

Ultra Low Emission Zone

Further consultation on Licensing Proposals for Taxi and
Private Hire Vehicles

Consultation Report

Ultra Low Emission Zone

Further consultation on Licensing Proposals For Taxi and Private Hire Vehicles

TfL's Report on the Consultation

October 2015

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Overview

TfL consulted on proposed changes to taxis and private hire vehicle (PHV) licensing between 1 July and 25 August 2015. The proposals consulted on are set out as Package 2 in the left-hand column of Table 1 below. Since those proposals were put forward, TfL has, following further engagement with the taxi and PHV trades and as a result of responses made to the consultation, revised these proposals. TfL is now recommending that the revisions set out in Package 2A (in the right-hand column of Table 1) be adopted. The terms 'Package 2' and 'Package 2A' will be used throughout this report.

Prior to this consultation, TfL consulted on an original set of proposed changes to taxi and PHV licensing as an integral part of the consultation on the Ultra Low Emission Zone (ULEZ) which ran from October 2014 to January 2015 and which is described more fully in the following chapter. That set of original taxi and PHV proposals is referred to in this report as Package 1 and TfL, as a result of responses made to that consultation, revised those proposals which became Package 2 and eventually Package 2A as set out in Table 1 below (and described in Chapter 1). Appendix A shows Package 1, Package 2 and Package 2A for comparison.

Table 1: Summary of proposals consulted on from July to August 2015 (Package 2) and proposals now recommended (Package 2A)

| PACKAGE 2 | PACKAGE 2A |
|--|--|
| Consulted taxi proposals | Recommended taxi proposals (no change) |
| <ul style="list-style-type: none"> Proposal 1: From 1 January 2018, all vehicles licensed for the first time as taxis must be ZEC. This is defined as a vehicle that emits (at tailpipe) ≤50g/km CO₂ with a minimum zero emission range of 30 miles.¹ A ZEC taxi must be petrol if an ICE engine, other non diesel fuels permissible for non-ICE². Proposal 2: Instead of a reduced age limit, a voluntary decommissioning scheme is put in place by TfL for taxis over 10 years old to speed their removal from London's taxi fleet. There will also be grants for the purchase of ZEC taxis. A policy review at the start of 2020 to gauge progress on the voluntary decommissioning scheme and ZEC uptake. | <ul style="list-style-type: none"> Proposal 1: From 1 January 2018, all vehicles licensed for the first time as taxis must be ZEC. This is defined as a vehicle that emits (at tailpipe) ≤50g/km CO₂ with a minimum zero emission range of 30 miles.³ A ZEC taxi must be petrol if an ICE engine, other non diesel fuels permissible for non-ICE⁴. Proposal 2: Instead of a reduced age limit, a voluntary decommissioning scheme is put in place by TfL for taxis over 10 years old to speed their removal from London's taxi fleet. There will also be grants for the purchase of ZEC taxis. A policy review at the start of 2020 to gauge progress on the voluntary decommissioning scheme and ZEC uptake. |
| Consulted PHV proposals | Recommended PHV proposals (change) |
| Changes apply to PHVs licensed for the first time in London | |
| <ul style="list-style-type: none"> Proposal 3: From 1 January 2018, <u>new</u> vehicles (defined as up to 18 months old (inclusive) from the date of registration with the DVLA) licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4); Proposal 4: For PHVs, any vehicle meeting the criteria set out in categories 1, 2 or 3 of the OLEV plug-in car grant eligibility criteria will be regarded by TfL as ZEC; Proposal 5: Vehicles with 6+ seats in addition to the driver's seat that are licensed for the first time as PHVs would not be required to meet the approved ZEC requirement until 1 January 2020. Until this time and from 1 January 2018, they would need to be at least Euro 6 to be licensed as a PHV; Proposal 6: From 1 January 2018, <u>used</u> vehicles (defined as more than 18 months old from the date of registration with the DVLA) licensed for the first time as PHVs must meet a minimum Euro 4 petrol or Euro 6 diesel standard. This is instead of the existing five year introductory age limit, which would be discontinued from 2018⁵. | <ul style="list-style-type: none"> Proposal 3A: From 1 January 2018, <u>all vehicles</u> licensed for the first time as PHVs must be Euro 6 (petrol or diesel), unless they are petrol hybrid, in which case Euro 4 is the minimum standard; Proposal 3B: From 1 January 2020, <u>new</u> vehicles (defined as up to 18 months old (inclusive) from the date of registration with the DVLA) licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4); Proposal 4: For PHVs, any vehicle meeting the criteria set out in categories 1, 2 or 3 of the OLEV plug-in car grant eligibility criteria will be regarded by TfL as ZEC; Proposal 5: No longer appropriate as superseded by modified Proposal 3; Proposal 6A: From 1 January 2020, <u>used</u> vehicles (defined as more than 18 months old from the date of registration with the DVLA) licensed for the first time as PHVs must be Euro 6; Proposal 7: From 1 January 2023, <u>all vehicles</u> licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4). |

¹ Carbon dioxide emissions and range measurements shall be taken from the "official" type approval data for the vehicle as prescribed in EU Regulation 715/2007 as amended.

² These requirements will remain under review and should suitable alternative emission vehicle technologies become available Transport for London may amend the list of permitted fuel types.

³ Carbon dioxide emissions and range measurements shall be taken from the "official" type approval data for the vehicle as prescribed in EU Regulation 715/2007 as amended.

⁴ These requirements will remain under review and should suitable alternative emission vehicle technologies become available Transport for London may amend the list of permitted fuel types.

⁵ In January 2015, TfL introduced an exemption to the 5 year rule – that full electric and petrol hybrid vehicles which emit less than 110g/km CO₂, as defined by the manufacturer, will be exempt from the 5 year rule.

1. Introduction

1.1. About this document

- 1.1.1. This report concerns the updated ULEZ taxi and PHV proposals which were consulted on from 1 July to 25 August 2015, the responses to these proposals made by the public, businesses and stakeholders, and TfL's subsequent recommendations to the Mayor for his endorsement so that TfL can make the appropriate amendments to licensing.
- 1.1.2. The taxi and PHV licensing proposals and the process by which they were developed are summarised in the following sections of this document, and in the Supplementary Information Addendum (SIA) made available for this consultation. Chapter 1 describes the proposals put forward in this second consultation, and compares them with those in the first consultation. Chapter 2 describes developments since the confirmation of the ULEZ in March 2015, and provides a context for the recommendations from this consultation.
- 1.1.3. The likely impacts of these changes on air quality and human health have been modelled and the impacts have been independently assessed by Jacobs consultancy, and set out in an Addendum to their original Integrated Impact Assessment (IIA). The IIA Addendum was available during the consultation period and its findings are summarised in Chapter 3. All of the consultation documents remain online⁶.
- 1.1.4. The consultation process is described in Chapter 4 and the responses received are summarised in Chapters 5 and 6. Chapter 7 is TfL's response to the issues raised in the consultation and its recommendations to the Mayor and Commissioner for Transport⁷. The conclusions are set out in Chapter 8.

1.2. Update on London's air quality

- 1.2.1. As set out in detail in the original consultation, the main rationale for the ULEZ package of measures is the need to improve air quality in London, alongside other objectives such as increasing the use of zero emission capable (ZEC) vehicles.

⁶ <https://consultations.tfl.gov.uk/environment/ulez-2>

⁷ TfL is the licensing authority for taxis and PHVs in London. Subject to the Mayor's endorsement, changes to the licensing requirements would be implemented by TfL by means of the Conditions of Fitness (CoF) for taxis and Vehicle Regulations for PHVs, and approved exemptions to them. These are the legal documents under which TfL licenses such vehicles. In addition to this report, TfL has prepared a memo to the Commissioner for Transport which seeks approval of the amended taxi and PHV licensing requirements, subject to the Mayor's endorsement.

- 1.2.2. There are two pollutants of most concern in London of which road transport emissions are a significant source:
- **Nitrogen dioxide (NO₂):** *At high concentrations, NO₂ 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.*
 - **Particulate matter (PM):** *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 (PM₁₀) are likely to be inhaled deep into the respiratory tract. The health impacts of PM_{2.5} are especially significant as smaller particles can penetrate even deeper.*
- 1.2.3. London currently breaches legal limits for NO₂, although it is compliant with the legal limit for all of the other eight pollutants regulated by the European Union (including PM). Compliance with the legal limit for NO₂ was meant to be met in 2010 but it is not currently expected to happen until after 2030 without further intervention, such as the ULEZ.
- 1.2.4. The Supreme Court ruled in April 2015 mandating the Government to submit plans to the European Commission by 31 December 2015 to bring forward the estimated date of NO₂ compliance. The Department for Environment Food and Rural Affairs (Defra) is therefore drafting a national NO₂ Action Plan as well as 16 regional NO₂ action plans (including for Greater London) to meet this requirement, which it must also undertake a public consultation on. TfL and the GLA both provided information and technical advice to Defra to help them produce the plan for London and continue to make the case to Government that additional funding provision and action is needed by the Government and the EU to improve air quality once and for all.
- 1.2.5. On 12 September 2015, Defra published draft air quality plans to meet the EU air quality limit values for NO₂. There are 38 plans by zone, including one for the Greater London Urban Area. The consultation runs until 6 November 2015.
- 1.2.6. The extent of the negative effects of air pollution on health is dependent on each person's level of exposure and other diseases they may be vulnerable to or suffering from. Knowledge of the impacts of air quality on health is continually increasing as research in this area progresses⁸.

⁸ <http://www.who.int/mediacentre/factsheets/fs313/en/>

- 1.2.7. It can be difficult to demonstrate a clear link between an individual's health and air quality. However, there are a number of studies that try to estimate the impacts at a population level. The Committee on the Medical Effects of Air Pollution has recognised a relationship between concentration and mortality rates⁹. This demonstrated that in 2008 an equivalent of 4,300 deaths in the Capital were attributed to long-term exposure to fine particulate matter (PM_{2.5}) and a permanent reduction of 1µg/m³ would increase life expectancy equivalent to an average 3 weeks per member of the 2008 population, with the expected gains differing by age¹⁰.
- 1.2.8. In 2012, the World Health Organisation classified diesel engine exhaust as carcinogenic to humans; based on sufficient evidence that exposure is associated with an increased risk of lung cancer¹¹. Due to the large number of variables that influence the health impacts of air pollution, scientific understanding of this complex relationship is continually advancing. Stronger evidence and methodologies to assess the health impacts of short and long-term exposure to NO₂ are being established which still require expert bodies to verify them.
- 1.2.9. A study undertaken by Kings College, London in 2015¹² looked at the impact of NO₂ and PM exposure in London and showed that, close to an equivalent of 10,000 deaths in the capital in 2010 can be attributed to poor air quality. The study found that the 2008 estimate of 4,300 deaths per year attributed to PM_{2.5} as noted in section 1.2.7 above had fallen to 3,537 in 2010, due to air quality improvements and methodological changes. For the first time statistics relating to NO₂ were published showing 5,879 deaths a year in 2010 can be ascribed to this pollutant. All of this shows that more needs to be done to improve air quality in London and the proposals in this consultation, alongside those already confirmed by the Mayor (refer to section 1.3 below), will help London take a significant step towards achieving this – especially in relation to the latest infraction proceedings against the Government.

1.3. The original consultation

- 1.3.1. The proposals discussed in this report (ie Package 2 and 2A from the 'current consultation'¹³, refer to Table 1 above) follow a widespread public and

⁹ for every 10µg/m³ increases in average PM_{2.5} concentration there is an estimated 6% increase in annual all-cause death

¹⁰ http://www.london.gov.uk/sites/default/files/Health_Study_%20Report.pdf

¹¹ http://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213_E.pdf

¹² <https://www.london.gov.uk/priorities/environment/publications/understanding-health-impacts-of-air-pollution-in-london>

¹³ Which ran from 1 July to 25 August 2015.

stakeholder consultation undertaken late last year (the 'original consultation')¹⁴ on a package of measures presented under the umbrella term 'Ultra Low Emission Zone (ULEZ)'. For the purpose of this report, this package of measures will be termed herein the 'original ULEZ package' and comprised overarching measures to not only reduce emissions from taxis and PHVs (ie Package 1) but also from buses and other road using vehicles.

1.3.2. TfL's report to the Mayor in March 2015¹⁵ summarised the outcome of the original consultation and its subsequent recommendations on the original ULEZ package, including the introduction of the ULEZ in central London from 7 September 2020 by means of a Variation Order¹⁶, which has since been confirmed by the Mayor.

1.3.3. In recognition of their total contribution to NO_x emissions (the pollutant which forms NO₂ concentrations in the atmosphere), the original ULEZ package also proposed a number of changes to taxi and PHV licensing requirements to reduce emissions and increase the uptake of ZEC vehicles in these fleets. These proposals (Package 1) were as follows:

- *A reduction in the age limit for all non-ZEC taxis from 7 September 2020 from 15 to 10 years (irrespective of date of licensing);*
- *A requirement that all taxis and new PHVs presented for licensing in London for the first time from 1 January 2018 would need to be ZEC;*
- *A requirement that second-hand PHVs presented for licensing in London for the first time from 1 January 2018 must meet the ULEZ standards, which are dependent on vehicle type (Euro 4 petrol, Euro 6 diesel).*

1.3.4. As an outcome of the original consultation, TfL recommended that the changes to taxi and PHV licensing should not be confirmed at that time and a further consultation should take place once certain concerns had been considered in more detail. The rationale for this recommendation was summarised in the Report to the Mayor as follows:

'There are uncertainties around the level of funding available and approach to take with regard to financial assistance towards mitigating the impact of the reduced taxi age limit. There is also a need to provide further clarity with regard to the funding required to assist with the purchase of ZEC taxis and PHVs. Of

¹⁴ Which ran from 27 October 2014 to 9 January 2015.

¹⁵ <https://consultations.tfl.gov.uk/environment/ultra-low-emission-zone?cid=ultra-low-emission-zone>

¹⁶ The scheme was implemented by means of a change to the Low Emission Zone (LEZ) Scheme Order, set out in The Greater London Low Emission Zone Charging (Variation and Transitional Provisions Order 2014).

particular concern for the PHV industry is the range of vehicle models which will satisfy the ZEC requirement and the needs of different operators. Finally, for both taxis and PHVs there is uncertainty about the availability of appropriate rapid-charging infrastructure for ZEC vehicles¹⁷.

1.4. The current consultation

1.4.1. As an outcome of the original consultation, the Mayor asked TfL to undertake further consultation and engagement with the taxi and PHV trades on the identified issues before making a final recommendation. Other developments also had a bearing on the decision to consult again including further announcements made by the Government about funding for ultra low emission vehicles (ULEVs), both during, and subsequently to, the original consultation. This included the Government announcing soon after the end of the first consultation that it had allocated £25m for London towards purchase grants for ZEC taxis¹⁸.

1.4.2. TfL undertook this further engagement and as a consequence of this and other developments, put forward updated taxi and PHV licensing proposals (Package 2), which were the subject of the current consultation. Full details and the reasoning for each proposal are provided in the SIA document which was prepared for the current consultation and made available online¹⁹.

1.4.3. Table 2 and Table 3 below provide a summary of the two sets of taxi and PHV proposals, ie those consulted on in 2014 (Package 1) and those consulted on in summer 2015 (Package 2).

Table 2: Comparison of taxi proposals put forward in Package 1 and Package 2

| Taxi licensing proposals presented in the original consultation (Package 1) | Taxi licensing proposals presented in the current consultation (Package 2) |
|--|---|
| <ul style="list-style-type: none"> Proposal 1: From 1 January 2018, all vehicles licensed for the first time as taxis must be ZEC. This is defined as a vehicle that emits (at tailpipe) ≤50g/km CO₂ with a minimum zero emission range of 30 miles. A ZEC taxi must be petrol if an internal | <ul style="list-style-type: none"> Proposal 1: From 1 January 2018, all vehicles licensed for the first time as taxis must be ZEC. This is defined as a vehicle that emits (at tailpipe) ≤50g/km CO₂ with a minimum zero emission range of 30 miles. |

¹⁷ Paragraph 12.4.2 of the Report to the Mayor, March 2015

¹⁸ These grants will top-up the already existing Government plug-in car grant, currently £5k per vehicle.

¹⁹ *Ultra Low Emission Zone, Further consultation on Licensing Proposals for Taxi and Private Hire Vehicles, Supplementary Information Addendum*, July 2015 v3, https://consultations.tfl.gov.uk/environment/ulez-2/user_uploads/ulez-supp-info-2307.pdf

| Taxi licensing proposals presented in the original consultation (Package 1) | Taxi licensing proposals presented in the current consultation (Package 2) |
|---|--|
| <p>combustion engine (ICE), other non-diesel fuels permissible for non-ICE²⁰.</p> <ul style="list-style-type: none"> • Proposal 2: A 10 year age limit for non ZEC taxis from 2020 with an associated compensation scheme for affected owners. | <ul style="list-style-type: none"> • Proposal 2: Instead of a reduced age limit, a voluntary decommissioning scheme is put in place by TfL for taxis over 10 years old to speed their removal from London's taxi fleet. There will also be grants for ZEC taxis. |

Table 3: Comparison of PHV proposals put forward in Package 1 and Package 2²¹

| PHV licensing proposals presented in the original consultation (Package 1) | PHV licensing proposals presented in the current consultation (Package 2) |
|--|---|
| <ul style="list-style-type: none"> • Proposal 1: From 1 January 2018, <u>new</u> vehicles (defined as up to 18 months old (inclusive) from the date of registration with the DVLA) licensed for the first time as PHVs must meet the approved ZEC requirement; • Proposal 2: From 1 January 2018, <u>used</u> vehicles (defined as more than 18 months old from the date of registration with the DVLA) licensed for the first time as PHVs must meet a minimum Euro 4 petrol or Euro 6 diesel standard. | <ul style="list-style-type: none"> • Proposal 1: From 1 January 2018, <u>new</u> vehicles (defined as up to 18 months old (inclusive) from the date of registration with the DVLA) licensed for the first time as PHVs must meet the approved ZEC requirement (revised criteria²²); • Proposal 1B: Vehicles with 6+ seats in addition to the driver's seat licensed for the first time as PHVs would not be required to meet the approved ZEC requirement until 1 January 2020. Until this time and from 1 January 2018, they would need to be at least Euro 6 to be licensed as a PHV; • A discontinuation of the introductory five year age limit rule²³ • Proposal 2: From 1 January 2018, <u>used</u> vehicles (defined as more than 18 months old from the date of registration with the DVLA) licensed for the first time as PHVs must meet a minimum Euro 4 petrol or Euro 6 diesel standard. |

²⁰ The ZEC requirements will remain under review and should suitable alternative emission vehicle technologies become available TfL may amend the list of permitted fuel types.

²¹ These would supersede the existing introductory five year age limit for newly licensed PHVs.

²² The criteria for a ZEC PHV have been updated since the original consultation.

²³ In January 2015, TfL introduced an exemption to the 5 year rule – that full electric and petrol hybrid vehicles which emit less than 110g/km CO₂, as defined by the manufacturer, will be exempt from the 5 year rule.

1.4.4. Key changes to the original Package 1 proposals were as follows:

- *No longer reducing the taxi age limit and introducing a voluntary decommissioning scheme instead to provide financial incentives and avoid unintended impacts to the taxi vehicle market, which remains volatile;*
- *A change in the PHV ZEC requirement to align with the Government's Plug-in Car Grant eligibility criteria to increase availability and affordability of suitable vehicles for use as PHV ZECs;*
- *Introducing a two-year sunset period exemption to the ZEC requirement for vehicles with 6+ seats in addition to the driver's seat.*

1.4.5. As a result of additional engagement and analysis undertaken during the current consultation, TfL is now recommending some changes to the PHV proposals set out in Package 2. The changed proposals are detailed as Package 2A and are shown in Table 4 below. No further changes to the taxi proposals set out in Package 2 are being put forward and it is recommended that changes to taxi licensing as set out in Package 2 are implemented.

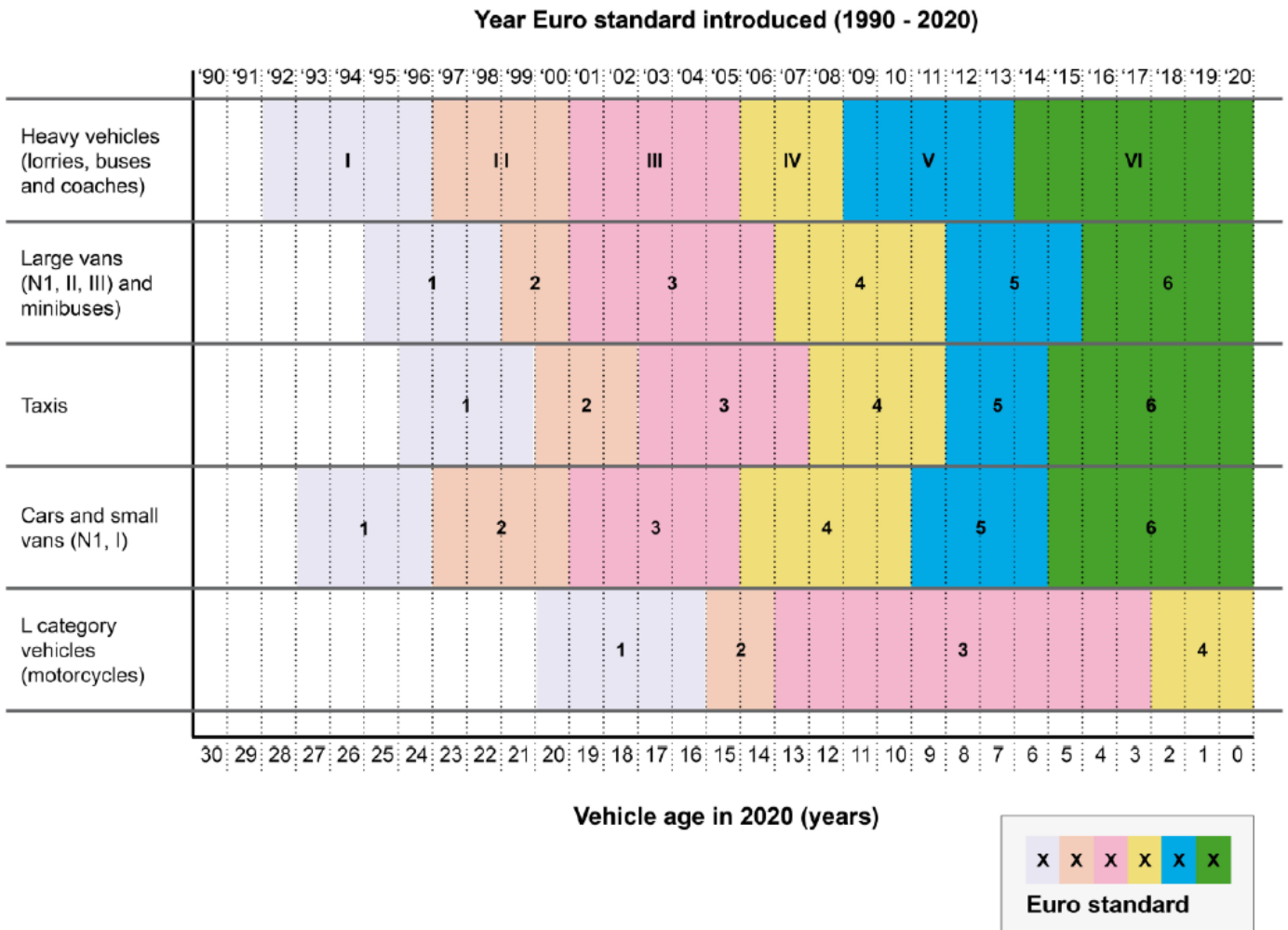
Table 4: Changes to PHV proposals now recommended (Package 2A)

| PHV licensing proposals now recommended by TfL (Package 2A). All changes apply to PHVs licensed for the first time in London. |
|---|
| <ul style="list-style-type: none">• Proposal 3A: From 1 January 2018, <u>all vehicles</u> licensed for the first time as PHVs must be Euro 6 (petrol or diesel) unless they are petrol hybrid (in which case Euro 4 is the minimum standard);• Proposal 3B: From 1 January 2020, <u>new</u> vehicles (defined as up to 18 months old (inclusive) from the date of registration with the DVLA) licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4);• Proposal 4: For PHVs, any vehicle meeting the criteria set out in categories 1, 2 or 3 of the OLEV plug-in car grant eligibility criteria will be regarded by TfL as ZEC;• Proposal 5: (ie the ZEC exemption for vehicles with 6+ seats in addition to the driver's seat) - No longer appropriate as superseded by modified Proposal 3 (3B);• Proposal 6A: From 1 January 2020, <u>used</u> vehicles (defined as more than 18 months old from the date of registration with the DVLA) licensed for the first time as PHVs must be Euro 6;• Proposal 7: From 1 January 2023, <u>all vehicles</u> licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4). |

Note: Carbon dioxide emissions and range measurements shall be taken from the "official" type approval data for the vehicle as prescribed in EU Regulation 715/2007 as amended.

1.4.6. Given the inclusion of Euro standards in the proposed changes to PHV licensing, it may be useful here to set out the dates from which certain Euro standards become mandatory (Table 5). As can be seen, Euro 6 becomes mandatory for newly-manufactured cars (and hence most PHVs) from 2015.

Table 5: Year of introduction for Euro standards



1.4.7. This report summarises the current consultation and outlines TfL’s subsequent recommendations. In order to consider how these updated proposals (and recommended modifications) contained in Package 2 and 2A might change the impact of the original consultation, they have been presented in addition to measures already confirmed by the Mayor in March 2015 as part of the original consultation (together hereon known as the ‘updated ULEZ package’). The measures that have already been confirmed are:

- *New exhaust emission standards for all vehicles driving in central London from 7 September 2020;*
- *Investment in the TfL bus fleet so that all double deck buses operating in central London will be hybrid and all single deck buses will be zero emission (at tailpipe) by 2020.*

1.4.8. It is important to highlight here that as these two measures have already been confirmed by the Mayor they were not subject to further consultation or modification. Regardless of the changes to taxi and PHV licensing which are eventually made, these measures already confirmed would achieve significant improvements to air quality and human health in London. Without the ULEZ, 63 per cent of the population in the zone would be living in NO₂ exceedance areas in 2020. With the ULEZ Variation Order measures already confirmed, this figure falls to 26 per cent. However, changes to taxi and PHV licensing are an opportunity to realise even more reductions in this exposure.

1.5. Stakeholder engagement

1.5.1. In developing the original ULEZ package, TfL undertook extensive engagement with the taxi and PHV trades including drivers' representative organisations, fleet owners/operators and manufacturers of ZEC vehicles²⁴. Since the original consultation, TfL has continued to engage with these stakeholders prior to and during the current consultation (a record of meetings is listed in Appendix B of this document).

1.6. ULEZ contribution to emission savings

1.6.1. The new proposals (Package 2) put forward in the current consultation, were developed to reflect the current challenges facing the taxi and PHV trades while tackling London's air quality in the most effective and sustainable way. The changes to taxi and PHV licensing set out in this consultation contribute to a significant reduction in air quality pollutant emissions when considered as part of the overall ULEZ package.

1.6.2. The reason for this maintained benefit is the additional measures put forward in this consultation. These are set out below and are in addition to the ongoing measures which could be taken by TfL, the London boroughs, national government and the EU as set out in TfL's Transport Emissions Roadmap (TERM) document.

- *TfL to retrofit 400 Euro V buses in outer London to meet a Euro VI standard;*
- *TfL to invite private companies to participate in a zero emission double-decker demonstrator project in central London;*

²⁴ See Appendix I of the Report to the Mayor (March 2015) for a list of these meetings, https://consultations.tfl.gov.uk/environment/ultra-low-emission-zone/user_uploads/ulez-consultation-report-to-the-mayor.pdf

- *Establishment of a Low Emission Neighbourhood (LEN) in central London.*

- 1.6.3. These additional interventions will not result in exactly the same impacts as the original proposals. They will achieve significant NO_x emissions savings – commensurate with the absolute savings made by the original proposal at a London wide level in 2020 – but will not lead to exactly the same reductions in NO₂ concentrations. This is especially the case in central London.
- 1.6.4. In central London, the compensatory action of additional measures is less effective in terms of maintaining emissions savings. This is in part because of the significant contribution made by taxis to air pollution and in part due to the significant reductions already achieved in London. As set out in section 1.4.8 above, the proportion of people living in NO₂ exceedance areas in the ULEZ zone as a result of the ULEZ measures already confirmed but not including the Package 1 PHV and taxi proposals falls from 63 per cent to 26 per cent in 2020. With Package 1 included, it falls to 16 per cent. With Package 2 or 2A, the figure increases to 17 per cent.
- 1.6.5. In terms of population living in areas of NO₂ exceedance there is one percentage point fewer people taken out of areas of exceedance in central London as a consequence of the updated taxi and PHV proposals (this applies in the case of either Package 2 or Package 2A).
- 1.6.6. Moving outside central London, the population living in exceedance areas without action in 2020 is lower, at seven per cent London-wide. This would reduce to around three per cent regardless of which taxi /PHV package is implemented.
- 1.6.7. In principle it would be possible to propose a transport intervention (for example by reducing HGV vehicle kilometres by 40 per cent) that would replicate the impact of the Package 1 proposal (particularly the 10 year taxi age limit). However, any such intervention would have significant adverse social and economic impacts which would considerably outweigh the air quality benefits.
- 1.6.8. The explanation for this difficulty lies in part in the success of interventions so far such as greener buses, taxi age limits and the Low Emission Zone (LEZ) and the further reductions which will be achieved by the ULEZ. As road transport emissions are successfully reduced, the measures required to achieve further significant reductions become increasingly drastic, with diminishing returns and

potential for other adverse impacts. Further details of these mitigation measures are provided in section 8 of the SIA document²⁵.

²⁵ https://consultations.tfl.gov.uk/environment/ulez-2/user_uploads/ulez-supp-info-2307.pdf

2. Recent developments

2.1. Revised PHV proposals

- 2.1.1. During the current consultation, TfL continued to engage with the PHV trade (see Appendix B for a list of meetings) which continued to express concern about the proposed 2018 ZEC requirement. They raised on-going concerns about the lack of appropriate electric vehicle charging infrastructure as well as availability and affordability of suitable ZEC vehicles which could be used as a PHV by 2018, even with the proposed relaxation of the ZEC criteria to align with the Office for Low Emission Vehicles (OLEV) criteria as well as the assurances provided by TfL that appropriate charging infrastructure would be developed and implemented in time to support the commencement of the 2018 requirement.
- 2.1.2. TfL considered these issues and consequently in August 2015 explored further possible options with the trade. This has led to the proposed further amendments to the proposals in Package 2 which are now being recommended by TfL as Package 2A. These changes are discussed in more detail in Chapters 7 and 8 and are summarised in Table 4 in the previous chapter.

2.2. An Ultra Low Emission Vehicle Delivery Plan

- 2.2.1. In July 2015 TfL published 'An Ultra Low Emission Vehicle Delivery Plan for London' which sets out the plan to make ULEVs part of London's public transport offer. In it, TfL sets out 15 actions aimed at developing and assisting ULEV take-up in London. These actions are categorised as: short term (quick wins and immediate action) to support those who already own ULEVs; medium term (up to the next 10 years); and long term to prepare for ULEVs becoming a mainstream vehicle option for London.
- 2.2.2. In addition to this, the Plan sets out three pillars that are needed to support the uptake of ULEVs, being: infrastructure; vehicles on the roads; and marketing and incentives. Innovation and new technologies will also push forward progress across all three themes.
- 2.2.3. The full list of actions with their corresponding pillars in brackets is as follows:

Short term

1. Support stakeholders' aspirations for expanding Source London²⁶ (infrastructure)
2. Identify priority charging and refuelling infrastructure locations, based on research and stakeholder insight (infrastructure)
3. Work with car clubs to achieve a target of 50 per cent ULEVs in the London car club fleet by 2025 (vehicles)
4. Deploy 1,000 vehicles in GLA Group fleets, including 120 ULEVs in TfL support fleet (vehicles)
5. Increase public awareness and acceptance of ULEVs (marketing & incentives)

Medium term

6. Deploy a rapid charge point network (infrastructure)
7. Provide charging solutions for residents without off-street parking (infrastructure)
8. Offer attractive incentives to stimulate ULEV uptake (marketing & incentives)
9. Support the implementation of local air quality schemes (marketing & incentives)
10. Streamline the ULEV and charging infrastructure procurement processes (marketing & incentives)
11. Achieve zero emission capable taxis and PHVs on London's streets from 2018 (vehicles)
12. Increase the uptake of ULEVs in freight and fleet organisations (vehicles)

Long term

13. Demonstrate and test new technologies and approaches (innovation & new technologies)
14. Test and evaluate the application of geofencing for zero emission capable vehicles (innovation & new technologies)
15. Ensure London is ready for the commercialisation of hydrogen transport (innovation & new technologies)

2.2.4. Several of these actions are directly relevant for the taxi and PHV proposals consulted on. In particular those concerning infrastructure are important. It must also be noted that the delivery of these actions is in some cases dependent on

²⁶ TfL set up and administered Source London from 2009 to 2014, using government Plugged-in Places and match-funding from partners. Together, the Source London partners have delivered 1,400 publically accessible charge points.

support and funding from OLEV and private sector interest and that some may need to be changed in the light of other developments. The transition to ultra low emission vehicles is an ambitious and complex project which will require contributions from the Government, the boroughs and the private sector as well as the Mayor and TfL.

- 2.2.5. Progress has already been made with regard to a rapid-charging network in London (Action 6 above). In June 2015, TfL published a Prior Information Notice (PIN) to seek views and information from a broad range of suppliers and partners, which will be used to progress future charging infrastructure in London. In particular this market engagement focused on how rapid charging infrastructure could be used to support the next generation of electric vehicles which will include taxis, PHVs and other commercial fleets.
- 2.2.6. There was significant interest resulting from the PIN from UK and European companies. As a result of the responses, TfL has now met with a range of interested parties, including a range of potential charge point suppliers, operators, investors, electricity suppliers and car clubs. The outcomes of this early market engagement will inform TfL's approach to how charging infrastructure can be deployed. TfL then plans to issue an OJEU invitation (currently scheduled for early 2016) to engage a supplier.
- 2.2.7. The Ultra Low Emission Vehicle Delivery Plan sets out that TfL will work with suppliers to develop a network of 150 rapid charge points by 2018, of which 90 charge points would be needed for ZEC taxis by 2018. The research TfL has undertaken and further engagement with the taxi and private hire trades will inform the locations in which the charge points will be installed. One immediate input has been the comments made in response to this consultation about the need for 22kW 'fast' charging for ZEC taxis. TfL is now considering installing this type of charge point at taxi ranks and other key locations.
- 2.2.8. For the wider network (open to PHVs as well as private vehicles), TfL is looking at higher power (43-50kW) 'rapid' charging. It is currently estimated that 300 rapid charge points will be needed by 2020.
- 2.2.9. Conventional, 'slow' charging will still be available on street via the existing charge point network (Source London, which has 1,400 charge points). The Ultra Low Emission Vehicle Delivery Plan notes that the owners of the network, IER Bolloré have plans to increase this to 6,000 by 2018.
- 2.2.10. TfL recognises that on-street charging (or in other non-residential sites such as supermarket or hotel car parks) is important for the taxi and PHV trades and has set out its plans to deliver the right network. Additionally, private charging will continue to be an option for some drivers.

2.3. OLEV funding

- 2.3.1. OLEV provides a grant for the purchase of eligible vehicles (the plug-in car grant, PICG). The PICG is currently set at a maximum of £5k. In both consultations TfL has reiterated that this grant would continue to be available for the purchase of vehicles to be used as ZEC PHVs, and, subject to the continuation of the funding, ZEC taxis when they are available. As set out below, TfL is proposing a 'top-up' grant in addition to the OLEV scheme for ZEC taxis.
- 2.3.2. The recent change to the vehicle eligibility criteria for the OLEV PICG has been reflected in Proposal 4 of this consultation (refer to Table 1 above) and is recommended for confirmation.
- 2.3.3. The Government committed previously to keeping the PICG at £5k until 50,000 claims had been reached. In August 2015, it confirmed that for all categories the grant will stay at its current level (35% of the cost of the car, up to a maximum of £5k) until at least the end of February 2016. The lead time limit of 9 months will continue to apply, ie the vehicle must be delivered and registered within 9 months of the claim being entered onto the portal.
- 2.3.4. An announcement setting out grant levels after February 2016 will be made after the autumn spending review towards the end of 2015.
- 2.3.5. The OLEV is seeking State Aid clearance from the European Commission for the maximum level of support that can be provided for each purchase of a ZEC taxi. It has indicated that this threshold is likely to be £8k per vehicle, which means TfL would be able to use the new £25m fund (refer to section 1.4.1 above) to provide a 'top-up grant' of up to £3k in addition to the national PICG. This would provide up to £8k towards the purchase of a ZEC taxi.

2.4. Taxi purchasing grants and decommissioning scheme

- 2.4.1. If the proposals set out in Package 2A are confirmed, TfL intends to make the ZEC taxi top-up grant payments available from mid 2017. This aligns with the availability of the new ZEC taxis (as set out in section 3.1 of the SIA document) and TfL will work with the manufacturers to ensure the grants are available from as soon as the vehicles are available. These grants will be paid directly to the manufacturer discounting the delivery cost to the taxi driver. This is also the approach taken by OLEV for its PICG and means that both grants are administered at the same time at point of sale, minimising bureaucracy.
- 2.4.2. Separately, TfL would make available decommissioning payments to eligible taxi owners. The payments will be available to owners who give up their right to re-license their vehicles as taxis in London before it meets the 15-year age limit, and will be on a sliding scale reflecting the number of 'plates' it has left. The

payments would be in the ranges set out in the consultation materials and shown in Table 6 below.

Table 6: Indicative taxi decommissioning payments

| Number of plates remaining | Payment amount |
|-----------------------------------|-----------------------|
| 5 | £5,000 |
| 4 | £3,800 |
| 3 | £2,800 |
| 2 | £1,900 |
| 1 | £1,200 |

2.4.3. The ZEC purchase ‘top-up’ grant and the decommissioning scheme are separate schemes and there is no compulsion for the recipient of a decommissioning payment to buy a ZEC vehicle with this money. However both schemes would be available from around the same time and run until the end of 2020. This timeframe reflects the fact that funding is available only until this date and also acts as an incentive for the early uptake of the schemes. Removing the oldest and most-polluting taxis from the fleet, and increasing the proportion of ZECs in this period will help to ensure that the benefits of the policies are realised in a timely fashion.

2.4.4. Appendix H sets out more information on the voluntary decommissioning scheme. TfL will publish more information on its website about the schemes early in 2016 (when a decision has been made about the proposals).

2.5. Future taxi and PHV exemptions

2.5.1. If the Package 2A consultation proposals are confirmed, TfL intends to consult at a later date on possible exemptions to the taxi and PHV ZEC licensing requirements (eg for specialist vehicles). However these would be expected to be few in number and be led by the existing age limit exemptions.

2.5.2. TfL has recently (27 March – 19 June 2015) consulted on a review²⁷ of the private hire regulations, including proposals for enhanced driver training and an English language requirement. TfL is considering the responses to this consultation and expect to bring forward shortly a package of measures to strengthen the regulation of private hire services in London and which is

²⁷ <https://consultations.tfl.gov.uk/tph/private-hire-regulations-review>

separate to the proposals to amend the licensing requirements as set out in this report.

2.6. Mitigation measures

- 2.6.1. As set out in section 1.6 above, Package 2 (or for that matter, Package 2A) would not achieve the same emissions savings in central London as the proposals in Package 1. For this reason TfL put forward in the second consultation some mitigation measures which would help to ‘close the gap’ between the emissions savings which could be realised with the two packages. These were:
- *Retrofit 400 Euro V buses to Euro VI outside central London;*
 - *Demonstrator bus fund to trial double deck buses in central London;*
 - *Creation of a Low Emission Neighbourhood (LEN) in central London.*
- 2.6.2. In 2016, TfL will progress with retrofitting trials to bring Euro V buses up to Euro VI standard and subject to confirmation of funding and successful outcome of the trials will look to commence the retrofit programme of the additional 400 buses in outer London in late 2016. Also, the uptake of the zero emission double-decker demonstrator project in central London will be subject to TfL funding which should be confirmed at the end of 2015.
- 2.6.3. Regarding the proposed LEN for central London, TfL are investigating options for a central London scheme that meets the LEN principles and objectives set out in TfL guidance. Details and location of the proposed LEN will be confirmed in mid 2016. The central London LEN will be in addition to the LENs funded through the Mayor’s Air Quality fund.
- 2.6.4. In addition to this, the ‘LEZ for NRMMs’ (non-road mobile machinery) was recently implemented in London²⁸. For new planning permissions, it will require certain equipment used in construction to comply with air quality emissions standards specified in EU Directives. NRMM used on construction sites was responsible for 12% of NO_x emissions and 15% of PM₁₀ emissions in Greater London.

²⁸ From 1 September 2015. See <http://nrmm.london/nrmm/about/cleaner-construction-machinery-london>

3. Impacts of the proposals

3.1. Introduction

3.1.1. Prior to the original ULEZ consultation, TfL commissioned Jacobs Consulting to produce an IIA of the ULEZ, which comprised the following:

- *Equalities Impact Assessment (EqIA)*;
- *Health Impact Assessment (HIA)*;
- *Environmental Impact Assessment (EIA), and*;
- *Economic and Business Impact Assessment (EBIA)*.

3.1.2. These are still all available on-line²⁹. As a result of the two minor changes which were recommended following TfL's consideration of the responses to the original consultation³⁰, an Addendum to the IIA was produced and published as Appendix K in the Report to the Mayor in March this year, which is still also available online³¹.

3.1.3. To assess the impacts of the updated proposals for taxis and PHVs put forward for the current consultation, a second IIA Addendum was produced by Jacobs and was made available for the consultation³². This Addendum contains an assessment of the changes to the taxi and PHV proposals. In preparing this second addendum, Jacobs identified those impacts from the original IIA which were relevant to each of the revised proposals and assessed whether there was a better or worse impact of each. Jacobs presented their findings in a summary table which is provided in Table 7 below.

3.1.4. An appendix to the Addendum, comprising the Air Quality Health Impact Assessment was published online on 22 July 2015³³.

3.1.5. The Addendum report itself is provided separately to this report.

²⁹ <https://consultations.tfl.gov.uk/environment/ultra-low-emission-zone>

³⁰ These were: the addition of an exemption (in the form of a three-year sunset period) for vehicles adapted for disability needs and a change to the definition of historic vehicles.

³¹ <https://consultations.tfl.gov.uk/environment/ultra-low-emission-zone>

³² https://consultations.tfl.gov.uk/environment/ulez-2/user_uploads/integrated-impact-assessment.pdf

³³ https://consultations.tfl.gov.uk/environment/ulez-2/user_uploads/ia-appendix.pdf

3.2. Summary of changes to impacts

3.2.1. Jacobs undertook assessments of the following changes to the proposals as detailed in Package 2:

- *the retention of the 15-year age limit for taxis with the introduction of the voluntary decommissioning scheme (Proposal 2);*
- *the change to the definition of a ZEC PHV (Proposal 4); and*
- *the two-year sunset period exemption from the ZEC requirement for PHVs that carry six or more passengers (Proposal 5).*

3.2.2. The assessment should be understood as covering the entire ULEZ package (ie including the vehicle emission standards set out in the Scheme Order already confirmed by the Mayor), albeit the impacts of the updated taxi / PHV proposals are identified separately. There was no further assessment of the unchanged proposals or those which pertain only to the Scheme Order. It should be noted that the three mitigation measures were included in the assessment of Package 2.

3.2.3. Table 7 below provides the summary of changes to the impacts identified in the original IIA (Package 1) from the revised taxi and PHV proposals (Package 2). There continue to be major long-term positive impacts on health and the environment from the ULEZ with these updated proposals.

3.2.4. This assessment stands even though with the changed proposals the environmental and health impacts are worsened. This is mostly due to a slight worsening in the air quality benefits identified in the original IIA for both 2020 and 2025 as a result of retaining the 15 year age limit for taxis with a voluntary decommissioning scheme (Package 2) as opposed to a compulsory 10 year age limit (in Package 1).

3.2.5. This impact would mainly affect the air quality within the central London ULEZ area. The air quality in inner and outer London remains largely comparable to the original proposal. In terms of population living in areas of exceedence the results for the Package 2 are very similar to Package 1. There is no change at the inner, outer and London wide level however as a result of Package 2 there is one percentage point fewer people taken out of areas of exceedence within ULEZ. This maintenance of air quality benefits is a result of the proposal to upgrade the additional 400 Euro V buses to Euro VI to operate outside the CCZ / ULEZ area outlined in section 1.6.1 above.

3.2.6. Two of the minor negative equality impacts of the compulsory age limit reduction in the original proposals would be removed with the revised proposals, namely the effect on older taxi drivers/owners and the effect on safety for vulnerable

users. The changes to the PHV proposals set out in Proposal 4 and 5 (refer to Table 1 above) reduce the potential negative equalities impact on BAME PHV drivers.

3.2.7. Slight improvements to the economic impacts were also identified as a result of reduced costs to businesses.

Table 7: Summary of changes to the impacts identified in the IIA (October 2014) for the ULEZ Package 2

| Relevant impacts identified in IIA (October 2014) as a result of Package 1 | Scale of impact | Relevant update assessed | Change to scale of impact with Package 2 |
|--|--------------------------|--------------------------|--|
| Environmental impacts | | | |
| ULEZ would result in air quality improvements in nitrogen dioxide (NO ₂) concentrations in 2020 and 2025 | Major positive long term | Update 1 | Worsened but still major positive long term |
| In 2020 ULEZ would result in approximately 18,000 receptors across London no longer being exposed to concentrations exceeding the annual mean NO ₂ Air Quality Objectives and a further 2,000 receptors no longer being exposed by 2025. The largest percentage reduction in receptors exceeding the Air Quality Objectives in 2020 would be in central London (approx. 4,500 or 86%), followed by Inner Zone (approx. 10,500 or 52%) and Outer Zone (approx. 2,800 or 33%) | Major positive long term | Update 1 | Improved in 2020 but still major positive long term |
| ULEZ would result in air quality improvements in particulate matter (PM _{2.5}) concentrations and PM ₁₀ emissions in 2020 and 2025 | Minor positive long term | Update 1 | Worsened but still minor positive long term overall |
| ULEZ would result in reductions in total road traffic CO ₂ emissions by 123,000 tonnes per annum in 2020 and 169,000 tonnes in 2025 in central London. | Minor positive long term | Update 1 | Worsened but still minor positive long term overall |
| ULEZ would result in a reduced risk of degradation of cultural heritage assets as a result of PM ₁₀ emissions. Most significant in CCZ (9% or 10tpa in 2020 and 3% or 3tpa in 2025) | Minor positive long term | Update 1 | Worsened but still minor positive long term overall |
| Health impacts | | | |
| ULEZ would result in reduction in the number of people living in areas above NO ₂ annual limit value in 2020 and 2025 | Major positive long term | Update 1 | Slightly worsened but still major positive long term overall |
| ULEZ would result in reduction in the number of care homes, hospitals and schools in areas exceeding the NO ₂ Air Quality Objectives (AQOs) across London (greatest in central London) | Major positive long term | Update 1 | Slightly worsened but still major positive long term overall |

| Relevant impacts identified in IIA (October 2014) as a result of Package 1 | Scale of impact | Relevant update assessed | Change to scale of impact with Package 2 |
|---|----------------------------------|---------------------------------|--|
| ULEZ would result in reductions of 4,123 life-years lost across Greater London in 2020, however this reduces in 2025 | Moderate positive long term | Update 1 | Slightly worsened but still moderate positive long term overall |
| ULEZ would result in improved health outcomes estimated to have a total monetised benefit of £101m in 2020 and £32m in 2025 | Moderate positive long term | Update 1 | Slightly improved for 2020 but still moderate positive long term overall |
| Equality impacts | | | |
| ULEZ would result in a minor long term beneficial reduction in the average exposure to NO ₂ for all people in 2020 and 2025 however this would be greater for those in deprived areas as the average level of reduction on NO ₂ concentrations is higher in the most deprived areas | Minor positive long term | Update 1 | No change |
| ULEZ would have a positive differential impact on school age children, older people and pregnant women. This is as a result of the reduction of sensitive receptors (schools, care homes and hospitals) that would be in areas which experience exceedences in NO ₂ emissions | Moderate positive long term | Update 1 | Slightly worsened but still moderate positive long term overall |
| Lowering the taxi age limit may have a disproportionate effect on the third of licensed taxi drivers who are older (60+) who may choose to retire early rather than upgrade to a ZEC vehicle | Minor negative short-medium term | Update 1 | Removed |
| ULEZ may have a differential effect on women and the Lesbian, Gay, Bisexual and Transgender (LGBT) community arising from increased fear for personal safety in central London and other town centres in Greater London at night as a result of a potential decrease of available taxis. | Minor negative short-medium term | Update 1 | Removed |
| Black and Minority Ethnic (BAME) people are disproportionately represented as PHV drivers and therefore any additional costs from the ULEZ Package 1 may impact upon this group disproportionately | Minor negative short-medium term | Update 3 | Reduced |
| Economic impacts | | | |
| The improved health outcomes arising from the reduction in NO _x , PM ₁₀ and PM _{2.5} under the ULEZ for the GLAA are estimated to have a total monetised benefit of £101m in 2020 and £32m in 2025 | Moderate positive long term | Update 1 | Slightly improved for 2020 but still moderate positive long term overall |
| ULEZ would result in a 1-2% loss to the night time economy and 0.2% loss to the tourist sector (of which taxis fall within) and an overall loss of 0.03-0.08% | Minor negative short-medium term | Update 1 | Reduced |

| Relevant impacts identified in IIA (October 2014) as a result of Package 1 | Scale of impact | Relevant update assessed | Change to scale of impact with Package 2 |
|---|----------------------------------|--------------------------|--|
| The total costs to businesses of either complying with the ULEZ or paying the charge is expected to be around £120-250m in the first year which will fall disproportionately on SMEs but will diminish over time as the proportion of vehicles becoming compliant increases | Minor negative short-medium term | Update 3 | Reduced |

3.2.8. It should be noted that there was no further assessment undertaken of the changes to PHV licensing which are now being recommended. The reason for this is that given the small contribution that PHVs make to air pollutant emissions (only four per cent of road transport NO_x emissions in 2020), it is unlikely that this change would have any material or significant impact on the benefits or disbenefits to the proposals consulted on as Package 2 in July 2015 or originally as Package 1 in 2014-15.

3.3. Assessment of further changes in Package 2A

3.3.1. In light of the further changes to PHV proposals now being recommended by TfL (Package 2A), Jacobs were asked to revisit this assessment. It has produced a report on its findings, which is included at Appendix K in this report.

3.3.2. Its assessment of Package 2A found that there would be no changes to the air quality impacts (or indirect other environmental impacts) from the proposed changes. However there may be a further reduction of negative impacts on equality groups and on London's economy and SMEs. This assessment is summarised in Table 8 below.

Table 8: Summary of assessment of further changes (Package 2A)

| Relevant impacts identified in the IIA (October 2014) | Scale of impact (Package 1) | Change to scale of impact (Package 2) | Change to scale of impact (Package 2A) |
|--|----------------------------------|---------------------------------------|--|
| Equality groups | | | |
| Black, Asian and Minority Ethnic (BAME) people are disproportionately represented as PHV drivers and therefore any additional costs from the proposed ZEC licensing requirement may impact upon this group disproportionately | Minor negative short-medium term | Reduced | Further reduced |
| Economic | | | |
| The total costs to businesses of either complying with the ULEZ or paying the charge is expected to be around £120-250m in the first year which will fall disproportionately on SMEs but will diminish over time as the proportion of vehicles becoming compliant increases. | Minor negative short-medium term | Reduced | Further reduced |

4. The consultation process

4.1. Introduction

- 4.1.1. This chapter provides an overview of this current consultation, as well as a description of the actions and communication methods employed to promote the consultation itself and elicit views from the public and stakeholders about the proposals.
- 4.1.2. The primary objective of the consultation process is to understand the views of the public and stakeholders concerning the proposals. This report sets out the feedback from the consultation process which aims to inform TfL's decision making process.
- 4.1.3. The consultation sought views on the proposed changes to the Conditions of Fitness for taxis and Vehicle Regulations for PHVs.

4.2. Consultation dates

- 4.2.1. The consultation ran for eight weeks, commencing on Wednesday 1 July 2015 and closing on Tuesday 25 August 2015. It was originally scheduled for six weeks, to close on 11 August, however a two week extension was granted on 15 July when the IIA Addendum was made available in recognition of the need for additional time to consider this information.

4.3. Publicising the consultation

- 4.3.1. A marketing campaign was developed to raise awareness of the consultation and encourage customers to have their say.
- 4.3.2. The consultation received media coverage through editorial pieces in the Metro on 1 July, 28 July and 11 August notifying people of the consultation and urging them to have their say. A press release was issued on 11 August, reminding people of their opportunity to comment on the proposals.
- 4.3.3. Social media activity included tweets that were sent from the @TfL Twitter feed throughout the consultation period.
- 4.3.4. Detailed information about the scheme, supporting documents and an online questionnaire was available on TfL's consultation portal website at <https://consultations.tfl.gov.uk/environment/ulez-2>.

4.4. Stakeholder communications and meetings

- 4.4.1. TfL engaged with stakeholders both in developing the proposals (prior to consultation) and during the consultation itself.
- 4.4.2. The public consultation was supplemented by further engagement with the taxi and PHV trades, as set out in Appendix B. This was to ensure the trades were well briefed about the potential timetable for the proposed changes, to understand their issues and concerns, and to encourage participation in the consultation.
- 4.4.3. TfL contacted the key stakeholder organisations from the original consultation notifying them of this consultation.
- 4.4.4. TfL also offered face-to-face meetings to a small number of stakeholder organisations in order to provide a further opportunity to explain the proposals in detail. Although none of the organisations took up this proposal, the invitation remained open throughout the consultation.
- 4.4.5. A final email was sent to key stakeholders including Local Authorities in the final week of the consultation reminding them again to have their say.

4.5. Letters and emails

- 4.5.1. Letters were sent to taxi and PHV owners, drivers and operators using the mailing list provided by Taxi and Private Hire in TfL.
- 4.5.2. Within the first week of the consultation launch date, TfL emailed approximately 16,000 people who provided their email address when they responded to the original consultation. The e-mail provided a summary of the updated proposals and a link to TfL's consultation portal.
- 4.5.3. The email included a click-through link to the consultation portal where customers could share their views via the online questionnaire.
- 4.5.4. A further e-mail was sent to key stakeholders on 15 July following the upload of the IIA Addendum advising them that the IIA was available and providing notice of the two week extension to the consultation.

4.6. TfL website

- 4.6.1. TfL raised awareness of the consultation by placing banners in a number of prime areas of its website, including the congestion charge area. The click-through link sent customers to the consultation portal and an opportunity for the public to provide their views.

4.7. The consultation portal

4.7.1. The TfL online consultation portal hosted all of the relevant information relating to the ULEZ consultation. During the consultation period, there were 5,969 unique visitors to the ULEZ consultation page. The consultation portal provided a summary of the proposed changes to the taxi and PHV licensing requirements and set out the proposed implementation dates. The portal included a link to the following documents which provided more detailed information on the proposals with the dates in brackets being the dates which each document was made available on the portal:

- *Supplementary Information Addendum (1 July 2015, start of consultation);*
- *IIA Addendum (15 July 2015, two weeks after start of consultation);*
- *IIA Appendix (22 July 2015, three weeks after start of consultation).*

4.7.2. The Supplementary Information Addendum document was updated twice during the course of the consultation with the following corrections:

Table 9: Summary of changes of subsequent versions of the Supplementary Information Addendum uploaded to the consultation portal

| Date | Summary of changes |
|-------------|--|
| 14/07/15 | References in Table 3 on page 14 and Table 1 of Appendix 16 to the proposed PHV two-year sunset period exemption from the ZEC requirement corrected to state 'six or more' passengers as opposed to 'more than six'. |
| 23/07/15 | The caption for Table 6 on page 56 corrected to state 'Emissions impact in 2020 from the original ULEZ proposals (Package 1)' as opposed to 'Emissions impact in 2020 from the revised ULEZ proposals (Package 1)'. The caption for Table 10 in Appendix 6 corrected to state 'Emissions impact in 2025 from the original ULEZ proposals (Package 1)' as opposed to 'Emissions impact in 2025 from the revised ULEZ proposals (Package 1)'. |

4.7.3. Respondents were requested to complete and submit an online questionnaire³⁴ to provide their feedback about the proposals. It included a number of open and

³⁴ Refer to Appendix C for a copy of the questionnaire

closed questions providing the opportunity for respondents to indicate their views about each of the proposals as well as give additional comments and feedback. A contact e-mail (consultations@tfl.gov.uk) was featured online and provided to allow respondents to ask any queries.

4.7.4. Key stakeholders were provided with a separate email address (Ultralowemissionzone@tfl.gov.uk) to submit written comments.

4.7.5. The portal also contained a link to the previous consultation portal and Report to the Mayor.

4.8. Late consultation responses

4.8.1. There were no representations from members of the public received after the consultation closed, and before this report was submitted.

5. Public, community and business responses to the consultation

5.1. Introduction

5.1.1. This section of the report provides a summary of the information collected about the responses received from the general public (not stakeholders) through the consultation questionnaire. In general, the data presented here is from Questions 3-18 in the questionnaire, although information about individual postcodes and business names is not presented. In each table, the total of the percentages is 100 per cent prior to rounding.

5.1.2. In total, 516 responses were received to the consultation from 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;*
- *Mail – comments posted directly to TfL.*

Table 10: Consultation responses by response method

| Response method | Number of responses | Percentage |
|------------------------------|----------------------------|-------------------|
| Online (consultation portal) | 472 | 91.5% |
| Email | 40 | 8% |
| Letter | 4 | 0.5% |
| Total | 516 | 100% |

5.2. Respondent types

5.2.1. Public, business, taxi and PHV respondents were asked to indicate what capacity they were responding to the consultation, ie whether they were representing themselves or another business or organisation. Respondents were free to identify themselves as any of these categories and it should be noted that where 'government organisation', 'community or voluntary organisation' or 'campaign group' was selected, TfL undertook a check to see if any of these were stakeholders and these respondents were transferred to the stakeholder analysis in this report.

Table 11: Proportion of responses by respondent type (Question 3)

| Respondent Type | Number of responses | Percentage |
|--|----------------------------|-------------------|
| As an individual | 385 | 75% |
| As a taxi (black cab) driver/owner | 65 | 13% |
| As a PHV/minicab driver/operator/owner | 30 | 6% |
| As a representative of a Government Organisation | 1 | 0% |
| As a representative of a business | 20 | 4% |
| As a representative of a community of voluntary organisation | 3 | 1% |
| As a representative of a campaign group | 0 | 0% |
| Not Answered | 12 | 2% |
| Total | 516 | 100% |

5.3. Information channels

5.3.1. To understand how news about the consultation was received, respondents were asked how they heard about the consultation.

Table 12: Information channels through which respondents heard about the consultation (Question 6)

| Respondent Type | Number of responses | Percentage |
|----------------------------------|----------------------------|-------------------|
| Received an email from TfL | 335 | 65% |
| Read about it on the TfL website | 43 | 8% |
| Read about it in the press | 32 | 6% |
| Through social media | 27 | 5% |
| Other | 30 | 6% |
| Not Answered | 49 | 9% |
| Total | 516 | 100% |

5.3.2. Question 6 also asked that 'If you have ticked Other, please specify how you heard about this consultation?' 'Other' information channels included from a

colleague, at a taxi rank, through an internet search and through specialist interest groups.

6. Analysis of public, community and business responses

6.1. Introduction

6.1.1. This chapter provides an analysis of the feedback provided by the public, community and businesses about the proposals as consulted on. A quantitative and qualitative analysis of the data received under each proposal is provided. A copy of the Questionnaire is provided in Appendix C.

6.1.2. The questionnaire was split into the following five sections:

- *Section 1: About you*
- *Section 2: Taxis*
- *Section 3: Private Hire Vehicles*
- *Section 4: Additional improvements*
- *Section 5: Your comments on the ULEZ proposal*

6.1.3. The response to the proposals is considered in the following order, as set out in the questionnaire:

Taxis

- *The principle of introducing a ZEC requirement for vehicles licensed for the first time as taxis from 2018 (Proposal 1)*
- *The timing of introducing a ZEC requirement for licenced vehicles*
- *Introducing a voluntary decommissioning scheme for taxis over ten years old and purchase grants for ZEC taxis (Proposal 2)*

Private Hire Vehicles

- *The principle of introducing a ZEC requirement for new vehicles licensed for the first time as PHVs from 2018 (Proposal 3)*
- *The timing of introducing a ZEC requirement for PHVs*
- *Introducing a two year sunset period exemption to this requirement until January 2020 for PHVs licensed to carry six or more passengers (Proposal 5)*

- *Introducing a requirement that used vehicles (older than 18 months) licensed for the first time as PHVs must meet a minimum Euro 4 petrol or Euro 6 diesel standard from January 2018 (Proposal 6)*
- *Changing the definition of a ZEC PHV to align with the eligibility criteria for the Office for Low Emission Vehicle's (OLEV) plug-in vehicle grant (Proposal 4)*

Additional improvements

- *Introducing TfL's additional initiatives to improve air quality in London (ie retrofitting an additional 400 Euro V buses outside of central London to meet the Euro VI standard, introducing a demonstrator fund for bus operators to trial double decker zero emission buses in central London, and creating a Low Emission Neighbourhood in central London)*

Quantitative analysis of closed questions

- 6.1.4. For each proposal, analysis of the closed questions contained within the questionnaire is provided. Results are provided for the number of respondents and the proportion of support and opposition. The question numbers as contained within the questionnaire are also referenced within the title of each sub-section.
- 6.1.5. In the explanatory text, the percentage for the proportions supporting the proposal includes those who stated that they 'strongly support' and 'support' each proposal. The percentage for those opposing the proposals likewise includes those who 'strongly oppose' and 'oppose'. A full breakdown of these categories is provided in the tables and charts.
- 6.1.6. Because of the rounding, some of the percentage totals may be approximately one per cent out (ie 99 or 101 per cent). In all cases, the totals equal 100 per cent prior to rounding, ie 516 respondents.

Qualitative analysis of free text responses (open questions)

- 6.1.7. The questionnaire contained three free text boxes to provide any comments or suggestions regarding the proposals. All of the comments and suggestions received were reviewed and coded in order to identify common themes of comments raised by respondents.
- 6.1.8. For clarity, these comments are organised underneath each identified theme. The qualitative analysis of this text also identifies the percentage of overall public and business comments related to each theme, calculated using the total number of respondents.

- 6.1.9. TfL's responses to the main comments and suggestions raised in the open text section of the questionnaire are provided in Chapter 7 of this report.

Quantitative analysis

Section 2: Taxis

6.2. Question 7: Introducing a ZEC requirement for vehicles licensed for the first time as taxis from January 2018 (Proposal 1)

- 6.2.1. Table 13 sets out the views of the general public on introducing a ZEC requirement for vehicles licensed for the first time as taxis from January 2018, which was unchanged from the original consultation proposals (Package 1). Seventy-one per cent of respondents 'strongly supported' or 'supported', while only 14 per cent 'strongly opposed' or 'opposed'. Fourteen per cent of respondents did not have a strong view or did not answer the question.

Table 13: Do you support the proposal to introduce a requirement that vehicles licensed for the first time as taxis from January 2018 must be ZEC?

| Response | Count | % |
|---------------------------|--------------|-------------|
| Strongly support | 321 | 62% |
| Support | 47 | 9% |
| Neither support or oppose | 29 | 6% |
| Oppose | 27 | 5% |
| Strongly oppose | 49 | 9% |
| Not Answered | 43 | 8% |
| Total | 516 | 100% |

6.3. Question 8: Timing of the proposal to introduce a ZEC requirement for vehicles licensed for the first time as taxis from January 2018

- 6.3.1. The views of the general public on the timing of the proposal to introduce a ZEC requirement for vehicles licensed for the first time as taxis from January 2018 are presented in Table 14 below. Twenty-two per cent of respondents thought the timing was about right, with 47 per cent suggesting it could be achieved earlier than 2018 and 18 per cent suggesting it can't be achieved until later than 2018. Fourteen per cent of respondents did not have a strong view or did not answer the question.

Table 14: Introducing a ZEC requirement for vehicles licensed for the first time as taxis from January 2018

| Response | Count | % |
|---|--------------|-------------|
| About right | 113 | 22% |
| Could be achieved earlier than 2018 | 243 | 47% |
| Can't be achieved until later than 2018 | 93 | 18% |
| No opinion | 9 | 2% |
| Don't know | 13 | 3% |
| Not Answered | 45 | 9% |
| Total | 516 | 100% |

6.4. Question 9: Introducing a voluntary decommissioning scheme for taxis over ten years old and purchase grants for ZEC taxis (Proposal 2)

6.4.1. Instead of the compulsory 10 year age limit for taxis as originally consulted on in Package 1, the updated proposals presented for the second consultation in Package 2 proposed introducing a voluntary decommissioning scheme for taxis older than ten years and purchase grants for ZEC taxis. Forty-five per cent of the general public supported or strongly supported this proposal while 33 per cent either opposed or strongly opposed. Twenty-two per cent did not express an opinion or did not answer.

Table 15: Do you support the proposal to introduce a voluntary decommissioning scheme for taxis over ten years old and purchase grants for ZEC taxis?

| Response | Count | % |
|---------------------------|--------------|-------------|
| Strongly support | 117 | 23% |
| Support | 116 | 22% |
| Neither support or oppose | 69 | 13% |
| Oppose | 70 | 14% |
| Strongly oppose | 100 | 19% |
| Not Answered | 44 | 9% |
| Total | 516 | 100% |

Section 3: Private Hire Vehicles

6.5. Question 11: Introducing a ZEC requirement for new vehicles licensed for the first time as PHVs from 2018 (Proposal 3)

6.5.1. The proposal to introduce a ZEC requirement for new vehicles licensed for the first time as PHVs from 2018 remained unchanged from the original consultation

(Package 1). Seventy-three per cent of the general public supported or strongly supported this proposal while 12 per cent either opposed or strongly opposed. Thirteen per cent did not express an opinion or did not answer.

Table 16: Do you support the proposal to introduce a requirement that new vehicles licensed for the first time as PHVs from January 2018 must be ZEC?

| Response | Count | % |
|---------------------------|--------------|-------------|
| Strongly support | 327 | 63% |
| Support | 54 | 10% |
| Neither support or oppose | 20 | 4% |
| Oppose | 17 | 3% |
| Strongly oppose | 49 | 9% |
| Not Answered | 49 | 9% |
| Total | 516 | 100% |

6.6. Question 12: Timing of the proposal to introduce a ZEC requirement for new vehicles licensed for the first time as PHVs from January 2018

6.6.1. Respondents were asked to nominate their views on the timing of the proposal to introduce the ZEC requirement for new vehicles licensed for the first time as PHVs from January 2018 with 25 per cent suggesting it was about right, 46 per cent suggesting it could be achieved earlier and 13 per cent suggesting it can't be achieved until later than 2018. Fifteen per cent stated either 'No opinion,' 'Don't know,' or did not answer.

Table 17: Introducing a ZEC requirement for new vehicles licensed for the first time as PHVs from January 2018

| Response | Count | % |
|---|--------------|-------------|
| About right | 129 | 25% |
| Could be achieved earlier than 2018 | 236 | 46% |
| Can't be achieved until later than 2018 | 67 | 13% |
| No opinion | 22 | 4% |
| Don't know | 11 | 2% |
| Not Answered | 51 | 9% |
| Total | 516 | 100% |

6.7. Question 13: Introducing a two year sunset period exemption to the ZEC requirement until January 2020 for PHVs licensed to carry six or more passengers (Proposal 5)

6.7.1. The proposal to introduce a two year sunset period exemption to the ZEC requirement until January 2020 for PHVs licensed to carry six or more passengers was a new proposal presented for the second consultation. Twenty per cent of the general public supported or strongly supported this proposal while 48 per cent either opposed or strongly opposed. Thirty-two per cent did not express an opinion or did not answer.

Table 18: Do you support the proposal to introduce a two year sunset period exemption to the ZEC requirement until January 2020 for PHVs licensed to carry six or more passengers?

| Response | Count | % |
|---------------------------|--------------|-------------|
| Strongly support | 42 | 8% |
| Support | 61 | 12% |
| Neither support or oppose | 118 | 23% |
| Oppose | 93 | 18% |
| Strongly oppose | 153 | 30% |
| Not Answered | 49 | 9% |
| Total | 516 | 100% |

6.8. Question 14: Introducing a requirement that used vehicles (older than 18 months) licensed for the first time as PHVs must meet a minimum Euro 4 petrol or Euro 6 diesel standard from January 2018 (Proposal 6)

6.8.1. The proposal to introduce a requirement that used vehicles (older than 18 months) licensed for the first time as PHVs must meet a minimum Euro 4 petrol or Euro 6 diesel standard from January 2018 remained unchanged from the original consultation. Sixty-five per cent of the general public supported or strongly supported this proposal while 12 per cent either opposed or strongly opposed. Twenty-three per cent did not express an opinion or did not answer.

Table 19: Do you support the proposal to introduce a requirement that used vehicles (older than 18 months) licensed for the first time as PHVs must meet a minimum Euro 4 petrol or Euro 6 diesel standard from January 2018?

| Response | Count | % |
|---------------------------|--------------|----------|
| Strongly support | 236 | 46% |
| Support | 98 | 19% |
| Neither support or oppose | 69 | 13% |
| Oppose | 20 | 4% |

| | | |
|-----------------|------------|-------------|
| Strongly oppose | 43 | 8% |
| Not Answered | 50 | 10% |
| Total | 516 | 100% |

6.9. Question 15: Changing the definition of a ZEC PHV to align with the eligibility criteria for the Office for Low Emission Vehicle’s (OLEV) plug-in vehicle grant (Proposal 4)

6.9.1. TfL’s proposal to change the definition of a ZEC PHV to align with the eligibility criteria for OLEV’s plug-in vehicle grant was a new proposal presented for consultation. Forty-six per cent of the general public supported or strongly supported this proposal while 11 per cent either opposed or strongly opposed. Forty-two per cent did not express an opinion or did not answer.

Table 20: Do you support the proposal to change the definition of a ZEC PHV to align with the eligibility criteria for the Office for Low Emission Vehicle’s (OLEV) plug-in vehicle grant?

| Response | Count | % |
|---------------------------|------------|-------------|
| Strongly support | 122 | 24% |
| Support | 116 | 22% |
| Neither support or oppose | 170 | 33% |
| Oppose | 18 | 3% |
| Strongly oppose | 41 | 8% |
| Not Answered | 49 | 9% |
| Total | 516 | 100% |

Section 4: Additional Improvements

6.10. Question 17: Introducing TfL’s additional initiatives to improve air quality in London

6.10.1. Question 17 of the questionnaire was another new proposal and asked the respondents to express their views on TfL’s proposal to introduce the following additional initiatives to improve air quality in London:

- *Retrofit an additional 400 Euro V buses outside of central London to meet the Euro VI standard;*
- *A demonstrator fund for bus operators to trial double decker zero emission buses in central London;*
- *The creation of a Low Emission Neighbourhood in central London.*

- 6.10.2. Regarding the proposal to retrofit an additional 400 Euro V buses outside of central London to meet the Euro VI standard, 78 per cent either supported or strongly supported, six per cent either opposed or strongly opposed, and 17 per cent did not express an opinion or did not answer.

Table 21: Retrofit an additional 400 Euro V buses outside of central London to meet the Euro VI standard?

| Response | Count | % |
|---------------------------|--------------|-------------|
| Strongly support | 313 | 61% |
| Support | 87 | 17% |
| Neither support or oppose | 42 | 8% |
| Oppose | 8 | 2% |
| Strongly oppose | 21 | 4% |
| Not Answered | 45 | 9% |
| Total | 516 | 100% |

- 6.10.3. For the proposal for a demonstrator fund for bus operators to trial double decker zero emission buses in central London, 71 per cent either supported or strongly supported, nine per cent either opposed or strongly opposed and 19 per cent did not express an opinion or did not answer.

Table 22: A demonstrator fund for bus operators to trial double decker zero emission buses in central London

| Response | Count | % |
|---------------------------|--------------|-------------|
| Strongly support | 274 | 53% |
| Support | 92 | 18% |
| Neither support or oppose | 54 | 10% |
| Oppose | 15 | 3% |
| Strongly oppose | 33 | 6% |
| Not Answered | 48 | 9% |
| Total | 516 | 100% |

- 6.10.4. For the proposal to create a LEN in central London, 69 per cent either supported or strongly supported, 11 per cent either opposed or strongly opposed, and 19 per cent did not express an opinion or did not answer.

Table 23: The creation of a Low Emission Neighbourhood in central London

| Response | Count | % |
|---------------------------|--------------|-------------|
| Strongly support | 308 | 60% |
| Support | 49 | 9% |
| Neither support or oppose | 54 | 10% |
| Oppose | 22 | 4% |
| Strongly oppose | 36 | 7% |
| Not Answered | 47 | 9% |
| Total | 516 | 100% |

Qualitative analysis of free text responses

6.11. Qualitative analysis of free text responses - general

6.11.1. The following questions in the questionnaire provided an opportunity for respondents to provide their written free text comments on the proposals:

- *Section 2: Taxis - Question 10;*
- *Section 3: Private Hire Vehicles - Question 16;*
- *Section 5: Your comments on the ULEZ proposal - Question 18.*

6.11.2. A summary of the analysis of free text responses is provided below, reported in themes. This was a wide-ranging consultation and therefore the comments made could be organised into a large number of sub-themes within each theme. For the sake of clarity, this chapter includes only the most popular sub-themes (ie where comments have been made by at least one per cent of all respondents) under each theme. Appendix F has the full free text analysis.

6.12. Taxi proposals

6.12.1. Two hundred and ninety-nine comments were made by the public and businesses on taxi proposals. The most common comment was expressing support for a 10 year age limit for taxis (11.5 per cent of respondents). Six per cent of respondents also suggested that ZEC standards should be implemented sooner and that age limits should be made compulsory.

The results are shown in

6.12.2. Table 24 below.

Table 24: Comments made on taxi proposals

| Comment | Number of comments | Percentage of all respondents |
|--|---------------------------|--------------------------------------|
| Supports a 10 year age limit for taxis | 59 | 11.4% |
| Suggests taxi ZEC standards should be implemented sooner | 31 | 6% |
| Does not support purchase grants for taxis | 31 | 6% |
| Suggests that age limit should be compulsory | 31 | 6% |
| Support for purchase grants for taxis | 30 | 5.8% |
| Does not support current proposal – retention of 15 year age with decommissioning scheme | 17 | 3.3% |
| Suggests that there are no taxis available that meets requirements | 17 | 3.3% |
| Supports current proposal – 15 year age limit with decommissioning scheme | 17 | 3.3% |
| Suggests taxi emissions standards should be stricter than proposed | 14 | 2.7% |
| Suggests that the costs of buying new taxis are too high | 11 | 2.1% |
| Requests that there should not have age limit and ZEC requirement | 8 | 1.5% |
| Suggests that the purchase grant is inadequate | 8 | 1.5% |
| Supports age limit of less than 10 years | 7 | 1.3% |

6.13. PHV proposals

6.13.1. Seventy-two comments were made by the public and businesses on PHV proposals.

6.13.2. The results are shown in Table 25 below. The most common comment was that emissions standards for PHVs should be stricter than proposed (3.1 per cent of respondents). Just over two per cent of respondents also stated that they did not support the sunset period for 6 seater PHVs and that the ZEC requirements should be implemented sooner.

Table 25: Comments made on PHV proposals

| Comment | Number of comments | Percentage of all respondents |
|---|---------------------------|--------------------------------------|
| Suggests that PHV emissions standards should be stricter than proposed | 16 | 3.1% |
| Does not support sunset period for 6 seater PHVs | 15 | 2.9% |
| Suggested that proposals will negatively impact on PHV trade | 12 | 2.3% |
| Suggests that PHV ZEC standards should be implemented sooner | 11 | 2.1% |
| Suggests that used PHVs should be ZEC rather than just Euro 4/6 compliant | 8 | 1.5% |
| Requested financial assistance for PHVs | 6 | 1.2% |

6.14. Vehicle emission standards

6.14.1. One hundred and ten comments were made by the public and businesses about vehicle emission standards.

6.14.2. The results are shown in Table 26 below. The most common comment was that vehicle standards should be stricter than proposed (5.8 per cent of all respondents).

Table 26: Comments made on vehicle emission standards

| Comment | Number of comments | Percentage of all respondents |
|--|---------------------------|--------------------------------------|
| Suggests that vehicle standards should be stricter than proposed. | 30 | 5.8% |
| Suggests that both taxis and PHVs should be subject to the same standards | 29 | 5.6% |
| States that emissions standards should be compulsory | 20 | 3.8% |
| States that low emission buses should be a priority | 16 | 3.1% |
| Suggests that it is easier for PHVs to comply as greater variety of vehicles in market | 8 | 1.5% |

| | | |
|--|---|------|
| States that ZEC should mean 100% emission free | 7 | 1.3% |
|--|---|------|

6.15. The principle of a ULEZ

- 6.15.1. Three hundred and ninety-eight comments were made about the principle of a ULEZ.
- 6.15.2. The results are shown in Table 27 below. The most common comment was that respondents supported measures to improve air quality in London (32.7 per cent of all respondents) while 11.8 per cent of respondents stated that they support ULEZ and just over nine per cent of respondents made comments about the impact of ULEZ on the taxi trade.

Table 27: Comments made on the principle of ULEZ

| Comment | Number of comments | Percentage of all respondents |
|---|--------------------|-------------------------------|
| Support measures to improve air quality in London | 169 | 32.7% |
| Supports ULEZ | 61 | 11.8% |
| Comments about the impact on taxi trade | 32 | 9.3% |
| Suggests ULEZ is an incentive to raise revenue/tax | 32 | 6.2% |
| Does not support a ULEZ | 29 | 5.6% |
| Requests that ULEZ proposals/standards are not reduced | 18 | 3.4% |
| Support the theory of lowering emissions but do not support this scheme | 8 | 1.5% |

6.16. Infrastructure and technology

- 6.16.1. A total of 33 comments were made about infrastructure and technology with 3.1 per cent of comments overall suggesting that infrastructure is not mature or widespread enough to rely on.

6.17. Timetable

- 6.17.1. A total of seventy-four comments were made about the timetable for the proposals. Just over 12 per cent of comments overall suggested that ULEZ could be implemented sooner.

6.18. Uber

6.18.1. A total of seven comments were made overall about the regulation of Uber.

6.19. Boundary

6.19.1. A total of 40 comments were made about the ULEZ boundary. Over six per cent of respondents suggested that the boundary could be extended to include more of London. TfL responded to comments about the boundary of the ULEZ in the March 2015 Report to the Mayor, and these are not repeated here.

6.20. Discounts and exemptions

6.20.1. A total of 26 comments were made about discounts and exemptions. Just over two per cent of respondents made reference to historic vehicles and just over one per cent made reference to motorcycles.

6.21. Supporting policy

6.21.1. A total of 40 comments were made about supporting policies. Just over one per cent of respondents suggested that there should be more pedestrian only areas in London for example, Oxford Street.

6.22. Consultation

6.22.1. A total of 10 comments were received which criticised the ULEZ consultation.

6.23. Other

6.23.1. A total of 24 comments were received which related to a variety of other topics not relating to the proposals. Just over one per cent of respondents made comments about a perceived negative treatment of the taxi trade.

7. TfL's response to the issues raised

7.1. Introduction

7.1.1. This chapter sets 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 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.

7.1.2. The chapter brings together comments from stakeholders and the public and businesses, including data from the questionnaire (as set out in full in Chapter 6). The coding of the comments made in the three open questions in the questionnaire was organised into themes and this convention is followed in this chapter, with some themes combined here for ease of understanding.

7.1.3. The list of stakeholders that responded to the consultation is provided in Appendix D and a summary of their responses is provided in Appendix E.

7.1.4. The themes addressed are as follows:

- A** Principle of a ULEZ
- B** Vehicle emissions standards
- C** Taxi proposals
- D** PHV proposals
- E** Supporting and complementary measures
- F** Discounts and exemptions
- G** Infrastructure / technology
- H** Comment on consultation

7.2. Theme A: Principle of a ULEZ

7.2.1. Thirty-one stakeholders commented on this theme: Addison Lee, Autogas, Baker Street Quarter Partnership, Better Bankside, Carey, Clean Air in London, Confederation of Passenger Transport, GMB, Justine Greening MP, Licensed Private Hire Car Association, London Borough of Camden, London Borough of Enfield, London Borough of Hackney, London Borough of Hammersmith and Fulham, London Borough of Lambeth, London Borough of Wandsworth, London Councils, London Taxi Company, New West End Company, Private Hire Board,

Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea, Society of Motor Manufacturers and Traders, Southwark Living Streets, Thriev, Toyota, Tristar, Uber, Unite the Union, Victoria Business Improvement District and Westminster City Council.

- 7.2.2. From public and business respondents, 152 comments were made on this theme, which constitutes 29 per cent of all respondents.

Issues raised in relation to this theme:

- ***Supports measures to improve air quality in London***
- ***Supports a ULEZ***
- ***Impact on London's taxi trade***

Supports measures to improve air quality in London

- 7.2.3. The following nineteen stakeholders support measures to improve air quality in London: Addison Lee, Autogas, Baker Street Quarter Partnership, Better Bankside, Carey, Confederation of Passenger Transport, GMB, Justine Greening MP, Licensed Private Hire Car Association, London Borough of Camden, London Borough of Enfield, London Borough of Lambeth, New West End Company, Southwark Living Streets, Toyota, Tristar, Uber, Unite the Union and Westminster City Council.

- 7.2.4. Most of these stakeholders supported measures to improve air quality in London without providing further specific comments. The London Borough of Enfield suggested that a continued focus on supporting a switch to sustainable modes of transport is needed, as is an increased focus on other initiatives which can be implemented relatively quickly which will have a positive impact on improving air quality. The New West End Company noted that reducing traffic and improving air quality throughout the West End is a high priority for its businesses and shoppers.

TfL response

- 7.2.5. TfL welcomes the support for measures to improve air quality in London and notes that the ULEZ package (with the exception of changes to taxi and PHV licensing) was confirmed by the Mayor in March 2015. This means that from September 2020, all vehicles entering central London must meet emissions standards in order to drive within the ULEZ without paying a daily charge.

Supports a ULEZ

- 7.2.6. The following nine stakeholders expressed support for a ULEZ: Addison Lee, Autogas, Baker Street Quarter Partnership, Better Bankside, Justine Greening

MP, London Councils, New West End Company, Society of Motor Manufacturers and Traders and Unite the Union.

- 7.2.7. Most of these stakeholders expressed direct support for a ULEZ in central London while the Baker Street Quarter Partnership noted that air quality is a key concern of their members, coming high up the list of their priorities in their annual survey. London Councils noted that there are aspects of the proposals which it does not consider go far enough. The SSMT noted that it believes that the proposed ULEZ will play a key role in driving the market for ultra low and zero emission capable vehicles in London.

TfL response

- 7.2.8. TfL welcomes these comments and notes that the ULEZ was confirmed by the Mayor in March 2015, to become operational in central London in September 2020.

Impact on London's taxi trade

- 7.2.9. Clean Air in London, London Borough of Lambeth and Victoria Business Improvement District all commented on the impact on London's taxi trade of the proposals.
- 7.2.10. Clean Air in London commented that the proposals as they stand will impact on the financial sustainability of the taxi industry which is being jeopardised by the Mayor and TfL. London Borough of Lambeth noted that with the increase in PHV, such as Uber, there may also be a decline in demand for taxis and this could signify less people joining the industry and a corresponding reduction in the uptake of ZEC taxis while the Victoria Business Improvement District commented that it also recognizes the contribution that London taxis make to the economy and the image of the capital and the concerns the taxi community has about the effect of the changes to taxi drivers' livelihoods.

TfL response

- 7.2.11. As set out in the SIA published for this consultation, the updated proposals were developed as a result of TfL's further engagement with the taxi trade. The proposals are in general now supported by the trade (see Theme C below). Although the impacts of the revised approach of a voluntary age limit supported by a decommissioning scheme offer less certainty, it nevertheless is potentially a way to remove the oldest vehicles from the fleet with reduced impacts on the trade. TfL will review the efficacy of the policy by 2020.
- 7.2.12. The purchase of ZEC taxis would be incentivised by both the PICG money and the top-up grant enabled by the Government funding made available to TfL.

Trade respondents have indicated that this would be sufficient incentive, given the right infrastructure and support, to introduce ZEC vehicles into the fleet.

- 7.2.13. It has never been the intention of the ULEZ proposal to change the number of licensed taxis in London.

TfL recommendation

No change to the proposals.

7.3. Theme B: Vehicle emissions standards

- 7.3.1. Twenty stakeholders commented on this theme: Addison Lee, Baker Street Quarter Partnership, Carey, City of London Corporation, Confederation of Passenger Transport, Licensed Private Hire Car Association, Licensed Taxi Drivers Association, London Borough of Camden, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Borough of Wandsworth, London Councils, London Taxi Company, New West End Company, Society of Motor Manufacturers and Traders, Southwark Living Streets, Toyota, Tristar and Westminster City Council.

- 7.3.2. From public and business respondents, 52 comments were made on this theme, which constitutes ten per cent of all respondents.

Issues raised in relation to this theme:

- ***Standards should be stricter than proposed***
- ***Both PHVs and black cabs should be subject to same standards***

Standards should be stricter than proposed

- 7.3.3. Twelve stakeholders commented on this sub-theme: Baker Street Quarter Partnership, City of London Corporation, Licensed Taxi Drivers Association, London Borough of Camden, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Borough of Wandsworth, London Councils, London Taxi Company, Southwark Living Streets and Westminster City Council.
- 7.3.4. The London Taxi Company commented that TfL's definition of ZEC sets the bar too low and in doing so misses the opportunity for greater emission reductions: a pure EV range of at least 60 miles and emissions of no more than 40g/CO₂/km. The London Borough of Lambeth strongly supports any initiative to reduce emissions from PHVs however does not believe that the current recommendations are sufficiently robust and that the ULEZ should continue to move forwards and push standards higher, that this is a backwards step which is driving standards lower. The LTDA suggests that the minimum standards of

ZEC should be raised for both industries to less than 50g/km CO₂ with a minimum zero emission range of 40 miles.

TfL response

- 7.3.5. The separate standards for taxis and PHVs were developed in response to the different characteristics of these vehicles, as explained in the consultation materials. In summary, taxis are purpose-built vehicles which must meet certain criteria (such as the turning circle) and this has led to manufacturers focussing on a small number of models which are relatively costly compared to most cars. This will also be the case for ZEC taxis. For PHVs, the vehicle can be a mainstream car or van and even with the ZEC requirement (as defined) this would remain the case. This means that PHV owners have a much wider range of vehicles to choose from and a wider price range.
- 7.3.6. Under the Package 1 proposals, the ZEC requirements for taxis and PHVs were the same: a maximum of 50g/km CO₂ and a range of at least 30 miles in zero emission mode. Package 2 proposed a modification of the requirement for PHVs to align with the recently-changed criteria for the OLEV PICG. The changes to the PICG are the introduction of three categories of eligible vehicle, but only one of these categories represents a weakening of the requirements (Category 3 has a CO₂ limit of 50-75g/km and a minimum zero emission range of 20 miles). In the absence of other purchase grants, the availability of the PICG will be especially important to PHV owners seeking to buy a ZEC vehicle, and therefore it is appropriate to align with these standards. It also provides certainty to manufacturers about the definition of a low emission vehicle and helps to grow the market, which in turn could help reduce purchase costs.

Both PHVs and taxis should be subject to same standards

- 7.3.7. Addison Lee, Carey, Licensed Private Hire Car Association, Licensed Taxi Drivers Association, London Taxi Company, SMMT, Tristar and the New West End Company all commented on this sub-theme.
- 7.3.8. Addison Lee noted that all currently licensed vehicles should be allowed to continue to be licensed to a maximum age of 10 years - reflecting the arrangement proposed for taxis and that no PH vehicles should incur the ULEZ charge – reflecting the arrangement proposed for taxis. The Licensed Private Hire Car Association queried how it is expected to accept proposals that will make pollution worse via PHVs. The LTDA commented that there should be parity between the two trades. The LTC noted that the private hire sector should be just as capable, if not more, of meeting the same ZEC requirements as the licensed taxi trade as set out in the original consultation paper while the New West End Company noted that reductions in air pollution will only be met if

PHVs meet the same emission standards as those required of licenced taxis, and by the same deadlines.

- 7.3.9. Carey said that there is no justification for the various exemptions and additional funding being made available to taxis and stated that the changes to PHV regulations were disproportionate to their contribution to air pollutant emissions. Toyota supports a technology neutral approach to incentivizing the uptake of low and ultra low emission vehicles. Tristar stated that the regulations are more strongly applied to PHV's whilst the proposed regulatory intervention in respect of taxis is far more 'light touch'.
- 7.3.10. The SMMT calls for a rethink on ULEZ requirements for petrol and diesel vehicles suggesting that ULEZ emission requirements for cars and vans must be technology neutral and apply the latest European vehicle emission standard (Euro 6) and that to deliver emission reductions and maintain parity in the market between petrol and diesel vehicles, requirements for emission standards through the ULEZ must reflect a technology neutral approach.

TfL response

- 7.3.11. The rationale for different standards for taxis and PHVs has been set out in the Supplementary Information and the Supplementary Information Addendum published for the two consultations. It is also summarised in Table 29 at the end of this report.
- 7.3.12. It is acknowledged that the contribution of PHVs to air pollutant emissions from road transport is relatively small compared to that of taxis (4 per cent of NO_x emissions compared to 18 per cent for taxis, by 2020). This consideration informed the Package 1 and Package 2 proposals which set out different approaches for new and used PHVs; an approach which is maintained, albeit with an earlier introduction of the ZEC requirement for new and used PHVs. TfL is now recommending further changes to the proposals for PHVs which would delay the introduction of the ZEC requirement by two years (see Theme D below).
- 7.3.13. The emissions standards proposed in the ULEZ (the vehicle emissions standards for the central London zone which the Mayor confirmed in March 2015) are technology neutral and enable the introduction of alternative technologies such as hydrogen and electric. As described in the March Report to the Mayor, a higher Euro standard was specified for diesel (Euro 6) than for petrol (Euro 4) in recognition of its higher NO_x emissions. This standard will pertain to PHVs using the ULEZ zone from September 2020, regardless of the outcome of the recent consultation which is the subject of this report.

TfL recommendation

No change to the proposals.

7.4. Theme C: Taxi proposals

7.4.1. Thirty stakeholders commented on this theme: Autogas, Baker Street Quarter Partnership, Better Bankside, City of London Corporation, Clean Air in London, Energy Saving Trust, GMB, Heart of London Business Alliance, inmidtown, Justine Greening MP, Licensed Private Hire Car Association, Licensed Taxi Drivers Association, London Borough of Camden, London Borough of Enfield, London Borough of Hackney, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Councils, London Taxi Company, New West End Company, Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea, Society of Motor Manufacturers and Traders, Southwark Living Streets, Toyota, United Cabbies Group, Unite the Union, Victoria Business Improvement District and Westminster City Council.

7.4.2. From public and business respondents, 725 comments were made on this theme in total.

Issues raised in relation to this theme:

- ***Timeframe for implementation of ZEC taxi standards (Proposal 1)***
- ***Support and opposition for new taxi proposals including voluntary decommissioning scheme (Proposal 2)***

Timeframe for implementation of ZEC taxi standards (Proposal 1)

7.4.3. Twenty-four stakeholders commented on the timeframe for implementation of ZEC taxi standards: Autogas, Baker Street Quarter Partnership, City of London Corporation, Clean Air in London, Energy Saving Trust, GMB, Heart of London Business Alliance, inmidtown, Justine Greening MP, Licensed Taxi Drivers Association, London Borough of Enfield, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Taxi Company, New West End Company, Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea, Society of Motor Manufacturers and Traders, Southwark Living Streets, Toyota, United Cabbies Group, Unite the Union and Victoria Business Improvement District.

7.4.4. Issues raised:

- *ZEC standard could be implemented sooner than 2018;*
- *2018 date for ZEC standard is about right;*
- *ZEC standard should be implemented later.*

- 7.4.5. The following stakeholders considered that the timing to introduce a ZEC requirement for vehicles licensed for the first time as taxis from January 2018 could be achieved earlier than 2018: Baker Street Quarter Partnership, Clean Air in London, inmidtown, London Borough of Islington, London Borough of Lambeth, Royal Borough of Greenwich, Southwark Living Streets.
- 7.4.6. The following stakeholders supported the 2018 date: City of London Corporation, Energy Saving Trust, GMB, Heart of London Business Alliance, Justine Greening MP, London Borough of Hammersmith and Fulham, London Borough of Enfield, London Borough of Hackney, London Taxi Company, New West End Company, Royal Borough of Kensington and Chelsea, Victoria BID. From the taxi trade, the LTDA was supportive of the 2018 date.
- 7.4.7. Autogas, GMB, Toyota and United Cabbies Group all considered that it can't be achieved until later than 2018.
- 7.4.8. Many stakeholders argued that the policy could be introduced sooner than 2018 (and added that they would support the 2018 date if this is not feasible). The London Borough of Lambeth stated that manufacturers could have been encouraged to produce vehicles sooner and that it was imperative that this date does not slip. It is also supportive of ZEC taxis but is concerned that they will not always operate in electric mode (and be zero emission) and also that with the increase of PHV operators like Uber there could be fewer taxis, constraining the effect of ZECs.
- 7.4.9. The GMB said it should be implemented a year later. Toyota stated that the start date was too early in the development of new taxis.
- 7.4.10. Justine Greening MP and Victoria BID stated that TfL must check that the vehicles will be available to buy in time. Victoria BID (while approving the ZEC purchase grants) is concerned that ZECs are available on time and that grants are available.
- 7.4.11. The New West End Company noted that it would support the early introduction of these regulations from January 2018, if not earlier, while Thriev suggested a phased implementation plan starting earlier in 2016, and a requirement for large fleets to maintain records of their emissions.
- 7.4.12. Clean Air in London stated that it did not support the proposal in its entirety and instead reiterated its 'Eight point transformation package'³⁵ for taxis in London. The first point of this package calls for a ZEC taxi with a minimum 40 mile range.

³⁵ <http://cleanair.london/sources/eight-point-transformation-package-for-the-taxi-and-phv-industry/>

- 7.4.13. From the public and business respondents, 71 per cent supported the ZEC proposal and 15 per cent opposed it. The proportion saying the ZEC proposal could be achieved earlier than 2018 was 47 per cent; 22 per cent said it was 'about right' and 18 per cent said it couldn't be achieved until later than 2018.
- 7.4.14. In the comments from the public, 11 per cent were in support of the ten year age limit.

TfL Response

- 7.4.15. There is little opposition to the principle of ZEC taxis and most respondents acknowledge the potentially significant positive impacts of these vehicles. Although the requirement does not specify that taxis must operate in zero emission mode all the time (which would not be enforceable in any case), there are significant air quality benefits by virtue of their having a petrol engine and an electric engine. The zero emission specification of a maximum CO₂ level of 50g/km and a minimum 30 mile range was developed in the context of what is currently achievable for manufacturers, acceptable to drivers and would allow the vehicle to operate in zero emission mode for a reasonable period each day. Given the fuel cost savings available from optimising use of the electric engine and the progress made on the charging network, it is expected that this will be an attractive mode. In future it may be desirable to specify locations or times of day, for example, where only zero emission mode is acceptable, but this would be premature at this time.
- 7.4.16. The proposed implementation date of 1 January 2018 for the ZEC requirement for newly-licensed taxis was included in both Package 1 and Package 2. This was set as an ambitious but realistic target in the light of the progress that manufacturers are making with the development of a new ZEC taxi and the centrality of the introduction of these vehicles into the London fleet to the achievement of the ULEZ. Taxis make a significant contribution to air pollutant emissions in London and in order to realise sufficient air quality benefits from this sector it is vital that both older vehicles are removed (by an age limit) and the proportion of ZEC vehicles is increased and accelerated.
- 7.4.17. As set out in the SIA document, the major manufacturers LTC, Karsan and Frazer-Nash have confirmed that they will have vehicles ready by the end of 2017. In its response to this consultation, LTC states that this date 'is the bedrock of [its] investment timetable', and in March 2015 it was announced that its parent company, Geely, had invested £250m in a new facility close to Coventry, specifically to produce ZEC taxis for London.
- 7.4.18. The significant investment made by manufacturers in developing a vehicle which meets the ZEC requirements and can also meet the other taxi licensing requirements such as wheelchair accessibility and the turning circle is an

important consideration here. Unlike PHVs, London taxis are purpose-built and given the extent of the licensing requirements, are costly to produce (and purchase). For this reason only a few models exist. The ZEC requirement is a further challenge to the industry but TfL is confident that it will be met and, given the significant contribution from taxis to air pollutant emissions, the ZEC requirement is a critical element of the ULEZ proposal. The Mayor first announced his intention to introduce ZEC taxis back in February 2013³⁶ and preparation for the 2018 implementation date is well underway. The two consultations which have followed have provided ample opportunity for the proposal to be commented on and refined. If the implementation date were changed, there would be highly adverse consequences for manufacturers which have invested in it (and for the UK jobs associated with this). This is especially true if the date was delayed but would also be a problem if the date was brought forward. Phased or earlier implementation is therefore not recommended.

- 7.4.19. As well as the continued development of the vehicles, there has also been the recent announcement by the Government of a £25m fund for London to use for grants to taxi owners to buy ZEC vehicles. Clearly there is an appetite for the benefits that this proposal can bring and, if it is not implemented at the time proposed, there could be a risk that this money would not be forthcoming.
- 7.4.20. Another factor is the readiness of the rapid-charging network. This issue was raised by many stakeholders, especially the taxi trade, in the first consultation and was one of the reasons for undertaking a further consultation. As set out in Theme G, there has been progress with regard to TfL's plans for procuring a supplier of rapid-charging network in London with points in place by 2018.
- 7.4.21. With regard to the point made by the London Borough of Lambeth, it has never been the intention of either Package 1 or Package 2 to reduce the number of taxis in the fleet and this is not expected to happen if these changes are implemented.
- 7.4.22. In the consultation materials TfL stated that progress on the voluntary decommissioning scheme and ZEC uptake would be monitored annually. Additionally, it stated that the policy would be reviewed in early 2020, or sooner if necessary. This approach would be followed if, as is recommended, the policies are adopted.
- 7.4.23. The ZEC proposal is critical to achieving the air quality impacts of the ULEZ. The foundations which would enable a January 2018 start date – availability of

³⁶ <https://www.london.gov.uk/media/mayor-press-releases/2013/02/mayor-of-london-announces-game-changer-for-air-quality-in-the>

ZEC taxis, purchase grants and rapid-charging infrastructure – have already been laid, and there is strong support from the public and stakeholders. It is acknowledged that this is an innovative project but it is one which can potentially deliver huge benefits and deliver the ULEZ objectives of reducing air pollutant emissions and stimulating the low emission vehicle market. TfL will carefully monitor the progress of ZEC uptake and may take actions such as seeking further Government funding or considering a 10 year age limit if there is insufficient progress.

Support and opposition for new taxi proposals including voluntary decommissioning scheme and purchase grants (Proposal 2)

- 7.4.24. Twenty-seven stakeholders commented on this theme: Autogas, Baker Street Quarter Partnership, Better Bankside, City of London Corporation, Clean Air in London, Energy Saving Trust, GMB, Heart of London Business Alliance, inmidtown, Justine Greening MP, Licensed Taxi Drivers Association, London Borough of Camden, London Borough of Enfield, London Borough of Hackney, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Councils, London Taxi Company, New West End Company, Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea, Southwark Living Streets, Unite the Union, United Cabbies Group, Victoria Business Improvement District and Westminster City Council.
- 7.4.25. The following stakeholders supported the voluntary decommissioning scheme for taxis over ten years old: Baker Street Quarter Partnership, Energy Saving Trust, Heart of London Business Alliance, inmidtown, Justine Greening MP, Licensed Taxi Drivers Association, London Borough of Enfield, London Taxi Company, New West End Company, Unite the Union and United Cabbies Group.
- 7.4.26. The following stakeholders opposed the proposal: Autogas, Better Bankside, City of London Corporation, Clean Air in London, GMB, London Borough of Camden, London Borough of Hackney, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Councils, Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea, Southwark Living Streets, Victoria Business Improvement District and Westminster City Council.
- 7.4.27. The following stakeholders all expressed support for purchase grants: Baker Street Quarter Partnership, GMB, Heart of London Business Alliance, inmidtown, Justine Greening MP, Licensed Taxi Drivers Association, London Borough of Enfield, London Borough of Islington, London Taxi Company, New West End Company, Victoria Business Improvement District and Unite the Union.

- 7.4.28. The London Borough of Hackney and Southwark Living Streets opposed the grants. The London Borough of Hackney commented that any other SMEs and private individuals (including PHV drivers) are to be affected by the ULEZ but no equivalent compensation-plus-grant scheme is proposed for them. Autogas noted that the proposals to incentivise the removal of 10 year old (or older) taxis from operation, even if they are LPG converted, is potentially fatal to the operation of LPG taxis.
- 7.4.29. Many of the stakeholders opposing the change highlighted that they had supported the original proposal - of a mandatory 10 year age limit - in the first consultation, and were opposed to a voluntary limit. Westminster City Council stated that it was disappointed that the original proposal had not been implemented and pointed to the worse air quality impacts from this proposal. The Royal Borough of Kensington and Chelsea stated that it preferred the mandatory 10 years originally proposed but if this was not possible, then a 12 year age limit should be implemented, as this would provide some certainty about the removal of the oldest vehicles. The GMB stated that it preferred a 12 year age limit. The London Borough of Islington stated that the proposals are not robust enough to reduce NO₂ concentrations as efficiently as required by the Supreme Court's ruling after the Client Earth case.
- 7.4.30. Justine Greening MP welcomed the fact that there had been further development of the proposal in light of the financial challenge of buying a ZEC. The GMB stated that the increased costs had been offset by the more generous scheme now available. Toyota stated that TfL and OLEV must ensure that grants are available in a timely fashion; LTC was concerned that the Government PICG may not be available in future and suggested that if this happened, TfL may need to increase its top-up grant.
- 7.4.31. Unite the Union suggested that once drivers become aware of the advantages of owning and driving a ZEC taxi then they will want to purchase one and that it will work with TfL and the other trade organisations to publicise the grants available and the benefits of owning a ZEC taxi compared to a diesel taxi. SMMT welcomed the Government commitment of £500m for ULEVs.
- 7.4.32. The London Borough of Hammersmith and Fulham said there was no certainty that owners would go on to buy a ZEC vehicle after decommissioning an older taxi. The Baker Street Quarter Partnership said that the two schemes must be linked. London Borough of Hackney said that this approach represents poor value for money compared to the original. London Borough of Islington is disappointed to see that TfL are now considering relaxing the compliance rules for taxis which contribute to 18% of NO_x emissions in Central London and that the proposals detailed in this second consultation are not robust enough to reduce NO₂ concentrations as efficiently as required by the Supreme Court's ruling after the Client Earth case.

- 7.4.33. The Royal Borough of Kensington and Chelsea stated that the proposed decommissioning scheme would be less effective in removing the oldest vehicles because the payments were smallest for the oldest taxis. LTC stated that grants should be structured on an emissions basis to maintain the benefits in future. London Borough of Hackney stated that there should be a mandatory reduction in the age limit combined with a decommissioning payment.
- 7.4.34. Victoria BID said that decommissioned taxis must not be used as private vehicles in London because this will mean the air quality benefits are not realised.
- 7.4.35. Clean Air in London stated that it did not support the proposal in its entirety and instead reiterated its 'Eight point transformation package' for taxis in London. It called on TfL to establish a £150m fund for the purchase of ZEC taxis.
- 7.4.36. From the public and business respondents, 55 per cent supported the proposal and 33 per cent opposed it.

TfL Response

- 7.4.37. The consultation materials set out that, as requested by the Mayor as part of his decision on the first consultation, TfL considered three options for the approach to removing the oldest taxis from the fleet. Option A was the original proposal (a mandatory 10 year age limit) and Option B a mandatory 12 year age limit and both of these would have been accompanied by a compensation scheme for taxi owners affected by the reduced age limit. Option C – the preferred approach set out in this consultation – was a voluntary 10 year age limit with a decommissioning scheme. Respondents were invited to give their views on these options as well as the proposals.
- 7.4.38. It is acknowledged (and was set out in the SIA) that there is greater certainty by using a mandatory reduction in the age limit. Option A would remove a further 6,700 vehicles (additional to natural churn) from the fleet and Option B, around 4,300 vehicles would be removed in 2020. With Options B and C, further mitigation measures would still be required to 'close the gap' on emissions compared to Option A.
- 7.4.39. Option B, then, has some merits but overall does not satisfy either the taxi trade preference for a voluntary approach nor does it achieve the emissions savings of Option A. A combination of Options A and C (as suggested by London Borough of Hackney) might well achieve air quality improvements but would be expensive and would not address the taxi trade's fundamental opposition to a mandatory age limit reduction.
- 7.4.40. The voluntary 10-year age limit could remove between 2,000 and 5,000 vehicles: a lower number and one which, by the nature of a voluntary age limit,

is less certain. For this reason, TfL proposed that if this approach were confirmed, it would monitor its progress on an annual basis and undertake a policy review at the start of 2020 to gauge progress on the voluntary decommissioning scheme and ZEC uptake.

- 7.4.41. The greater certainty of a mandatory age limit must however be balanced with the likely impact on the taxi trade. In response to the first consultation the taxi trade organisations expressed strong opposition to a mandatory 10 year age limit, citing the financial impacts on an industry already experiencing challenges. While it was enthusiastic about ZEC vehicles, the trade was also concerned about the cost and availability of ZEC taxis and the charging infrastructure to support them. The Mayor requested TfL to undertake further engagement on these matters. During this engagement the trade advocated for a 'voluntary' ten year age limit with incentives for owners to take older vehicles out of the fleet. In principle, this could achieve similar effects as a mandatory age limit if the trade plays its part in encouraging owners and drivers to decommission vehicles (and buy ZECs). In its response to this consultation, the LTDA – which is the biggest taxi trade organisation – has supported this approach.
- 7.4.42. A further consideration here is the funding available for the removal of older taxis (by whatever means) and for the purchase of ZEC taxis. The trade was concerned about the price premium for ZEC vehicles and the fact that fuel cost savings will be realised over time rather than immediately. As set out above, there is now additional funding from the Government available for ZEC purchase in London, so part of the issue has been resolved. The original proposal linked both the removal of older taxis and the purchase of ZEC vehicles but subsequent consideration – informed by analysis and discussion with the trade – indicated that it would be more effective to decouple the two. The introduction of ZEC vehicles is of course an untried policy. But it is very unlikely to be the case that most owners of older taxis automatically buy a ZEC vehicle. This led to the development of the proposed decommissioning payment. An advantage of this approach is its flexibility: owners who decommission an older taxi can buy a second-hand vehicle, a ZEC vehicle or leave the trade as they choose. By not linking ZEC vehicle purchase to decommissioning, the funds available for decommissioning will be more effectively deployed. Additionally, this approach does not increase the number of conventional taxis in the London fleet.
- 7.4.43. It is acknowledged that the OLEV money will not be available indefinitely. The purchase grant and the decommissioning payment are both time-limited (to 2020) in order to take advantage of the funds currently available. TfL will continue to work with Government on this matter.
- 7.4.44. It is expected that most decommissioned taxis would be scrapped. Licensing authorities outside London have their own age limits and once a taxi is decommissioned, it cannot be relicensed in London. It is possible in principle

that taxis could be used as private vehicles but this is unlikely to happen owing to higher associated fuel costs and the introduction of the ULEZ in central London from 2020.

- 7.4.45. The decommissioning scheme is time-limited in order to ensure timely uptake and in recognition of the need to realise air quality impacts by 2020. With regard to the point made by the Royal Borough of Kensington and Chelsea, while the sliding scale does mean that a taxi with more plates is eligible for a larger grant, this is a reflection of the potential value lost by the owner, which is of course more for a younger vehicle. Without this structure, it would be unlikely to act as an effective incentive to owners. It should be noted that the scheme is only available for vehicles with up to five plates left (the equivalent of a ten year age limit) and is set at a maximum of £5k. It is not practicable to link the ZEC grant to emissions because taxis are purpose-built vehicles and only a few models will be available. Of course this may become a consideration if there are many models in the future with greatly varying emissions.
- 7.4.46. At present, LPG taxis are exempt from the 15-year age limit (in effect, an extra five years is allowed). As already stated TfL will undertake a further consultation on potential exemptions.
- 7.4.47. If the 'voluntary' ten year age limit is proceeded with, it will be an opportunity for taxi owners and the trade generally to prove that this can be an effective approach, as they have stated. It will be important for the support shown by the taxi trade to be followed through with practical encouragement and advice to its members and the wider trade. In this context the remarks made by Unite are particularly welcomed. TfL would carefully monitor the uptake of the decommissioning scheme and the impacts on air quality. If the change is confirmed, TfL will undertake a review by 2020 of the impact of this approach, and could consult on a mandatory 10 year age limit if this is deemed necessary. TfL is mindful of the point raised by London Borough of Hackney and others of the need to secure value for money in the use of public funds.
- 7.4.48. It bears re-stating (with regard to London Borough of Islington's point) that it was never the case that the ULEZ alone (regardless of the various taxi and PHV licensing proposals) would by itself achieve compliance with the EU limit values for air pollutant emissions. This will require further action at European and national Government level as well as by boroughs and the Mayor.
- 7.4.49. The need to tackle air pollutant emissions remains a pressing issue in London and there remains strong stakeholder and public support for a mandatory 10 year age limit. Notably, the inner London boroughs most affected by poor air quality have strongly advocated for this approach. While this is not currently proposed, it remains an option for the future if take-up of ZEC vehicles and retirement of older more polluting taxis is insufficient.

TfL recommendation

No change to the proposals.

7.5. Theme D: PHV proposals

7.5.1. Thirty-four stakeholders commented on this theme: Addison Lee, Autogas, Baker Street Quarter Partnership, Better Bankside, Carey, City of London Corporation, Clean Air in London, Confederation of Passenger Transport, eConnect Cars, Energy Saving Trust, GMB, Heart of London Business Alliance, inmidtown, Licensed Private Hire Car Association, London Borough of Hammersmith and Fulham, London Borough of Camden, London Borough of Enfield, London Borough of Hackney, London Borough of Islington, London Borough of Lambeth, London Councils, New West End Company, Private Hire Board, Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea, Southwark Living Streets, Society of Motor Manufacturers and Traders, Thriev, Toyota, Tristar, Uber, United Cabbies Group, Victoria Business Improvement District and Westminster City Council.

7.5.2. From public and business respondents, 287 comments were made on this theme out of the 516 respondents that commented on this theme in total.

Issues raised in relation to this theme (set out in the same order as in the consultation questionnaire):

- ***Timeframe for implementation of ZEC PHV standards (Proposal 3)***
- ***Support for sunset period for PHVs with more than 6 seats (Proposal 5)***
- ***Support for used PHVs Euro 4 petrol Euro 6 diesel standards (Proposal 6)***
- ***Support for alignment of ZEC criteria with OLEV's (Proposal 4)***
- ***Other comments***

Timeframe for implementation of ZEC PHV standards (Proposal 3)

7.5.3. Twenty-seven stakeholders commented on the timeframe for implementation of PHV taxi standards: Addison Lee, Autogas, Baker Street Quarter Partnership, Better Bankside, City of London Corporation, Clean Air in London, Energy Saving Trust, GMB, Heart of London Business Alliance, inmidtown, Licensed Private Hire Car Association, London Borough of Hammersmith and Fulham, London Borough of Enfield, London Borough of Islington, London Borough of Lambeth, London Councils, Private Hire Board, Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea, Southwark Living Streets, Society of Motor Manufacturers and Traders, Thriev, Toyota, Tristar, Uber, United Cabbies Group and Victoria Business Improvement District.

7.5.4. Issues raised:

- *ZEC standard could be implemented sooner than 2018;*
- *2018 date for ZEC standard is about right;*
- *ZEC standard should be implemented later.*

- 7.5.5. The following stakeholders all considered that the proposal to introduce a ZEC requirement for all vehicles under 18 months that are newly licensed PHVs from January 2018 could be achieved earlier than 2018: Baker Street Quarter Partnership, City of London Corporation, Clean Air in London, London Borough of Lambeth, Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea, Southwark Living Street and Thriev.
- 7.5.6. The following stakeholders considered that the 2018 date is about right: Better Bankside, Energy Saving Trust, Heart of London Business Alliance, inmidtown, London Borough of Enfield, London Borough of Hammersmith and Fulham, London Borough of Islington, London Councils, Society of Motor Manufacturers and Traders, Uber, United Cabbies Group and Victoria Business Improvement District.
- 7.5.7. The following considered that it can't be achieved until after 2018: Addison Lee, Autogas, GMB, Licensed Private Hire Car Association, Private Hire Board, Toyota and Tristar.
- 7.5.8. Those stakeholders that considered the date could be achieved earlier than 2018, or that the 2018 date was about right, did not provide any further specific comments.
- 7.5.9. Addison Lee commented that the zero-emission requirement for the PH sector is not economically and operationally viable within the target timescales. GMB noted that a delay until 2019 is more than acceptable. The Licensed Private Hire Car Association stated that 2018 is not appropriate as a start date for their industry, which changes its vehicles far more frequently than taxis and buses, so it must be aligned with others from September 2020. By this time it will have a better idea of the Electric Charging infrastructure and its appropriateness to the Industry, which cannot rank up like taxis.
- 7.5.10. The Private Hire Board³⁷ recommended a 2018 review before finalising 2020 ZEC inception dates for Private Hire. Toyota noted that the mandating of a sole requirement of 50g/km CO₂ and a minimum zero emission range of 10 miles or 75g/km CO₂ and a minimum zero emission range of 20 miles by 2018 for all new PHVs is likely to be too early in the early market development of these

³⁷ A PHV trade representative organisation

technologies. Tristar noted that the requirement for all new PHV's to meet the zero emissions capable standard in 2018 is wholly unrealistic and suggested an achievable timescale by which all the PHV fleet should be ZEC should be set, if the supporting infrastructure is in place this may be achievable by 2022/2023 and to delay adoption to 2025 may lack ambition.

- 7.5.11. From the public and business respondents, 74 per cent supported the ZEC proposal and 13 per cent opposed it. The proportion saying the ZEC proposal could be achieved earlier than 2018 was 46 per cent; 25 per cent said it was 'about right' and 13 per cent said it couldn't be achieved until later than 2018.

TfL response

- 7.5.12. In response to the public consultation, 25 per cent of public and business respondents and twelve stakeholders supported a ZEC requirement for PHVs from 2018 and an additional 46 of public and business respondents suggested this could be implemented even sooner. However, this is in contrast to views from other stakeholders, including the PHV trade, that 2018 is too early to introduce a ZEC requirement given the current pricing and availability of suitable vehicles. The trade has suggested that a phased timetable would be more manageable.
- 7.5.13. As an outcome of its discussion during consultation with the trade and car manufacturers, TfL accepts there is a disparity in the general car market, across the UK and in London between the projected uptake of vehicles that meet the proposed ZEC criteria for PHVs (ie plug-in hybrid or battery electric) and other conventionally fuelled vehicles. Importantly, vehicles used as PHVs meet a very diverse set of customer needs and to do this, operators must procure vehicles from a broader variety of vehicle models and manufacturers than is required by the taxi market.
- 7.5.14. The SIA published for the consultation included a list of ZEC vehicle models grouped into types of vehicle (Appendix 1 of the SIA). In discussion with TfL recently, the PHV trade representatives have queried whether there is a 'ZEC equivalent' for its most popular models. In response to this, TfL has considered the six most popular PHV models and suggested equivalent ZEC vehicles and this is set out in Appendix I of this report. There is a caveat which is that individual operators may have particular requirements, eg interior space, which is not met by these suggested equivalents. Taking this into account and when considering motoring manufacturer industry projections, it is now considered that, on balance, starting the ZEC requirement from 2020 (instead of 2018) for PHVs is a reasonable request by the trade. The ZEC requirement for taxis is recommended to be introduced from 2018 for reasons set out in Theme C above.

- 7.5.15. The Government's national PICG will continue to act as an incentive for PHV drivers to switch to ZEC vehicles much sooner than 2020, alongside measures in TfL's Ultra Low Emission Vehicle Delivery Plan. OLEV recently announced that it would continue to provide current levels of support under the PICG until at least February 2016. Further details on the levels of support to be offered under the PICG after February will be announced shortly after the autumn spending review, which is expected to be published in November 2015.
- 7.5.16. Although PHVs contribute less to NO_x emissions in central London than other commercial fleets, there remains a strong case for the trade and TfL to demonstrate it is taking effective action to improve air quality – part of this is to use its influence to transition the PHV fleet to become 'ULEZ ready' as soon as practicable. It is particularly important to ensure no more pre-Euro 6 diesel vehicles join the fleet as they have been shown to contribute disproportionately to NO_x emissions. Furthermore, as PHV licensing requirements are applied at a London wide level, it will address the contribution to NO_x emissions these vehicles make elsewhere in the Capital (which is likely to be higher as cars have a greater contribution outside of the ULEZ).
- 7.5.17. Existing rules mean that a vehicle can only be licensed as a PHV for the first time in London if it is less than five years old or a petrol hybrid no more than ten years old³⁸. Euro 6 is mandatory for all cars manufactured from September 2015 – this means, under the existing rules, every PHV licensed for the first time from late 2020 (regardless of whether it is brand new or not) will be Euro 6 by default or, at minimum, a Euro 4 petrol hybrid.
- 7.5.18. In light of the recommendation to delay the ZEC requirement until 2020, it would be prudent to bring forward the date from when Euro 6 is the default standard so that cleaner 'ULEZ ready' vehicles enter the fleet much sooner. It is important to ensure no more pre-Euro 6 diesel vehicles join the fleet because they contribute disproportionately to NO_x emissions. A minimum Euro 6 requirement is therefore considered to be an appropriate requirement for all PHVs new to licensing from 2018. It is proposed to retain the current exemption for older Euro 4 petrol hybrids until 2020 as this will allow the trade to continue to embrace hybrid technology, which has become increasingly popular and which performs better on emissions than non-hybrids.
- 7.5.19. Under this scenario, between 1 January 2018 and 1 January 2020 a vehicle could only be licensed as a PHV for the first time if it is minimum Euro 6 diesel or petrol or Euro 4 petrol hybrid (or if it met the ZEC criteria as currently proposed).

³⁸ Petrol hybrid exemption is defined as minimum Euro 4 and <110g/km CO₂.

Support for sunset period for PHVs with more than 6 seats (Proposal 5)

- 7.5.20. Eighteen stakeholders commented on this theme: Addison Lee, Better Bankside, Clean Air in London, Energy Saving Trust, Heart of London Business Alliance, inmidtown, London Borough of Hammersmith and Fulham, London Borough of Camden, London Borough of Enfield, London Borough of Hackney, London Borough of Islington, London Borough of Lambeth, London Councils, Southwark Living Streets, Uber, United Cabbies Group, Victoria Business Improvement District and Westminster City Council.
- 7.5.21. The following stakeholders all expressed support for the sunset period exemption: Addison Lee, Better Bankside, Heart of London Business Alliance, inmidtown, London Borough of Camden, London Borough of Enfield, London Borough of Hackney, London Borough of Islington, London Councils, Uber, Victoria Business Improvement District and Westminster City Council.
- 7.5.22. Most of these stakeholders expressed support without making any specific comments while the London Borough of Hackney and Better Bankside both noted that the sunset period for specialist vehicles seems reasonable on availability grounds, to give the industry a greater chance of sourcing appropriate new ZEC vehicles by 2020 while the London Borough of Camden noted that given PHVs are modelled to only contribute 4% of Central London's NO_x in 2020, it has no objections to this change. London Councils noted that it strongly supports TfL's statement that it is not appropriate to completely exempt PHVs carrying six or more passengers.
- 7.5.23. The following stakeholders opposed the sunset period exemption: Clean Air in London, Energy Saving Trust, London Borough of Hammersmith and Fulham, London Borough of Lambeth, Southwark Living Streets and United Cabbies Group.
- 7.5.24. Again most of these stakeholders did not make any specific comments other than noting their opposition however the London Borough of Lambeth specifically noted that in order to avoid the charge, PHV companies may prioritise these larger and more polluting vehicles entering the ULEZ.
- 7.5.25. From the public and business respondents, 20 per cent supported the proposed sunset period exemption, 48 per cent opposed it and 32 per cent neither supported or opposed or did not answer.

TfL response

- 7.5.26. A number of stakeholders strongly opposed the proposal to introduce an exemption from the ZEC requirement until 2020 for PHVs that carry six or more passengers. This is because they were concerned drivers may prioritise larger and more polluting vehicles as an interim measure or exploitation of a policy

'loophole'. However, the majority of questionnaire respondents and a number of other stakeholders considered the proposed sunset period to be a reasonable adjustment.

- 7.5.27. Given that TfL is now recommending that the ZEC start date for all new PHVs be delayed to January 2020, there is now less justification for a 6+ passenger seater exemption. A further factor here is that these vehicles comprise around a third of the PHV fleet, meaning that an exemption has a potentially and very detrimental effect on air quality lasting until 2030.
- 7.5.28. Coupled with the 2020 start date, not having this exemption would achieve a balance: drivers would keep the additional two years to acquire vehicles but it would also remove the potential for unintended consequences (ie 'loophole') as there would be no differentiation in vehicle size from the start date. TfL therefore recommends that there is no 6+ passenger seater exemption. However it is worth restating that it has always been the intention to consult separately on a very limited number of exemptions (eg specialist PHVs and taxis) in the future, and this remains the intention, albeit a 6+ passenger seater exemption would probably not be within scope.

Support for used PHVs Euro 4 petrol Euro 6 diesel standards (Proposal 6)

- 7.5.29. The following seventeen stakeholders all commented on this theme: Baker Street Quarter Partnership, Carey, City of London Corporation, Clean Air in London, Energy Saving Trust, Heart of London Business Alliance, inmidtown, London Borough of Enfield, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Councils, New West End Company, Royal Borough of Kensington and Chelsea, Southwark Living Streets, United Cabbies Group and Victoria Business Improvement District.
- 7.5.30. The following stakeholders supported this proposal: Baker Street Quarter Partnership, Energy Saving Trust, Heart of London Business Alliance, inmidtown, London Borough of Enfield, London Borough of Hammersmith and Fulham, London Councils, Royal Borough of Kensington and Chelsea, Southwark Living Streets, United Cabbies Group and Victoria Business Improvement District.
- 7.5.31. The following stakeholders opposed this proposal: Carey, City of London Corporation, Clean Air in London, London Borough of Islington, London Borough of Lambeth and New West End Company.
- 7.5.32. The London Borough of Hammersmith and Fulham supported the proposal, but noted that it creates a loophole as more drivers could opt to buy a used car over 18 months old rather than a new vehicle which would have to be ZEC. London

Councils noted that it would welcome confirmation that the requirement for PHVs being licensed for the first time need to be at least Euro 4 (petrol) or Euro 6 (diesel) from 1 January 2018 will apply London-wide.

- 7.5.33. The New West End Company noted that it does not believe there should be a distinction in the licensing requirements for new and used PHVs licensed for the first time.
- 7.5.34. From the public and business respondents, 65 per cent supported the proposal for used PHVs, 12 per cent opposed it and 23 per cent neither supported or opposed or did not answer.

TfL response

- 7.5.35. TfL proposed that drivers wanting to enter the London PHV market and license older, or 'used' vehicles for the first time would not need to meet the ZEC requirement. This was in recognition that, at the time of developing the proposals, the UK second-hand vehicle market and/or 'already licensed' London PHV market is not expected to be buoyant enough to accommodate demand for ZEC vehicles from 2018. TfL has reassessed the efficacy of the proposed concession for 'used vehicles' in light of responses to the consultation and the current recommendation to delay the PHV ZEC requirement until 2020.
- 7.5.36. In contrast to views from the PHV trade, the majority of respondents felt that the ZEC requirement for newly manufactured PHVs could either be brought in sooner than 2018 or that it was an appropriate date for the policy to start.
- 7.5.37. Although there was a broad consensus that the concession for second-hand vehicles was appropriate if the ZEC requirement was introduced in 2018, a number of stakeholders raised concerns that it would act as a loophole and discourage the procurement of new vehicles. Furthermore, since the ZEC proposal was first conceived, the London PHV fleet has evolved – there are now ~79,000 licensed drivers and ~67,000 vehicles – which is an approximate 25% increase over the past three years and this trend is expected to continue.
- 7.5.38. This means there is a greater need to ensure entrants into the PHV market are using the cleanest vehicle possible (ie ZEC). There will also be a larger catchment of 'already licensed' PHVs unaffected by the ZEC requirement by 2020, which drivers can seek to trade between themselves.
- 7.5.39. Taking into account the request from the PHV trade to delay the ZEC requirement to 2020 and the above discussion points, it is considered necessary to time limit the exemption for second-hand vehicles from the ZEC requirement until 2023. This would mean all PHVs licensed for the first time from 2023 are subject to a universal emissions requirement, regardless if the vehicle is newly manufactured or 'used' (as is the case now).

- 7.5.40. Implementing this change would result in an entirely ZEC PHV fleet from 2033, whereas this is left open in the current proposal because drivers could continue to license diesel vehicles. Similarly, the taxi requirements would result in an entirely ZEC taxi fleet by 2033.

Support for alignment of ZEC criteria with OLEV's (Proposal 4)

- 7.5.41. The following twenty stakeholders commented on this theme: Baker Street Quarter Partnership, Better Bankside, Carey, Clean Air in London, Energy Saving Trust, GMB, Heart of London Business Alliance, inmidtown, London Borough of Camden, London Borough of Enfield, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Councils, New West End Company, Royal Borough of Kensington and Chelsea, The Society of Motor Manufacturers and Traders, Uber, Victoria Business Improvement District and Westminster City Council.
- 7.5.42. The following twenty stakeholders supported the proposal: Baker Street Quarter Partnership, Better Bankside, GMB, Heart of London Business Alliance, inmidtown, London Borough of Camden, London Borough of Enfield, London Borough of Islington, The Society of Motor Manufacturers and Traders, Uber, Victoria Business Improvement District and Westminster City Council.
- 7.5.43. The following stakeholders opposed the proposal: Carey, Clean Air in London, Energy Saving Trust, London Borough of Hammersmith and Fulham, London Borough of Lambeth, London Councils and Royal Borough of Kensington and Chelsea.
- 7.5.44. Uber specifically commented that it welcomes the attempt to improve the likely supply of vehicles through the slight relaxation of the ZEC criteria that appears in the revised consultation. GMB noted however that it can only accept such a proposal if it can be demonstrated 'without any such criteria is based on existing proposals even if the grant is withdrawn over the ensuing period.' Westminster City Council also noted that the proposed changes to the 'zero emission capable' (ZEC) criteria for PHVs to that used by OLEV are useful in helping to support the uptake of low emission vehicles. The Society of Motor Manufacturers and Traders reiterated the importance of criteria and requirement levels being consistent with measures that encourage uptake of ULEVs at a national level through the OLEV and the PICG. Differing definitions risk complicating efforts being made to present an easy to understand offer to ULEV purchasers and users.
- 7.5.45. London Councils noted that whilst it would be consistent with OLEV's PICG, it is disappointed that it is proposed to weaken the ULEZ by setting a less ambitious definition of 'zero emission capable' for PHVs than taxis and suggests that such an approach could be justified if it leads to a significant increase in the number

of PHVs meeting the ZEC standard because a wider range of vehicles is available to companies/drivers. It added that evidence of this has not been presented to London Councils.

- 7.5.46. The New West End Company suggested that if the ZEC criteria for PHVs were aligned to match that of OLEV's grant criteria, considering the availability of vehicles on the market that already match these requirements, consideration should be given to introducing these requirements before January 2018.
- 7.5.47. From the public and business respondents, 46 per cent supported aligning the ZEC criteria with OLEV's, 11 per cent opposed it and 42 per cent neither supported or opposed or did not answer.

TfL response

- 7.5.48. TfL welcomes the support for this change and recommends that it is implemented. Aligning with the OLEV standards helps to ensure that as wide a range of vehicles as possible is eligible for the PICG and maintains consistency in definitions. This helps to guide the market in the development of a range of ZEC vehicles suitable for the PHV and other commercial and private vehicle markets.

Other comments

- 7.5.49. The following twenty-four stakeholders all made other comments related to the PHV proposals: Addison Lee, Autogas, Better Bankside, Carey, City of London Corporation, Clean Air in London, Confederation of Passenger Transport, GMB, Licensed Private Hire Car Association, London Borough of Camden, London Borough of Hackney, London Borough of Hammersmith and Fulham, London Borough of Islington, London Borough of Lambeth, London Councils, New West End Company, Private Hire Board, Royal Borough of Kensington and Chelsea, Southwark Living Streets, The Society of Motor Manufacturers and Traders, Thriev, Toyota, Tristar and Uber.
- 7.5.50. Thriev had a number of suggestions based on its experience of operating electric vehicles including that PHV operators to ensure a certain percentage of miles should be zero emissions with suggested targets: 2016 5%, 2017 20%, 2018 25% plus all new PHV cars mandated to be zero emissions by 2018. And that by 2022 all the London PHV vehicles should be shared PHVs. Failure to achieve the targets should invite 20p per mile penalty – for unfulfilled targets (this is effectively 10% of PHV revenues given the fares are averaging £2 per mile, although this may not be steep enough to yield results). Emission charge should apply on each non-zero emission vehicle – this should be £30 per week starting 2016. This should increase each year. Full congestion charge should apply on non-zero emission vehicles from 2016 and this should be raised by an

'accelerator' rising at a rate 10% faster than a general rate of congestion charge increase. Public sector tenders should give preference to zero emission vehicles and for large firms, operators with more than 50 vehicles should be required to publish their emissions levels.

- 7.5.51. The Private Hire Board noted their concerns to the future availability of vehicles used by the differing sectors of the industry and recommended hybrid vehicles with minimal ZEC mileage should be used. It also suggested that a small variation could be considered where Used and New could include Euro 5 Petrol less than 5 years old to help reduce reliance on diesel vehicles and help drivers enter the trade.
- 7.5.52. Carey noted that it believes that the proposals in their current form would severely damage the industry, and put at risk many companies currently operating fully compliant and profitable businesses. It noted that there is currently an extremely limited range of vehicles which would be available to the chauffeur / executive industry - in terms of size, status, cost and capability and that all subsequent issues, costs and burdens raised should be held in the context of the PHV trades' small contribution to total NO_x emissions.
- 7.5.53. Tristar expressed concern about the unavailability of new ZEC vehicles in the executive market in 2018 noting that following lengthy discussions with Mercedes, vehicles which are demanded by the consumer (Mercedes E, S and V Classes) will almost certainly not be available to meet this timescale and that this proposal will see operators continue to use older, probably more polluting vehicles for longer. It also noted that in its opinion, it is entirely illogical to have a different requirement for new vehicles from the requirement for the licensing of older vehicles and to scrap the differential between the requirements for new and used fleets and focus on setting a standard which needs to apply for all vehicles, thus avoiding any unintended consequences.
- 7.5.54. Toyota commented that the proposed standards could preclude a number of current other low emission vehicles from being eligible. It also noted that it feels it is important to have consistency of policy and eligibility criteria for the consumer to avoid unnecessary confusion.
- 7.5.55. The London Borough of Lambeth is concerned there is no guarantee a ZEC vehicle would operate in zero-emissions mode and the expected emission reductions would not be achieved. It would also like to see a timetable for the introduction and compulsory use of zero-emission PHVs. It noted that ZEC vehicles are already available on the market and to stop further damage to the health of Londoners, it should be mandatory all new licences are for ZEC vehicles only and any vehicles entering the market should be at least ZEC if not completely ZE. It lastly commented that the PHV market is growing rapidly, but there is a good chance the amount of new drivers will have plateaued by 2018

as the market becomes saturated. The opportunity for all new PHVs to be ZEC will therefore be reduced and Londoners will have to wait until 2020 for a reduction in air pollution from these vehicles.

- 7.5.56. GMB suggested a 26 month limit to introduce a ZEC requirement for all vehicles that are newly licensed PHVs from January 2018 and propose implementation from June 2019 for a used vehicles requirement unless grants can be made available. It also noted its contention that similar grants should be made available for higher polluting vehicles at the latter end of their availability to the PHV trade and funds similar to those offered to taxis in addition to any grant should be made available.
- 7.5.57. London Borough of Hammersmith and Fulham noted that zero emission capability should be the default operation in London where vehicles are not fully electric.
- 7.5.58. Clean Air in London noted that it does not support the package of proposals and that private hire vehicles are contributing increasingly to congestion and diesel pollution and that PHVs need to reduce air pollution by meeting the same emission standards as licenced taxis by the same deadlines. They should no longer be exempt from paying the congestion charge (or emission charges) given they do not have to meet the customer service, accessibility and other standards required of taxis.
- 7.5.59. The City of London Corporation noted that new PHVs presented for licencing should be petrol based zero emission capable rather than zero emission capable. Given the availability of these vehicles this could be achieved before 2018.
- 7.5.60. The London Borough of Hackney does not believe that it is necessary to drop the requirement for second hand PHVs to be zero-emissions-capable however would support reviews of this requirement in 2017 and 2019 as the market is rapidly evolving and it may turn out not to be necessary to retain the sunset period if sufficient vehicles are available.
- 7.5.61. Addison Lee noted that the recently redefined zero emission requirement appears arbitrary and defines the technology rather than the desired end state – and instead proposes that TfL define the target emission levels. It also does not accept that the PHV industry should be required to comply with separate onerous requirements two years ahead of the establishment of the ULEZ in 2020. It recommends a phased transition period whereby maximum emission levels are set annually for newly licensed vehicles which gradually reduce up to 2025 and that PH vehicles that are already licensed would not incur the ULEZ charge. It stated that the implementation of the new vehicle licensing regulations in 2018 would be damaging for the PH Industry with adjustment costs of £1.8bn

It also noted that all currently licensed vehicles should be allowed to continue to be licensed to a maximum age of 10 years - reflecting the arrangement proposed for taxis and that no PH vehicles should incur the ULEZ charge – reflecting the arrangement proposed for taxis.

- 7.5.62. Autogas noted that the proposals to incentivise the removal of 10 year old (or older) taxis from operation, even if they are LPG converted, is potentially fatal to the operation of LPG taxis. The proposal, effectively removing the ability for certain LPG autogas converted vehicles to operate in London, is extraneous and arbitrary and does not give proper consideration to the current market, cost and environmental savings that LPG run taxis can offer, regardless of age.
- 7.5.63. The Society of Motor Manufacturers and Traders commented that TfL's 'zero emission capable' requirement for private hire vehicles should reflect the availability of vehicles on the market today as well as those coming to market between now and 2018. TfL's approach is right in promoting and encouraging the cleanest and most efficient vehicles, but must recognise that the market is still in development and that its requirements should support vehicles across technology types and diversity in the industry.
- 7.5.64. The Licensed Private Hire Car Association commented that forcing ULEZ and ZEC on Private Hire Vehicles will bring to an end the 'year on year' reductions in emissions achieved to date by London's PHVs and that the proposed measures will increase poorer air quality as the PHV Industry will be forced to hold onto its vehicles much longer. It states that there is no certainty about the costs, supply, numbers, models and availability of vehicles to meet the current set of ULEZ proposals. It also suggested the best way forward is to take the more balanced view of getting ZEC via the more common sense approach of moving towards hybrid vehicles for Private Hire as has been done for buses. It noted that it wants to avoid the London PHV Industry being forced to use older vehicles for longer and taking measures like potentially licensing any new fleet outside of London.

TfL response

- 7.5.65. TfL welcomes all other policy suggestions by stakeholders as a result of this current consultation. TfL has undertaken significant and on-going dialogue with the PHV trade as set out in Appendix B, prior to, during and subsequent to the current consultation, and has arrived at the recommendations noted below through listening to the concerns of the trade, including the availability and affordability of appropriate vehicles which will meet the requirements as well as the availability of rapid charging infrastructure, and consider the recommendations as the fairest policy proposals keeping in mind the intended objective of improving air quality in London.

TfL recommendation

That the following changes to the PHV proposals are made:

- **Proposal 3A:** From 1 January 2018, all vehicles licensed for the first time as PHVs must be Euro 6 (petrol or diesel) unless they are petrol hybrid (in which case Euro 4 is the minimum standard);
- **Proposal 3B:** From 1 January 2020, new vehicles (defined as up to 18 months old (inclusive) from the date of registration with the DVLA) licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4);
- **Proposal 4:** For PHVs, any vehicle meeting the criteria set out in categories 1, 2 or 3 of the OLEV plug-in car grant eligibility criteria will be regarded by TfL as ZEC;
- **Proposal 5:** Sunset period exemption for vehicles with more than 6 seats no longer appropriate as superseded by modified Proposal 3;
- **Proposal 6A:** From 1 January 2020, used vehicles (defined as more than 18 months old from the date of registration with the DVLA) licensed for the first time as PHVs must be Euro 6;
- **Proposal 7:** From 1 January 2023, all vehicles licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4).

7.6. Theme E: Supporting and complementary measures

- 7.6.1. The following 26 stakeholders commented on supporting and complementary measures to the ULEZ: Baker Street Quarter Partnership; Better Bankside; City of London Corporation; Clean Air in London; eConnect Cars; Energy Saving Trust; GMB; Heart of London Business Alliance; inmidtown; Licensed Taxi Drivers Association; London Borough of Hammersmith and Fulham; London Borough of Camden; London Borough of Enfield; London Borough of Hackney; London Borough of Islington; London Borough of Lambeth; London Councils; Royal Borough of Kensington and Chelsea; Southwark Living Streets; The Society of Motor Manufacturers and Traders; Thriev; Uber; United Cabbies Group; Victoria Business Improvement District; and Westminster City Council.

7.6.2. From public and business respondents, 112 comments were made on this theme from the 516 respondents.

Issues raised

- ***Retrofit of 400 Euro V buses***
- ***Demonstrator fund for sightseeing buses***
- ***Low Emission Neighbourhood***
- ***Expansion of the ULEZ***
- ***Additional suggestions for taxis***
- ***Additional suggestions for PHVs***
- ***Additional suggestions for buses***
- ***Additional suggestions for freight***
- ***General suggestions***

Retrofit of 400 Euro V buses

7.6.3. The following 18 stakeholders supported the additional retrofit of buses: Baker Street Quarter Partnership; Better Bankside; City of London Corporation; Energy Saving Trust; Heart of London Business Alliance; inmidtown; Licensed Taxi Drivers Association; London Borough of Hammersmith and Fulham; London Borough of Camden; London Borough of Enfield; London Borough of Hackney; London Borough of Islington; London Borough of Lambeth; London Councils; Royal Borough of Kensington and Chelsea; Southwark Living Streets; Victoria Business Improvement District; and Westminster City Council.

7.6.4. Two stakeholders opposed the retrofit proposals: GMB and United Cabbies group.

7.6.5. The following eight stakeholders stated that the proposed additional measures for bus retrofit, sightseeing buses and a central London LEN, should be undertaken alongside the original package of proposals consulted on or regardless of the outcome of the main ULEZ package: Better Bankside; London Borough of Islington; London Borough of Lambeth; London Borough of Hammersmith and Fulham; London Borough of Hackney; London Borough of Camden; Royal Borough of Kensington and Chelsea; and Westminster City Council.

7.6.6. The following stakeholders requested that retrofit of buses should be focussed in their local area: London Borough of Lambeth; London Borough of Hammersmith and Fulham; London Borough of Hackney; and Royal Borough of Kensington and Chelsea.

7.6.7. London Councils stated that more ambition was required for the bus proposals.

7.6.8. GMB stated that retrofit must be undertaken at the bus operators' expense.

- 7.6.9. 78 per cent of public and business responses supported the proposal for additional retrofit of buses. Six per cent opposed.

TfL response

- 7.6.10. As with previous retrofit of exhaust after-treatment technology, the decision regarding which bus routes to retrofit will be based on which routes pass through areas of high NO₂ concentrations where buses are a large contributor to vehicle NO_x emissions and routes that have the longest contract end date so that benefits are realised over a sufficient time period. It will be a pan London rather than borough specific approach.
- 7.6.11. TfL has one of the cleanest bus fleets of any major world city and are constantly upgrading the fleet to take advantage of emerging technologies. The proposals are ambitious and, it is considered, provide value for money.
- 7.6.12. TfL awards bus contracts (which last for 5-7 years) on a specification that is relevant at the time. When TfL changes the requirements of that specification during the contract, any changes in costs are subject to a commercial negotiation.

Demonstrator fund for sightseeing buses

- 7.6.13. The following 17 stakeholders supported the a demonstrator fund for sightseeing vehicles: Baker Street Quarter Partnership; Better Bankside; City of London Corporation; Energy Saving Trust; Heart of London Business Alliance; inmidtown; London Borough of Hammersmith and Fulham; London Borough of Camden; London Borough of Enfield; London Borough of Hackney; London Borough of Islington; London Borough of Lambeth; London Councils; Royal Borough of Kensington and Chelsea; Southwark Living Streets; Victoria Business Improvement District; and Westminster City Council.
- 7.6.14. Two stakeholders opposed the proposals: GMB and United Cabbies group.
- 7.6.15. London Borough of Lambeth and Royal Borough of Kensington and Chelsea stated that the trial should be extended to coaches.
- 7.6.16. Better Bankside stated that the pilot should be wider ranging and look at testing of ZEC buses in air quality sensitive areas.
- 7.6.17. 71 per cent of public and business responses supported the proposal for a demonstrator fund for tour buses. Nine per cent opposed.

TfL response

- 7.6.18. Sightseeing tour buses were suggested for a demonstrator as they operate mainly within the ULEZ and travel shorter distances than coaches, making them

more suitable for conversion to electric operation. However TfL will consider any viable proposals for electric coaches.

- 7.6.19. TfL is already piloting zero emission buses. The world's first purpose built double decker bus will be trialled on route 69 later this year and all single decker buses within the ULEZ will be converted to zero emission at tailpipe by 2020.

Low Emission Neighbourhood

- 7.6.20. The following 18 stakeholders supported the proposal for a central London LEN: Baker Street Quarter Partnership; Better Bankside; City of London Corporation; Energy Saving Trust; Heart of London Business Alliance; inmidtown; Licensed Taxi Drivers Association; London Borough of Hammersmith and Fulham; London Borough of Camden; London Borough of Enfield; London Borough of Hackney; London Borough of Islington; London Borough of Lambeth; London Councils; Royal Borough of Kensington and Chelsea; Southwark Living Streets; Victoria Business Improvement District; and Westminster City Council.
- 7.6.21. GMB opposed the central London LEN.
- 7.6.22. London Borough of Hackney and London Councils requested clarification as to whether the central London LEN would be in addition to the programme committed under the Mayor's Air Quality Fund.
- 7.6.23. London Borough of Hammersmith and Fulham requested that the LEN should apply to inner London.
- 7.6.24. Better Bankside stated they were willing to work with TfL and the GLA to develop low emission areas.
- 7.6.25. London Councils stated that TfL should work with boroughs to develop the central London LEN proposal.
- 7.6.26. London Borough of Camden stated that whilst they support the LEN it would be more complicated and expensive to deliver than a taxi ten year age limit and harder to quantify the benefits.
- 7.6.27. 69 per cent of public and business responses supported the proposal for a central London LEN. Sixteen per cent opposed.

TfL response

- 7.6.28. TfL can confirm that the central London LEN will be in addition to the committed proposals for LENs delivered through the Mayor's Air Quality Fund and it will be happy to work with boroughs, Business Improvement Districts and other partners to support delivery.

- 7.6.29. The LEN has been suggested for central London to complement the ULEZ proposals and as such will need to demonstrate impact in the ULEZ area.
- 7.6.30. The taxi age limit is discussed in Theme C above.

Expansion of the Ultra Low Emission Zone

- 7.6.31. The following four stakeholders made comments on the size of the ULEZ: Clean Air for London, London Borough of Enfield, Royal Borough of Greenwich; Royal Borough of Kensington and Chelsea and Southwark Living Streets.
- 7.6.32. Royal Borough of Greenwich, Royal Borough of Kensington and Chelsea and Southwark Living Streets stated that the ULEZ boundary should be extended.
- 7.6.33. London Borough of Enfield stated that further investigation into the impacts of the ULEZ on residents and businesses would be required if the zone were to be expanded in future.
- 7.6.34. Clean Air for London called for emissions based road user charging on a wider scale.

TfL response

- 7.6.35. As stated in the March Report to the Mayor, it is not recommended that any change is made to the ULEZ boundary at this time. However TfL is seeking to work with boroughs to develop options for future alterations to the ULEZ and London wide Low Emission Zone, including expansion. This work will incorporate a full investigation of the likely impacts on residents and businesses. Any future extension of the zone would be subject to public and stakeholder consultation on a further scheme order revision and Mayoral approval.

Additional suggestions for taxis

- 7.6.36. The following stakeholders made additional suggestions for taxi policy: Clean Air in London, London Councils and Westminster City Council.
- 7.6.37. Westminster City Council and London Councils proposed that ZEC taxis should be given preferential access to taxi ranks to encourage early uptake.
- 7.6.38. Clean Air in London called for scrapping the 15 year age limit and proposed a 10 year age limit, scrapping the turning circle requirement, alterations to VED banding based on air pollution emissions and a network of 500 rapid charge points by 2018.

TfL response

- 7.6.39. TfL supports the principle of preferential access to ranks for ZEC taxis and will consider this as part of the delivery of additional ranks outlined in their Taxi Ranks Action Plan³⁹.
- 7.6.40. The 15 year age limit ensured that the oldest most polluting vehicles were removed from London's roads. Abolishing this would be a retrograde step in reducing NO_x and PM emissions from the taxi sector. The proposed ten year age limit is no longer recommended.
- 7.6.41. The manoeuvrability requirement (ie turning circle) that all London taxis must meet is an important feature of the London taxi, which provides a range of benefits to passengers and drivers and reduces traffic congestion on London roads. TfL does not propose to amend the manoeuvrability requirement or accessibility requirements for any taxis, including new models currently in development.
- 7.6.42. TfL has undertaken an initial analysis based on the driving and likely charging patterns of taxi drivers. This analysis indicated around 90 charge points would be required for taxis in 2018, out of a total of 150 rapid charging points for all vehicles. This analysis will be shared with stakeholders later in 2015. TfL have been involved in extensive market engagement with charging suppliers and operators and will be issuing an OJEU invitation in early 2016 to deliver the rapid charge network in time for delivery up to 2018.
- 7.6.43. VED banding and similar benefits are set by national government. As stated in the TERM document, TfL concurs that this should be based on air pollution as well as CO₂.

Additional suggestions for PHVs

- 7.6.44. The following four stakeholders made additional suggestions for PHV policy: Clean Air in London, eConnect cars, GMB and Thriev.
- 7.6.45. Clean Air in London, eConnect cars and Thriev proposed that non-ZEC PHVs should be subject to the congestion charge.
- 7.6.46. eConnect cars proposed a range of interventions to reduce the barriers to EV uptake in the PHV sector, including access to bus lanes, reduced costs of licensing and education and promotion of EV benefits to drivers.
- 7.6.47. GMB suggested a scrappage scheme for PHVs.

³⁹ <https://tfl.gov.uk/cdn/static/cms/documents/tfl-ranks-action-plan.pdf>

TfL response

- 7.6.48. PHVs are exempt from the Congestion Charge when undertaking private hire bookings as they are operating as a form of public transport. However TfL regularly reviews the Congestion Charging scheme to ensure it remains effective in reducing traffic and congestion in central London, and to improve the operation of the scheme. TfL has proposed that PHVs will not be exempt from the ULEZ and will need to meet the set emission standards or pay a charge when entering the zone.
- 7.6.49. TfL's Ultra Low Emission Vehicle Delivery Plan contains a range of actions to support and encourage the uptake of ultra low emission vehicles, including in the taxi and PHV sector. Engagement and education forms a key part of this and TfL welcomes further discussion with the taxi and PHV trade on how to support uptake.
- 7.6.50. TfL previously undertook analysis on allowing EVs in Bus Lanes⁴⁰ where the position remains that allowing EVs into bus lanes would cause severe disruption to the bus network, which would outweigh any potential emissions savings benefits from such a measure.
- 7.6.51. As there is no proposed change to the age limit for PHVs, TfL has not proposed a decommissioning scheme for PHVs. There is a larger potential market of buyers for decommissioned PHVs and a larger range of available vehicles for PHVs than for taxis and so TfL do not believe this is required.

Additional suggestions for buses

- 7.6.52. GMB proposed that smaller buses should be used off peak and in low usage routes.

TfL response

- 7.6.53. Bus operations are planned in line with TfL's service planning guidelines and aim to provide sufficient capacity to meet demand at the busiest points. Substantial data is collected to understand passenger demand and the size of bus and frequency is based on that demand. TfL allocates single and double deck vehicles to routes to customise services to demand and the characteristics of the road network locally. In line with best practice capacity is there to satisfy demand at the busiest points which can give the appearance of over-supply on other sections of the same route. Using smaller vehicles in off-peak periods would require procurement of an additional set of vehicles for every bus route,

⁴⁰ <http://legacy.london.gov.uk/electricvehicles/docs/Electric%20Vehicles%20in%20Bus%20Lanes.pdf>

with relatively modest savings in fuel and significant increases in additional vehicle and depot costs. The in-service savings in fuel and emissions would in many cases be less than the fuel used to swap vehicles over. Capacity is constantly being adjusted across London, however, to tailor bus services to demand and deliver a cost efficient bus network.

Additional suggestions for freight

- 7.6.54. The following three stakeholders provided additional suggestions for freight emissions: Clean Air for London, GMB and The Society for Motor Manufacturers and Traders.
- 7.6.55. The SMMT proposed more use of night time deliveries.
- 7.6.56. The GMB proposed a ban on daytime use of freight vehicles, a shared payload scheme and higher charges for HGV use in peak hours.
- 7.6.57. Clean Air for London proposed more freight consolidation.

TfL response

- 7.6.58. TfL recognises there could be significant benefits from a reduction in daytime goods vehicle activity, particularly in the morning peak period. Reducing freight in this period could make a significant contribution to congestion, safety risk and a reduction in daytime air pollution. However, this must be balanced against the operational and regulatory constraints, such as the London Lorry Control Scheme, facing freight operators and their customers, which may restrict their ability to undertake servicing and deliveries in London during quieter times of the day.
- 7.6.59. As part of the current freight programme, TfL is working with a range of partners in industry and a number of London boroughs through an 'out-of-hours consortium' to better understand how deliveries can be re-timed to quieter periods of the day. This has included a series of research trials to investigate noise-reducing technology and working practices, how local timing restrictions imposed by local authority planning conditions can be overcome and whether changes to delivery practices can be sustained in the longer term.
- 7.6.60. TfL is currently working with stakeholders to develop a new freight strategy for London. This will consider the evidence currently available around the costs, benefits and activity needed to implement policy around re-timed deliveries and freight consolidation. Additional regulatory measures could possibly form part of the recommended policy mix if other measures do not achieve the required benefits.

- 7.6.61. These measures can help reduce freight emissions and congestion, but do not by themselves provide enough benefits in terms of overall emissions reductions to be seen as a substitute for the ULEZ.

Other Suggestions

- 7.6.62. The following stakeholders raised additional suggestions not listed above: Clean Air in London, GMB, London Borough of Hackney, London Borough of Islington, Thriev, Uber, Victoria Business Improvement District and Westminster City Council.
- 7.6.63. London Borough of Hackney and Clean Air in London commented on Geofencing, with London Borough of Hackney arguing for mandatory enforceable electric running only zones and Clean Air for London calling for an undertaking that geofencing should never take place near pollution monitors.
- 7.6.64. Uber called for more action to reduce private car use in London.
- 7.6.65. The GMB called for emissions stickers for foreign registered vehicles, a Euro IV standard for industrial plant equipment from 2017, greater use of synthetic FT diesel, carbon cotton batteries and hydrogen.
- 7.6.66. Thriev called for public sector tenders to give preference to zero emission vehicles.
- 7.6.67. Victoria BID called for an expanded rapid charging network for vehicles.
- 7.6.68. Westminster City Council called for an increase to the penalty for engine idling.
- 7.6.69. London Borough of Islington called for a ban on diesel passenger cars by 2025.

TfL response

- 7.6.70. With regard to geofencing, TfL will be undertaking trials and feasibility assessment on bus route 159. This will help to inform the wider applicability or otherwise of the policy. For maximum benefits, geofencing is likely to be undertaken in areas of high public exposure to NO₂. As air pollution monitors may be located in these areas, undertaking geofencing near air pollution monitors should not be ruled out.
- 7.6.71. With regard to reducing private car usage TfL recognises the need for complementary measures to reduce traffic demand and promote alternative modes of travel. Currently only 33 per cent of journey stages in London are made by private transport. As part of the programme of works arising from the Roads Task Force report, TfL is developing a suite of measures to further reduce the overall demand for motorised travel, including working with the industry to produce a car club strategy. TfL is working to increase the capacity of

the public transport network through the tube upgrade programme which will significantly increase peak capacity, and delivering Crossrail which will increase London's overall rail capacity by 10 per cent and developing the case for new rail infrastructure on top of this to encourage sustainable growth. Nearly £1bn is being invested to improve conditions for cycling by delivering the Mayor's cycling vision for London; including new segregated cycle superhighways, Quietways and local 'mini-Holland' schemes in outer London boroughs.

- 7.6.72. With regard to the sticker system for foreign vehicles, use of sticker enforcement was considered for the London wide LEZ, but rejected in favour of camera enforcement as this was likely to lead to higher rates of compliance. The compliance rate for LEZ is over 95 per cent. TfL has extensive experience of enforcing against these vehicles from operating both the CC and LEZ, and collection rates have improved significantly over the period since CC began in 2003. Its service provider for recovering penalty charges has established links with many non-UK Vehicle Licensing Agencies and the number continues to increase.
- 7.6.73. With regard to the proposed emissions standards for plant machinery, a LEZ standard for NRMM comes into force in 2015, with stronger standards in 2020. Full details are available via the GLA website⁴¹. Whilst NRMM contributes to 14 per cent of NO_x emissions, this is significantly less than transport's contribution. Additionally transport emissions are at roadside where public exposure is greater.
- 7.6.74. With regards to developments in battery technology these are to be welcomed, but vehicle manufacturers rather than TfL are best placed to consider and develop these.
- 7.6.75. With regard to hydrogen, TfL recognises the potential role of hydrogen as a zero tailpipe emission fuel in the future and is working with the London Hydrogen Partnership to exploit future opportunities. The ZEC standard proposed for taxis and PHVs can be met by hydrogen fuel cell vehicles.
- 7.6.76. Fischer-Tropsch synthetic diesel is still in the early stages of development. Research undertaken for the International Energy Agency indicates that it will make up only two per cent of biodiesel by 2020. Much of it is manufactured from coal. Evidence on NO_x reduction from this fuel is mixed and significantly more NO_x emissions can be saved by cleaner engines than by cleaner fuel.

⁴¹ <https://www.london.gov.uk/priorities/environment/clearing-londons-air/non-road-mobile-machinery-low-emission-zone>

- 7.6.77. TfL are currently developing a low emission commercial fleet programme. One workstream from this is to encourage public sector planning and procurement activities that support the uptake of low emission commercial vehicles. The programme will run from 2015 to 2020.
- 7.6.78. TfL have been involved in extensive market engagement with charging suppliers and operators and will be issuing an OJEU invitation in early 2016 to deliver the rapid charge network, in time for delivery up to 2018.
- 7.6.79. TfL agree that engine idling penalties should be increased in line with other traffic offences and the Mayor has previously discussed this issue with the Secretary of State for Transport.
- 7.6.80. An outright ban on vehicles would require a traffic regulation order (TRO) signed by all affected highway authorities. Whilst this is in principle feasible, albeit complicated, a 24 hour per day ban is not legally enforceable. TROs can only ban vehicles for a maximum of 8 hours in every 24 hour period, unless it is for the purposes of 'avoiding danger to persons or other traffic using the road to which the order relates or any other road'. Legal advice has been that this requirement is unlikely to be met in relation to air quality purposes in a large area.

TfL recommendation

No change to the proposals.

7.7. Theme F: Discounts and exemptions

- 7.7.1. The following three stakeholders had comments regarding discounts and exemptions: GMB, Licensed Private Hire Car Association, and Private Hire Board.
- 7.7.2. GMB commented that if the individuals or companies are working for commercial gain then they should pay as any other road user would for zone access, and there should not be exemptions for private ambulances, for example.
- 7.7.3. Licensed Private Hire Car Association suggested that exceptions need to be made for specialist vehicles like wheelchair accessible and school conversions as there is currently no availability in hybrid. Private Hire Board also commented that exemptions for specialist vehicles, ie wheelchair accessible school conversions should be in place to allow these limited availability vehicles to remain usable.
- 7.7.4. From public and business respondents, 26 comments were made on this theme, which constitutes five per cent of all respondents.

TfL Response

- 7.7.5. TfL has set out that it will consult at a later date on potential exemptions to the ZEC requirements for taxis and PHVs. With regard to the GMB comment regarding exemptions for private ambulances, no such exemption was proposed or confirmed in relation to the ULEZ emissions standards which were confirmed by the Mayor in March 2015.

TfL recommendation

No change to the proposals.

7.8. Theme G: Infrastructure / technology

- 7.8.1. The following eighteen stakeholders commented on this theme: Addison Lee, Autogas, Baker Street Quarter Partnership, Carey, Confederation of Passenger Transport, GMB, Licensed Private Hire Car Association, Licensed Taxi Drivers Association, London Borough of Camden, London Borough of Islington, London Taxi Company, Private Hire Board, The Society of Motor Manufacturers and Traders, Toyota, Tristar, Unite the Union, Victoria Business Improvement District and Westminster City Council.
- 7.8.2. Private Hire Board was concerned about the suitability of the charging infrastructure. Carey noted that at the time of the consultation, TfL has yet to make any commitment to the development of the required charging infrastructure, and that most PHV do not have houses with driveways that would allow the installation or use of a charging facility.
- 7.8.3. Tristar commented that the infrastructure is not yet in place and charging cannot be fitted in 'between jobs'.
- 7.8.4. Toyota stated that customers need to 'see' public charging infrastructure – the majority of charging is still carried out at home or the place of work. These locations should continue to be the areas prioritised for installation of charging infrastructure. It also stressed that it is very important that the focus should be on multi-standard charging solutions which can be used by a range of vehicles as not all ZEC vehicles are compatible with rapid charge points (43kW or 50kW).
- 7.8.5. The London Taxi Company stated that charging infrastructure remains a key concern and that TfL's target to install 90 rapid charge stations exclusively for taxis and commercial vehicles by 2018 should be increased to 150 by 2018 and TfL should set targets for growing this number year on year up to at least the end of 2021. It also noted that rapid charge points can be very complex to install and expensive, and should be seen as only one part of the required infrastructure mix in London for commercial vehicles and that the answer to getting suitable charging infrastructure in place quickly across London for

commercial vehicles is to include many more 'fast' 22kW charge points. It would also like to play a greater role in the design and delivery of charging infrastructure in London because it sees this as a crucial element to the success of its £250m investment in ZEC taxis and other commercial vehicles that will follow.

- 7.8.6. London Borough of Islington suggested that a network of alternative fuel recharging infrastructure should be created for the use of taxi's and PHV's.
- 7.8.7. GMB queried how much above the odds will the consumer pay for the benefit of obtaining charging power for their vehicles and how will bays be policed to allow a through flow of vehicles that need to charge up? Especially those engaged in Hire and Reward work or deliveries.
- 7.8.8. Victoria Business Improvement District suggested that it will become increasingly important to express emissions in terms of combinations of specific technologies.
- 7.8.9. Westminster City Council welcomes working with the Mayor of London to further his electric taxi aims, in particular the urgent need for greater investment in rapid charging infrastructure and ensuring that there is adequate investment in the provision of additional electricity supplies by UK Power Networks to meet that demand (particularly in central London).
- 7.8.10. Addison Lee commented that TfL has provided no evidence of the comprehensive planning process required to develop an effective plug in infrastructure within the ULEZ specifically, or the Greater London and Home Counties areas where 75% of Addison Lee drivers live and that the scope for widespread use of electric vehicles will remain at best limited until the London plug-in charging infrastructure is comprehensively upgraded.
- 7.8.11. Autogas expressed concern about TfL's proposal of increasing charging infrastructure of electric vehicle charge points in order to support the uptake of ZEC-ready electric vehicles by the commercial sector (including taxis and PHVs), neglecting already-established alternative fuels which could otherwise assist in achieving their air quality goals and that with a refuelling infrastructure in place nationally and a relatively low price premium, LPG autogas could be an additional option to other technologies that are not yet as mature, have higher upfront costs and/or cannot meet the needs of some drivers (such as driving range and access to infrastructure).
- 7.8.12. The Confederation of Passenger Transport expressed concern that the cost of the charging infrastructure and its operation will be borne ultimately by the taxpayer and London's business ratepayers meaning London's coach operators and their employees and customers will be subsidising the capital's taxi fleet. It

also queried why non-Euro 5 taxis still in operation after 2020 are not being compelled to comply with Euro 6 NO_x and PM levels with the use of aftermarket equipment and whether stop-start systems might offer any improvements to the projected air-quality. It also suggested alternative fuels should not be excluded from any future thinking.

- 7.8.13. London Borough of Camden would welcome further details regarding the expected role of boroughs to meet the proposed 90 rapid chargers needed by 2018 for ZEC taxis and 60 needed for PHVs and other commercial vehicles.
- 7.8.14. Licensed Taxi Drivers Association noted that in order to support and encourage further the uptake of ZEC vehicles by all sectors, a minimum of 50 rapid 50kW chargers are required in central London by 2018; increasing to 150 by 2020.
- 7.8.15. The Society of Motor Manufacturers and Traders commented that it is of paramount importance that ULEZ is supported by alignment of ULEZ requirements with national incentive criteria and that an appropriate, fully functioning recharging infrastructure is provided early.
- 7.8.16. The Licensed Private Hire Car Association commented that figures supplied by TfL in June 2015 indicated there are around 64,000 PHVs and 23,000 taxis in London however other figures supplied at the same time also shows that there will only be 6,000 vehicle charging points to be shared by the whole of London's electric motoring community by January 2018, and very few rapid charging points. Also, PHV drivers would be unable to work whilst charging, whereas a taxi could effectively be ranked up whilst doing so. It also noted that the Cycle Hire Scheme struggled to find areas to locate cycles so the location of charging points and the associated parking room will be even more challenging and that drivers would have to use normal fuel to drive, so emissions would not be cut.
- 7.8.17. Unite the Union also commented that is important that all taxi drivers have access to charge points wherever they live.
- 7.8.18. From public and business respondents, 11 comments were made on this theme, which constitutes two per cent of all respondents.

TfL response

- 7.8.19. As part of the rationale for delaying the ZEC requirement, the trade has suggested that London's electric vehicle charging network will not be sufficiently developed to support their operations by 2018 and that 2020 is a more realistic timeframe to require the use of ZEC vehicles on this scale.
- 7.8.20. TfL's Ultra Low Emission Vehicle Delivery Plan identifies that 150 rapid or fast charge points will be needed by 2018 to support the introduction of ZEC taxis, ZEC PHVs and other ultra low emission commercial vehicles. TfL was recently

allocated £10m from the Government's National Infrastructure Plan for this venture and has started to plan the implementation of the network. A PIN was recently issued as part of this process to understand the current market and explore partnership opportunities.

- 7.8.21. TfL will begin a tender process in early 2016 to identify a partner to build a rapid and fast charging network to meet the demand presented by ZEC taxis and PHVs. A key objective of the tender process will be to leverage private investment in the development and operation of new charging infrastructure. TfL's market engagement through the PIN has revealed a strong appetite from the private sector for providing investment and partnering with TfL in the development of charging networks.
- 7.8.22. The charging network developed by TfL and its selected partner will be subject to a rigorous testing, monitoring and maintenance regime, which will ensure that the availability and reliability of charge points are upheld to the high standards which will be required to support the introduction of ZEC taxis, PHVs and other ultra low emission commercial fleets.
- 7.8.23. In developing the charging network TfL and its selected partner will ensure that charge points are deployed in locations that ensure convenient access for taxi, PHV and other commercial fleet drivers. Building upon existing research and data, TfL will undertake further engagement with the taxi and PHV trades to identify where charge points would be best located to support their operation and minimise disruption to current working patterns.
- 7.8.24. TfL has commenced engagement with UK Power Networks to determine the potential impact of new charge points on electricity supply infrastructure. The availability of power will vary from location to location but where there is a requirement to upgrade the existing electricity network infrastructure, TfL will work closely with UK Power Networks to develop a suitable solution.
- 7.8.25. It is possible that there will be some vehicles suitable for use as ZEC taxis and PHVs that are not rapid charge capable. Working with its appointed partner TfL will ensure that an appropriate mix of infrastructure is delivered to ensure compatibility of the charging network with the widest range of vehicles possible. This will include deploying charge points that are compatible with variants of AC and DC charging and which provide multi-standard connectors, eg Mennekes Type 2, CCS Combo 2 and CHAdeMO.
- 7.8.26. Taxi and PHVs drivers may also seek to use publically accessible networks, such as over-night residential charging infrastructure, which is more challenging in London given that 46 per cent of inner London households and 33 per cent of outer London households do not have access to off-street parking. The Licensed Private Hire Car Association has also estimated that around 90% of PHV drivers

do not have access to off-street parking and notes that many live outside London.

- 7.8.27. TfL expects there will be at least 7,000 publicly accessible charge points across London in the expanded Source London and POLAR networks by 2018. There are also likely to be other charge point networks that develop during this period to provide additional capacity.
- 7.8.28. Furthermore, TfL is currently seeking further funding for residential infrastructure through an application to OLEV's Go Ultra Low City Scheme fund. The main objective is to establish a new delivery model and acquire capital funding to simplify and accelerate the provision of borough-led residential charging infrastructure and act as one point of contact, delivery, management and maintenance. The outcome of this process is expected to be known at the end of this year.
- 7.8.29. It is clear that delaying the PHV ZEC requirement to 2020 would not only allow more time for the vehicle market to mature but it also presents an opportunity for TfL to phase its approach to delivering charging infrastructure in London by focussing on serving demand from ZEC taxis in the initial phase and meeting PHV demand thereafter.

TfL recommendation

No change to the proposals.

7.9. Theme H: Consultation

- 7.9.1. Three stakeholders commented on this theme: Carey, Confederation of Passenger Transport and Private Hire Board.
- 7.9.2. From public and business respondents, eight comments were made on this theme which constitutes two per cent of all respondents.

Issues raised in relation to this theme:

- ***Extension of the consultation period***
- ***Publicising the consultation***
- ***Consideration of stakeholder comments***

Extension of the consultation period

- 7.9.3. Carey was the only stakeholder that made comments on this sub-theme. It suggested that difficulties in communicating about the consultation resulted in an extension of the consultation.

TfL response

- 7.9.4. The consultation took place between 1 July and 25 August 2015, a period of eight weeks. It was originally scheduled to run for six however was extended by two weeks (to close on 25 August 2015) when the IIA was published on 15 July 2015. This was to provide adequate time for stakeholders to consider this additional information and in turn, inform their consultation responses.

Publicising the consultation

- 7.9.5. Carey was the only stakeholder that made comments on this sub-theme.
- 7.9.6. Carey suggested that as the consultation was not featured on the TPH section of the TfL website, that the level of response would be low.

TfL response

- 7.9.7. The consultation was publicised in a number of ways (please refer to Chapter 4 of this report) including through the Metro, stakeholder emails, banners on the TfL website and letters directly to taxi and private hire owner/drivers.
- 7.9.8. TfL believes that the consultation was adequately publicised.

Consideration of stakeholder comments

- 7.9.9. The Confederation of Passenger Transport UK suggested that TfL has not fully considered responses from stakeholders.

TfL response

- 7.9.10. TfL has engaged with stakeholders throughout the development of the ULEZ proposals and has taken the time to fully consider and address any points that have been raised. In concluding the first ULEZ consultation, Chapter 10 of the March Report to the Mayor set out TfL's responses to key issues raised.

TfL recommendation

No change to the proposals.

8. Conclusions and recommendations

8.1. TfL's conclusions

- 8.1.1. TfL considers that this Consultation Report on the outcomes of the consultation (alongside the IIA and SIA that were provided for the consultation) provides the information and analysis needed to make an informed decision, taking into account the range of views expressed during the consultation, as to whether to endorse the proposed changes to the taxi CoF and PHV Vehicle Regulations, for TfL to confirm.
- 8.1.2. This report and the consultation responses permit decision-makers to take into account the range of views expressed during the consultation. In this report, TfL has analysed the consultation responses and set out its views on the representations received on the proposals.
- 8.1.3. It is worth stating at the start that the ULEZ package as already confirmed by the Mayor in March 2015 will make a significant improvement to air quality and health in London. Without any action 63 per cent of the population in central London will live in NO₂ exceedance areas by 2020: with the parts of the scheme which are confirmed (the vehicle emission standards and improvements to the TfL bus fleet) this would fall to 26 per cent. Outside central London, the figures are lower but still significant (see Appendix G for a borough-level analysis). But there are still potentially much greater savings to be made if changes are made to taxi and PHV licensing. Changes to taxi licensing in particular are important given their contribution to emissions; the changes to licensing would also apply London-wide. The package which is now being recommended would, if implemented, lead to only 17 per cent of the population in central London living in exceedance areas. Making changes to taxi and PHV licensing therefore remains a critical part of the ULEZ package.
- 8.1.4. The main objective of the ULEZ package has always been to reduce air pollutant emissions from road transport and thereby improve health in London. The changes to taxi and PHV licensing put forward (regardless of whether these are Package 1, 2 or 2A) are only concerned with reducing pollutants from these fleets. There is no intention to change the size or nature of the taxi or private hire markets in London by these measures. Nor is it the intention to address congestion as a result of either taxi or private hire vehicles operating in London.
- 8.1.5. Changes to taxi and PHV licensing were well-supported by the public and the majority of stakeholders (with the exception of the taxi and PHV trades) in both this and the previous consultation. Seventy-one per cent supported the ZEC requirement for taxis, and 47 per cent said it could be achieved earlier than 2018. Seventy-three per cent supported the ZEC requirement for PHVs and a

similar proportion (46 per cent) also said this could be achieved earlier than 2018. The London boroughs in particular remain strongly supportive of a mandatory age limit reduction for taxis.

8.1.6. In light of further discussions with the taxi trade, and the availability of additional Government funding, the updated proposal (Package 2) consulted on could achieve the same emissions savings as was proposed in Package 1. No further changes for taxis are proposed. However it will be incumbent on the taxi trade to respond appropriately and TfL will review the policy by 2020 with the option to introduce a mandatory age limit reduction if necessary, subject to consultation. Further changes to Package 2 are however recommended for PHVs. These are described below. Appendix J is a summary timeline of the proposed changes to licensing, setting out how the requirements, if implemented, would change over time from now until 2033, at which time all taxis and PHVs in London would be ZEC.

8.1.7. Finally, it is recommended that the three mitigation measures proposed to help close the 'emissions gap' opened up by the changes to taxi licensing are implemented as consulted on. These are as follows:

- *Retrofit an additional 400 Euro V buses outside of central London to meet the Euro VI standard;*
- *A demonstrator fund for bus operators to trial double decker zero emission buses in central London;*
- *The creation of a Low Emission Neighbourhood in central London.*

Taxis

8.1.8. TfL is not recommending any further changes to the proposals set out for taxis in Package 2 (these simply become known as Package 2A to align with the PHV proposals). However there were considerable changes made to the taxi proposals set out in Package 1 when it became Package 2, namely: the move from a mandatory age limit reduction to a voluntary decommissioning scheme supported by grants up to the value of £5k; and the confirmation of a ZEC purchase grant worth up to £8k in total (sum of the OLEV PICG and the TfL grant).

8.1.9. These changes were made partly as a result of representations made by the taxi trade concerning the financial impact of a mandatory age limit reduction on drivers and owners and the uncertainty associated with the purchase and operation of a new ZEC taxi. TfL has taken account of these concerns and, following further discussion and analysis has put forward a decommissioning scheme which would support owners to voluntarily remove the oldest and most polluting taxis (those over 10 years old) from the fleet. This scheme reconfigures

the money that had originally been identified for a compensation scheme. In March 2015, the Government also made available £25m for the purchase of ZEC taxis in London (in addition to the PICG). The adverse impacts on the trade are lessened or removed by these changes and the biggest taxi representative organisation, the LTDA, has indicated that it is content with the package.

- 8.1.10. Taxi manufacturers have indicated their readiness to bring ZEC taxis to market in time for the January 2018 start date. As LTC states in its response, this has required huge investment and is contributing towards UK employment; manufacturers not only have to meet the ZEC requirement but also the existing licensing requirements such as the taxi being wheelchair accessible. It is therefore critical that a market for these ZECs emerges in a timely fashion and can sustain this investment. The ZEC purchase grants will be an important support for this.
- 8.1.11. Another factor is charging infrastructure and as described in Chapter 2, TfL has now set out its plan for deploying a rapid-charge network and has already made progress in preparing potential suppliers. Taxi manufacturers have assumed rapid-charging in their model development and TfL has undertaken work on potential locations for charge points, with the opportunity for taxis to have exclusive access at some locations. It will be important for TfL to learn from the introduction of the first phase of ZEC taxis with regard to future charging infrastructure. ZEC vehicle affordability and infrastructure were two of the trade's major concerns and steps have been taken to address these, as well as commitments made to ongoing work.
- 8.1.12. Taxis make a significant contribution to NO_x emissions in London (18 per cent in central London in 2020) and in order for this revised proposal to achieve sufficient reductions, it will be necessary both to accelerate the removal of the oldest taxis and increase the proportion of ZEC vehicles in the fleet. The decommissioning scheme and the purchase grant are separate schemes but both are critical. A taxi owner who chooses to take advantage of both could be eligible for up to £13k in public money. Additionally, ZEC taxis will be licensed for 15 years, offering more time for cost recovery. It is therefore critical that the trade responds appropriately and provides support and encouragement to its members in decommissioning vehicles and switching to ZECs. In this context, the comments from Unite the Union that it will work with the trade on this matter, and that the benefits of ZEC taxis will help to ensure their uptake, are welcomed.
- 8.1.13. The advantage of a mandatory reduction to the taxi age limit (as proposed in Package 1) is its certainty: with that approach an additional 6,700 taxis would be removed from the fleet by 2020. With the voluntary approach now recommended, the number of taxis removed from the fleet is fewer (2,500-5,000) and there is much less certainty. Stakeholders (including London boroughs) not in the taxi trade were generally opposed to this move from a

mandatory to a voluntary age limit. Because of the significant contribution that taxis make to air pollutants, TfL must carefully monitor the uptake of the scheme in terms of its success in removing the oldest vehicles from the fleet and stimulating accelerated uptake of ZECs. For this reason it remains the case that the approach will be subject to review in early 2020 and, if insufficient numbers of older taxis have been removed, then further measures, including the introduction of a mandatory 10-year age limit, could be taken. Regardless of this, both the decommissioning and purchase grant schemes will be time-limited (to the end of 2020) in order to realise these changes in a timely way, optimise the use of the money available and align with the 2018 ZEC requirement.

PHVs

- 8.1.14. Compared to taxis (with an 18 per cent contribution to NO_x emissions in central London in 2020), PHVs are projected to make a much smaller contribution (around 4 per cent), despite being considerably more numerous in London overall. Like the taxi trade, the PHV trade has also been very concerned about the financial impact of the ZEC requirement. No change to the PHV age limit (which has been 10 years since 2012) has been put forward at any stage of ULEZ development. However it has already been confirmed that PHVs which do not meet the ULEZ emission standards (Euro 6 diesel, Euro 4 for petrol) would need to pay a daily charge to drive in the ULEZ zone from September 2020.
- 8.1.15. Consistent in Package 1 and Package 2 for PHVs was a differential approach to licensing for new and older or used⁴² vehicles. This is in recognition of a highly diverse fleet (PHVs are essentially just cars or vans, they are not purpose-built like taxis) and the fact that many drivers work part-time or on a temporary basis. The PHV trade has raised concern about the availability and cost of suitable ZEC vehicles as well as their access to charging infrastructure. Unlike taxi drivers, their main concern has been with mainstream ('slow' charging) and the difficulty for many drivers of charging at home. The on-street charging network is extensive and its owners, IER Bolloré, have plans to add significantly more charge points in the next few years. This will help to support ZEC PHVs but will not address the problems of home charging. An additional factor here is that many drivers live outside London and it is not within TfL's purview to support networks outside the Capital. A further consideration is the different operating practices of taxis and PHVs: as pointed out by respondents, PHVs do not ply for hire so building in (rapid) charging time on-street is more of a challenge.
- 8.1.16. TfL recognises that there will be a cost to PHV owners of this move to ZEC vehicles: the continuation of the PICG is a welcome mitigation but, unlike taxi

⁴² More than 18 months from date of DVLA registration

owners, there is no dedicated additional fund for ZEC purchase available. This reflects the fact that there are few taxi models and they are all priced relatively high (and the same will be true for ZEC taxis). As shown in Appendix I, there is already a range of vehicles suitable for use as PHVs available to buy, albeit there is a price premium. As the range grows, the price would be expected to fall, but currently it is significant for some vehicle types. There is also potentially more scope to recover purchase costs through fares, which unlike in the case of taxis, are not regulated and may be set by individual operators. The trade has indicated that a phased implementation of licensing changes would be more manageable.

8.1.17. TfL is now recommending some changes to Package 2, which together is referred to as Package 2A. These changes include a delay to the start date of the ZEC requirement for PHVs – to 1 January 2020. This is in recognition that the market for suitable ZECs is still maturing and that there are cost implications for owners, and to give more time for the charging network to grow. It is worth reiterating here that all of these changes would apply only to vehicles licensed for the first time in London (and not retrospectively to vehicles already licensed by TfL). Finally it should be noted that there has never been a proposed change to the ten year age limit currently in place for PHVs as part of the ULEZ.

Table 28: Further revised proposals for PHVs (Package 2A)

| Recommended PHV proposals |
|---|
| <ul style="list-style-type: none"> • Proposal 3A: From 1 January 2018, <u>all</u> vehicles licensed for the first time as PHVs must be Euro 6 or Euro 4 if petrol hybrid; • Proposal 3B: From 1 January 2020, <u>new</u> vehicles (defined as up to 18 months old (inclusive) from the date of registration with the DVLA) licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4); • Proposal 4: For PHVs, any vehicle meeting the criteria set out in categories 1, 2 or 3 of the OLEV plug-in car grant eligibility criteria will be regarded by TfL as ZEC; • Proposal 5: Sunset period exemption for vehicles with more than 6 seats no longer appropriate as superseded by modified Proposal 3; • Proposal 6A: From 1 January 2018, <u>used</u> vehicles (defined as more than 18 months old from the date of registration with the DVLA) licensed for the first time as PHVs must be Euro 6; |

- **Proposal 7:** From 1 January 2023, all vehicles licensed for the first time as PHVs must meet the approved ZEC requirement (see Proposal 4).

- 8.1.18. By delaying the ZEC start date by two years, there is in one respect a lessening of the ZEC policy for PHVs. However, unlike the taxi ZEC approach, the PHV ZEC policy is not about creating a step change in the fleet's emissions but about introducing new technologies into the fleet over a period of time. There remains a clear disparity within the car market (across the UK and in London) between the projected uptake of vehicles that meet the proposed (modified) ZEC criteria for PHVs and other conventionally-fuelled vehicles. Taking into account trade and manufacturer projections and TfL's assessment of the PHV vehicle market, this is an appropriate approach.
- 8.1.19. Under Package 2, even though the requirement in 2018 for newly licensed vehicles was ZEC, there were a number of exemptions to this that could have allowed for the uptake of standard petrol / diesel vehicles instead (namely exemptions for vehicles older than 18 months and with more than 6 seats). Exemptions in the latter category alone account for just over a third of the entire PHV fleet so it is apparent that this constituted a significant constraint on the impact of the policy. By moving to 2020, it is no longer necessary to have a sunset period for PHVs with more than 6 seats.
- 8.1.20. This means that the ZEC requirement will apply to all new PHVs presented for licensing from January 2020. This is easier to understand and is a more complete policy. Finally, it is recommended that the proposed change to the definition of a ZEC for PHVs consulted on in Package 2 is adopted. This ensures that as wide a range of vehicles as possible will be eligible for the PICG. TfL would urge the Government to retain this grant in its present form beyond February 2016.
- 8.1.21. Both Package 1 and Package 2 maintained a different approach to licensing for used PHVs and it is proposed that a difference is also maintained in Package 2A, albeit with modifications. Another important change here is the introduction of time-limited requirements for non-ZEC PHVs, so that the phasing-in of cleaner and eventually ZEC vehicles into the PHV fleet can be achieved to a set timetable.
- 8.1.22. For all vehicles (regardless of whether new or older / used), the requirement is now proposed to be that from January 2018 they must be Euro 6 (petrol or diesel) unless they are petrol hybrid (in which case Euro 4 is the minimum standard). Retaining the current exemption for petrol hybrids for two years will allow the trade to continue to move to these vehicles, which have become increasingly popular in the fleet and have emissions advantages over non-hybrid

equivalents. This is a tightening of the current standards for PHVs⁴³ and recognises the importance of hybrid vehicles in improving air quality, a point made by the trade to TfL. From January 2020, this requirement will be tightened for used vehicles, which will be required to meet a Euro 6 requirement. These two steps ensure that no more pre-Euro 6 vehicles join the PHV fleet, which is important because these vehicles contribute disproportionately to air pollutant emissions.

- 8.1.23. A further tightening of standards would apply in 2023, when all PHVs presented for licensing for the first time would be required to meet the ZEC criteria. This proposal, alongside the existing 10-year age limit for PHVs, means that by 2033 all PHVs in London will be ZEC. This achieves parity with the taxi sector, where a combination of a 2018 ZEC start date and a 15-year age limit would also result in a ZEC-only fleet by the end of 2033.
- 8.1.24. Package 2A, then, represents a refining of the PHV proposals in recognition of the specific characteristics of this fleet with regard to vehicle availability and cost, its contribution to emissions and how vehicles are used in London. PHVs are used much more in inner and outer London and for night-time travel than taxis (which are concentrated on central London). By putting in a small delay to the start of the ZEC requirement, there would be more time for the vehicle market to mature and for the charging infrastructure to develop. This approach also reflects the different contributions of taxis and PHVs to NO_x emissions and the fact that the air quality problem is significantly worse in central London, where taxis are concentrated. This is one reason that it is appropriate to prioritise the introduction of the ZEC taxi requirement.
- 8.1.25. Another reason for the different start dates for the ZEC requirement for taxis and PHVs is the need to focus efforts on the rapid-charging infrastructure that will serve taxis. There is the opportunity to put this infrastructure into locations used only by taxis, concentrated in central London. It will still be important to enhance charging infrastructure for PHVs, but the requirements are likely to be more widely-spread (given their much more widely-dispersed origin and destination points) and there will be more time to do this.
- 8.1.26. By phasing in different requirements over time, TfL would be able to achieve gradual but assured change and in setting out a timetable for the next ten years, give certainty to manufacturers and operators. As can be seen, in the short-term there is some lessening of requirements (for example the delay of ZEC) but in the longer-term the change and the benefits are greater. There is also reduced

⁴³ Which are that vehicles must be no more than five years old and meet a minimum Euro 4 standard.

adverse impact on PHV drivers and owners, but no significant changes to air quality or health impacts.

- 8.1.27. In terms of air quality, Package 2A is likely to have comparable air quality benefits to Package 2. As we have seen, the air quality problem is especially severe in central London. Importantly for air quality benefits, PHVs entering central London will still have to meet Euro 4 petrol / Euro 6 diesel standards from September 2020 (or pay a charge) under the ULEZ already confirmed. This is the main driver for emissions reductions in the short term within the fleet. The other changes set out in Package 2A ensure that the benefits are spread London-wide and are increased year over year. By the end of 2033 only ZEC taxis and PHVs will operate in London.
- 8.1.28. Package 2A then ensures that both taxis and PHVs play their part in reducing air pollutant emissions in London in a way that is appropriate for the different fleets and takes account of the trades' views as put forward in this consultation and in the original ULEZ consultation. These proposals have been shaped with considerable input from the taxi and PHV trades. If implemented, these changes will help to achieve the ULEZ objectives of reducing air pollutant and CO₂ emissions from road transport, and of providing a stimulus to the low emission vehicle economy in the UK.

8.2. Conclusion

- 8.2.1. TfL is able to influence the emissions standards of both taxis and PHVs via the licensing regime and targeted incentives, which is a more direct approach and allows us to apply standards appropriate to these vehicles. The proposals described above reflect the emissions contribution of these vehicles compared with other vehicles; for taxis the contribution is much greater than PHVs due to their high mileage within the ULEZ zone. The packages have also been tailored to reflect the different types of vehicles used as taxis and PHVs and their associated cost. Additionally the timetable for the availability of suitable charging infrastructure has been a factor in shaping the proposals.

For these reasons the requirement for taxis and PHVs differs in some ways from those for those for private cars; additionally in some respects the proposals for PHVs differ from the differ from the proposals for taxis. For both PHVs and taxis the intention is to incentivise the development and take-up of ZEC vehicles while encouraging the removal of removal of the oldest vehicles from the fleet. The proposed approach is considered to be the considered to be the most appropriate way to achieve this for each sector.

- 8.2.2. Table 29 below summarises the considerations which have influenced the proposed changes to taxi and PHV licensing.

Table 29: Summary of considerations for changes to taxi and PHV licensing

| | | Taxi | PHV |
|---|---------------------------------|--|--|
| Key fleet information | | <ul style="list-style-type: none"> • High contribution to NO_x emissions in central London (18% of road transport in 2020); • Majority of taxis operate in central London on a regular basis; • Drivers compelled to accept journeys in London (especially central London); • Fares regulated and set by TfL; • Very limited choice of vehicle models; • 15 year age limit; • All vehicle models are diesel; • High average fleet age (eight years) as vehicles are built for long service life. | <ul style="list-style-type: none"> • Low contribution to NO_x emissions in central London (4% of road transport in 2020); • Variable operating patterns across London; • Flexibility over which journeys to accept; • Able to set own fares; • Widespread choice of diesel and petrol vehicle models; • 10 year age limit; • Average fleet age 4.5 years so compliance with central London scheme much more likely. |
| Discouraging the use of older vehicles | | <ul style="list-style-type: none"> • Due to limited choices for owners/drivers (fares, journeys and vehicles) taxis are best dealt with through licensing rules and incentives to remove older vehicles; • Owing to high contribution to emissions it is necessary to accelerate ZEC taxis as soon as possible and no longer license diesel vehicles; • Need to remove oldest and most polluting vehicles from the fleet to achieve emissions savings. | <ul style="list-style-type: none"> • Due to greater flexibility PHVs can be included in the ULEZ charging scheme alongside cars and vans; • Important to accelerate ZEC vehicles but flexibility for gradual introduction through phased timescale for new and used vehicles; • 10 year age limit already in place. |
| Transitioning the fleet to zero emission capability (by 2018 for taxis; 2020 for | Vehicle charging network | <ul style="list-style-type: none"> • Greater insight and influence over vehicle manufacturing process to ensure rapid charging capability; • Opportunities for 'exclusive' access to rapid charge points at existing taxi rest ranks and hub locations; • Good understanding of response to ZEC policy will | <ul style="list-style-type: none"> • Varied charging capability across ZEC models leading to a variety of charging solutions; • More demand for public and residential charging infrastructure, which is more challenging to deliver; • Far greater volume of ZEC vehicles that will require charging infrastructure and |

| | | Taxi | PHV |
|-------|--------------------------------------|--|--|
| PHVs) | | help to inform planning – captive fleet of 9,000 ZEC taxis by 2020. | diverse response to policy. |
| | Affordability of ZEC vehicles | <ul style="list-style-type: none"> • Greater insight and influence over vehicle development, which enhances understanding of likely costs; • Estimated to be an £8k premium compared to conventional taxis; • Secured funding from Government to ‘top-up’ plug-in car grant and bridge the premium; • Can license the vehicles for up to 15 years; • Lack of flexibility in fare structure to recoup premium cost of ZEC taxi (one fare is set for the entire taxi fleet and regulated by TfL). | <ul style="list-style-type: none"> • Limited influence over vehicle development, which affects estimates of likely costs; • Whilst some smaller saloon models have a small premium, this varies substantially for larger niche products; • Financial support from the Government £5k plug-in car grant but this is likely to vary in the future depending on type of vehicle; • Can license the vehicles for up to 10 years; • Able to amend fare structure to account for increased cost (subject to customer expectations). |
| | Availability of ZEC vehicles | <ul style="list-style-type: none"> • Greater insight and influence over production timescales; • TfL is able to seek assurance from vehicle manufacturers on availability prior to 2018; • Single standard specification for vehicle type. | <ul style="list-style-type: none"> • Limited influence over vehicle development and production timescales; • Uncertainty of development of vehicles owing to competitive market and manufacturers willingness to cooperate; • Far more diverse market and range of vehicles required. |

Appendix A: Description of ULEZ packages

| | Original ULEZ Package (Consulted upon October 2014 – January 2015) | Revised ULEZ Package (Consulted upon July 2015 - August 2015) | FINAL ULEZ Package (Recommended for implementation) |
|-----------------------|---|---|--|
| ULEZ proposals | <p>Exhaust emission standards in central London</p> <p>All vehicles (excluding taxis) driving in central London from September 2020 would need to meet new exhaust emissions standards (ULEZ standards) or pay a daily charge.</p> <p>CONFIRMED IN MARCH 2015</p> | <p>Exhaust emission standards in central London</p> <p>All vehicles (excluding taxis) driving in central London from September 2020 would need to meet new exhaust emissions standards (ULEZ standards) or pay a daily charge.</p> <p>ALREADY CONFIRMED – INCLUDED FOR IMPACTS COMPARISON</p> | <p>Exhaust emission standards in central London</p> <p>All vehicles (excluding taxis) driving in central London from September 2020 would need to meet new exhaust emissions standards (ULEZ standards) or pay a daily charge.</p> <p>ALREADY CONFIRMED – INCLUDED FOR IMPACTS COMPARISON</p> |
| | <p>TfL Buses</p> <p>Additional requirement for TfL buses operating in the ULEZ:</p> <ul style="list-style-type: none"> • Double decker buses hybrid • Single decker buses zero emission (at tailpipe) <p>CONFIRMED IN MARCH 2015</p> | <p>TfL Buses</p> <p>Additional requirement for TfL buses operating in the ULEZ:</p> <ul style="list-style-type: none"> • Double decker buses hybrid • Single decker buses zero emission (at tailpipe) <p>ALREADY CONFIRMED – INCLUDED FOR IMPACTS COMPARISON</p> | <p>TfL Buses</p> <p>Additional requirement for TfL buses operating in the ULEZ:</p> <ul style="list-style-type: none"> • Double decker buses hybrid • Single decker buses zero emission (at tailpipe) <p>ALREADY CONFIRMED – INCLUDED FOR IMPACTS COMPARISON</p> |
| | <p>Private Hire Vehicle (PHV) licensing</p> <p>Changes to PHV licensing to accommodate the following:</p> <ul style="list-style-type: none"> • From January 2018, new PHVs (<18 months old) licensed for the first time to be ZEC • From January 2018, used PHVs (≥ 18 months old) licensed for the first time to be Euro 4 petrol, Euro 6 diesel <p>NOT CONFIRMED IN MARCH 2015</p> | <p>Private Hire Vehicle (PHV) licensing</p> <p>Changes to PHV licensing to accommodate the following:</p> <ul style="list-style-type: none"> • From January 2018, new PHVs (<18 months old) licensed for the first time to be ZEC (<i>ZEC criteria modified from original proposals</i>) • From January 2018, used PHVs (≥ 18 months old) licensed for the first time to be Euro 4 petrol, Euro 6 diesel <p>MODIFIED FOR CONSULTATION IN SUMMER 2015</p> | <p>Private Hire Vehicle (PHV) licensing</p> <p>Changes to PHV licensing to accommodate the following:</p> <ul style="list-style-type: none"> • From January 2018, all PHVs licensed for the first time to be Euro 6 (or Euro 4 if petrol hybrid) • From January 2020, new PHVs (<18 months old) licensed for the first time to be ZEC and used PHVs (≥ 18 months old) licensed for the first time to be Euro 6 • From January 2023, all PHVs licensed for the first time to be ZEC <p>RECOMMENDED POLICY – MODIFIED FOLLOWING CONSULTATION</p> |
| | <p>Taxi licensing</p> <p>Changes to taxi licensing to accommodate the following:</p> <ul style="list-style-type: none"> • From January 2018, all taxis licensed for the first time to be ZEC • From September 2020, a 10 year age limit for non-ZEC taxis <p>NOT CONFIRMED IN MARCH 2015</p> | <p>Taxi licensing</p> <p>Changes to taxi licensing to accommodate the following:</p> <ul style="list-style-type: none"> • From January 2018, all taxis licensed for the first time to be ZEC • A voluntary decommissioning scheme for taxis older than 10 years (<i>this is a new proposal put forward as part of an option assessment</i>) <p>MODIFIED FOR CONSULTATION IN SUMMER 2015</p> | <p>Taxi licensing</p> <p>Changes to taxi licensing to accommodate the following:</p> <ul style="list-style-type: none"> • From January 2018, all taxis licensed for the first time to be ZEC • A voluntary decommissioning scheme for taxis older than 10 years <p>RECOMMENDED POLICY – NO CHANGE FOLLOWING CONSULTATION</p> |

Appendix B: Taxi and Private Hire trade meetings

a) Taxi engagement

- **27 April 2015** – Meeting with the taxi trade on charging infrastructure including the number of charge points needed; locations and potential delivery mechanisms and financing.
- **11 May 2015** - Meeting with the taxi and Private Hire trades to provide an update on the proposed policy including financing and to provide notice of the public consultation.
- **21 May 2015** – Meeting with Karsan to discuss manufacturer provisions including rapid charging capable.
- **21 May 2015** - Meeting with Frazer Nash to discuss manufacturer provisions including rapid charging capable.
- **28 May 2015** – Meeting with Mercedes Benz to discuss manufacturer provisions including rapid charging capable.
- **28 May 2015** - Meeting with LTC to discuss manufacturer provisions including rapid charging capable.
- **25 June 2015** – Meeting with the taxi trade to provide an update on proposed financial support for ZEC and older taxis, as well as an update on rapid charging and the consultation proposals.
- **10 September 2015** - Meeting with the taxi trade to update on the outcome of the consultation and the recommendations on the proposals for the Mayor to endorse and TfL to confirm.

b) Private Hire engagement

- **15 April 2015** – Meeting with the Private Hire trade on charging infrastructure including the number of charge points needed; locations and potential delivery mechanisms and ZEC vehicle availability and financing update on discussions with the OLEV and manufacturers about the availability and affordability of zero emission capable vehicles that could be used as PHVs from 2018, fleet replacement cycle and procurement lead in times.

- **7 May 2015** - Meeting with the Private Hire trade to provide an update on the proposed policy and to provide notice of the public consultation.
- **11 May 2015** - Meeting with the taxi and Private Hire trades to provide an update on the proposed policy including financing and to provide notice of the public consultation.
- **15 June 2015** – Discussion with various PHV company reps including Addison Lee, Carey International and Tristar to look at affordability and availability of luxury ZEC PHVs in 2018.
- **18 June 2015** – Meeting with the PHV trade to provide an update on the forthcoming consultation as well as the affordability of ZEC chauffeur and executive vehicles and an update on rapid charging.
- **16 July 2015** - Meeting with the PHV trade to discuss consultation proposals and availability and affordability of luxury PHVs.
- **11 August 2015** - Meeting with the PHV trade to update on consultation proposals.
- **7 September 2015** - Meeting with the PHV trade to update on the outcome of the consultation and the recommendations on the proposals

Appendix C: Consultation questionnaire

NB Please note that some of these proposals differ from the original proposals consulted on between 2014 to January 2015. Each question relating to proposals is therefore marked either 'new' or 'unchanged'.*

Section 1 – About you

Please tell us about yourself. This will help us to analyse responses and contact you in the future.

1. Name

2. Email address

This is optional, but if you enter your email address then you will be able to return to edit your response at any time until you submit it. You will also receive an acknowledgement email when you complete your response.

3. In what capacity are you responding to this consultation?

- As an individual
- As a taxi (black cab) driver/owner
- As a private hire vehicle (PHV)/minicab driver/operator/owner
- As a representative of a Government Organisation
- As a representative of a business
- As a representative of a community or voluntary organisation
- As a representative of a campaign group

4. If responding on behalf of an organisation, business or campaign group, please provide us with the name:

5. Postcode (of your home or business)

6. How did you hear about this consultation?

Please tick as many options as apply.

- Received an email from TfL
- Read about the consultation on the TfL website
- Read about it in the press
- Through social media
- Other

If you have ticked Other, please specify how you heard about this consultation

Section 2: Taxis

7. As set out in our original consultation, do you support the proposal to introduce a requirement that vehicles licensed for the first time as taxis from January 2018 must be ZEC? (Unchanged proposal)

| | | | | |
|------------------|---------|---------------------------|--------|-----------------|
| Strongly support | Support | Neither support or oppose | Oppose | Strongly oppose |
|------------------|---------|---------------------------|--------|-----------------|

8. Do you think the timing of our proposal to introduce a ZEC requirement for vehicles licensed for the first time as taxis from January 2018 is?

| | | | | |
|-------------|-------------------------------------|---|------------|------------|
| About right | Could be achieved earlier than 2018 | Can't be achieved until later than 2018 | No opinion | Don't know |
|-------------|-------------------------------------|---|------------|------------|

9. Do you support our current preferred approach – both a voluntary decommissioning scheme for taxis over ten years old and purchase grants for ZEC taxis? (New proposal)

| | | | | |
|------------------|---------|---------------------------|--------|-----------------|
| Strongly support | Support | Neither support or oppose | Oppose | Strongly oppose |
|------------------|---------|---------------------------|--------|-----------------|

10. Please write in the box below if you wish to make any comments about any of our proposals for taxis, including the above and the options for a reduced 10 or 12 year age limit.

Section 3: Private Hire Vehicles

11. As set out in our original consultation, do you support the proposal to introduce a requirement that new vehicles licensed for the first time as PHVs must be zero emission capable from January 2018? (Unchanged proposal)

| | | | | |
|------------------|---------|---------------------------|--------|-----------------|
| Strongly support | Support | Neither support or oppose | Oppose | Strongly oppose |
|------------------|---------|---------------------------|--------|-----------------|

12. Do you think that our proposal to introduce a ZEC requirement for all vehicles under 18 months that are newly licenced PHVs from January 2018 is?

| | | | | |
|-------------|-------------------------------------|---|------------|------------|
| About right | Could be achieved earlier than 2018 | Can't be achieved until later than 2018 | No opinion | Don't know |
|-------------|-------------------------------------|---|------------|------------|

13. TfL is proposing a two year sunset period exemption to this requirement until January 2020 for PHVs licensed to carry six or more passengers. Do you support this proposal? (New proposal)

| | | | | |
|------------------|---------|---------------------------|--------|-----------------|
| Strongly support | Support | Neither support or oppose | Oppose | Strongly oppose |
|------------------|---------|---------------------------|--------|-----------------|

14. As set out in our earlier consultation, do you support the proposal to introduce a requirement that used vehicles (older than 18 months) licensed for the first time as PHVs must meet a minimum Euro 4 petrol or Euro 6 diesel standard from January 2018? (Unchanged proposal)

| | | | | |
|------------------|---------|---------------------------|--------|-----------------|
| Strongly support | Support | Neither support or oppose | Oppose | Strongly oppose |
|------------------|---------|---------------------------|--------|-----------------|

15. Do you support the proposal to change the definition of a zero emission capable PHV to align with the eligibility criteria for the Office for Low Emission Vehicle's (OLEV) plug-in vehicle grant? (New proposal)

| | | | | |
|------------------|---------|---------------------------|--------|-----------------|
| Strongly support | Support | Neither support or oppose | Oppose | Strongly oppose |
|------------------|---------|---------------------------|--------|-----------------|

16. Please write in the box below if you wish to make any comments about our proposals for PHVs

Section 4: Additional improvements

17. Do you support TfL's additional initiatives to improve air quality in London? (New proposal)

- Retrofit an additional 400 Euro V buses outside of central London to meet the Euro VI standard
- A demonstrator fund for bus operators to trial double decker zero emission buses in central London
- The creation of a Low Emission Neighbourhood in central London

| | | | | |
|------------------|---------|---------------------------|--------|-----------------|
| Strongly support | Support | Neither support or oppose | Oppose | Strongly oppose |
|------------------|---------|---------------------------|--------|-----------------|

Section 5: Your comments on the ULEZ proposal

18. Please write in the box below if you wish to make any other comments about any aspect of the proposals put forward for consultation or you would like to expand on any of your responses above.

Appendix D: List of stakeholders that responded to the consultation

| Organisation name | Submitted by | Received by |
|--|--------------------------------------|---------------------------------------|
| Addison Lee | Michael S. Galvin | Email |
| Autogas | Paul Oxford | Email |
| Baker Street Quarter Partnership | Katie Lindsay | Consultation portal |
| Better Bankside | Sophie Tyler | Email |
| Carey Worldwide Chauffeured Services | Greg Mendoza | Email |
| City of London Corporation | Ruth Calderwood | Consultation portal |
| Clean Air in London | Simon Birkett | Consultation portal |
| Confederation of Passenger Transport | Andy Warrender | Email |
| eConnect Cars | Alistair Clarke | Email |
| Energy Saving Trust | Fergus Worthy | Consultation portal |
| GMB Professional Drivers | Steve Garelick | Email |
| Heart of London Business Alliance | James Robinson | Consultation portal |
| Inmidtown | Corin Wates | Consultation portal |
| Licensed Private Hire Car Association | Steve Wright | Email |
| Licensed Taxi Drivers Association | Steve McNamara | Email |
| London Borough of Camden | Adam Webber | Email |
| London Borough of Enfield | Cllr Daniel Anderson | Email |
| London Borough of Hackney | Paul Bowker | Email |
| London Borough of Hammersmith and Fulham | Richard Buckley and Chris Bainbridge | Consultation portal (two submissions) |
| London Borough of Islington | Cllr Claudia Webbe | Email |
| London Borough of Lambeth | Cllr Jennifer Brathwaite | Email |
| London Borough of Wandsworth | Houda Al Sharifi | Email |
| London Councils | Steve Craddock | Email |
| New West End Company | Steven Medway | Email |
| Private Hire Board | E Townson | Email |
| Royal Borough of Greenwich | Nick Marks | Email |
| Royal Borough of Kensington and Chelsea | Mark Chetwynd | Email |
| Southwark Living Streets | Jeremy Leach | Consultation portal |
| Society of Motor Manufacturers and Traders | Jonathan Hawkins | Email |
| The London Taxi Company | David Ollier | Email |
| Thriev | Ian Mihajlovic | Email |
| Toyota | Sophie Ogunbiyi and | Email |

| | | |
|--|---------------------|---------------------|
| | Chris O'Keefe | |
| Tristar | Doug Claringbold | Email |
| Uber | Alan Clarke | Email |
| United Cabbies Group | Not specified | Consultation portal |
| Unite the Union | Mike Hedges | Email |
| Victoria Business Improvement District | David Beamont | Consultation portal |
| Westminster City Council | Sion Pryse | Email |
| | Justine Greening MP | Email |

Appendix E: Summary of stakeholder responses

Businesses

Autogas

Autogas is supportive of TfL's ambition to significantly improve air quality across London through the Ultra-Low Emission Zone. However it states that it cannot support the proposed 10 year decommissioning scheme for taxis or the requirement for all new taxis and PHVs to be ZEC from January 2018, given the unproven nature of the technology or without due regard for the need of a bridging technology. It suggests LPG could offer an alternative affordable solution in the short to medium term as it is proven technology, already meeting the proposed Euro emissions standards with infrastructure already set up nationally and has a relatively low price premium. It also notes that LPG can meet driving needs of some drivers such as driving range.

Toyota

Toyota supports improving air quality in London and globally and recognises the impact vehicle emissions have on this. It suggests that uptake of ZEC taxis and PHVs by 2018 may be slow due to issues relating to cost/affordability, consumer acceptance and access and availability of charging and refuelling infrastructure. It suggests mandating the ZEC criteria for taxis and PHVs for 2018 may be too early in the early market development of these technologies and could preclude a number of current low emission, hybrid and plug-in vehicles from being eligible. It suggests that a technology neutral approach should be adopted and that future eligibility criteria are based on one set of concrete PM and NO_x levels rather than Euro standards. It also notes that in order to support the growth of the zero and ultra-low emission vehicle market further recharging infrastructure is needed across London and that it is very important that the focus should be on multi-standard charging solutions which can be used by a range of vehicles as not all ZEC vehicles are compatible with rapid charge points (43kW or 50kW).

Business Representative Organisations

Baker Street Quarter Partnership

The Baker Street Quarter Partnership notes that air quality is a key concern of its members and it therefore strongly supports the aims of these proposals. It suggests improvements in air quality for health reasons must be the priority over challenges facing taxi drivers. It supports the proposals for taxis and PHVs however suggests the ZEC requirement for both could be achieved earlier than 2018.

Better Bankside

Better Bankside does not support however the voluntary decommissioning scheme for taxis older than 10 years as it will not provide the same air quality benefits as the original proposal and it does not provide the level of certainty required by taxi manufacturers to create a new market for ZEC vehicles. It supports the two year sunset period ZEC exemption for seven seater PHVs, the ZEC requirement for newly licensed PHVs from 2018 and the alignment of the PHV ZEC criteria with OLEV's. It also supports the additional initiatives to improve air quality suggesting they should go ahead regardless of the outcome of the consultation.

Heart of London Business Alliance

The Heart of London Business Alliance supports all of the proposals and considers the ZEC requirement date of 2018 about right for both taxis and PHVs.

InMidTown BID

Inmidtown supports all of the proposals overall but specifically indicates strong support for the taxi and PHV ZEC requirements, the voluntary decommissioning scheme, the retrofitting of the 400 additional buses and the creation of a Low Emission Neighbourhood. It considers the ZEC requirement date could be achieved earlier than 2018 for taxis while it supports the 2018 date for PHVs.

New West End Company

The New West End Company supports the ZEC taxi proposal from 2018 however it suggests that it should also be required of PHVs so that all new vehicles licensed as either a taxi or PHV should be ZEC from 2018. It does not agree with the licensing distinction for new and used PHVs and states that if the PHV ZEC criteria aligns with OLEV's, the requirements should be introduced from January 2018. It also supports ZEC taxi purchase grants as well as the voluntary decommissioning scheme for taxis older than 10 years however at the same time states that the original proposal to reduce the age limit for taxis to 10 years should be maintained.

Victoria Business Improvement District (BID)

Victoria BID does not support the voluntary decommissioning scheme for taxis older than 10 years, noting its support instead for the 10 year age limit for taxis with the associated compensation scheme which appears to provide greater certainty over emissions reductions and associated health benefits. It notes that an upgraded and expanded charging network is needed quickly and the need to ensure that the ZEC taxis are available on time and are reliable.

Campaign Groups

Clean Air in London

Clean Air in London does not support the proposals for taxis and PHV as they do not include their proposals set out in the 'Eight point transformation package' it has previously set out. These changes include for example the removal of the 25 foot turning circle requirement for taxis and a requirement for PHVs to pay the Congestion Charge. It also suggests the proposed ZEC requirement for taxis and PHVs could be achieved earlier than 2018. It supports the creation of a LEN in central London.

Energy Saving Trust

The Energy Saving Trust supports all of the proposals for taxis and PHVs except for the two year sunset period exemption for PHVs licensed to carry six or more passengers suggesting there are already at least two vehicles that would be compliant and likely more in the next two years. It states that the proposal to align the PHV ZEV criteria with that of OLEV will not maximise air quality benefits and several vehicles are already available which meet the stricter criteria. It also supports the additional initiatives to improve air quality.

Southwark Living Streets

Southwark Living Streets supports the ZEC proposal for both taxis and PHVs however thinks it could be introduced earlier than 2018 for both. It also supports the proposal for used PHVs to be either Euro 4 petrol or Euro 6 diesel and strongly supports the additional initiatives to improve air quality in London. It opposes however the voluntary decommissioning scheme for taxis older than 10 years and purchase grants for ZEC taxis stating that it cannot be supportive of any moves to reduce the obligations that taxis have to reduce their emissions.

London Boroughs

City of London Corporation

The City of London Corporation supports the ZEC requirement for taxis and PHVs however while suggesting the 2018 date for taxis is about right, suggests it could be achieved earlier for PHVs. It opposes the voluntary decommissioning scheme for taxis older than 10 years noting its support in the previous consultation to the 10 year age limit for taxis and states that the incentives are not sufficient for taxi drivers to opt to replace their existing vehicle with a ZEC. It opposes the used PHV requirement for vehicles to be either Euro 4 petrol or Euro 6 diesel from 2018, suggesting the PHV policy should be more robust given the large number of petrol based ZEC cars now on the market. It strongly supports the additional initiatives to improve air quality.

London Borough of Camden

The London Borough of Camden welcomes proposals to improve air quality in London however it believes that the ULEZ as proposed is not fit for purpose. It is disappointed in the reversal of the 10 year age limit policy for taxis as it will result in lower air quality benefits. It states that the voluntary age limit and decommissioning scheme proposal indicate that the demands of the black cab taxi industry are seen as more important than the health and wellbeing of London's population. It also welcomes TfL's commitment to further improving the EV charging infrastructure throughout London and notes that further details would be welcome regarding the expected role of boroughs to meet the proposed 90 rapid chargers needed by 2018 for ZEC taxis and 60 needed for PHVs and other commercial vehicles.

London Borough of Enfield

The London Borough of Enfield supports the updated ULEZ proposals for taxis and PHV licensing however makes various suggestions for work to carry on alongside. This includes: continued engagement between TfL and taxi and PHV operators to ensure the introduction of the ULEZ is successful without impacting on their service to outer London residents.

London Borough of Hackney

The London Borough of Hackney opposes the proposals for taxis and PHVs overall as they do not believe they represent good value for money nor sufficient air quality benefits. It suggests the proposed decommissioning scheme will be significantly more costly than the original age limit proposal and that it is unfair not to offer similar compensation to PHV drivers. It suggests the original proposals for taxis should be retained however phase the new taxi age limit in over the years between now and 2025 to mitigate market distortion. Regarding PHVs it does not believe it is necessary to drop the requirement for second hand PHVs to be ZEC. It also suggests electric only running zones where in known hotspots it would become mandatory for ZEC buses and taxis to run in electric mode.

London Borough of Hammersmith and Fulham

The London Borough of Hammersmith and Fulham supports the 2018 ZEC requirement for taxis and PHVs licensed for the first time however opposes the voluntary decommissioning scheme for taxis older than 10 years as it will not give the same air quality benefits as the 10 year age limit which it supports. It also opposes the sunset period exemption for PHVs with more than 6 seats as it would encourage the purchase of second hand 6 seater vehicles instead of upgrading to ZEC. It opposes the proposal for used PHVs as more drivers would buy a used vehicle rather than upgrade, and it opposes the alignment of the PHV ZEV criteria with that of OLEV as it is inconsistent with the taxi criteria and reduces effectiveness of the proposals.

London Borough of Islington

The London Borough of Islington strongly supports the ZEC proposals for both taxis and PHVs however while agreeing with the 2018 date for PHVs considers the requirement could be implemented earlier for taxis. It also supports the proposal to align the definition of ZEC PHV to the OLEV criteria, the sunset period for PHVs licensed to carry six or more passengers, and the additional initiatives to improve air quality in London. It strongly opposes the voluntary decommissioning scheme for taxis older than 10 years. It also suggests a network of alternative fuel recharging infrastructure should be created for the use of taxis and PHVs and that the compulsory 10 year age limit for taxis should remain.

London Borough of Lambeth

The London Borough of Lambeth is concerned about the proposal to lessen the measures for taxis, including the voluntary decommissioning scheme for taxis older than 10 years and the purchase grants for ZEC taxis. Although it supports the ZEC requirement for both taxis and PHVs it considers that the requirement for both could be achieved earlier than 2018 and is also concerned that there is no guarantee a ZEC vehicle would operate in zero-emissions mode. It opposes the proposed sunset period exemption for vehicles licensed to carry six or more passengers as PHV companies may prioritise these larger and more polluting vehicles entering the ULEZ. It opposes the used vehicle distinction for PHVs suggesting any vehicles entering the market should be at least ZEC, and also opposes the proposal to align the PHV ZEC criteria with OLEV's criteria suggesting this is a backwards step which is driving standards lower.

London Borough of Wandsworth

The London Borough of Wandsworth notes its support in the previous consultation in January for taxis and PHVs to be ZEC and the reduction in age limit for taxis to 10 years however suggests it could be achieved earlier than 2018. It suggests the proposals for taxis and PHVs should be applied London wide. It lastly expresses disappointment that the proposals are a reduction in standards compared to the original consultation in January and urge TfL to apply the more rigorous standards in respect of taxis and PHVs.

London Councils

London Councils supports the ULEZ proposals however do not consider they go far enough. It is disappointed that the proposal for taxis have to meet an age limit of a maximum of 10 years from 7 September 2020 has been dropped in favour of a voluntary decommissioning scheme and that the new definition of ZEC for PHVs weakens the ULEZ. It suggests the decommissioning scheme should be a transitional measure to the 10 year age limit. It supports the proposal that new vehicles licensed for the first time as PHVs will need to meet a ZEC requirement from 1 January 2018. It requests confirmation that the used vehicle PHV proposal will apply London wide. It also supports the additional initiatives to improve air quality.

Royal Borough of Kensington and Chelsea

The Royal Borough of Kensington and Chelsea generally supports the ZEC requirement for taxis and PHVs for 2018 however suggests the date is reviewed within the next year to potentially bring it forward. It expresses concern about the definition of a ZEC taxi which is defined only in terms of CO₂ emissions and would like to ensure that such vehicles are operated in this mode in the London area. It does not support the voluntary decommissioning scheme for taxis older than 10 years preferring to see the original proposal for a 10 year age limit. It understands the proposed exemption for PHVs with more than 6 seats however notes that it could result in the purchase of second hand six seaters rather than upgrade to a ZEC. It opposes the proposal to align the PHV ZEC criteria with that of OLEV as it is inconsistent compared to taxis and could reduce the effectiveness of the proposals.

Royal Borough of Greenwich

The Royal Borough of Greenwich notes its response to the original consultation in January where it suggested the proposals did not go far enough and suggested an extension of the ULEZ to match the current LEZ boundaries. It supports the ZEC requirement for taxis and PHVs however suggests that it could be achieved sooner than 2018. It supports a reduction in age limit for taxis to 10 years and suggests the age related proposals for taxis and PHVs should apply London wide as this will bring public health benefits to communities in a wider area than central London. It finally notes that the new proposals in the current consultation represent a relaxation of the standards proposed in the original consultation and it does not support this proposed change.

Westminster City Council

Westminster City Council states that it would like to see the Mayor revise his plans in order to achieve the air quality health standards across London as soon as possible. It notes that in the previous consultation it stated that it would like to see a much greater level of ambition for reducing emissions from taxis, bringing the proposed taxi standards of the ULEZ in line with those for other vehicle types and so is disappointed in the proposed reversal of the 10-year age limit outlined in this new consultation as it would result in less air quality benefits. It supports the alignment of the PHV ZEC criteria with that of OLEV as well as the sunset period for PHVs with more than 6 seats. It believes that the proposed 'additional measures' should be undertaken by TfL regardless of the ULEZ proposals.

Political Representatives

Justine Greening MP

Justine Greening (MP for Putney, Roehampton and Southfields) welcomes the introduction of the ULEZ in London noting that it is critical to help improve the air quality for residents.

She also welcomes the allocated funding to assist taxi drivers with purchasing a new vehicle as well as for the voluntary decommissioning scheme and suggests that the scheme's progress is monitored to evaluate its success and its impact on improving air quality in London.

Taxi & PHV licensed bodies and other related organisations

Addison Lee

Addison Lee states that the ZEC requirement for PHVs cannot be achieved by 2018 as there will not be a suitable and affordable range of vehicles available, including seven seaters. It proposes that TfL define the target emission levels for the ZEC requirement instead of the technology. It notes that it has commissioned its own impact assessment which shows there will be a £1.8bn detrimental impact on the PHV sector if the proposals for PHVs are implemented two years ahead of the ULEZ in 2020. It also expresses concerns about the proposed charging infrastructure noting the lack of infrastructure in Home Counties areas where most of its drivers live. It recommends a phased transition period whereby maximum emission levels are set annually for newly licensed vehicles which gradually reduce up to 2025. It also proposes that PHVs that are already licensed would not incur the ULEZ charge. It supports the Euro 4 and 6 requirements for 2020 and suggests all currently licensed vehicles should be allowed to continue to be licensed to a maximum age of 10 years, reflecting the arrangement proposed for taxis.

Carey Worldwide Chauffeured Services

Carey supports a cleaner more healthy environment in London however does not support the proposals in their current form suggesting they would severely damage the industry. It suggests there is an extremely limited range of vehicles which would be available to the chauffeur / executive industry that would comply with the ZEC threshold in 2018, and that there will be premium for these. It finally goes on to support amended proposals including new or used vehicles to be Euro 6 or Euro 4 petrol hybrid in September 2018, ZEC requirement for new vehicles in September 2020 subject to review with Euro 6 or Euro 5 petrol hybrid for used vehicles and Euro 6 requirement for used vehicles by 2025.

eConnect Cars

eConnect Cars suggests a range of measures to promote EVs to the PHV sector. It suggests incentivising uptake of EVs through tax incentives, providing funds and underwriting leases. It does not comment directly on the proposals.

GMB Professional Drivers Branch (GMB)

GMB supports the ZEC requirement for taxis however is concerned about the availability of vehicles for 2018 and so suggests this date should be pushed back to 2019. It is also

concerned that the proposed funding for ZEC taxis may run out and supports a 12 year age limit for taxis instead of the voluntary decommissioning scheme for taxis older than 10 years. It does not support the 2018 ZEC requirement date for new PHVs, instead it suggests a delay until 2019. It also suggests funding should be made available to the PHV trade similar to that offered to taxis.

Licensed Private Hire Car Association

The LPHCA supports improving air quality in London however disagrees with the proposals for PHVs noting that the London Private Hire Industry is a relatively low polluting industry compared to other transportation industries and 'year on year' it improves its carbon footprint. Whilst it has no problem meeting the ULEZ requirements by 2018 it does not support the proposals for ZEC PHVs because of the cost uncertainty, the readiness of the infrastructure, the inability of drivers to charge at home, the timelines proposed and the uncertainty of grant funding. It suggests the best option for getting to ZEC for PHVs is by moving towards hybrid vehicles for Private Hire as has been done for buses.

Licensed Taxi Drivers Association (LTDA)

The LTDA welcomes the proposals of taxi purchase grants and the voluntary decommissioning scheme for taxis older than 10 years. However it suggests that there should be parity between the taxi and PHV trades as the weakened definition of ZEC for PHVs coupled with the proposal to exempt vehicles with more than 6 seats for 2 years will have a detrimental effect on the level of pollutants emitted by the PHV trade. It suggests the minimum standards of ZEC should be raised for both industries to less than 50g/km with a minimum zero emission range of 40 miles. It also suggests that in order to support and encourage further the uptake of ZEC vehicles by all sectors, a minimum of 50 rapid 50kW chargers are required in central London by 2018; increasing to 150 by 2020. It also supports the proposals to retrofit 400 buses to Euro VI standard along with the introduction of a Low Emission Neighbourhood in Central London.

Private Hire Board

The Private Hire Board welcomes the effort in consulting with the trade to achieve a cleaner London however expresses concerns about the future availability of vehicles used by the differing sectors of the industry. It notes that larger vehicles which carry six to nine passengers and chauffeur vehicles have not been produced in hybrid type in any meaningful numbers and those that are available are high specification and up to 50% more expensive to purchase. It also expresses concern about the suitability and availability of appropriate charging infrastructure. It recommends hybrid vehicles with minimal ZEC mileage requirements and that a 2018 review should be carried out before finalising a 2020 ZEC inception date and that used or new vehicles could include Euro 5 petrol less than 5 years old to reduce reliance on diesel vehicles and help drivers enter the trade. It also suggests exemptions for specialist vehicles, ie wheelchair accessible school conversions.

The London Taxi Company (LTC)

The LTC states that the proposal for ZEC taxis for 2018 is the bedrock to their investment timetable and notes their new ZEC taxi factory in Coventry. It suggests that the definition of ZEC is too low and misses the opportunity for greater emissions reductions and that the standard should be more ambitious, ie 60 miles EV range and maximum 40g/CO₂/km. It states that TfL should structure its top up grants according to emissions performance to encourage the uptake of cleaner more efficient vehicles. It supports the voluntary decommissioning scheme for taxis older than 10 years and suggests it should commence from 1 January 2018 to align with the ZEC requirements and that a review in 2020 is undertaken to ensure that it is achieving air quality objectives and that ZEC taxi uptake is on track. It expresses concern about charging infrastructure suggesting 150 rapid charge stations exclusively for taxis and commercial vehicles should be installed by 2018 instead of the 90 as planned

Thriev

Thriev supports accelerated targets for the PHV sector to adopt ULEZ compliant or 100% electric vehicles. It also suggests a range of supporting policies such as: a phased implementation plan starting in 2016 whereby PHV operators ensure a certain percentage of miles are zero emissions, increasing each year. It also recommends a non-financial incentive approach noting there should be no public funding on initiatives to deliver zero emission PHVs.

Tristar

Tristar supports improving air quality and the quality of the environment in London however is concerned about the availability of new ZEC vehicles in the executive market in 2018, noting that the requirement for all new PHVs to meet the ZEC standard in 2018 is wholly unrealistic. It suggests certain models demanded by the consumer will not be available which will mean operators may continue to use older, more polluting vehicles for longer. It also suggests that until the range of ZEC improves and the technology is sufficiently robust to enforce ZEC operation within ULEZ any benefit is likely to be dissipated outside of the zone. It expresses concerns about the adequacy of charging infrastructure.

Uber

Uber welcomes measures to improve air quality in London however suggests reducing the overall number of vehicles on the road and utilising the space in those vehicles more efficiently by giving Londoners viable alternatives to private car ownership would have much larger potential impact than the current proposals.

United Cabbies Group

The United Cabbies Group supports the voluntary decommissioning scheme for taxis older than 10 years, strongly opposing any age limit for taxis. It supports the ZEC requirement for

PHVs from 2018 however opposes the same requirement for taxis and adds that it can't be achieved until later than 2018. It also supports the Euro 4 petrol and Euro 6 diesel requirement for used PHVs from 2018 but opposes the sunset period exemption for PHVs with more than 6 seats. It states that if buses are to be permitted Euro 6 retrofit [under ULEZ from 2020] then taxis should be afforded the same opportunity.

Unite the Union

Unite the Union supports the updated ULEZ proposals for taxis in particular the voluntary decommissioning scheme and purchase grants for ZEC vehicles, suggesting these proposals will bring stability to the taxi market and can deliver the greatest air quality benefits. It suggests that once drivers become aware of the advantages of owning and driving a ZEC taxi then they will want to purchase one and that it will work with TfL and the other trade organisations to publicise the grants available and the benefits of owning a ZEC taxi compared to a diesel taxi. It also notes that it is fully engaging in the delivery of the charging infrastructure network and is pleased that the consultation discusses the work that is currently taking place regarding the charging infrastructure in London.

Trade Associations

Confederation of Passenger Transport (CPT)

CPT welcomes proposals to improve air quality in London however feel that the proposals are unfairly balanced in support of taxis. It notes that the coach and taxi industries are very similar - generally privately owned enterprises operating within a framework controlled by a regulating authority - however the financial support and standards for taxis is unfair as although they will be given financial incentives towards the cost of meeting the requirements of the ULEZ, the coach industry will have to bear the entire cost unaided. It also expresses doubt as to the effectiveness of the voluntary decommissioning scheme, noting that it is reliant on the uptake of the scheme being of the order as predicted to achieve the required improvements in air quality.

Transport Organisations

The Society of Motor Manufacturers and Traders (SMMT)

SMMT believes that the proposed ULEZ will play a key role in driving the market for ultra low and zero emission capable vehicles in London however needs to be supported by aligning ULEZ requirements with national incentive criteria and that an appropriate, fully functioning charging infrastructure is provided early. It calls for a rethink on requirements for petrol and diesel vehicles suggesting the standards must be technology neutral and apply the latest Euro standard of Euro 6. It suggests that differentiating between petrol (Euro 4) and diesel (Euro 6) risks undermining the market. It also supports the ZEC proposals for taxis and

PHVs. It notes that the reduction in age limit from 15 to 10 years for taxis is a very welcome step and it suggests TfL and the GLA should look at proposals to complement the ULEZ such as night-time deliveries and other supplementary traffic measures.

Appendix F: Public and business free text analysis

The following details the number of comments made, and the percentage of all respondents that commented on each theme. Only the most popular sub-themes (ie where comments have been made by at least one per cent of all respondents) under each theme have been included.

Comments about TfL's proposals for PHVs

| Theme | Code | All | % of respondents |
|------------------------------------|---|-----|------------------|
| PHV proposals | Does not support sunset period for 6 seater PHVs | 15 | 2.90% |
| | PHV emissions standards should be stricter than proposed | 16 | 3.10% |
| | PHV ZEC standards should be implemented sooner | 11 | 2.10% |
| | Used PHVs should be ZEC rather than just Euro 4/6 compliant | 8 | 1.50% |
| Principle of a ULEZ | Does not support a ULEZ | 7 | 1.30% |
| | Support a ULEZ | 10 | 1.93% |
| | Supports measures to improve AQ in London | 28 | 5.40% |
| Timetable | Implement ULEZ sooner | 15 | 2.90% |
| Vehicle emissions standards | Both PHVs and black cabs should be subject to same standards | 17 | 3.30% |
| | Easier for PHVs to comply as they have a wider choice of vehicles | 8 | 1.50% |
| | Standards should be stricter than proposed | 8 | 1.50% |
| | ZEC standard should mean 100% emission free | 9 | 1.70% |

Comments about any of TfL's proposals for taxis

| Theme | Code | All | % of respondents |
|------------------------------------|--|-----|------------------|
| Costs | High cost of buying new vehicles | 11 | 2.10% |
| Financial assistance | Proposed grant is not enough | 8 | 1.50% |
| Infrastructure / technology | Infrastructure is not mature or widespread enough to rely on | 6 | 1.10% |
| PHV proposals | PHVs should not receive financial support | 6 | 1.10% |
| Principle of a ULEZ | Supports measures to improve AQ in London | 81 | 15.70% |
| | Impact on London's taxi trade | 33 | 6.40% |
| | Support a ULEZ | 24 | 4.60% |
| | Prefer original ULEZ proposals | 16 | 3.10% |
| | Does not support a ULEZ | 9 | 1.70% |
| | Objective to raise revenues / another tax | 9 | 1.70% |
| Taxi proposals | Supports 'hard' 10 year age limit | 59 | 11.40% |
| | Age limit should be compulsory | 31 | 6% |
| | Taxi ZEC standards should be implemented sooner | 31 | 6% |
| | Unsupportive of purchase grants for taxis | 31 | 6% |
| | Support for purchase grants for taxis | 30 | 5.80% |
| Taxi proposals | Does not support 'soft' age limit and decommissioning scheme | 17 | 3.30% |
| | No taxi available that meets requirements | 17 | 3.30% |

| | | | |
|------------------------------------|--|----|-------|
| | Support for 15 year limit with decommissioning scheme | 17 | 3.30% |
| | Taxi emissions standards should be stricter than proposed | 14 | 2.70% |
| | Comment about strength of taxi lobby | 11 | 2.10% |
| | Do not have age limit and ZEC requirement | 8 | 1.50% |
| | Supports age limit of less than 10 years | 7 | 1.30% |
| Timetable | Implement ULEZ sooner | 22 | 4.30% |
| | Supports faster transition for older vehicles | 8 | 1.50% |
| Uber comment | Regulate Uber | 7 | 1.40% |
| Vehicle emissions standards | Emissions standards should be compulsory | 20 | 3.90% |
| | Both PHVs and black cabs should be subject to same standards | 12 | 2.30% |
| | Standards should be stricter than proposed | 11 | 2.10% |
| | ZEC standard should mean 100% emission free | 7 | 1.30% |
| Other | Complaint about TfL's treatment of black cabs | 7 | 1.30% |

Other comments about any aspect of the revised ULEZ proposals or expansions on previous responses

| Theme | Code | All | % of respondents |
|------------------------------------|--|------------|-------------------------|
| Boundary | Expand the boundary to cover a greater proportion of London | 30 | 5.80% |
| | Expand the boundary to include inner London | 6 | 1.20% |
| Discounts and exemptions | Exemptions for vintage / historic / classic vehicles | 11 | 2.10% |
| | Motorcycles | 6 | 1.20% |
| Infrastructure / technology | Infrastructure is not mature or widespread enough to rely on | 7 | 1.40% |
| PHV proposals | Demand for financial support for PHVs | 6 | 1.20% |
| | ULEZ proposals will drive PHV out of business | 7 | 1.40% |
| Principle of a ULEZ | Do not allow ULEZ standards to be watered down | 10 | 1.90% |
| | Does not support a ULEZ | 13 | 2.50% |
| | Impact on London's taxi trade | 12 | 2.30% |
| | Objective to raise revenues / another tax | 11 | 2.10% |
| | Support a ULEZ | 27 | 5.20% |
| | Supports measures to improve AQ in London | 60 | 11.60% |
| Suggested supporting policy | More pedestrian only areas, e.g. Oxford Street | 6 | 1.20% |
| Taxi proposals | Support for purchase grants for taxis | 10 | 1.90% |
| Timetable | Implement ULEZ sooner | 28 | 5.40% |
| Vehicle emissions standards | Low emission buses should be a priority | 16 | 3.10% |
| | Standards should be stricter than proposed | 11 | 2.10% |
| Other | Complaint about TfL's treatment of black cabs | 6 | 1.20% |
| Comment on consultation | Criticism of consultation | 8 | 1.50% |

Appendix G: Borough emissions with ULEZ

| | Baseline Road Transport Emissions (tonnes, 2020) | | | | Baseline Road Transport Emissions (tonnes, 2025) | | | | With ULEZ Road Transport Emissions (tonnes, 2020) | | | | With ULEZ Road Transport Emissions (tonnes, 2025) | | | | Percentage Change in Emissions (2020) | | | | Percentage Change in Emissions (2025) | | | |
|------------------------|--|------|-------|---------|--|------|-------|---------|---|------|-------|---------|---|------|-------|---------|---------------------------------------|------|-------|------|---------------------------------------|------|-------|------|
| | NOx | PM10 | PM2.5 | CO2 | NOx | PM10 | PM2.5 | CO2 | NOx | PM10 | PM2.5 | CO2 | NOx | PM10 | PM2.5 | CO2 | NOx | PM10 | PM2.5 | CO2 | NOx | PM10 | PM2.5 | CO2 |
| Barking and Dagenham | 287 | 44 | 21 | 132,413 | 193 | 44 | 20 | 131,442 | 261 | 44 | 21 | 132,114 | 189 | 44 | 20 | 130,437 | -9% | 0% | 0% | 0% | -2% | 0% | 0% | -1% |
| Barnet | 799 | 114 | 56 | 368,688 | 548 | 114 | 55 | 364,945 | 718 | 114 | 56 | 366,992 | 530 | 114 | 54 | 360,456 | -10% | 0% | 0% | 0% | -3% | 0% | -3% | -1% |
| Bexley | 387 | 58 | 28 | 176,592 | 265 | 58 | 28 | 174,674 | 349 | 58 | 28 | 176,114 | 258 | 58 | 27 | 173,167 | -10% | 0% | 0% | 0% | -3% | 0% | -2% | -1% |
| Brent | 462 | 67 | 32 | 202,309 | 310 | 67 | 32 | 201,970 | 412 | 67 | 32 | 200,676 | 297 | 67 | 31 | 198,680 | -11% | 0% | -1% | -1% | -4% | 0% | -3% | -2% |
| Bromley | 556 | 87 | 42 | 241,063 | 382 | 87 | 42 | 238,813 | 500 | 87 | 42 | 240,326 | 372 | 87 | 40 | 236,733 | -10% | 0% | 0% | 0% | -3% | 0% | -3% | -1% |
| Camden | 399 | 46 | 23 | 165,770 | 261 | 44 | 21 | 166,852 | 303 | 45 | 22 | 157,419 | 229 | 44 | 21 | 157,794 | -24% | -4% | -6% | -5% | -12% | -1% | -3% | -5% |
| City | 133 | 13 | 7 | 50,771 | 84 | 12 | 5 | 51,264 | 69 | 12 | 6 | 43,934 | 61 | 12 | 5 | 44,164 | -48% | -10% | -16% | -13% | -28% | -3% | -1% | -14% |
| City of Westminster | 697 | 74 | 38 | 273,606 | 447 | 69 | 33 | 276,392 | 468 | 70 | 34 | 248,648 | 356 | 68 | 32 | 246,572 | -33% | -6% | -10% | -9% | -20% | -1% | -3% | -11% |
| Croydon | 524 | 79 | 38 | 225,976 | 354 | 79 | 38 | 224,974 | 470 | 79 | 38 | 225,141 | 344 | 79 | 36 | 222,814 | -10% | 0% | 0% | 0% | -3% | 0% | -3% | -1% |
| Ealing | 617 | 91 | 44 | 277,202 | 417 | 91 | 44 | 275,909 | 554 | 91 | 44 | 275,932 | 403 | 91 | 42 | 272,611 | -10% | 0% | 0% | 0% | -3% | 0% | -3% | -1% |
| Enfield | 701 | 99 | 49 | 356,380 | 479 | 100 | 49 | 352,554 | 634 | 99 | 49 | 355,374 | 466 | 100 | 48 | 349,171 | -10% | 0% | 0% | 0% | -3% | 0% | -2% | -1% |
| Greenwich | 473 | 70 | 34 | 209,247 | 320 | 70 | 33 | 208,686 | 420 | 70 | 34 | 207,346 | 306 | 70 | 33 | 205,289 | -11% | 0% | 0% | -1% | -4% | 0% | -3% | -2% |
| Hackney | 317 | 39 | 19 | 130,286 | 204 | 38 | 18 | 131,181 | 261 | 38 | 18 | 126,896 | 188 | 38 | 18 | 127,741 | -18% | -2% | -3% | -3% | -8% | 0% | -3% | -3% |
| Hammersmith and Fulham | 272 | 35 | 17 | 113,921 | 180 | 35 | 17 | 114,556 | 226 | 35 | 17 | 111,050 | 167 | 35 | 16 | 111,532 | -17% | -2% | -2% | -3% | -7% | 0% | -3% | -3% |
| Haringey | 333 | 44 | 21 | 138,334 | 219 | 43 | 21 | 138,788 | 277 | 43 | 21 | 135,058 | 204 | 43 | 20 | 135,639 | -17% | -2% | -2% | -2% | -7% | 0% | -3% | -2% |
| Harrow | 301 | 45 | 22 | 130,512 | 205 | 45 | 21 | 129,347 | 270 | 45 | 22 | 130,096 | 199 | 45 | 21 | 128,147 | -10% | 0% | 0% | 0% | -3% | 0% | -3% | -1% |
| Havering | 603 | 86 | 43 | 320,312 | 407 | 87 | 43 | 315,483 | 547 | 86 | 43 | 319,842 | 397 | 87 | 42 | 313,217 | -9% | 0% | 0% | 0% | -3% | 0% | -2% | -1% |
| Hillingdon | 786 | 114 | 56 | 375,889 | 534 | 115 | 56 | 369,840 | 707 | 114 | 56 | 374,092 | 516 | 115 | 54 | 365,121 | -10% | 0% | 0% | 0% | -3% | 0% | -2% | -1% |
| Hounslow | 618 | 91 | 44 | 278,871 | 423 | 91 | 44 | 276,461 | 552 | 91 | 44 | 276,350 | 405 | 91 | 43 | 271,013 | -11% | 0% | 0% | -1% | -4% | 0% | -3% | -2% |
| Islington | 261 | 30 | 15 | 103,662 | 168 | 29 | 14 | 104,457 | 202 | 29 | 14 | 99,236 | 150 | 29 | 14 | 99,970 | -22% | -3% | -5% | -4% | -11% | -1% | -3% | -4% |
| Kensington and Chelsea | 304 | 34 | 17 | 123,573 | 200 | 33 | 16 | 125,051 | 245 | 33 | 16 | 117,198 | 175 | 32 | 15 | 116,514 | -19% | -3% | -4% | -5% | -13% | 0% | -4% | -7% |
| Kingston | 341 | 52 | 25 | 157,000 | 235 | 52 | 25 | 154,997 | 307 | 51 | 25 | 156,701 | 229 | 52 | 24 | 153,609 | -10% | 0% | 0% | 0% | -3% | 0% | -2% | -1% |
| Lambeth | 433 | 54 | 26 | 174,812 | 279 | 53 | 25 | 175,733 | 341 | 53 | 25 | 168,406 | 252 | 53 | 24 | 169,589 | -21% | -2% | -4% | -4% | -10% | 0% | -3% | -3% |
| Lewisham | 392 | 52 | 25 | 162,697 | 257 | 51 | 24 | 163,302 | 328 | 51 | 24 | 159,187 | 241 | 51 | 24 | 160,128 | -16% | -1% | -2% | -2% | -6% | 0% | -3% | -2% |
| Merton | 310 | 45 | 21 | 134,065 | 209 | 44 | 21 | 133,604 | 278 | 44 | 21 | 133,526 | 202 | 44 | 21 | 132,242 | -10% | 0% | 0% | 0% | -3% | 0% | -3% | -1% |
| Newham | 409 | 59 | 29 | 182,969 | 272 | 59 | 28 | 182,331 | 343 | 58 | 28 | 178,874 | 253 | 59 | 27 | 177,950 | -16% | -2% | -2% | -2% | -7% | 0% | -1% | -2% |
| Redbridge | 499 | 78 | 38 | 238,005 | 345 | 78 | 37 | 235,440 | 450 | 78 | 38 | 236,925 | 333 | 78 | 37 | 232,368 | -10% | 0% | 0% | 0% | -3% | 0% | -2% | -1% |
| Richmond | 361 | 54 | 26 | 159,191 | 245 | 54 | 26 | 158,586 | 322 | 54 | 26 | 158,440 | 237 | 54 | 25 | 156,775 | -11% | 0% | 0% | 0% | -3% | 0% | -3% | -1% |
| Southwark | 439 | 53 | 26 | 175,355 | 281 | 52 | 24 | 176,446 | 338 | 52 | 25 | 168,324 | 251 | 51 | 24 | 169,615 | -23% | -3% | -4% | -4% | -11% | -1% | -3% | -4% |
| Sutton | 247 | 38 | 18 | 105,477 | 168 | 38 | 18 | 104,697 | 222 | 38 | 18 | 105,113 | 163 | 38 | 18 | 103,718 | -10% | 0% | 0% | 0% | -3% | 0% | -3% | -1% |
| Tower Hamlets | 399 | 55 | 26 | 170,560 | 266 | 54 | 26 | 171,295 | 332 | 54 | 26 | 166,174 | 247 | 54 | 25 | 166,610 | -17% | -2% | -2% | -3% | -7% | 0% | -2% | -3% |
| Waltham Forest | 375 | 55 | 27 | 167,763 | 256 | 55 | 26 | 166,728 | 334 | 55 | 27 | 166,168 | 245 | 55 | 26 | 163,490 | -11% | 0% | 0% | -1% | -4% | 0% | -2% | -2% |
| Wandsworth | 416 | 56 | 27 | 177,073 | 278 | 55 | 26 | 177,646 | 350 | 55 | 26 | 173,531 | 261 | 55 | 26 | 174,426 | -16% | -1% | -2% | -2% | -6% | 0% | -3% | -2% |

| | Total Population | | Total Population In Output Areas exceeding NO2 Limit Value - Baseline | | Total Population In Output Areas exceeding NO2 Limit Value - with ULEZ | | Percentage Change in Population Living In Output Areas Exceeding the NO2 Limit Values | | Population weighted average concentration 2020 - Baseline | | | Population weighted average concentration 2025 - Baseline | | | Population weighted average concentration 2020 - 'with ULEZ' | | | Population weighted average concentration 2025 - 'with ULEZ' | | | Change in population weighted average concentration 2020 (ug/m3) | | | Change in population weighted average concentration 2025 (ug/m3) | | |
|------------------------|------------------|---------|---|--------|--|--------|---|--------|---|------|-------|---|------|-------|--|------|-------|--|------|-------|--|------|-------|--|------|-------|
| | 2020 | 2025 | 2020 | 2025 | 2020 | 2025 | 2020 | 2025 | NO2 | PM10 | PM2.5 | NO2 | PM10 | PM2.5 | NO2 | PM10 | PM2.5 | NO2 | PM10 | PM2.5 | NO2 | PM10 | PM2.5 | NO2 | PM10 | PM2.5 |
| Barking and Dagenham | 223,361 | 239,028 | 3,296 | 1,288 | 2,939 | 971 | -11% | -25% | 28 | 21 | 12 | 25 | 21 | 12 | 27 | 21 | 12 | 25 | 21 | 12 | -0.9 | -0.0 | -0.0 | -0.2 | -0.0 | -0.0 |
| Barnet | 406,996 | 427,057 | 13,569 | - | 6,714 | - | -51% | | 29 | 21 | 12 | 25 | 21 | 12 | 28 | 21 | 12 | 25 | 21 | 12 | -1.0 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Bexley | 248,979 | 256,403 | - | - | - | - | | | 26 | 21 | 12 | 23 | 20 | 12 | 25 | 21 | 12 | 23 | 20 | 12 | -0.8 | -0.0 | -0.0 | -0.2 | -0.0 | -0.0 |
| Brent | 348,194 | 363,349 | 30,631 | 5,372 | 19,132 | 4,105 | -38% | -24% | 32 | 22 | 13 | 29 | 21 | 12 | 31 | 22 | 13 | 28 | 21 | 12 | -1.2 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Bromley | 334,739 | 345,367 | - | - | - | - | | | 26 | 20 | 12 | 23 | 20 | 12 | 25 | 20 | 12 | 23 | 20 | 12 | -0.8 | -0.0 | -0.0 | -0.2 | -0.0 | -0.0 |
| Camden | 243,628 | 249,800 | 94,411 | 27,931 | 50,114 | 15,884 | -47% | -43% | 39 | 23 | 14 | 34 | 23 | 13 | 37 | 23 | 14 | 34 | 23 | 13 | -2.6 | -0.1 | -0.0 | -0.9 | -0.0 | -0.0 |
| City | 8,363 | 8,592 | 5,028 | 2,194 | 2,009 | - | -60% | -100% | 43 | 25 | 15 | 37 | 25 | 14 | 37 | 25 | 15 | 34 | 25 | 14 | -5.9 | -0.2 | -0.1 | -2.4 | -0.0 | -0.0 |
| City of Westminster | 239,118 | 244,395 | 105,841 | 31,810 | 49,315 | 16,106 | -53% | -49% | 41 | 24 | 14 | 35 | 24 | 13 | 37 | 24 | 14 | 34 | 24 | 13 | -3.5 | -0.1 | -0.1 | -1.4 | -0.0 | -0.0 |
| Croydon | 398,288 | 412,206 | 130 | - | 130 | - | 0% | | 28 | 21 | 12 | 25 | 21 | 12 | 27 | 21 | 12 | 25 | 21 | 12 | -1.0 | -0.0 | -0.0 | -0.2 | -0.0 | -0.0 |
| Ealing | 368,057 | 380,126 | 8,207 | 974 | 5,551 | 634 | -32% | -35% | 30 | 21 | 12 | 27 | 21 | 12 | 29 | 21 | 12 | 27 | 21 | 12 | -1.0 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Enfield | 352,552 | 369,406 | 3,114 | 345 | 1,546 | 345 | -50% | 0% | 27 | 21 | 12 | 24 | 21 | 12 | 26 | 21 | 12 | 23 | 21 | 12 | -1.0 | -0.0 | -0.0 | -0.2 | -0.0 | -0.0 |
| Greenwich | 282,396 | 293,394 | 6,222 | 506 | 1,905 | 506 | -69% | 0% | 30 | 21 | 13 | 27 | 21 | 12 | 29 | 21 | 13 | 27 | 21 | 12 | -1.1 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Hackney | 281,565 | 294,154 | 22,900 | 1,793 | 7,574 | 1,374 | -67% | -23% | 35 | 23 | 13 | 30 | 22 | 13 | 33 | 23 | 13 | 30 | 22 | 13 | -1.9 | -0.0 | -0.0 | -0.6 | -0.0 | -0.0 |
| Hammersmith and Fulham | 185,902 | 187,574 | 26,987 | 5,418 | 13,424 | 3,654 | -50% | -33% | 35 | 23 | 13 | 31 | 22 | 13 | 34 | 23 | 13 | 30 | 22 | 13 | -1.9 | -0.0 | -0.0 | -0.6 | -0.0 | -0.0 |
| Haringey | 282,647 | 292,060 | 12,727 | 2,067 | 7,226 | 365 | -43% | -82% | 32 | 22 | 13 | 28 | 22 | 12 | 30 | 22 | 13 | 28 | 22 | 12 | -1.5 | -0.0 | -0.0 | -0.4 | -0.0 | -0.0 |
| Harrow | 263,980 | 274,033 | 1,163 | - | 1,163 | - | 0% | | 27 | 20 | 12 | 24 | 20 | 12 | 26 | 20 | 12 | 24 | 20 | 12 | -0.8 | -0.0 | -0.0 | -0.2 | -0.0 | -0.0 |
| Havering | 259,418 | 270,833 | - | - | - | - | | | 23 | 20 | 12 | 20 | 20 | 11 | 22 | 20 | 12 | 20 | 20 | 11 | -0.7 | -0.0 | 0.0 | -0.2 | -0.0 | -0.0 |
| Hillingdon | 315,838 | 330,671 | 599 | 239 | 232 | - | -61% | -100% | 26 | 20 | 12 | 23 | 20 | 11 | 25 | 20 | 12 | 23 | 20 | 11 | -0.7 | -0.0 | -0.0 | -0.2 | 0.0 | 0.0 |
| Hounslow | 290,790 | 303,756 | 9,086 | 570 | 4,638 | 364 | -49% | -36% | 31 | 21 | 12 | 28 | 21 | 12 | 30 | 21 | 12 | 27 | 21 | 12 | -1.0 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Islington | 237,251 | 245,756 | 40,156 | 4,007 | 13,073 | 2,291 | -67% | -43% | 36 | 23 | 13 | 32 | 23 | 13 | 34 | 23 | 13 | 31 | 23 | 13 | -2.3 | -0.1 | -0.0 | -0.8 | -0.0 | -0.0 |
| Kensington and Chelsea | 155,709 | 155,915 | 54,260 | 13,431 | 33,575 | 8,678 | -38% | -35% | 39 | 23 | 14 | 34 | 23 | 13 | 37 | 23 | 13 | 33 | 23 | 13 | -2.7 | -0.1 | -0.0 | -1.1 | -0.0 | -0.0 |
| Kingston | 178,426 | 184,369 | 2,092 | - | 1,098 | - | -48% | | 28 | 21 | 12 | 25 | 21 | 12 | 27 | 21 | 12 | 25 | 21 | 12 | -1.0 | -0.0 | -0.0 | -0.2 | -0.0 | -0.0 |
| Lambeth | 336,397 | 345,827 | 42,047 | 4,867 | 12,409 | 2,545 | -70% | -48% | 35 | 23 | 13 | 30 | 22 | 13 | 33 | 23 | 13 | 30 | 22 | 13 | -2.1 | -0.0 | -0.0 | -0.7 | -0.0 | -0.0 |
| Lewisham | 309,500 | 321,560 | 12,452 | 373 | 3,592 | 373 | -71% | 0% | 32 | 22 | 13 | 28 | 22 | 12 | 31 | 22 | 13 | 28 | 22 | 12 | -1.5 | -0.0 | -0.0 | -0.4 | -0.0 | -0.0 |
| Merton | 221,272 | 229,523 | 905 | - | - | - | -100% | | 30 | 21 | 12 | 26 | 21 | 12 | 29 | 21 | 12 | 26 | 21 | 12 | -1.1 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Newham | 365,346 | 386,080 | 15,055 | 1,395 | 5,844 | 1,220 | -61% | -13% | 32 | 22 | 13 | 29 | 22 | 12 | 31 | 22 | 13 | 28 | 22 | 12 | -1.4 | -0.0 | -0.0 | -0.4 | -0.0 | -0.0 |
| Redbridge | 321,640 | 340,009 | 5,836 | 925 | 4,043 | 194 | -31% | -79% | 28 | 21 | 12 | 25 | 21 | 12 | 27 | 21 | 12 | 24 | 21 | 12 | -1.0 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Richmond | 202,494 | 207,969 | 1,189 | - | 312 | - | -74% | #DN/O! | 29 | 21 | 12 | 26 | 21 | 12 | 28 | 21 | 12 | 25 | 21 | 12 | -1.0 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Southwark | 321,392 | 331,612 | 55,990 | 6,738 | 14,478 | 1,687 | -74% | -75% | 36 | 23 | 13 | 31 | 23 | 13 | 34 | 23 | 13 | 31 | 23 | 13 | -2.4 | -0.1 | -0.0 | -0.8 | -0.0 | -0.0 |
| Sutton | 211,701 | 220,333 | - | - | - | - | | | 27 | 21 | 12 | 24 | 20 | 12 | 26 | 21 | 12 | 24 | 20 | 12 | -0.9 | -0.0 | -0.0 | -0.2 | -0.0 | -0.0 |
| Tower Hamlets | 309,073 | 325,894 | 46,985 | 9,109 | 23,091 | 5,990 | -51% | -34% | 36 | 23 | 13 | 31 | 23 | 13 | 34 | 23 | 13 | 31 | 23 | 13 | -2.1 | -0.0 | -0.0 | -0.7 | -0.0 | -0.0 |
| Waltham Forest | 294,159 | 308,985 | 9,167 | 437 | 5,417 | 437 | -41% | 0% | 30 | 22 | 13 | 27 | 21 | 12 | 29 | 22 | 13 | 26 | 21 | 12 | -1.2 | -0.0 | -0.0 | -0.3 | -0.0 | -0.0 |
| Wandsworth | 328,394 | 334,332 | 22,905 | 768 | 7,154 | 554 | -69% | -28% | 33 | 22 | 13 | 29 | 22 | 12 | 32 | 22 | 13 | 29 | 22 | 12 | -1.7 | -0.0 | -0.0 | -0.5 | -0.0 | -0.0 |

Appendix H: Voluntary decommissioning payment scheme

The original proposal posited a compensation scheme for owners of older taxis which would be removed from the fleet under a mandatory 10-year age limit, and £40m was allocated for this in TfL's Business Plan. Because the updated proposal (Taxi Option C) is shaped to achieve a voluntary removal of these older taxis, the compensation scheme as originally envisaged is no longer the most appropriate approach. Instead it is proposed to offer a decommissioning scheme for older taxis, under which owners receive a payment in return for no longer being able to re-license their taxi in London, ie they are 'decommissioned' as London taxis⁴⁴.

At the outset it is important to state that taxi decommissioning payment would not be linked to purchase of a ZEC taxi. There are two main reasons for this. Firstly, the decommissioning scheme by itself is a critical approach to achieving the ULEZ objective of reduced air pollutant emissions. Older taxis are more polluting than newer vehicles and so removing taxis over ten years old from the fleet brings significant emissions savings. The second reason for this is to allow flexibility in driver / owner response and help achieve the optimum uptake not just of ZEC taxis, but of replacement of older taxis with vehicles under ten years old.

It is proposed that taxis over ten years old at the point of making the claim would be eligible for a decommissioning payment. Focusing on these older vehicles is most effective in terms of securing the emissions savings which ULEZ is intended to achieve and uses the money available most effectively. Once the claim has been made, the vehicle cannot be relicensed as a taxi in London. This completely removes older and more polluting taxis from the London fleet, which helps to achieve the ULEZ objectives and is in line with the previous proposal. It also ensures that a decommissioning payment cannot be made more than once for the same taxi.

A decommissioned taxi could be scrapped, sold for private use or (subject to local licensing) be used as a taxi or PHV outside London. TfL does not propose to mandate any use for these decommissioned taxi vehicles. Nor is it assumed that the recipient automatically goes on to buy a ZEC taxi. As shown in Figure 2 below, there are a number of options available including the purchase of a second-hand taxi under ten years old. In this way the effect of the scheme is to create additional market capacity in the vehicle market by creating opportunities to buy and sell a range of taxis, including ZECs and second-hand vehicles. The decommissioning payments scheme would operate once ZEC taxis are available on the market (anticipated mid 2017) until the end of 2020. This coincides with the proposed mandatory ZEC requirement for newly-licensed taxis from 2018 and, in running for over three years, helps to support the introduction of these vehicles into the fleet.

⁴⁴ Taxis are re-licensed on an annual basis

There is a balance to be struck between making sure the payments are high enough to act as an incentive and spreading the cost so that the scheme can run for an adequate period. The individual payment for decommissioning would be on a sliding scale related to the vehicle's age and, most importantly here, the number of times it could have been re-licensed were it not to be decommissioned. In the trade this is known as the remaining 'number of plates' a vehicle has.

It is worth expanding here on the way that taxi re-licensing works in relation to vehicle age, because it is an important factor in calculating the decommissioning amount payable. Taxis are re-licensed on an annual basis but the date of relicensing will of course vary between vehicles. An eleven year-old taxi may, depending on its date of relicensing, have 4 or 5 re-licenses (years of service) left before it breaches the 15-year age limit and cannot be relicensed.

This is demonstrated in the example given in Figure 1, where a taxi has its licence renewed annually on 1 June.

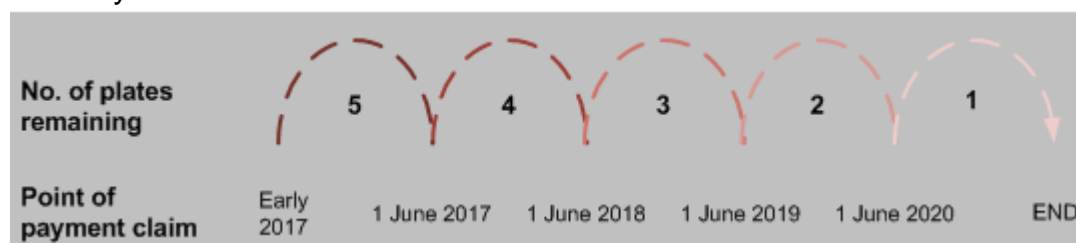


Figure 1: Taxi relicensing and interaction with decommissioning scheme

In considering whether to take the decommissioning payment, the owner would consider the number of plates remaining (ie years of service left in the vehicle). Proposed decommissioning payments are shown in Table 30 below.

Table 30: Proposed decommissioning payments by vehicle plates remaining

| Number of plates remaining | Payment amount |
|----------------------------|----------------|
| 5 | £5,000 |
| 4 | £3,800 |
| 3 | £2,800 |
| 2 | £1,900 |
| 1 | £1,200 |

In calculating these amounts, CEPA has taken into account both second hand market taxi values and the effect of the scheme on profitability (for the owner) in future years. It is not expected that everyone who is eligible for the decommissioning grant would apply for it. Some owners will sell their vehicle (potentially earlier than planned) and either buy a newer second hand vehicle (with lower maintenance costs), buy a ZEC taxi or exit the market. This is shown in summary in Figure 2. The process has been shaped so that it works with this range of responses and gives appropriate flexibility to owners. It is not the intention of this policy that the overall number of licenses will decrease, nor is it expected to produce this result.

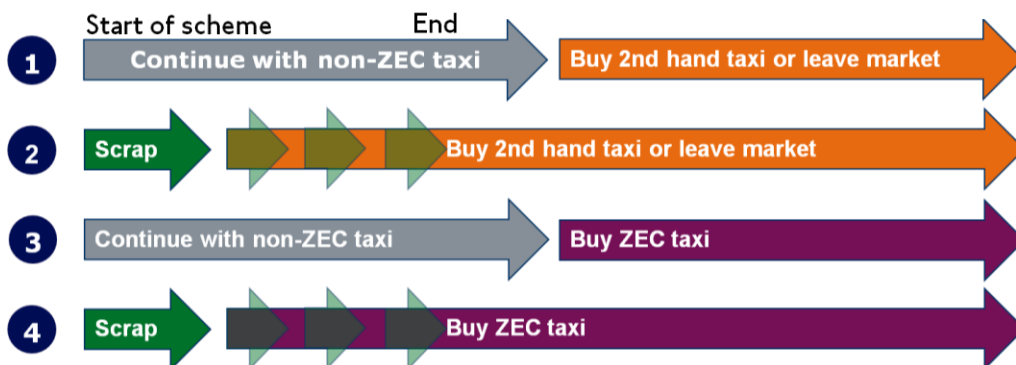


Figure 2: Possible scenarios for taxi owners 2017-2020

More information on how the decommissioning payment may be claimed will be made available following a decision on whether to proceed with these proposals. The process will be developed so that it is easy to understand and administer; taxi drivers could carry on using their vehicle during the application procedure.

Uptake forecasts are uncertain because decision-making by taxi owners depends on a range of financial and non-financial factors. CEPA has utilised economic theories and scenario modelling to provide some high-level uptake estimates. The results indicate uptake could be in the range 25 per cent to 65 per cent of eligible vehicles over the duration of the scheme, which would correspond to costs broadly in the range £10m to £25m. Although these estimates are uncertain, they indicate that the allocated £40m would likely suffice to assist taxi vehicle owners if it is allocated towards a voluntary decommissioning payment scheme. Within the assessment work a mid-point of 3,500 vehicles removed in addition to natural turnover was used. The work undertaken by CEPA shows it is appropriate there are eligibility requirements and time constraints on the scheme.

Given it is proposed to no longer reduce the age limit, it will be important for the trade to 'sell' the benefits of the decommissioning scheme (and purchasing grants) to its members.

Subject to the outcome of the consultation, TfL will continue its engagement with the trade to ensure whichever proposal is taken forward is easy to understand and administer to drivers.

Appendix I: Top 6 PHV vehicles and ZEC equivalent⁴⁵

| Make / Model | Mkt Segment | Number in fleet (rounded) | Official CO ₂ emissions (g/km) | Price | Alternative Make/Model | Official CO ₂ emissions (g/km) | Zero emission range* (miles) | Number of seats | Available? | Approx cost in 2015 |
|---------------------------------------|-------------|---------------------------|---|---------|-------------------------|---|------------------------------|-----------------|------------|---------------------|
| Ford Galaxy 2.0 diesel | MPV | 10200 | 139 | £29,000 | Volvo XC90 T8 | 49 | 27 | 7 | 2015 | |
| Mercedes-Benz E 220 BlueTec SE diesel | Exec | 6300 | 114 | £34,000 | Mercedes-Benz S500 PHEV | 65 | 20 | 5 | 2015 | |
| Vauxhall Zafira 1.7 diesel | MPV | 6000 | 134 | £21,000 | Mitsubishi Outlander | 44 | 33 | 5 | 2015 | |
| VW Sharan/Seat Alhambra 2.0 diesel | MPV | 3500 | 130 | £28,000 | Volvo XC90 T8 | 49 | 27 | 7 | 2015 | |
| VW Passat 2.0 diesel | Saloon | 2500 | 106 | £24,000 | Mitsubishi Outlander | 44 | 33 | 5 | 2015 | |
| Toyota Avensis 1.8 petrol | Saloon | 2000 | 140 | £24,000 | Toyota Prius PHV | 49 | 16 | 5 | 2015 | |

Please note. Vehicles shaded thus:- Do not represent a direct alternative and may not be suitable for all operators.

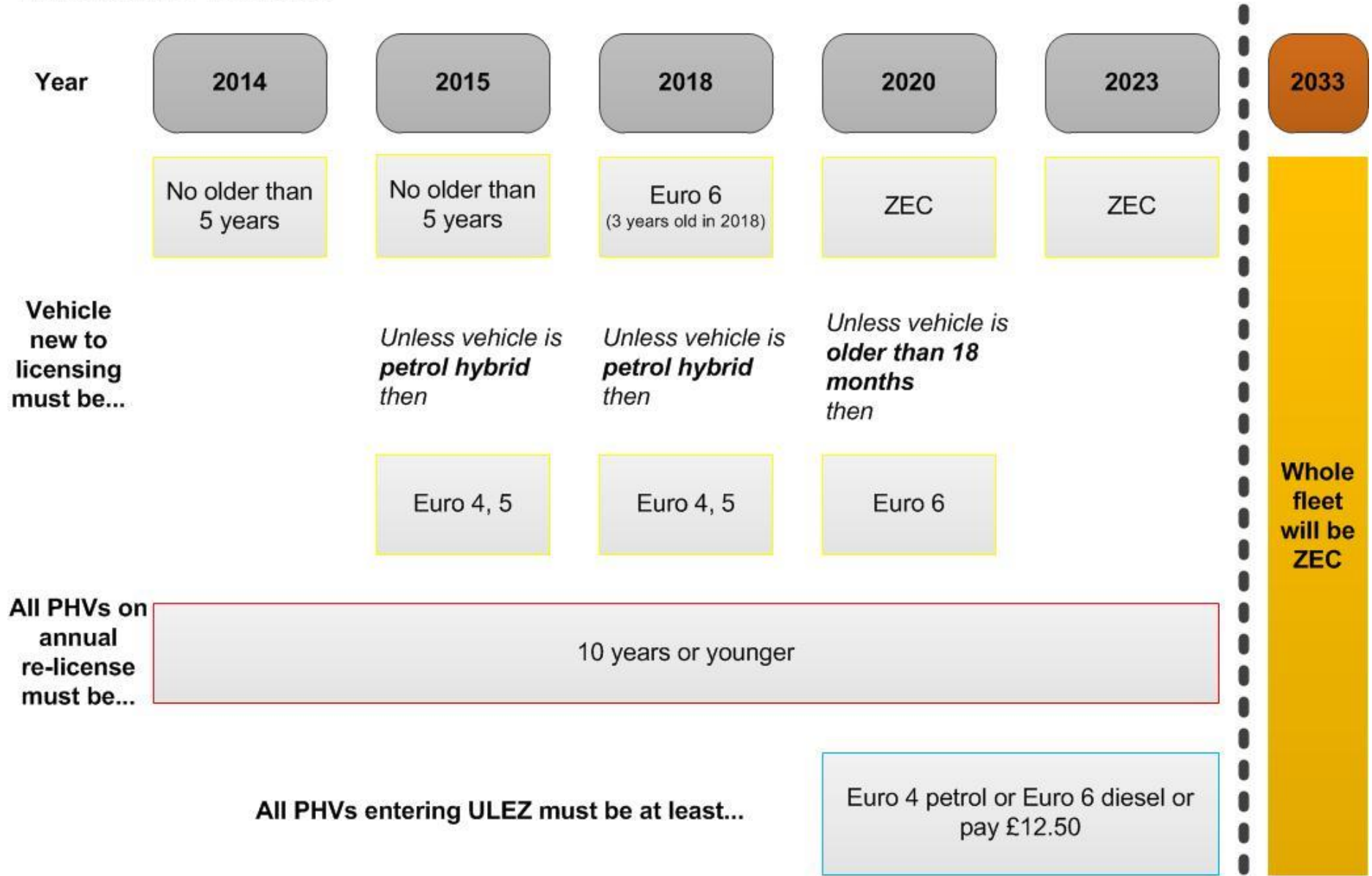
Prices are approximate based on manufacturer's on the road prices but excluding OLEV grant.

Data source = vehicle manufacturer websites or <http://www.carbuyer.co.uk>

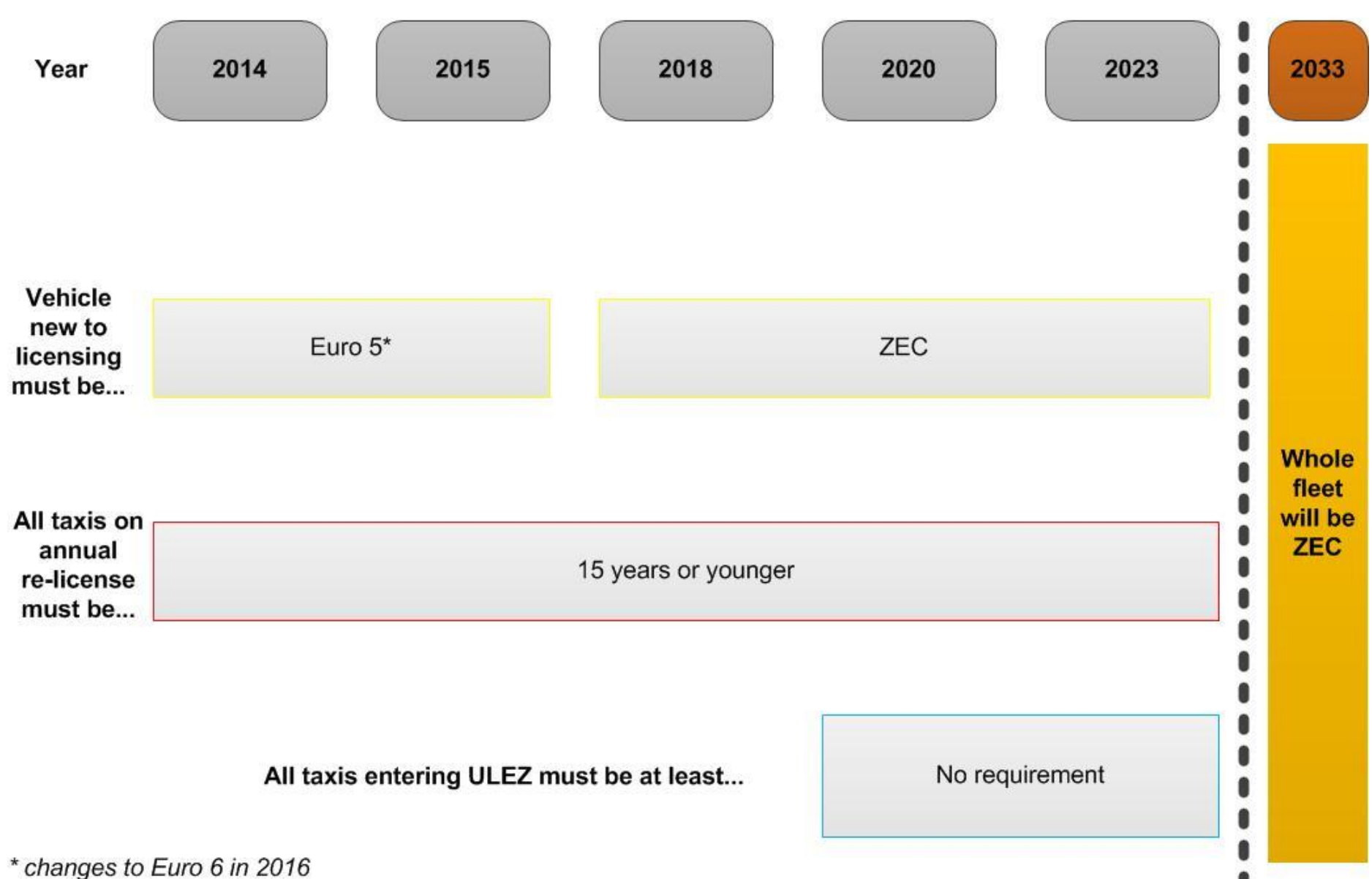
⁴⁵ As at September 2015

Appendix J: Outline of final recommended licensing requirements for taxis and PHVs

Private Hire Vehicles



Taxis



* changes to Euro 6 in 2016

Appendix K: IIA Memorandum

Date 14 September 2015

Subject **Proposed updates to ULEZ (Package 2) PHV licensing requirements**
Review of Integrated Impacts Assessment (IIA) in relation to updates

Contents

1. Introduction
 - 1.1 Purpose of this memo
2. Current licensing rules
3. Impacts
4. Assessment
5. Summary and conclusions
6. References

1. Introduction

Transport for London (TfL) commissioned Jacobs in May 2014 to undertake an Integrated Impact Assessment (IIA) of the Ultra Low Emission Zone (ULEZ). The ULEZ includes vehicle emission standards (confirmed by the Mayor in March 2015) and licensing requirements proposals (yet to be confirmed).

Since project inception, the ULEZ has undergone detailed assessment and analysis, stakeholder consultation and a number of updates. An overview of the process undertaken to date is depicted in Figure 1.1.

As a result of stakeholder consultation on ULEZ (Package 2), in particular with the Private Hire Vehicle (PHV) trade, TfL is proposing updates to the PHV licensing requirements proposals. These updates include the following and are compared to previous proposals in Table 1.1.

From 2018, all PHVs presented for licensing for the first time must be Euro 6 petrol or diesel or Euro 4 petrol hybrid;

From 2020, new PHVs presented for licensing for the first time must be zero emission capable (ZEC);

Between 2020 and 2023, all used PHVs presented for licensing for the first time must be Euro 6 petrol or diesel;

From 2023, all PHVs presented for licensing for the first time must be ZEC.

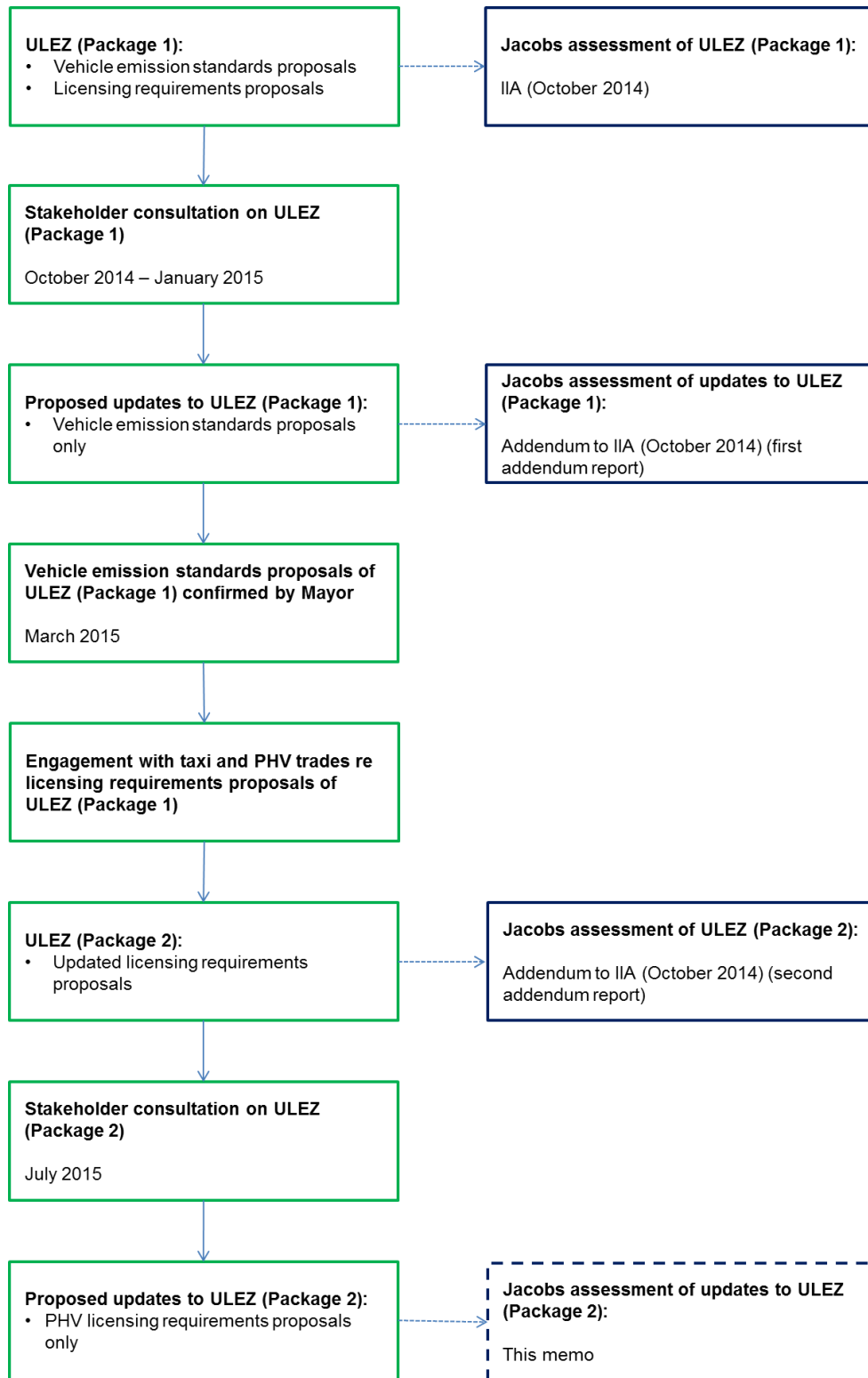


Figure 8.3 : Overview of ULEZ and Jacobs involvement its development

Table 8.31 : Private Hire Vehicle (PHV) licensing components for ULEZ

| ULEZ (Package 1) – original proposal <i>(consulted between October 2014 and January 2015)</i> | ULEZ (Package 2) – updated proposal <i>(consulted between July 2015 and August 2015)</i> | Updates |
|---|--|---|
| From January 2018, new PHVs licensed for the first time to be ZEC | From January 2018, new PHVs licensed for the first time to be ZEC (<i>ZEC criteria modified from original proposals</i>) | From January 2020 , new PHVs licensed for the first time to be ZEC (<i>ZEC criteria as per ULEZ (Package 2)</i>) From January 2023 , all PHVs licensed for the first time to be ZEC |
| From January 2018, used PHVs licensed for the first time to be Euro 4 petrol, Euro 6 diesel | From January 2018, used PHVs licensed for the first time to be Euro 4 petrol, Euro 6 diesel | From January 2018, all PHVs licensed for the first time to be Euro 4 petrol hybrid , Euro 6 petrol or diesel Between 2020 and 2023 , used PHVs licensed for the first time to be Euro 6 petrol or diesel |

*new PHVs are <18 months old

**used PHVs are ≥18 months old

1.1 Purpose of this memo

This memo provides an assessment of the updates against the IIA (October 2014) and the Addendum to IIA (October 2014) (second addendum report). It identifies where the updates would result in a change to the impacts identified in these reports.

2. Current licensing rules

In order to qualify for a PHV licence under TfL’s current licensing rules the vehicle must meet the following age criteria (TfL, 2015):

all new vehicles or vehicles new to licensing must be no older than five years and meet the Euro 4 standards for emissions at time of licensing;

vehicles already licensed by TfL must be no older than 10 years at time of annual licence renewal.

3. Impacts

PHVs make up a small portion of road transport contributing to nitrogen oxides (NO_x) emissions. Specifically, in 2020 emissions from PHVs are estimated to make up four per cent of the total road transport NO_x emissions in central London.

Given the small portion of PHVs contributing to NO_x emissions and the unknowns around the take up of ZEC vehicles in 2018, no assumptions were made within the atmospheric emissions modelling⁴⁶ used to undertake all Jacobs assessments of potential impacts for ULEZ. Therefore, any changes to PHVs as a result of this update would not result in changes to the air quality impacts (or indirect other environmental impacts) identified

⁴⁶ Jacobs assessment relied on results from the atmospheric emissions modelling data received from Transport for London and undertaken by Kings College London

as part the IIA or addendum IIAs prepared by Jacobs. Consequently there would be no changes to the health impacts identified as part of any IIA prepared by Jacobs.

However, the proposed update may result in changes to impacts identified on equality groups and on London's economy and small medium sized enterprises (SMEs).

The economic and equality impacts of the ULEZ (Package 1) relating to the PHV trade are provided in Table 3.1 and the changes to these impacts as a result of the ULEZ (Package 2) are provided in Table 3.2.

Table 8.32 : Impacts identified in IIA (October 2014)

| Relevant impacts identified in the IIA (October 2014) | Scale of impact (ULEZ (Package 1)) |
|--|------------------------------------|
| Equality groups | |
| Black, Asian and Minority Ethnic (BAME) people are disproportionately represented as PHV drivers and therefore any additional costs from the proposed ZEC licensing requirement may impact upon this group disproportionately | Minor negative short-medium term |
| Economic | |
| The total costs to businesses of either complying with the ULEZ or paying the charge is expected to be around £120-250m in the first year which will fall disproportionately on SMEs but will diminish over time as the proportion of vehicles becoming compliant increases. | Minor negative short-medium term |

Table 8.33 : Changes to impacts identified in Addendum to IIA (October 2014) (second addendum report)

| Relevant impacts identified in the IIA (October 2014) | Scale of impact (ULEZ (Package 1)) | Change to scale of impact (ULEZ (Package 2)) |
|--|------------------------------------|--|
| Equality groups | | |
| Black, Asian and Minority Ethnic (BAME) people are disproportionately represented as PHV drivers and therefore any additional costs from the proposed ZEC licensing requirement may impact upon this group disproportionately | Minor negative short-medium term | Reduced |
| Economic | | |
| The total costs to businesses of either complying with the ULEZ or paying the charge is expected to be around £120-250m in the first year which will fall disproportionately on SMEs but will diminish over time as the proportion of vehicles becoming compliant increases. | Minor negative short-medium term | Reduced |

4. Assessment

The proposed updates to the PHV licensing requirements proposals would allow more time for the ZEC market to mature thereby further lessening the impacts identified in Table 3.1 and Table 3.2, but not removing them.

As minicabs are predominantly used in outer London⁴⁷ and given the young age profile of PHVs, the percentage of PHV operators that would be impacted by ULEZ is small. The IIA (October 2014) identified that those PHV operators (e.g. tour guides, those who operate contracts for local authorities etc.) would likely be

⁴⁷ As concluded in the IIA (October 2014) as over half of minicab journeys take place within outer London boroughs.

most affected as new vehicles used for these type of services⁴⁸ may not be available in 2018 or may be too expensive for some PHV operators and drivers.

Given the extended time period to comply with the ZEC requirement, this impact on PHV operators and drivers will be reduced. Further, given assumptions around the larger size of ZEC market in 2020 (for new PHVs) and 2023 (for used PHVs), expenses incurred by PHV operators and drivers to be compliant should be lower than previously anticipated. This will therefore reduce the disproportionate impact identified on BAME people.

In relation to the impacts on London's economy and SMEs, the IIA (October 2014) identified that the total cost to PHV businesses of complying with ULEZ requirements or paying the charge were expected to be approximately £0.6 – £1.8m in the first year. Again, having regard to assumptions around a more mature ZEC market, this cost is likely to decrease by 2020 and 2023. Therefore, the total costs to businesses of either complying with ULEZ or paying the charge will further decrease as a result of the proposed update, in turn reducing those disproportionate impacts on SMEs.

Please note that neither impacts can be removed entirely as ULEZ will still result in some financial impact to the current situation and in doing so these impacts may fall disproportionately on those groups (BAME people) or businesses (SMEs) with a greater representation in the PHV trade.

5. Summary and conclusion

The proposed updates to the PHV licensing requirements proposals will further reduce the impacts identified in Jacobs IIA (October 2014) and subsequent addendums to the IIA. However, ULEZ will still result in minor financial impacts compared with today's scenario and these will fall more on those groups or businesses that have a greater representation in the PHV trade.

| Relevant impacts identified in the IIA (October 2014) | Scale of impact (ULEZ (Package 1)) | Change to scale of impact (ULEZ (Package 2)) | Change to scale of impact (ULEZ (Package 2) updated) |
|--|------------------------------------|--|--|
| Equality groups | | | |
| Black, Asian and Minority Ethnic (BAME) people are disproportionately represented as PHV drivers and therefore any additional costs from the proposed ZEC licensing requirement may impact upon this group disproportionately | Minor negative short-medium term | Reduced | Further reduced |
| Economic | | | |
| The total costs to businesses of either complying with the ULEZ or paying the charge is expected to be around £120-250m in the first year which will fall disproportionately on SMEs but will diminish over time as the proportion of vehicles becoming compliant increases. | Minor negative short-medium term | Reduced | Further reduced |

6. References

Transport for London (TfL). (2015). *Private hire vehicle licence*. Accessed on 14 September 2015 from: <https://tfl.gov.uk/info-for/taxis-and-private-hire/become-a-private-hire-licensee/private-hire-vehicle-licence>

⁴⁸ for example, not those typically used for minicab services