

## Requirements for urban buses in New Zealand for consistent urban bus quality (2022)

1 February 2022


Version 4.1

### Summary of amendments

#### Appendix 1: Sections to be amended

Section to be amended	Amendment
Section 1.1.3 Strategic context (p9)	<p data-bbox="763 627 1122 655"><i>Environmental outcomes</i></p> <p data-bbox="763 743 1850 943">Reducing road transport emission is a key environmental priority for the government. To give this effect, the government is mandating that only zero-emission public transport buses be purchased by 2025 (the 2025 Mandate); and this supports a future target of decarbonising the public transport bus fleet by 2035.</p> <p data-bbox="763 970 1850 1257">From 1 July 2025, the government will only allow zero-emission public transport buses to be purchased. The 2025 Mandate will apply to public transport buses registered for the first time in New Zealand from 1 July 2025. This will cover new and used buses that are imported to New Zealand and new buses manufactured or built up in New Zealand. It will not cover buses that are already in the public transport bus fleet prior to 1 July 2025 - even if they are transferred between regions or operators or refurbished.</p>

	<p>The 2025 Mandate will apply to public transport buses and small passenger service vehicles used to deliver public transport services contracted by public transport authorities. It will not apply to vehicles used to deliver Total Mobility services. It will not apply to buses used for services contracted by the Ministry of Education. Earlier transition prior to this may be agreed between affected councils and operators on a case-by-case basis.</p>
<p>Definition section (p7)</p>	<p>Include definition of 'zero-emission bus':</p> <p>Buses that produce zero emissions at tailpipe. This will include fuel sources such as electric and hydrogen, but there may be other technologies available.</p>
<p><b>Section 1.1.3 Strategic context</b> (p9) – inclusion of reference to the Road to Zero 2020-2030 safety programme.</p>	<p><i>Safety outcomes</i></p> <p>Improving safety on New Zealand roads is a priority for Waka Kotahi. Road to Zero 2020-2030, New Zealand's road safety strategy, tells us what New Zealand needs to do to make improvements in road safety. It sets us on a path to achieve Vision Zero, a New Zealand where no one is killed or seriously injured on our roads. Road to Zero sets an initial target to reduce deaths and serious injuries on New Zealand's roads, streets, cycleways and footpaths by 40 percent over the next 10 years. Reaching that target would mean reducing annual road deaths to 227 and serious injuries to 1,680 by 2030.</p> <p>Aspects of the RUB support the following key focus areas under Road to Zero:</p> <ul style="list-style-type: none"> <li>• Infrastructure improvements and speed management (e.g. onboard telematics to monitor drivers' speed)</li> <li>• Vehicle safety (e.g. ESC on double decker buses, continuous handrails in stairwells, anti-trap door requirements,)</li> </ul>

	<ul style="list-style-type: none"> <li>• Work-related road safety (e.g. mandated seatbelts for drivers, driver-controlled dimmable interior lighting to prevent glare)</li> <li>• Road user choices (e.g. making public transport more appealing to commuters by introducing climate control and noise level requirements, ability to carry a bicycle, better accessibility for less able passengers, performance-based requirements for mobility devices)</li> <li>• System management (e.g. external camera views of pedestrians and cyclists)</li> </ul>
<p><b>Section 2.3 Battery powered electric buses</b></p>	<p>A battery electric bus must be able to meet operational requirements without the need for an additional bus, as required under the contract with council. This is a transitional measure while technology is advancing at a considerable pace and can be revisited.</p> <p>Public transport contracting authorities and bus operators must use battery electric buses which have the CCS2 type plug, which is currently the most common type used in New Zealand and is recommended in the Public Transport Design Guidance (PTDG).</p>  <p>See <a href="http://www.nzta.govt.nz/ptdg">www.nzta.govt.nz/ptdg</a> for infrastructure guidance on battery electric buses which may help with plug location and depot layout to increase interoperability. It is anticipated that any on-route chargers provided by Auckland Transport or regional councils will work best with plugs on the left-hand side towards the rear of the bus.</p>

Battery electric buses must use the Open Charge Point Protocol (OCPP) for communication between electric bus and chargers to enable central management system.