicle owners including small and medium sized enterprises (SMEs).
- The health benefits from ULEZ will result in an economic benefit associated with reductions in air pollution, quantified as moderate positive long term.

The identified impacts are not materially different from those identified in the original scheme and its commencement date of September 2020. Officers advise that no further mitigations are necessary.

## **8. Financial comments**

There are no direct financial consequences for the GLA arising from this report.

There will be direct financial consequences for TfL. The implementation of the ULEZ will be funded through the TfL investment programme. The TfL Business Plan includes £875m for investment in action to improve the quality of the Capital's air through to 2021/22. This package of funding supports the Stage 3a consultation proposals and the TfL bus replacement/ retrofit programme to strengthen the standard of TfL buses to Euro VI.

## **9. Legal comments**

(This section covers legal issues not addressed elsewhere in this Form.)

#### General comments

The Mayor has the power to vary the Scheme Order under paragraph 38 of Schedule 23 to the GLA Act and any order making variations. TfL made the Variation Order to implement the consultation proposals which may only take effect if confirmed by the Mayor with or without modifications. In order to make a lawful decision on whether to confirm the Variation Order, and if so whether or not to approve modifications to it, the Mayor must comply with statutory procedural requirements and make a rational decision, after having taken into account all relevant considerations and discounting irrelevant ones. This section covers the remaining legal issues not addressed elsewhere in this Form or the RTM.

#### Variation Order

The GLA Act gives TfL the power to create or vary road user charging schemes in Greater London. Details of the required contents of a scheme order are contained in Schedule 23 of the GLA Act which stipulates that a charging scheme must:

- Designate the area to which it applies
- Specify the classes of motor vehicles in respect of which a charge is imposed
- Designate those roads in the charging area in respect of which a charge is imposed
- Specify the charges imposed

These powers were used to implement the London LEZ under the Scheme Order, which took effect from 4 February 2008. The Scheme Order was varied in 2015 to provide for the ULEZ in central London, to become operational on 7 September 2020.

#### Requirements of Schedule 23 GLA Act regarding the Variation Order

The power to make and confirm a Variation Order is exercisable in the same manner and subject to the same limitations and conditions as the making of a scheme order. As a result, the making, approval and possible modification of the Variation Order are subject to the same Schedule 23 requirements for the making of a charging scheme. Paragraph 4(3) of Schedule 23 provides that the Mayor acting on behalf of the Greater London Authority may –

- consult, or require an authority making a charging scheme to consult, other persons;
- require such an authority to publish its proposals for the scheme and to consider objections to the proposals;
- hold an inquiry, or cause an inquiry to be held, for the purposes of any order containing a charging scheme;
- appoint the person or persons by whom any such inquiry is to be held;
- make modifications to any such order, whether in consequence of any objections or otherwise, before such order takes effect;
- require the authority by whom any such order is made to publish notice of the order and of its effect;
- require the authority by whom any such order is made to place and maintain, or cause to be placed and maintained, such traffic signs in connection with that order as the Mayor may require.

Paragraph 4(3) applies to the making, confirmation and modification of the Variation Order.

Paragraph 34 of Schedule 23 provides for the Mayor to issue guidance to TfL or any London borough councils in relation to the discharge of their functions under Schedule 23. Paragraph 34(2) requires TfL to have regard to any guidance issued by the Mayor when exercising its functions under Schedule 23. Guidance to TfL on road user charging schemes pursuant to Schedule 23 of the GLA Act (“the RUC Guidance”) was published on 16 February 2007. The measures included in the Variation Order are considered to be a major variation under Section 4.1 of the RUC Guidance. TfL had regard to the Guidance in relation to the making of the Variation Order and conducted the consultation in compliance with the requirements specified under Section 4 of the same. The Variation Order was subject to public and stakeholder consultation between 4 April and 25 June 2017.

#### Climate change duties

The Mayor’s attention is drawn to his duties under Section 361A of the GLA Act to address climate change, so far as relating to Greater London. In the case of the Mayor, this duty consists of each of the following:

- to take action with a view to the mitigation of, or adaptation to, climate change;

requirements specified under Section 4 of the same. The Variation Order was subject to public and stakeholder consultation between 4 April and 25 June 2017.

### Climate change duties

The Mayor's attention is drawn to his duties under Section 361A of the GLA Act to address climate change, so far as relating to Greater London. In the case of the Mayor, this duty consists of each of the following:

- to take action with a view to the mitigation of, or adaptation to, climate change;
- in exercising any of his functions under this Act or any other Act (whenever passed), to take into account any policies announced by Her Majesty's Government with respect to climate change or the consequences of climate change; and
- to have regard to any guidance, and comply with any directions, issued to the Authority by the Secretary of State with respect to the means by which, or manner in which, the Mayor is to perform the duties imposed on him as above.

No specific guidance under the third bullet point above has been issued by the Government with regard to the confirmation or modification of charging scheme variation orders.

### Power to hold a public inquiry

Paragraph 4(3) of Schedule 23 provides that the Mayor may 'hold an inquiry, or cause an inquiry to be held, for the purposes of any order containing a charging scheme'. Whether an inquiry should be held to consider the implementation of the measures contained in this Variation Order is a matter for the Mayor to decide.

TfL advise that no specific request for a public inquiry into the consultation proposals themselves to be held was received during the Stage 3a consultation. There have been calls for the Prime Minister and Defra to set up an Independent public inquiry to "independently investigate more effective, fairer and available ways to improve Air Quality in all UK Cities"<sup>24</sup>.

The ULEZ itself, including its emission standards and charges, and its commencement in April 2019 as well as the potential application of ULEZ standards and charges to heavy vehicles and (subject to consultation) expansion of the Zone to Inner London, covering all vehicles, is included in the Government's AQP as a key measure to bring forward NO2 limit value compliance. Officers doubt that much further material evidence beyond that already supplied by TfL and GLA officers (including those contained in the consultation responses) would emerge in an inquiry that would assist the Mayor's decisions and note that an inquiry would delay the confirmation of the measures contained in the Variation Order. Officers do not consider that there are any issues which point strongly to the holding of a public inquiry and do not recommend that an inquiry be held.

### Considerations under the Human Rights Act 1998

Under Section 6 of the Human Rights Act 1998 ("the Human Rights Act"), it is unlawful for a public authority to act in a way which is incompatible with the European Convention on Human Rights. The Mayor and TfL are therefore obliged to consider possible impacts upon people's convention rights before taking any actions. Few of the rights protected by the Convention are absolute. The majority of Convention rights which are potentially capable of being the subject of interference from the actions of public bodies, most notably the right to privacy and family life and the right to the peaceful enjoyment of possessions (vehicles), are subject to express limitations which permit restrictions of the rights for certain specified purposes. In assessing whether any established interference with a convention right falls lawfully within a permitted category of restriction, the public body must demonstrate the level of interference is proportionate to the public benefit to be derived from the action.

---

<sup>24</sup> Fair Fuel campaign at <https://www.fairfueluk.com/#Sign-up> and at <https://www.crowdjustice.com/case/stop-toxic-taxes/>

The practice with previous road user charging schemes and their variations has been to build in a pre-compliance period between the date when the scheme or variation is confirmed by the Mayor and the date when it takes effect, i.e. when the charge starts to be payable. This is to give those affected a chance to adapt to how they use their vehicles, whether personally or for business. Previous practice has been, though not invariably, to provide a period of around 12 months, but there are examples of schemes where shorter periods have been given or as with the ULEZ confirmation in 2015 a much longer period (5 years). In the case of ULEZ it is proposed to bring the scheme forward to Spring 2019 rather than 2020 and this was the subject of the Stage 3a consultation.

Confirmation of the Variation Order in November 2017 provides a pre-compliance period of 17 months of operational commencement on 9 April 2019. As the ULEZ was originally confirmed in March 2015 vehicle owners will have been aware of it for some years already and have had over 5 years advance notice in total. A decision to bring forward the start of the ULEZ giving a pre-compliance period of 17 months is proportionate and lawful. This is particularly the case given the need to address the current infraction of NO<sub>2</sub> limit values and to bring as a matter of urgency in order to about compliance as soon and as effectively as possible and, in any case, to bring forward the health benefits that reduced exposure will bring about even in compliant areas.

In the view of officers, confirmation of the Variation Order (with or without modification), and the consultation proposals implemented by it, do not raise any particular Human Rights Act considerations.

#### Best Value

TfL and the GLA, in so far as it exercises its functions through the Mayor, are both "best value authorities" under Section 1 of the Local Government Act 1999 ("the 1999 Act"). Under Section 5 of the 1999 Act, the GLA and TfL must conduct best value reviews of their functions in accordance with the provisions of any order made by the Secretary of State under that section.

Any review which includes a review of the implementation of the measures contained in this Variation Order must be in accordance with the Local Government (Best Value) Performance Review Order 1999, as amended. In conducting such a review, the two bodies are under a duty to aim to improve the way in which its functions are exercised, having regard to a combination of economy, efficiency and effectiveness, and must have regard to any guidance issued by the Secretary of State under Section 5 of the 1999 Act.

In the view of officers, no negative cost / benefit concerns arise in relation to the measures contained in the consultation proposals and/ or the approval of the Variation Order.

### **10. Planned delivery approach and next steps**

*Set out how the project will be delivered and complete the outline timetable*

<b>Activity</b>	<b>Timeline</b>
Announcement	3 November 2017
Delivery Start Date	8 April 2019

#### **Appendices and supporting papers:**

**Appendix A** – Greater London Low Emission Zone Charging (Variation and Transitional Provisions) Order 2017

**Appendix B** – TfL's Report to the Mayor, which includes the Consultation and Information Document and Integrated Impact Assessment.

**Appendix C** – Instrument of Confirmation with Schedule of Variations

**Public access to information**

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FOI Act) and will be made available on the GLA website within one working day of approval.

If immediate publication risks compromising the implementation of the decision (for example, to complete a procurement process), it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary. **Note:** This form (Part 1) will either be published within one working day after approval or on the defer date.

**Part 1 Deferral:**

**Is the publication of Part 1 of this approval to be deferred? YES**

If YES, for what reason:

Until the Mayor publicly announces his decision.

Until what date: (a date is required if deferring) **3 November 2017.**

**Part 2 Confidentiality:** Only the facts or advice considered to be exempt from disclosure under the FOI Act should be in the separate Part 2 form, together with the legal rationale for non-publication.

**Is there a part 2 form – NO**

**ORIGINATING OFFICER DECLARATION:**

Drafting officer to confirm the following (✓)

**Drafting officer:**

Elliot Treharne has drafted this report in accordance with GLA procedures and confirms the following: ✓

**Sponsoring Director:**

Fiona Fletcher-Smith has reviewed the request and is satisfied it is correct and consistent with the Mayor's plans and priorities. ✓

**Mayoral Adviser:**

Shirley Rodrigues has been consulted about the proposal and agrees the recommendations. ✓

**Advice:**

The Finance and Legal teams have commented on this proposal. ✓

**Corporate Investment Board**

This decision was agreed by the Corporate Investment Board on 30 October 2017.

**EXECUTIVE DIRECTOR, RESOURCES:**

I confirm that financial and legal implications have been appropriately considered in the preparation of this report.

**Signature**

**Date**

30.10.17

Bon Middleton on behalf of Martin Clarke

**CHIEF OF STAFF:**

I am satisfied that this is an appropriate request to be submitted to the Mayor

**Signature**

**Date**

2/11/2017.





**GREATER LONDON AUTHORITY ACT 1999**  
**TRANSPORT ACT 2000**

**Greater London Low Emission Zone Charging (Variation and  
Transitional Provisions) Order 2017**  
**Instrument of Confirmation 2017**

*Made*

**2/11/ 2017**

*Coming into force*

*In accordance with article 1*

Whereas—

- (1) On 30 March 2017 Transport for London made the Greater London Low Emission Zone Charging (Variation and Transitional Provisions) Order 2017 (“the Variation Order”) which contained in a Schedule a Scheme (“the Variation Scheme”) for varying the Greater London Low Emission Zone Charging Order 2006;
- (2) pursuant to paragraph 4(1)(b) of Schedule 23 to the Greater London Authority Act 1999(a) Transport for London submitted the Variation Order to the Mayor of London for confirmation; and
- (3) the Mayor of London has decided to confirm the Variation Order with modifications:

Now, therefore, the Mayor of London, in exercise of the powers conferred on him by paragraph 4(1)(b) of Schedule 23 to the Greater London Authority Act 1999, and of all other powers enabling him in that behalf, hereby makes the following Instrument:—

**Citation and commencement**

1. This Instrument may be cited as the Greater London Low Emission Zone Charging (Variation and Transitional Provisions) Order 2017 Instrument of Confirmation 2017 and shall come into force on the day on which it is made.

**Confirmation of the Variation Order**

2. The Greater London Low Emission Zone Charging (Variation and Transitional Provisions) Order 2017 is hereby confirmed subject to the modifications set out in Schedule 1 to this Instrument.

3. The Variation Scheme as modified in accordance with Schedule 1 to this Instrument is set out in Schedule 2 to this Instrument.

Dated

**2/11**

2017



Mayor of London

---

(a) 1999 c. 29; Schedule 23 was amended by the Transport Act 2000 (c. 38), Schedule 13

## SCHEDULE 1

Article 2

### MODIFICATIONS TO THE VARIATION SCHEME

1. Renumber articles 2 to 6 of the Variation Scheme as articles 3 to 7 respectively.
2. Before article 3 of the Variation Scheme as renumbered insert—

#### **“Emissions Standards**

2. For article 6(2) of the LEZ Scheme substitute—

“(2) A vehicle meets the standards required of an ultra low emission vehicle for the purposes of this Scheme if Transport for London is satisfied that the vehicle meets the emissions standards specified for that vehicle in Tables 2 to 6 of Part 2 of Annex 2.”.

- 3.—(1) Article 4 of the Variation Scheme as renumbered is amended as follows.

- (2) For paragraph (2) substitute—

- “(2) For paragraph (7) substitute—

“(7) Charges imposed by this Scheme shall be paid by such means as Transport for London shall from time to time specify on its web-site, which may include the following—

- (a) post;
      - (b) call centre;
      - (c) App;
      - (d) on-line;
      - (e) ULEZ Auto Pay,

or by such other means as Transport for London may in the particular circumstances of the case accept.”.

- (3) Omit paragraph (3).
  - (4) Renumber paragraphs (4) and (5) as paragraphs (3) (4) respectively.
4. For article 7 of the Variation Scheme as renumbered and its heading substitute—

#### **“Transitional Provisions – advance purchase of licences, resident’s vehicles and certain disabled vehicles**

7. The Annex to this Variation Scheme has effect in relation to the advance purchase of certain licences, resident’s vehicles and certain disabled vehicles.”.

5. After paragraph 2 of the Annex to the Variation Scheme insert—

#### **“Restriction on advance purchase of ULEZ licences**

3. Notwithstanding the provisions of articles 8(5)(a) and 8(6)(b) of the LEZ Scheme, a licence in respect of a charge imposed by article 7(2) of the LEZ Scheme may only be purchased on or after 8 April 2019.”.

## **SCHEDULE 2**

Article 3

### **THE VARIATION SCHEME AS MODIFIED**

### **SCHEME VARYING THE LEZ SCHEME**

#### **Preliminary**

1.—(1) The LEZ Scheme shall be varied in accordance with the provisions of this Schedule.

(2) Article 1 of the Scheme contained in the Schedule to the Greater London (Central Zone) Congestion Charging Order 2004 ('the Principal Scheme') shall apply, so far as material, for the interpretation of the Annex to this Variation Scheme as it applies for the interpretation of the Principal Scheme.

(3) Article 1 of the LEZ Scheme shall apply, so far as material, for the interpretation of this Variation Scheme as it applies for the interpretation of the LEZ Scheme.

#### **Emissions Standards**

2. For article 6(2) of the LEZ Scheme substitute—

“(2) A vehicle meets the standards required of an ultra low emission vehicle for the purposes of this Scheme if Transport for London is satisfied that the vehicle meets the emissions standards specified for that vehicle in Tables 2 to 6 of Part 2 of Annex 2.”.

#### **Imposition of Charges**

3. In article 7(2) of the LEZ Scheme, for “7 September 2020” substitute “8 April 2019”.

#### **Payment of Charges**

4.—(1) Article 8 of the LEZ Scheme is amended as follows.

(2) For paragraph (7) substitute—

“(7) Charges imposed by this Scheme shall be paid by such means as Transport for London shall from time to time specify on its web-site, which may include the following—

- (a) post;
- (b) call centre;
- (c) App;
- (d) on-line;
- (e) ULEZ Auto Pay,

or by such other means as Transport for London may in the particular circumstances of the case accept.”.

(3) In paragraph (8) renumber sub-paragraphs (c) to (f) as (d) to (g) respectively.

(4) After paragraph (8)(b) insert—

“(c) a charge is paid by App if it is paid by credit or debit card through a software application, for use on an electronic device, provided for that purpose by Transport for London;”.

## Annex 2 to the Scheme

5.—(1) Paragraph 2 of Annex 2 to the LEZ Scheme is amended as follows.

(2) For sub-paragraph (1)(b) and (c) substitute—

“(b) the vehicle has been adapted, by means of an exhaust after-treatment system or otherwise, so that—

- (i) the limit values for the emission of NO<sub>x</sub> specified for the vehicle in column (e) would not be exceeded during the appropriate test or tests specified in column (g) of the Table; and
- (ii) for vehicles falling within Tables 2, 3 or 4, the limit values for the emission of particulate matter specified for the vehicle in column (f) would not be exceeded during the appropriate test or tests specified in column (g) of the Table; or

(c) in respect of all other vehicles—

- (i) the limit values for the emission of NO<sub>x</sub> specified for the vehicle in column (e) would not be exceeded during the appropriate test or tests specified in column (g) of the Table; and
- (ii) for vehicles falling within Tables 2, 3 or 4, the limit values for the emission of particulate matter specified for the vehicle in column (f) would not be exceeded during the appropriate test or tests specified in column (g) of the Table.”.

(3) For Tables 2 to 4 substitute the following new Tables—

“TABLE 2 - EURO VI STANDARDS FOR COMPRESSION IGNITION CLASS M & N VEHICLES

(a) Row No.	(b) Class of vehicle	(c) Reference mass of vehicle, where relevant (kg)	(d) EC emissions standard	(e) Limit values for NO <sub>x</sub> (grams per kWh)	(f) Limit values for particulate matter	(g) Appropriate tests
(1)	M <sub>1</sub>	exceeding 2610	Euro VI	0.4 (WHSC) and 0.46 (WHTC)	0.01 g/kWh and 8.0×10 <sup>11</sup> PN/kWh (WHSC) and 6.0×10 <sup>11</sup> PN/kWh (WHTC)	WHSC and WHTC
(2)	M <sub>2</sub>	exceeding 2610	Euro VI	0.4 (WHSC) and 0.46 (WHTC)	0.01 g/kWh and 8.0×10 <sup>11</sup> PN/kWh (WHSC) and 6.0×10 <sup>11</sup> PN/kWh (WHTC)	WHSC and WHTC
(3)	M <sub>3</sub> , N <sub>3</sub>		Euro VI	0.4 (WHSC) and 0.46 (WHTC)	0.01 g/kWh and 8.0×10 <sup>11</sup> PN/kWh (WHSC) and 6.0×10 <sup>11</sup> PN/kWh (WHTC)	WHSC and WHTC

(4)	N <sub>2</sub>	exceeding 2610	Euro VI	0.4 (WHSC) and 0.46 (WHTC)	0.01 g/kWh and 8.0×10 <sup>11</sup> PN/kWh (WHSC) and 6.0×10 <sup>11</sup> PN/kWh (WHTC)	WHSC and WHTC
(5)	N <sub>1</sub>	exceeding 2610	Euro VI	0.4 (WHSC) and 0.46 (WHTC)	0.01 g/kWh and 8.0×10 <sup>11</sup> PN/kWh (WHSC) and 6.0×10 <sup>11</sup> PN/kWh (WHTC)	WHSC and WHTC

TABLE 3 - EURO VI STANDARDS FOR POSITIVE IGNITION CLASS M & N VEHICLES

(a) Row No.	(b) Class of vehicle	(c) Reference mass of vehicle, where relevant (kilograms)	(d) EC emissions standard	(e) Limit values for NO <sub>x</sub> (grams per kilowatt hour)	(f) Limit values for particulate matter	(g) Appropriate tests
(1)	M <sub>1</sub>	exceeding 2610	Euro VI	0.46	0.01 g/kWh and 6.0×10 <sup>11</sup> PN/kWh	WHTC
(2)	M <sub>2</sub>	exceeding 2610	Euro VI	0.46	0.01 g/kWh and 6.0×10 <sup>11</sup> PN/kWh	WHTC
(3)	M <sub>3</sub> , N <sub>3</sub>		Euro VI	0.46	0.01 g/kWh and 6.0×10 <sup>11</sup> PN/kWh	WHTC
(4)	N <sub>2</sub>	exceeding 2610	Euro VI	0.46	0.01 g/kWh and 6.0×10 <sup>11</sup> PN/kWh	WHTC
(5)	N <sub>1</sub>	exceeding 2610	Euro VI	0.46	0.01 g/kWh and 6.0×10 <sup>11</sup> PN/kWh	WHTC

TABLE 4 - EURO 6 STANDARDS FOR COMPRESSION IGNITION CLASS M & N VEHICLES

(a) Row No.	(b) Class of vehicle	(c) Reference mass of vehicle, where relevant (kilograms)	(d) EC emissions standard	(e) Limit values for NO <sub>x</sub> (grams per kilometre)	(f) Limit values for particulate matter	(g) Appropriate tests
(1)	M <sub>1</sub>	not exceeding 2610	Euro 6	0.08	0.005 g/km and 6.0×10 <sup>11</sup> PN/km	Type 1

(2)	M <sub>2</sub>	not exceeding 2610	Euro 6	0.125	0.005 g/km and 6.0×10 <sup>11</sup> PN/km	Type I
(3)	N <sub>2</sub>	not exceeding 2610	Euro 6	0.125	0.005 g/km and 6.0×10 <sup>11</sup> PN/km	Type I
(4)	N <sub>1</sub> sub- class (i)	not exceeding 2610	Euro 6	0.08	0.005 g/km and 6.0×10 <sup>11</sup> PN/km	Type I
(5)	N <sub>1</sub> sub- class (ii)	not exceeding 2610	Euro 6	0.105	0.005 g/km and 6.0×10 <sup>11</sup> PN/km	Type I
(6)	N <sub>1</sub> sub- class (iii)	not exceeding 2610	Euro 6	0.125	0.005 g/km and 6.0×10 <sup>11</sup> PN/km	Type I

”.

(4) In Tables 5 and 6 renumber column (f) as column (g).

6.—(1) Paragraph 3 of Annex 2 to the LEZ Scheme is amended as follows.

(2) In sub-paragraph (t) omit “the fifth column of”.

(3) In sub-paragraph (v) omit “column L4 of”.

(4) After sub-paragraph (x) insert—

“(xa) “Euro V” means the emissions limit values set out in row B2 of Table 1 and Table 2 of Section 6.2.1 of Annex 1 to Council Directive 55/2005;”.

(5) In sub-paragraph (y) omit “the sixth column of”.

(6) Renumber sub-paragraphs (gg), (hh) and (ii) as sub-paragraphs (jj), (kk) and (ll) respectively.

(7) Renumber sub-paragraph (ee) as (gg).

(8) After sub-paragraph (dd) insert—

“(ee) “NEDC” means the drive cycle defined in Annex 4a of Regulation No. 83 of the Economic Commission for Europe of the United Nations;”.

(9) After sub-paragraph (gg) as renumbered insert—

“(hh) “PN/km” means the number of solid particles emitted by a vehicle per kilometre;

(ii) “PN/kWh” means the number of solid particles emitted by a vehicle per kilowatt-hour;”.

(10) For sub-paragraph (jj) as renumbered substitute—

“(jj) “Type I test” means a test carried out in accordance with Annex III of Council Directive 692/2008 applying the NEDC or the appropriate WLTC test cycle;”.

(11) In sub-paragraphs (kk) and (ll) as renumbered, for “United Nations.” substitute “United Nations;”.

(12) After sub-paragraph (ll) as renumbered insert—

“(mm) “WLTC” means the Worldwide Light-Duty Test Cycles as defined in Annex 1 of Global Technical Regulation No. 15 of the Economic Commission for Europe of the United Nations.”.

**Transitional Provisions – advance purchase of licences, resident's vehicles and certain disabled vehicles**

7. The Annex to this Variation Scheme has effect in relation to the advance purchase of certain licences, resident's vehicles and certain disabled vehicles.

## ANNEX TO THE VARIATION SCHEME

### TRANSITIONAL PROVISIONS

#### **Resident's vehicles liability for ULEZ charge**

1.—(1) During the residents' transitional period Transport for London shall treat any vehicle that is—

- (a) liable to pay a charge imposed by article 7(2) of the LEZ Scheme; and
- (b) a qualifying resident's vehicle,

as if it were a non-chargeable vehicle for the purposes of the LEZ Scheme in respect of charges imposed by article 7(2).

(2) In this paragraph—

- (a) "residents' transitional period" means the period beginning with 8 April 2019 and ending on 10 April 2022;
- (b) "qualifying resident's vehicle" means a vehicle—
  - (i) that is a resident's vehicle within the meaning of paragraph 2 of Annex 3 of the Principal Scheme; and
  - (ii) particulars of which appear in the register.

#### **Certain disabled vehicles liability for ULEZ charge**

2.—(1) During the disabled vehicles transitional period Transport for London shall treat any vehicle that is—

- (a) liable to pay a charge imposed by article 7(2) of the LEZ Scheme;
- (b) a disabled vehicle; and
- (c) not operated by or on behalf of Transport for London,

as if it were a non-chargeable vehicle for the purposes of the LEZ Scheme in respect of charges imposed by article 7(2).

(2) In this paragraph—

- (a) "disabled vehicles transitional period" means the period beginning with 8 April 2019 and ending on 10 September 2023;
- (b) "registered in the GB & NI records" in relation to a vehicle means that the vehicle is registered under section 21 of the 1994 Act in the register which is maintained on behalf of the Secretary of State by the Driver and Vehicle Licensing Agency.
- (3) A "disabled vehicle" is a vehicle that is —
  - (a) a vehicle registered in the GB or NI records and falling within paragraphs 18, 19 or 20 of Schedule 2 to the 1994 Act; or
  - (b) a vehicle registered under legislation relating to the registration of vehicles in a member State in respect of which Transport for London is satisfied that, had the vehicle been registered under the 1994 Act, it would have been an exempt vehicle under paragraph 18 or 20 of Schedule 2 to that Act had it been registered under that Act.

#### **Restriction on advance purchase of ULEZ licences**

3. Notwithstanding the provisions of articles 8(5)(a) and 8(6)(b) of the LEZ Scheme, a licence in respect of a charge imposed by article 7(2) of the LEZ Scheme may only be purchased on or after 8 April 2019.