

UNECE Regulation 22.05 Motorcycle Helmets in Australia

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Abstract

The recent regulatory shift regarding the motorcycle helmets both approved for sale and approved for use on the road in Australia is likely to lead to significant change. It is now possible to import, sell and use UNECE Regulation 22.05 Protective helmets and their visors for drivers and passengers of motor cycles and mopeds as well as AS/NZS 1698 Protective helmets for vehicle users on the roads in Australia. The question for the Australian consumer is will these significant changes produce simpler, more understandable regulation and cheaper and safer helmets.

Background

The pressure for this change came from several areas of the community. The framework for the change was setup at the Standards Australia Forum on AS/NZS 1698 in 2015, which focussed on:

Harmonisation of regulatory requirements within Australia;

Harmonisation with international standards; and

Related matters of cost, safety, certification and supply.

These aims of this Forum followed and conformed with the Federal Government's desire to cut business red tape such as Australian standards which differ from international standards; to eliminate technical barriers to trade; and, encourage a low cost, business-friendly environment by the acceptance of international standards.

Method

This paper examines the effect of these regulatory changes on safety of motorcycle helmets available to the consumer in Australia.

A major Cochrane Collaboration by Lui et al. (2009) of available helmet effectiveness studies found that motorcycle helmets were 45% effective in reducing fatality risk and 69% effective in reducing the risk of serious injury. There was insufficient evidence to demonstrate whether differences in helmet type confer more or less advantage in injury reduction. This indicated that there was little value in comparing the technical attributes of the helmets defined by the test requirements within the two standards.

Other areas of the standards were reviewed for substantial differences. The responsiveness of each standards setting process was compared for demonstrated adaptable and timeliness in its changes to keep track with helmet developments on the market. The differences in the quality assurance regimes of the two standards were investigated as well as how well these regimes met the **ISO/IEC-17065 Conformity assessment -- Requirements for bodies certifying products, processes and services** and **ISO/IEC-17067 Conformity assessment - Fundamentals of product certification and guidelines for product certification schemes**.

The quality assurance process based on these requirements by a major international helmet manufacturer with a presence in both the European and Australian markets was reviewed. The

internal processes used by the manufacturer highlighted the differences required for conformity assessment for each jurisdiction. A substantiation of compliance must be demonstrated by the collection of test and inspection documentation regarding type testing, production qualification and on-going batch testing.

The differences in the production qualification regimes between the standards were investigated. Forty identical Australian certified helmets were tested to the UNECE Regulation 22.05 sampling protocols for comparison and to investigate the statistical variation of the AS/NZS 1698 flat energy attenuation test results.

Results

The test results demonstrated that this Australian certified helmet was unable to meet the production qualification requirements of UNECE Regulation 22.05.

Conclusions

For the Australian consumer, adding helmets meeting UNECE Regulation 22.05 motorcycle helmet approved for sale and use on the road to AS/NZS 1698 helmets will produce simpler more understandable regulation as well as cheaper and safer helmets. For this to be successfully implemented will require a means of proof of substantiation of helmet conformance with the provisions of Australian Consumer Law (ACL).

Reference

Liu BC, Ivers R, Norton R, Boufous S, Blows S, Lo SK. Helmets for preventing injury in motorcycle riders. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD004333. DOI: 10.1002/14651858.CD004333.pub3.

Conformity assessment -- Requirements for bodies certifying products, processes and services