

**Submission
No 8**

**ELECTRIC BUSES IN REGIONAL AND METROPOLITAN PUBLIC
TRANSPORT NETWORKS IN NSW**

Organisation: Blind Citizens Australia

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Blind Citizens Australia

Submission to Inquiry about electric buses in regional and metropolitan public transport networks in NSW

18th December 2019

To:

NSW Legislative Assembly
Committee on Transport and Infrastructure

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Introduction

In Sydney, a trial of a fleet of 4 electric buses will be commencing in the inner west. Historically, the switch to electric rather than traditional, diesel buses has been driven by the desire for more economical and environmentally-friendly options for public transit.

Blind Citizens Australia (BCA) would like to address the issues relating to electric or hybrid vehicles and their silent nature, which will cause significant safety issues for pedestrians who are blind or vision impaired. People who are blind or vision impaired use the sound of approaching traffic to determine when to cross roads. Additionally, there is an increased concern for pedestrians who have hearing loss in addition to vision loss; the silent nature of electric or hybrid vehicles poses significant risk to their safety.

BCA would like to propose the installation of an Acoustic Vehicle Alerting System (AVAS) into electric or hybrid vehicles, including electric buses, to enable a minimum sound emission for approaching buses to maximise the safety for pedestrians who are blind or vision impaired.

BCA also recommends the implementation of stop announcements in both visual and audio forms to aid bus passengers who are blind and vision impaired to navigate their way to their final destination.

BCA would like to request public consultation including user testing prior to the implementation of the recommendations. This would enable user-testing by individuals who are blind or vision impaired to achieve truly accessible outcomes for the implementation of electric buses across the transport network.

Background to hybrid and electric vehicles

The introduction of electric or hybrid vehicles has caused significant issues for pedestrians who are blind or vision impaired because they are silent. This was identified to be a substantial issue in London,

where electric buses will have mandatory installation of a minimum noise emission for electric buses to eradicate the issues causes for blind or vision impaired pedestrians.¹

This move by London officials echoes the work of the World Blind Union (WBU) and the European Blind Union (EBU). Both the WBU and EBU have been campaigning for a mandate to have a minimum sound emitted by electric or hybrid vehicles, including electric buses to alert pedestrians to their presence in areas with traffic. Due to this campaigning, the European Union has created a minimum standard for noise emittance by hybrid and electric cars, the Regulation of Sound Level of Motor Vehicle (EU 540/2014). This EU standard legally prescribes installation of a system, the Acoustic Vehicle Alerting System (AVAS) in electric and hybrid vehicles. It is a mandatory prescription, with implementation commencing on July 1, 2019.

The WBU urges all member nations to push for a Global Technical Regulation to have a minimum sound standard that:

- a) Is similar in character to the sound emitted by an internal combustion engine;
- b) Requires sound be emitted whenever the vehicle is in operation, including when stopped;
- c) Applies to any quiet vehicle including electric, hybrid electric and quiet internal combustion engines; and
- d) Prohibits the inclusion of a driver controlled on/off switch.

UN regulation no.138 covers the “uniform provisions concerning the approval of Quiet Road Transport Vehicles with regard to their reduced audibility.” In 2017, amendment no.1 to this regulation specified that an off-switch for the AVAS is prohibited.

In Australia, bipartisan support was secured in 2019 to develop a regulatory statement in relation to a minimum noise emission for

¹ <https://www.theguardian.com/world/2019/jul/01/futuristic-sounds-to-make-electric-buses-safer-hit-wrong-note>

hybrid and electric vehicles. A Regulation Impact Statement is now being developed by the government to examine the implementation of AVAS in hybrid and electric vehicles or rather, a minimum sound emission.

Context

In terms of both the recommendations for a minimum sound emission in electric / hybrid vehicles and the implementation of stop announcements, these recommendations are steeped in current conventions and standards. The Australian Government has signed and ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and therefore, Australia is bound by its obligations. Article 9 of the UNCRPD requires that parties undertake measures to allow people with disabilities to participate fully in all aspects of life, through the “identification and elimination of obstacles and barriers to accessibility”. This requirement is further reinforced within the National Disability Strategy 2010-20.

The Disability Standards for Accessible Transport (2002) set out the requirements for accessibility in relation to all forms of public transport. In terms of Stop Announcements, sections 17.4, 17.5 and 27.1 are relevant to the provision of this type of information, in an accessible format for bus passengers who are blind or vision impaired.

Recommendations

BCA encourages the installation of AVAS in electric and hybrid vehicles, including electric buses. This system would require a noise to be emitted from car start-up to travelling 20 km/hr, either in a forward direction or in reverse.

Further, BCA encourages the implementation of Stop Announcements to enable passengers who are blind or vision impaired to be able to determine where they are located in relation to their final destination. For passengers who are blind or vision

impaired, they are unable to rely on the visual cues outside the bus to work out where they are located in relation to a final destination. Audio and visual announcements of stops would enable these passengers to know exactly where to disembark without relying on other passengers or the driver to get off at the correct stop.

Finally, BCA recommends public consultation including user testing occurs to enable people who are blind and vision impaired passengers and pedestrians to offer feedback prior to the implementation of any accessibility measures. This consultation and feedback will allow for truly accessible solutions for the use of electric buses for transport.