

ACRS Submission on Emergency Lane Keeping Systems for passenger vehicles and light goods vehicles



About the Australasian College of Road Safety

The Australasian College of Road Safety was established in 1988 and is the region's peak organisation for road safety professionals and members of the public who are focused on saving lives and serious injuries on our roads.

The College Patron is Her Excellency the Honourable Sam Mostyn AC, Governor-General of the Commonwealth of Australia.

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Table of Contents

Introduction	3
ACRS response to the Consultation Draft	4
a) A false start	4
b) The expert from Australia	4
c) Implementation timelines	4
d) The road ahead	5
Conclusion and Recommendations	5
References.....	6

Introduction

The Australasian College of Road Safety is the region's peak membership association for road safety with a vision of eliminating death and serious injury on the road. Our members include experts from all areas of road safety including policy makers, health and transport professionals, academics, community organisations, researchers, federal, state and local government agencies, private companies and members of the public. The purpose of the College is to support our members in their efforts to eliminate serious road trauma through knowledge sharing, professional development, networking and advocacy. Our objectives include the promotion of road safety as a critical organisational objective within government, business and the community; the promotion and advocacy of policies and practices that support harm elimination; the improvement of relative safety outcomes for vulnerable demographic and user groups within the community; the promotion of post-crash policies and practices; and the promotion of a collegiate climate amongst all those with responsibilities for and working in road safety.

The College believes that we should prevent all fatal and serious injuries on our roads; the road traffic system must be made safe for all road users; system designers should aim to prevent human error and mitigate its consequences; life and health are not exchangeable for other benefits in society; and that all College policy positions must be evidence based.

This consultation follows on from the Lane Keeping Systems for light vehicles consultation that concluded in February 2022. Based on the feedback from that consultation, there was a decision to harmonise the Australian Design Rules with a United Nations regulation that was not yet in existence. Australia has since collaborated with the UN to develop an international vehicle regulation for Emergency Lane Keeping Systems (ELKS).

The current consultation seeks feedback on the proposed ADR 107/00 including:

- The suitability of ADR 107/00, along with any comments on functional and/or performance requirements, test requirements or implementation, such as the applicable vehicle categories and timing; and
- Any other relevant information.

The consultation paper defines ELKS as “a driver assistance system that should provide warning to the driver and correct the trajectory only when the driver is unintentionally leaving the lane. An ELKS comprises a Lane Departure Warning System (LDWS) and a Corrective Directional Control Function (CDCF)”.

The consultation paper notes that the purpose of ADR 107/00 “is to specify requirements for Emergency Lane Keeping Systems (ELKS) for new passenger vehicles (ADR vehicle categories MA, MB, and MC) and new light goods vehicles (ADR vehicle category NA), to reduce deaths or injuries from unintended lane departures. The ADR provides manufacturers with minimum performance requirements for ELKS to be installed in new vehicles”.

New model passenger and light goods vehicles must be certified to this Standard from 1 November 2027, and all new passenger and light goods vehicles from 1 November 2028.

ACRS response to the Consultation Draft

A significant amount of passenger vehicle travel in Australia occurs on rural or remote roads as well as on inter-urban roads with speed limits of 70 km/h and above. On both these roads, the risk of a loss of control is heightened by the speed of travel. When such an event occurs, the high travel speed also means that the consequences are likely to be severe. In the absence of barriers to control vehicle trajectories, loss of control crashes will typically result in collisions with roadside objects (e.g. trees or poles), rollovers, or oncoming traffic.(1-3)

Research conducted in 2021 by the Monash University Accident Research Centre (MUARC), which accompanied the previous consideration of an ADR on ELKS, found that a staggering 42% of fatal crashes in Australia involved a loss of control.(4) That only 16% of serious injury crashes involve a loss of control is likely an indication that these types of crash are disproportionately resulting in fatal outcomes. More to the point, it is further evidence that modern vehicles are simply not capable of preventing fatal injuries when a loss of control occurs while travelling at the posted speed limits that have become so common on Australian roads.

Given the current situation, and in the absence of significant reform on the setting of rural road speed limits (which it is acknowledged the Australian Government is currently considering), it is clear that Australia has a lot to gain from the benefits of ELKS. The MUARC research estimated that ELKS technologies would reduce the likelihood of fatal and serious injury loss of control crashes by 22%. As such, the ACRS fully supports the adoption of ADR 107/00.

Some further considerations are provided below.

a) A false start

This is the second consideration of an ADR on ELKS within a relatively short timeframe. While no definitive reasons were given, it is understood that the decision not to implement an ADR in 2022 was largely due to the absence of a corresponding UNECE regulation (at that time, only an EU GSR had been drafted).

b) The expert from Australia

The Australian Government representatives to the United Nations Working Party 29 (WP.29) should be commended for their leadership in progressing the development of a UNECE regulation on ELKS. The ACRS emphasises the importance of Australia maintaining active and ongoing participation in WP.29, particularly in relation to regulations with significant implications for road safety. Active engagement ensures that Australia's perspectives are considered in the global regulatory process, which is especially important given the distinctive features of the Australian road environment (such as higher rural travel exposure, greater distances, and the prevalence of wildlife crashes), which can differ markedly from many European contexts.

c) Implementation timelines

Having led the development of the UNECE regulation on ELKS through WP.29, the Australian Government will be well aware that it is scheduled to come into force in February 2026. By contrast, the proposed ADR (107/00) would not apply to new model vehicles until 1 November 2027 (almost two years later), and to all vehicle models until 1 November 2028 (almost three years later). This timeline represents an unnecessary delay in the introduction of life-saving technology to the Australian vehicle fleet: a delay that will inevitably

result in preventable road trauma. The ACRS strongly recommends that the implementation dates for ADR 107/00 be brought forward to the earliest practicable timeframe.

Manufacturers have been supplying ELKS-equipped vehicles to the EU market since 2022. Even prior to that, vehicles sold in Australia have demonstrated strong performance against ANCAP lane support system (LSS) testing protocols since 2018. These protocols have become progressively more stringent over time, and manufacturers have consistently met the higher performance requirements, demonstrating both capability and readiness for earlier adoption of ELKS in Australia.

d) The road ahead

All ADRs should be reviewed regularly to ensure they continue to provide an appropriate minimum performance standard that reflects modern vehicle and technological capabilities. Maintaining this minimum standard requires periodic updates to performance criteria as technologies evolve.

For ELKS in particular, this should include consideration of corrective directional control function performance criteria that account for dashed lane markings and road edges where no line is present (which is a common situation found in rural Australia). In addition, inappropriate, unexpected, or excessive activation of ELKS has been a long-standing issue, especially on lower-speed urban environments. Many drivers report that they frequently disable ELKS in these situations,(5) which renders the system unavailable when it may be most needed in an emergency. To address this, a standard for appropriate system activation should be considered in future revisions.(6)

Conclusion and Recommendations

The adoption of evidence-based vehicle technologies is essential in improving road safety and preventing deaths and serious injuries. ACRS recommends:

- ADR 107/00 should be adopted
- Australia should continue active participation in WP.29 and the development of UNECE regulations
- Australia should adopt corresponding ADRs as soon as practicable following relevant EU or UNECE regulations
- Australia should continue to actively review all ADR over time to ensure they are relevant to the changing road safety and technological landscape
- Alignment of ADRs with European vehicle safety standards for faster implementation of new safety technologies (adapted where necessary for unique Australian operating conditions)
- Transparency of the ADR development and implementation processes
- Road safety expert representation on the Vehicle Standards Consultative Committee.

ACRS appreciates the opportunity to comment on this ADR and contribute to improved road safety in Australia. Please contact me if you need any further information.



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References

1. Fitzharris MP, Lenné MG, Corben B, Arundell TP, Peiris S, Liu S, et al. Overview and analysis of serious injury crashes - crash types, injury outcomes and contributing factors, ECIS Report 1. https://www.monash.edu/_data/assets/pdf_file/0003/3127521/1-FITZHARRIS-ET-AL-ECIS-REPORT-1-SI-CRASHES-MUARC-REPORT-343-2020.pdf: Monash University Accident Research Centre; 2020.
2. Keall M, Newstead S. Relative Vehicle Safety, Road Environment and Crash Type. MUARC Report No. 337. https://www.monash.edu/_data/assets/pdf_file/0008/1572920/VSRG-Relative-Vehicle-Safety-Road-Environment-and-Crash-Type-Report-337.pdf: Monash University Accident Research Centre; 2018.
3. McLean A, Kloeden C, Ponte G, Baldock M, Lindsay V, van den Berg A. Rollover Crashes. CASR Report CASR026. Adelaide: Centre for Automotive Safety Research, University of Adelaide; 2005.
4. Newstead S, Watson L, Budd L. the Potential Benefits of Lane Keep Assist Systems in Australian Light Vehicles. MUARC Report no. 365. https://www.monash.edu/_data/assets/pdf_file/0009/3219570/The-Potential-Benefits-of-LKAS-in-Australia-MUARC-Report-365.pdf: Monash University Accident Research Centre; 2021.
5. Suncorp Group. New AAMI Crash Index research shows one in five drivers disabled their car's safety features <https://www.suncorpgroup.com.au/news/news/aami-crash-index-2025>. 2025 23 July.
6. Pilot research project lifts the lid on useability of lane support systems [press release]. <https://www.ancap.com.au/media-and-gallery/media-releases/a62a71>: Australasian New Car Assessment Program, 26 July 2024.