

ZEV Mandate consultation – Motability response introduction

About us

Motability, the Charity

Motability the Charity was founded in 1977 to create a car leasing scheme that could offer disabled people the best value for money, give advice on suitable cars and adaptations, and make any adaptations needed. Since then, we're proud that the Motability Scheme has supplied more than 5.5 million cars, scooters and powered wheelchairs to disabled people across the UK, supported by thousands of grants from the charity every year.

Anyone who receives qualifying mobility allowances from the government can apply for a Scheme vehicle. We then provide grants to cover the costs of leasing the right car or Wheelchair Accessible Vehicle (WAV). We support people to find the right adaptations so that they can use their car more easily, and provide grants to cover the costs. All of our Motability Scheme grant applications are means-tested to make sure that we give funding to those most in need of support.

We continue to make sure that the Motability Scheme is the best it can be. It's run by a separate company, Motability Operations Limited. We oversee them to make sure the Scheme gives disabled people the best choice, value for money and customer service possible – and to make sure it is sustainable for generations to come.

Every day, we continue to expand our work, both with and for disabled people, focusing on the ongoing changes needed across different types of transport to make all journeys accessible.

We help fund other charities and organisations who give disabled people everyday transport options, from community buses to wheelchairs. We provide research grants to better understand the ways transport accessibility needs to change – funding long-term projects like the National Centre for Accessible Transport. We also use our own research, and work with disability experts, partners and policy makers, to keep exploring and developing new ways to make all transport accessible.

Motability Operations Limited (MO)

Motability Operations is the commercial organisation responsible for the operation of the Motability Scheme. It is a purpose-led organisation that exists to deliver smart, sustainable solutions that improve customer's mobility in a fast-changing world. Motability Operations leases more than 670,000 vehicles to disabled people across the UK.

Motability Operations is the largest leasing company in the UK, buying around 13% of all new cars in the UK each year. It is also the largest supplier of used cars to trade, selling around 220,000 used cars a year through dedicated ecommerce and physical auction channels.

Motability Operations' unique business model means it can offer universality: no matter how complex a customer's needs, they receive the same level of service and package with no pricing differentials. Any profit Motability Operations makes is reinvested to keep prices affordable, create the most positive impact for over 650,000 customers or donated to Motability the Charity.

Background

Ensuring that all disabled people, including Motability Scheme users, experience a smooth transition to Zero Emission Vehicles (ZEVs) is a priority goal for both Motability the Charity

and Motability Operations, which is why we are submitting a joint response to the Government's consultation on this issue. In terms of our response, many of the questions fall outside of our locus, or area of expertise. We have therefore focused our answers on questions 4, 6, 12 and 17 on the consultation that we view as being particularly relevant, and where we can best offer our experience and support, enhancing the lives of disabled people with transport solutions. Most notably, looking at whether the measures taken to support the transition to EVs for WAV users are sufficient, the barriers currently facing disabled people in making this change, and potential solutions.

Motability recently commissioned new research conducted by the Energy Saving Trust (EST) into EV design and disability inclusion. This research looked into the barriers to accessible EV design for disabled people, with a spotlight on WAVs. The final report was published in March 2023 and is available [here](#). Our response to this consultation is largely framed by its main findings.

Our response to the ZEV consultation

Question 4: Do you agree or disagree with the proposal for the central trajectory for new zero emission vans set out in Table 2?

We do not have a detailed view on the trajectories set out in Table 2 but would note that the vast majority of Wheelchair Accessible Vehicles (WAVs) are converted from passenger variants of Light Commercial Vehicle (LCV) derived vehicles. This is due to the need for a vehicle with a square back, which can easily accommodate a wheelchair. Most modern passenger cars have a sloping rear, and so LCVs are preferable.

Therefore, although our WAV fleet is for passenger use, they all started life with commercial chassis. The LCV market is not as advanced as the passenger car market when it comes to EVs, and this means that there are fewer suitable vehicles available for conversion even before the technical challenges we describe in question 6. This can lead to a situation where WAVs are treated similarly to other passenger vehicles while not having the same maturity of powertrain technology.

It is crucial to ensure the continued supply of suitable vehicles for WAV conversion, based on our response to question 6 regarding the difficulty of converting EVs to WAVs. In question 12 we set out our concern about the unintended consequences that could result from the mandate's incentives towards Zero Emission WAVs, or "e-WAVs".

With a lack of smaller chassis suitable for conversion, users risk being forced to choose larger models derived from panel vans. These are often less suitable for customers' needs and are also more expensive, meaning disabled people may need to make a higher advance payment and Motability the Charity may need to provide a much larger grant to cover the cost.

Question 6: Do you agree or disagree with these proposals for the inclusion or exclusion of SPVs?

We agree with the proposed exclusion of WAVs from the scope of the ZEV mandate given the distinct requirements, design challenges and consequently increased cost of the vehicles.

A key challenge to converting and adapting EVs compared with internal combustion engine (ICE) vehicles is the position of the battery. Most Original Equipment Manufacturers (OEMs) place the large batteries needed for an EV, along with the necessary safety and cooling equipment, under the vehicle floor between the vehicle's two axles. This position is necessary to give the vehicle a low centre of gravity, which improves overall stability while enhancing handling and performance.

However, this position is also exactly the raised area under the rear seat, where adapters and converters would normally drill holes for ramps and access adaptations.

Our conversations with aftermarket battery manufacturers show widespread scepticism about the commercial feasibility of producing a battery that can accommodate a lowered floor as well as the aforementioned engineering concerns. As a result we strongly agree with the proposal to include WAVs as an SPV. This is crucial in order to guarantee the availability of WAVs for users' post 2030.

Question 12: Is the proposed incentive mechanism an appropriate and beneficial way to support the development of zero emission WAVs?

We welcome the proposed extra credits for ZEVs converted into WAVs, and we know the transition to electric vehicles will be more complex for our users with the most extensive mobility requirements. It is absolutely vital that our users have a solution or that meets their needs post-2030, and to enable the transition to eWAVs, the continued supply of WAV base vehicles must be incentivised.

There have been some suggestions that there is a lack of demand for e-WAVs, but this is not the case; rather, there are no suitable models available to users and so the issue is a supply one. In question 6 we touch on the engineering and design reasons why this is the case. There is also a marketing issue here; compared to passenger cars, WAVs are not heavily marketed, and disabled people leasing a new car will generally only get information to inform their choices from Motability Scheme sources and the converters. This means that there is not a large market to drive customer sentiment.

We are working closely with our partners in the Wheelchair Accessible Vehicle Converters Association (WAVCA), the automotive industry, existing converters and new entrants to deliver a commercially viable e-WAV offering. Motability Operations has also partnered with the design and engineering firm CALLUM to explore the design challenges inherent in converting e-WAVs, including investigating work on battery conversions and the feasibility of the creation of a modular battery pack that enables use of the traditional floor conversion method.

These ongoing efforts will need regulatory support to be commercially viable. One potential mechanism that could be utilised to guarantee supply is to offer more certificates for WAV base vehicles. The number of additional ZEV mandate certificates should be decided in consultation with OEMs and converters. Additional WAV certificates could be divided between them to encourage greater collaboration. This would also allow converters to sell certificates as an additional revenue stream.

The DVLA registration process should also be reviewed to see if a dedicated WAV marker could be added to the vehicle description to enable this ZEV mandate feature. This would make it simpler to implement multiple certificates and easier to track the development of the WAV market.

It is crucial that users of the Scheme maintain access to WAVs at all times during the EV transition, and it is vital that the adoption of the proposed incentive mechanism does not have the unintended consequence of prematurely limiting or blocking the supply of ICE WAVs.

There is a chance that premature implementation of the proposed incentive mechanism could lead OEMs to prematurely reduce or end the supply of ICE WAVs, on the basis that by supplying ZEVs for the WAV market they can amass additional credits in a consistent sales channel. This approach is entirely rational from the OEM perspective, but thanks to the practical difficulties in converting e-WAVs as outlined in questions 4 and 6, it could lead to an

unintended situation where supply is heavily constrained. We strongly believe that Government should be aware of this risk and consider it carefully when implementing any incentives.

Question 17: What are your views on the proposed categories for exemptions from the non-ZEV CO2 standard?

We welcome the proposal that SPVs, including WAVs, will be exempted from the non-ZEV CO2 emissions standard. As noted above, the transition to EVs will be complex and new emission targets means there will be further upward pressure on pricing and more range rationalisation. An exemption from the CO2 standard will help support the supply of WAVs while the conversion industry adapts to the transition.

Conclusion

One of our key priorities is to work with the Government in the process of ensuring support is in place for disabled people impacted by the transition to net zero. We therefore welcome the opportunity to contribute to the ZEV mandate, and the recognition of the challenges faced by WAV users. But there is still a long way to go.

The recent report by Motability and EST has highlighted the barriers to making the design of EVs accessible for disabled people, with a particular focus on WAVs. Our research found that the requirements of disabled people are not being sufficiently considered in the design and production of EVs, with WAV users in particular raising concerns about finding models suitable for their needs.

A survey of disabled WAV users conducted as part of the research found that over 70% of respondents have considered driving an eWAV, with over 25% planning to get one as their next vehicle. However the limited choice of suitable vehicles available is a key concern for disabled people, with 85%¹ of respondents listing it as a significant barrier for them. Examples of unsuitable design features included some electric vehicles not being tall enough for some seated wheelchair users, or not enough boot space for mobility equipment.

With the control systems in EVs becoming increasingly advanced, more engagement is needed to ensure that new features work for disabled people. The placement of the battery and the charging socket are highlighted as key accessibility concerns for EVs. The position of the battery is a key concern for adapters and converters, and is a particular challenge to producing small WAVs, which are the preferred size for many WAV users.

The other major barrier is cost. Nearly half of those in poverty in the UK are either disabled or live with a disabled person, and these people are also less likely to have access to home charging. Research from Purple also found that disabled people's living costs are 25% higher than those of non-disabled people.²

By 2027, it is expected that the prices of EVs and ICE vehicles will be equal, reaching a state of price parity.³ Until then industry experts suggest that EVs will mostly be more expensive for consumers. This is due to factors such as their higher research and development costs compared to conventional cars, higher manufacturing costs and the high cost of lithium-ion batteries.⁴

¹ [Report commissioned by Motability: EV design & disability inclusion](#)

² <https://wearepurple.org.uk/disability-and-inequality-infographic/>

³ [Hitting the EV inflection point - Transport & Environment \(transportenvironment.org\)](#)

⁴ [Why are electric cars so expensive? \(electrifying.com\)](#)

This issue will be particularly apparent for those requiring modifications and adaptations to their vehicle or WAVs because modified vehicles generally have a higher upfront cost than commercial vehicles. Affordability is also linked with accessible transport as these additional costs create an economic barrier to accessible, low carbon transport options for disabled consumers.

In June 2022, the government announced that the Plug-in Car Grant (PiCG) would be closed owing to its diminishing impact, and that they would instead focus on growing sub-sectors that had been slower to adopt EVs such as “vans, trucks, motorcycles and wheelchair accessible vehicles”. Subsequently, £300 million in grant funding was made available for the sale of electric vans, taxis and motorcycles. It is important that WAVs and adapted vehicles are supported in a similar way.

Awareness and take-up of the PiCG scheme among disabled consumers remains low. A research survey from the EST revealed that 51% of respondents were unaware of the PiCG scheme. Of those who were aware of the PiCG, 19% said the eligible cars were unsuitable for them and highlighted that it does not make the high upfront costs more affordable.⁵

Further barriers to disabled people using an EV identified by the EST report were as follows:

- Scarcity of chargepoints, specifically accessible chargepoints.
- Accessibility issues with the built environment around chargepoints.
- Accessibility issues with the chargepoints themselves

We've conducted extensive research to understand the barriers disabled people face when using electric vehicles chargepoints. These include the weight of charging cables, the force required to attach the connector, the lack of dropped kerbs around chargepoints and unsuitable parking arrangements.

In partnership with the Office for Zero Emission Vehicles (OZEV) we commissioned the British Standards Institution (BSI) to develop PAS 1899, a national accessible charging standard for EV chargepoints, which launched in October 2022.

We have been working with officials in the Department for Transport to explore positive ways to incentivise compliance with the PAS 1899 standard, which provides industry with a clear specification of how to make public EV charging accessible, and has been designed to apply to all chargepoints. For example, setting a requirement to comply with PAS 1899 in order to access the Rapid Charging Fund or the LEVI fund for local councils; and considering how the Open Charge Point Interface (OPCI), the open data standard, might require charge point providers to provide certain kinds of accessibility information to consumers.

Owning and using an EV requires some changes in behaviour, primarily around charging. Disabled consumers must have all the necessary information to ensure that making the switch will be the right decision for them. However, industry survey respondents perceived limited knowledge as a common barrier for consumers' purchase of EVs, indicating there is either a lack of awareness or insufficient publicly available guidance for disabled users on this topic. Developing, identifying, and raising awareness of information that is available is crucial to ensure that the end consumers can acquire the necessary knowledge independently.

We also know how fundamentally important WAVs are for their users. In November 2022 Motability reviewed the existing evidence of how the WAV Grant Programme works for

⁵ [Report commissioned by Motability: EV design & disability inclusion](#)

beneficiaries⁶, and an understanding of their expectations and satisfaction with the vehicle provided.

The results showed that 93% of beneficiaries surveyed reported that their vehicle made a significant or life changing difference to their ability to access people and places. 88% of surveyed beneficiaries said they saw a significant or life-changing difference to their sense of control and choice over their lives as a result of their Motability vehicle.

96% of beneficiaries either strongly agreed or agreed that the grant provided by Motability was sufficient to lease a vehicle that meets their and their family's needs. Satisfaction was higher for beneficiaries who previously owned WAVs (79% reported the WAV met their disability needs) compared to those moving from a car to a WAV (66%) or those with no previous vehicle (69%) indicating that having to adjust to WAV may have an effect on the satisfaction of the vehicle. 94% of beneficiaries rate the overall service received from the grants department as excellent.⁷

One of our key priorities is to work with industry, Government and other charities to amplify the voices of disabled people in the transport system and create innovative solutions to these challenges. We would recommend further incentivising the production of WAV base vehicles with the help of the ZEV mandate, and a strengthening of the PiCG to support the uptake of e-WAVS. We look forward to seeing the industry collaboratively develop accessible design guidelines and strive for a higher set of industry standards, fostering trust and introducing a solution-orientated approach to support disabled people.

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⁶ In order to receive grant support, an applicant must be in receipt of a higher rate mobility allowance and meet the eligibility requirements of the Motability Scheme. To ensure Motability priorities grants for people that need them the most, grants are means-tested.

⁷ Charitable Operations Wheelchair Accessible Vehicle Grant Programme – Evaluation Report, November 2022