

EXPLANATORY STATEMENT

Consumer Goods (Self-balancing Scooters) Safety Standard 2018

Overview

The Commonwealth Assistant Minister to the Treasurer and Parliamentary Secretary to the Treasurer, the Hon. Michael Sukkar MP (the Minister), has made a safety standard for self-balancing scooters pursuant to section 104 of the Australian Consumer Law, which is Schedule 2 of the *Competition and Consumer Act 2010* (Cth).

The safety standard comes into effect on the day after it is registered on the Federal Register of Legislation.

The safety standard was introduced to address a regulatory gap that exists in some state and territory electrical safety regimes, which do not regulate extra low-voltage electrical products which includes self-balancing scooters.

The purpose of the safety standard is to reduce the risk of death and serious injuries to consumers from self-balancing scooter related fires including house fires. House fires have occurred when some self-balancing scooters have overheated when charged via a mains power supply.

Based on Australian and international evidence, house fires are most likely caused by self-balancing scooters with one or more of the following characteristics:

- they contain substandard lithium-ion batteries
- they are designed and manufactured with substandard mechanical protection for the batteries
- they are designed and manufactured with substandard electrical circuitry
- they have non-compliant electrical chargers.

The safety standard includes requirements that the components and electrical circuitry used in the manufacture of self-balancing scooters safely manage battery charging, battery discharging, battery temperature controls and unbalanced charge in multiple lithium-ion battery cells.

The safety standard updates requirements that are detailed in the repealed safety standard to address design and construction flaws that pose a risk of thermal runaway of lithium-ion batteries causing them to overheat, spark and emit smoke, leading to fires.

Repealed Standard

The previous safety standard for self-balancing scooters was the *Consumer Goods (Self-balancing Scooters) Standard 2016*.

Under subsection 33(3) of the *Acts Interpretation Act 1901* (Cth), where an Act confers a power to make, grant or issue any instrument of a legislative or administrative character (including rules, regulations or by-laws), the power shall be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend, or vary any such instrument.

Requirements of the safety standard

The safety standard applies to single-wheeled and two-wheeled self-balancing scooters and requires that they comply with either the mandated clauses of the voluntary standards

listed in this safety standard or the mandated clauses of the voluntary standards listed in the superseded *Consumer Goods (Self-balancing Scooters) Safety Standard 2016*.

The safety standard includes the following definitions:

Australian Consumer Law means Schedule 2 to the *Competition and Consumer Act 2010*.

AS/NZS 60335.1:2011 means Australian/New Zealand Standard AS/NZS 60335.1:2011 *Household and similar electrical appliances—Safety Part 1: General Requirements (IEC 60335-1 Ed 5.2, MOD)*

AS/NZS 60335.2.201:2016 means Australian/ New Zealand Standard AS/NZS 60335.2.201:2016 *Household and similar electrical appliances – Safety – Particular requirements for battery powered self-balancing personal transport devices*

IEC 60335-1:2010 means IEC 60335-1:2010+AMD1:2013+AMD2:2016 *Household and similar electrical appliances - Safety - Part 1: General requirements*.

IEC 62133-2:2017 means IEC 62133-2:2017 *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary lithium cells, and for batteries made from them, for use in portable applications – Part 2: Lithium systems*.

Self-balancing scooter means a ride-on device that:

- (a) has 1 or 2 wheels; and
- (b) has no steering grips, seat or handlebars; and
- (c) is powered by a lithium-ion battery that is rechargeable via connection to a mains power supply.

Note: Self-balancing scooters are also known as hoverboards, gliders, smart boards, sky walkers, monoboards, or mod boards.

UL 2272 means *UL 2272 – UL 2272 - Standard for Electrical Systems for Personal E-Mobility Devices*.

Access to Australian and international standards

Where practicable, product safety legislative instruments only reference extrinsic material that is readily accessible for free to the public. However, as in the current case, many product safety legislative instruments need to incorporate extrinsic technical standards over which certain bodies have copyright. AS/NZS 60335.1:2011 and AS/NZS 60335.2.201:2016 referenced in this instrument are available for purchase at SAI Global's website (<https://www.saiglobal.com>). The IEC 62133-2:2017 and IEC 60335-1:2010 standards are available for purchase at the IEC webstore (<https://webstore.iec.ch>). The first edition of UL 2272 standard can be purchased from Underwriters Laboratories Inc. (<https://standardscatalog.ul.com>) and SAI Global's website.

The Australian Competition and Consumer Commission (ACCC) can also make a copy of these standards available for viewing at one of its offices, subject to licensing conditions.

Consultation

The ACCC published a consultation paper for self-balancing scooters from 14 June to 28 July 2017. The paper assessed the suitability of expanding the scope of the safety

standard to include single-wheeled self-balancing scooters. It provided stakeholders with two alternative policy options:

Option 1 - Keep the current safety standard, which does not include single-wheeled self-balancing scooters (status quo)

Option 2 - Remake the safety standard to include single-wheeled self-balancing scooters.

In December 2017 and January 2018 stakeholders were contacted for their views on referencing the latest editions of the voluntary standards and the voluntary Australian/New Zealand standard *AS/NZS 60335.2.201:2016*.

Disallowance

This legislative instrument is not subject to disallowance due to section 44 of the *Legislation Act 2003* (Cth).

Commencement

This legislative instrument commences on the day after it is registered on the Federal Register of Legislation.

Period of effect

This legislative instrument ends on 16 July 2019.

Sunsetting

This legislative instrument is not subject to sunsetting due to section 54 of the *Legislation Act 2003* (Cth). Although not subject to sunsetting provisions the safety standard lapses on 16 July 2019.

Regulation impact assessment

The Office of Best Practice Regulation advised that a Regulation Impact Statement was not required.