



14 July 2021

## Inquiry into Vehicle Safety, Standards and Technology, including Engine Immobiliser Technology

### NMVTRC Answers to Committee's Additional Questions

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#### Introduction

The format below follows the same paragraph numbering as Mr King's letter of 1 July.

1. The NMVTRC concurs with ANZPAA's assessment that the use of REI technology is not feasible in the medium term in Australia based on a number of both technical and environmental considerations that limit the practical application of the technology at this time.
2. No.
3. Demonstrating cost-effectiveness, safety and efficacy compared to more practical tracking-only solutions and consumer sentiment.
4. In both Queensland and across Australia, vehicle crime is increasingly no longer a single crime and is now often at the centre of a more complex mix of high-harm, high-impact offending that may involve significant road safety risks, other crimes against a person, subsequent property crimes and a wide variety of fraudulent activity in respect of personal identity, finance, and staged collisions.

The NMVTRC is in the final stage of completing its analysis of relevant Queensland data which indicates that half of the vehicles stolen were involved in an ancillary offence before they were recovered—with stolen vehicles linked to 33 different types of serious offences, including traffic offences which involved crashes and reports of dangerous driving. We are currently awaiting QPS's consent to provide the Committee with a copy of the final report.

There has also been a big change in age profile of offenders with the proportion of adult offenders involved now accounting for 6 in 10 thefts.

Nearly all vehicle thefts are now preceded by a residential burglary to access an original key (transponder). Disappointingly, in around 1 in 5 thefts a key was left in the vehicle.

The consistent and constant promotion of the safeguarding of keys in the home, and the importance of home security standards generally to combat related crime is critical and under invested in compared with, for example, road safety.

Our research suggests that in almost all cases (95 per cent) there will be no confrontation with the homeowner. The NMVTRC maintains a range of print, social media, and other materials to help homeowners understand the problem and mitigate related risks. The materials are based on the best available expert behavioural science advice and consumer insights to encourage positive safeguarding practices. Resources are available to police and community group free of charge via our website (<https://carsafe.com.au/pop-lock-stop>).

5. See immediately above.
6. Profit-motivated thieves are looking to covert stolen vehicles into cash. Vehicle rebirthing has been substantially curtailed by a significant tightening of the processes for managing of written-off vehicles, with theft for scrap now the preferred choice for profit-motivated thieves converting whole vehicles into cash. Industry sources continue to report that demand for vehicles for metal recycling and the export of whole and partial vehicles continues to grow and that

legitimate industry participants are finding it increasingly difficult to compete against rogue operators who have no outward appearance of compliance with regulatory requirements and established industry standards.

In 2016 the NSW Government introduced the Scrap Metal Industry Act 2016 which requires persons dealing in scrap metal to register with NSW Police, bans cash transactions and imposes a range of obligations on participants to maintain certain records and report suspicious activity. Following this, in 2018 the Victorian Government amended its second-hand dealing laws to adopt key elements of the NSW approach including banning cash payments and trading in de-identified vehicles.

While the NSW and Victorian reforms represented a major step forward, similar vulnerabilities exist in all the remaining states and territories, including Queensland.

In our view, like reform is necessary in Queensland to close off gaps that allow some activity to go unregulated and equip regulators with a better 'tool-kit' to deal with serial non-compliance. The NMVTRC is currently working through options with its Queensland stakeholders to put a reform proposal to the Queensland Government. Like reforms in the United Kingdom are estimated to have curtailed related illicit trade by up to 80 per cent.

The NMVTRC estimates that the export of stolen vehicles as separated parts or scrap could account for 4 in 10 profit-motivated thefts with a proliferation of new entrants in 'cash for cars' sector focussed on scrap metal exports, making it a major source of loss and a crucial area of vehicle crime reform.

Since September 2020, the NMVTRC has been working with Victoria Police (together with the Commonwealth Department of Home Affairs, Australian Border Force, the Australian Federal Police, Australian Criminal Intelligence Commission, Austrac, and the Australian Taxation Office) on an all-agency intelligence exercise to undertake an extensive analysis of export risks. The project is expected to be completed later this month and will include recommendations to assist in early intervention and propose options for legislative and/or practice change at the Commonwealth level.

7. See 4 above—key safeguarding.
8. In Queensland in the 12 months to 31 March, motorcycle thefts were almost split equally between short-term and profit-motivated thefts (734 to 705). The low recovery rate (49 per cent) is driven by the ease with which motorcycles can be disassembled and sold for parts and – in the case of off-road motorcycles – the absence of “mandatory” registration transactions at which a suspicious vehicle may be detected.  
 Around 1 in 4 were sooters in the 50-200cc range. Bikes in the 250-500cc range made up 1 in 6. By contrast the largest capacity bikes (i.e., above 1000cc) represented less than 3 per cent.  
 For many motorcycles, the value of separated components exceeds the bikes unitary value. There are also anecdotal reports that many stolen motorcycles are broken down and used for spares in amateur motorsport events.
9. To our knowledge there has been no change to the export declaration requirements to date. We hope the upcoming report on related matters—see 6 above—may prompt some action.
10. There is no question that vehicle safety significantly evolves at intervals of around five years. By way of illustration, majority of vehicles manufactured up until the late 1990s could be characterised as comprising a fundamental vehicle structure of press formed steel panels with limited use of high strength steels or other materials. The steel panels would be spot welded together. Crashworthiness requirements of the time focused on the design and compliance of components within the vehicle such as seats and seat anchorages, seatbelts, the steering column, and side door strength. Electronics systems were limited to the engine management system.

By 2010 that had evolved to—

- the fundamental vehicle structure being manufactured from formed parts;
- the use of a range of high strength metals with yield stresses of up to 1000MPa;
- the extensive use of structural foams and plastics; and
- new bonding techniques to connect structural elements.

Crashworthiness requirements increased to include evaluations of the vehicle as a whole system including full frontal (and offset) impact occupant protection, dynamic side impact protection vehicle and pedestrian protection.

Electronics are used extensively in braking systems (ABS, brake distribution), collision avoidance (Electronic Stability Control), airbag and seatbelt pre-tensioner deployment, parking assistance (proximity sensing, reversing cameras), seat positioning, driver information display, tyre pressure sensors, etc.

The next five to ten years are likely to see even more rapid introduction of composite materials, foams and lightweight metals in key structural components, and increasingly complex electronics to deliver intelligent transport system and safety applications.

However, the use of government underwritten incentives, typically characterised as *cash for clunkers* schemes, have been spectacularly unsuccessful in encouraging the owners of older vehicles into newer vehicles. The world markets with the youngest vehicle fleets have typically achieved that by negatively pricing older vehicles off the road via environmental levies.

11. With less than 5 in every 100 vehicles now without the protection of an Australian Standard Equivalent engine immobiliser, the time has passed to incentivise (or penalise) owners. Natural attrition will further reduce the non-protected pool.
12. The *Ghost Immobiliser* (GI) is a propriety product of the Autowatch corporation (distributed in Australia by Dynamco). Independent testing commissioned by the NMVTRC confirms it as an effective option for an additional layer of protection against key theft. However, its cost at over \$1,000 means it is not an option for mandatory retrofitting and consumers have in the past generally rejected layered systems as being too fiddly. The full evaluation report can be downloaded from the Carsafe website via this link—  
[https://carsafe.com.au/assets/NMVTRC\\_Ghost\\_Immobiliser\\_Report\\_FINAL\\_.pdf](https://carsafe.com.au/assets/NMVTRC_Ghost_Immobiliser_Report_FINAL_.pdf)
13. The NMVTRC does not support the mooted ban on the re-registration of vehicles assessed by insurers to be a total loss on the grounds that it will impose an unreasonable impost on insurance costs in the current absence of any published empirical evidence that a properly repaired Repairable Write-off (RWO) poses any significant safety risk. A ban on RWOs will also not have any impact on profit-motivated vehicle crime, which is currently being driven largely by scrap metal values and export of whole vehicles and separated parts.

In our assessment, repairable write-offs do not pose a safety risk. A 2018 expert audit of a pool of more than 400 RWOs commissioned by the NMVTRC to determine if any posed a structural repair risk found that all could be completely and safely repaired provided that—

- all work is undertaken by a competent, qualified repairer using appropriate equipment;
- the vehicle manufacturer's specified method of repair is strictly observed; and
- appropriate quality recycled or OEM replacement parts are used.

Additionally, with many vehicles now having advanced driver aid systems which if even sustaining minor damage can result in a total loss, a general ban is likely to result in vehicles with minimal damage being classified as non-registerable and pose a significantly negative environmental impact.

We would, however, support the RACQ's suggestion that sellers of RWOs be required to inform prospective purchasers of the vehicle's status so that they can determine the level of expert inspection they wish to apply prior to purchase.

We also have a suggestion on how to address the evidence gap prior to proceeding with a ban to ensure any decision is appropriately informed of the facts. We would recommend that an appropriate technical repair expert be inserted into the QIS inspection process to carry out a parallel, proper technical assessment of the standard of repair. We would be happy to recommend an independent technical expert.

14. As noted above the NMVTRC does not support the New South Wales model. The NMVTRC's analysis is that while vehicle crime rates in NSW are below 2010 levels, a range of other factors such as the reform of criminal offences for related crime, better police responses and better regulation of the scrap metal and parts markets have made a significant contribution. The matched reduction in the theft of vehicles more than 15 years old (and therefore outside the operation of the re-registration ban) is evidence that there are a broad range of factors that have contributed to the improved position in the State. The NMVTRC's latest theft data for 2020 indicates that some 2,150 vehicles stolen in NSW remain unrecovered, which is still the second highest volume nationally, behind Victoria (2,770).

In comparison with other states, Queensland could improve its RWO inspection model by elevating the standard of repair requirement to be equivalent to the identification element. It could achieve this by requiring the party presenting an RWO for re-registration to demonstrate that—

- all work has been undertaken by a competent, qualified repairer using appropriate equipment;
- the vehicle manufacturer's specified method of repair has been strictly observed; and
- appropriate quality recycled or OEM replacement parts have been used.

15. We have no data to form a view of the benefits or otherwise of annual inspection schemes.
16. See 13 and 14 above.
17. The estimates provided in the QPU submission as to the costs of a trial of a GI device grossly underestimate the cost by a factor of 5. As per 12 above, the installed cost of the GI is between \$700 and \$1,000 depending on the type of vehicle. The cost of the mooted trial would therefore be closer to \$27m.