Road Safety Barrier Systems Standard
AS/NZS 3845 being updated

by Raphael Grzebieta

Roadside safety barriers are an integral part of the road safety protection engineering systems we have come to rely on to help reduce road trauma.

The current Australian and New Zealand joint standard AS/NZS 3845 is being reviewed by the CE33 committee made up of barrier and road safety experts. Representatives from road authorities, Austroads, councils, researchers, manufacturers and road users are considering a number of issues including:

i. Expanding the standard to provide consideration of European (EN 1317) and US (NCHRP 350) approved barriers that comply with Australian requirements

ii. Expanding the standard to consider other roadside furniture such as poles, sign gantries, bollards, signage and other road appurtenances.

iii. Terminology harmonisation and relationship of the current code to other advisory design guidelines and codes, e.g. bridge code.

iv. Legislation issues, i.e. should the standard be mandatory for road and bridge designers.

v. Whether or not to retain Test Level 0 requiring redirection of vehicles striking a temporary (e.g. plastic) barrier at 50 km/hr impact. There is a strong impetus to only allow barrier systems onto Australian roads that redirect vehicles at 70 km/hr as a minimum requirement.

vi. Whether or not to allow the systems that were developed prior to 1999 when AS/NZS 3845 was released, to be “deemed to comply” with the code. This is an issue that may have considerable financial ramifications for councils and jurisdictions if such systems now need to comply to the code. Most road safety barriers comply with the current test regime. However there are a number of older systems that may need replacing, i.e. guardrail systems that have no block outs between the posts and guardrail is one example, dangerous fish tale end terminals as shown below is another example.

vii. Should installers be required to undergo training and be registered.

viii. What are the minimum requirements in regards to maintenance of impacted systems. Should they be replaced within 24 hours, one week or when convenient.

ix. Should there be a national body, i.e. Australian Transport Safety Bureau that approves and regulates barrier systems as occurs in the USA, or is the current “State by State” control satisfactory.

It is expected that the review process will require a couple of years. Committee members are well aware that their deliberations and outcomes will be critical to the level of inherent safety within Australia’s road infrastructure and its effect on road trauma.

Finally, the committee wants to see the interests of all road safety stakeholders, jurisdictions, manufacturers and road users represented and encourages any comments to be forwarded to either myself, Professor Rod Troutbeck from QUT who Chairs the committee or Mr. Eddie Go who is CE 33 Committee’s Projects Manager (Eddy.Go@standards.org.au).