Chief Technical Officer's Meeting
Thursday, 28th February, 2019, @ 10.00 am

National Transport Commission
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Melbourne, 3000 Victoria

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Item 1: Welcome, Competition and Consumer Act Statement, Introductions, call for apologies:

TIC's CTO reminds all attendees of their obligations during the course of today's meeting under the Competition and Consumer Act 2010.

Consumer statement: ***All attendees are reminded that there will be no discussion of pricing, stock levels, forward model or product plans, etc, at TIC meetings.***

Item 2: Minutes of CTO Meeting 15th November 2018 (Melbourne):

- **Acceptance**
- **Actions arising from previous meeting Minutes**

2a. NEVDIS In-Service Truck Registration Data:

Historical recap:

ARTSA have access to VIN specific heavy vehicle NEVDIS data for trucks, buses and heavy trailers.
Third Party supplier, BigData, are not responding to TIC calls or emails, January 2018.
Issue was elevated to TIC CEO in March 2018 and an alternative source of NEVDIS information was investigated in April 2018.
TIC entered into discussions with another (the second) organisation to gain access to NEVDIS In-Service Truck Registration Data, in July 2018.
The alternate provider is having issues with the accuracy of the data supplied by NEVDIS however progress continues, October 2018.

February 2019 update:

- TIC has been unable to progress with an agreement with the alternative provider (the second organisation TIC has dealt with).

- In early December 2018 TIC started up discussions with yet another NEVDIS data provider (a third organisation!) after an introduction facilitated by the FCAI.
- "Organisation 3" has confirmed with NEVDIS and TIC that they can provide the data set that TIC has requested and pricing discussions for that data are currently underway.
- Pricing will be "per VIN/truck".
- There are approximately 650,000 registered trucks above 3.5t GVM in Australia.
- TIC has been offered three data captures:
  - Monthly (12 times/year), the cheapest rate per VIN/truck
  - Quarterly (4 time/year), ARTSA get information quarterly
  - Yearly, the most expensive rate per VIN/truck
- If we ASSUME that Brand "I" has 100,000 registered trucks out there and the price is $1.00/VIN, that is $100,000 for a SINGLE Yearly data capture, or $1,200,000 for 12 x MONTHLY data captures.
- Note: Brand "I" would only have access to Brand "I" data and NOT Brand "H" data, etc.

- Which of the three data capture options above would be the CTO's preference?

2b. OICA "anti-trust" document:

Historical recap:

In early 2018 OICA developed an "anti-trust" document that details expected behaviour of member companies at its industry meetings in Europe and around the world.
Some OICA members requested, in October 2018, that OICA obtain legal advice to determine the validity of the "anti-trust" document in all EU countries. TIC have held off gaining legal advice in Australia until the OICA document has gained EU legal "blessing".

February 2019 update:

- The OICA Executive approved the "anti-trust" document at their February 2019 General Assembly meeting.
- TIC will now obtain Australian legal advice on this document and any "tweaks" that might be required for its use in Australia.
- Thought is that TIC members would have to acknowledge the document in their acceptance of a TIC meeting invitation.

2c. Potential safety issues associated with Kobe Steel products:

Historical recap:

At the November 2017 SVSEG meeting, TfNSW asked industry groups if the Kobe Steel announcement (that they had been falsifying material specs) would affect any vehicles in Australia. SVSEG Chair ask industry groups to follow up on this issue. TIC CTO asked TIC Members at March 2018 CTO's meeting if their Brands are affected in any way? At the May CTO's meeting TIC CTO detailed that he had received no response from any TIC Members and again asked for Members to consult with their parent organisations and/or suppliers of steel components, to ask if the Kobe Steel issue affects any of their Australia products.

By November 2018 TIC CTO had received replies from 5 TIC member Brands, only 11 Brands to go!

February 2019 update:

The following TIC members HAVE provided feedback:

- Navistar (International and CAT)
- Scania
- PACCAR (Kenworth, DAF)
- Mack, UD and Volvo

- Isuzu
- Nothing but silence from the other Brands……

2d. DIRDC's future HV safety strategy:

Historical recap:

DIRDC drafted a new version of the National Road Safety Action Plan 2018-2020 for approval by Ministers at COAG TIC in late May 2018. Heavy Vehicle actions included:

- AEBS for Heavy Vehicles
- Review alignment with international HV Mass and Dimension regulations. This is based on the TIC lead, industry presentation "Removing Barriers" to SVSEG on 22nd November 2017.
- New Safety Technologies Information Program (all road vehicles).
- Vulnerable Road Users and Heavy Vehicle Interactions Near Construction Sites

COAG TIC voted to accept the draft National Road Safety Action Plan 2018-2020 in late May 2018. For details, refer to http://roadsafety.gov.au/action-plan/2018-2020/

DIRDC detailed at TLG (7th November 2018) that:

- DIRDC were undertaking a literacy search of global dimension and mass regulations – TIC has supplied some initial data.

- DIRDC is supporting an Austroads project reviewing the impact of increasing maximum vehicle width requirements in Australia (safety, economic, etc) – TIC has supplied some initial cost data.
- DIRDC to await the release of the Austroads report before developing recommendations for COAG TIC.
- A RIS should not be required as dimension and mass changes would be a reduction in stringency.

TfNSW and NSW-RMS have done a policy "backflip", announcing on 2nd October 2018 that they will allow 2.55m wide buses on selected routes, effectively immediately.

<u>February 2019 update:</u>

- The above detailed actions are continuing.
- TIC CTO attended an Austroads Heavy Vehicle Freight Vehicle Dimensions Review Workshop yesterday, 27th February 2019, which is part of the Austroads Project NEF6116: Exploration of Heavy Freight Vehicle Dimensions: Productivity, Safety and Other Considerations. Workshop outcomes were:
  - WPS (consultants to Austroads) and Austroads revealed the results of their 2.55m Vehicle Width Survey (TIC responded, as did all States and Territories and Transport operator groups such as NatRoads and the ATA), headline results were:

- 74% of respondents favoured a move to 2.55m (61% believed it would lead to productivity benefits and 53% believed that safety benefits would be realised)
- 26% were against a move beyond 2.5m (86% has safety concerns and 29% were concerned that it would negatively impact on Australian manufacturers [trailers])

➢ Detailed survey results will not be published, but used in compiling the Austroads 2.55m Vehicle Width Recommendations Report.

➢ Austroads/DIRDC (Steven Hoy) outlined the "next steps" timeline:

- Austroads (and WPS) to liaise with their stakeholders (road authorities and road owners)
- Summary Report to be given to DIRDC in mid-September 2019
- Final Report to be given to Austroads stakeholders and DIRDC on the 18th October 2019
- Neither the Summary, nor Final, Reports will be made public (Austroads however indicated that they may reconsider this restriction, given the level of interest shown by the broader transport industry)
- DIRDC will develop a Vehicle Width Discussion Paper planned for release in Q1 2020
- After Discussion Paper public consultation, DIRDC will develop and release a Vehicle Width RIS planned for Q3 2020

- After RIS public consultation, DIRDC will develop changes to the ADR and revised Vehicle Width could be approved (law) by the end of 2020

2e. The Takata SRS Air Bar Recall:

Historical recap:

On the 28th Feb 2018 the ACCC made the Takata air bag recall "compulsory". With all OEM's given until the December 31st 2020 to complete the recall.

This is the first ever compulsory automotive recall in Australia.

Two TIC Members (3 Brands) are affected.

CEO's of effected Brands stated at the March 2018 CEO's meeting that they would have their effected trucks rectified well before the December 31st 2020 deadline set by the ACCC.

The ACCC is the sole management authority for this compulsory recall and will continue to manage this recall even after the RVSA recall provisions are enacted.

The Takata Corporation has been sold and has a new name. This new company name MUST be used on all new RVCS forms/applications, otherwise they will be rejected. Takata make other products such as seat belts, ALL their products require the new name, Joyson Safety Systems on new RVCS forms.

TIC raised the issue that some TIC members were experiencing "communication issues" with the ACCC over the recognition and posting of "truck" recalls with DIRDC. DIRDC feedback was that the ACCC has and will continue to give preferential treatment to "consumer goods" recalls. TIC members should allow up to one month for ACCC action on "non-consumer goods" recall requests. If no action after that, raise the issue with TIC CTO/TO.

February 2019 update:

- No further TIC member feedback has been received regarding the Takata recall.
- There are now four States (SA, QLD, ACT and TAS) that have implemented a registration probation for vehicles with un-rectified 'alpha' Takata airbags. This action probably won't assist TIC members as they don't have vehicles fitted with Alpha air bags. The Alpha bag inflators are a small subset of the total mandatory recall, about 7,800 of the over 1 million outstanding vehicles. The majority are Beta airbags and not yet subject to State or Territory registration prohibition.
- Issue Closed (pending any future activity/issues arising).

2f. ANCAP Testing and Star Ratings for Heavy Vehicles (no discussion outside TIC please):

Historical recap:

April 2018 SVSEG meeting, ANCAP detailed that were investigating the possibility of extending their testing and safety star rating system to trucks. Detailed by Mark Tyrrell (ANCAP Technical Director) as likely to be non-destructive performance testing and rating of HV safety systems such as AEBS, LKAS, etc. James Goodwin (ANCAP Chief Executive) was quoted as saying, in June 2018, that ANCAP were investigating crash statistics to determine if crash testing of trucks in the 3.5t to 4.5t GVM range should be considered.

TIC CEO, CTO and CO met with TfNSW in September 2018 to discuss a number of heavy vehicle safety issues. At that meeting TfNSW clarified that the 80% increase in deaths and serious injuries from vehicle crashes was in the NA vehicle segment, up to 3.5t GVM and NOT in the for 3.5t to 4.5t GVM (NB1) range. ANCAP would struggle to justify crash testing of NB1, or higher GVM, trucks.

February 2019 update:

- TIC was made aware of approaches made to Isuzu by ANCAP on 22nd February 2019 requesting specific information about the availability (Standard Fitment/Option/Not Available) of a series of advanced (beyond ADR mandation) safety features/systems.
- TIC informed all TIC members of this ANCAP action and requested that:

- TIC members not reply to ANCAP until after discussions at today's CTO's meeting
- TIC members inform TIC CTO if they receive a formal request for information from ANCAP

- What we know thus far:
  - Fuso, Hino, Isuzu, MAN and Mercedes Benz have been approached by ANCAP. Why not others?
  - FCAI are unaware of Ateco (RAM), Fiat, Ford, M-B (Sprinter), Renault and VW being contacted by ANCAP, BUT they may have been contacted.
  - Request information varies, LD only for some Brands, LD and MD for others. Does ANCAP really know what they want? Or are they "fishing" to see what information Brands give up?
  - ANCAP wish to develop a safety star rating (will not involve crash testing of trucks).
  - ANCAP wish to test (non-destructive testing) and rate these safety systems.
  - ANCAP have not contacted the NHVR to discuss this issue or their intent.
  - ANCAP's requests for information have no legal or government mandate/standing

- ANCAP will start with LD (and possibly MD) trucks, but will likely extend this to HD trucks in time.
- What are individual TIC member's views on giving out the requested information?

The FCAI/Light Vehicle ANCAP experience:

- Light vehicle OEM's and the FCAI strongly opposed the ANCAP safety rating system (derived from crash testing and safety feature comparison and now, non-destructive system testing).
- Basically, they lost that battle. ANCAP rating is now a (the?) key purchasing factor for a light vehicle (particularly for Fleet and Government purchases).
- FCAI now have little involvement with ANCAP. FCAI policy is to allow their members to liaise directly with ANCAP. At times the FCAI has played a "co-ordinating" role for its members with ANCAP, particularly with the introduction timing of new ANCAP testing.

Where to from here for TIC and TIC members? TIC suggests that TIC Members:

- Write back to ANCAP and ask what are ANCAP's intentions in collecting this data?

- What is the specific GVM range of the vehicles they are seeking information for (LD and MD is simply too vague)?
- Discuss this issue internally with your senior management team/s and brief your TIC CEO representative.
- Armed with answers to the above from ANCAP, send you CEO/representative to the 13th March 2019 TIC Council meeting, at which TIC and TIC members can form an "ANCAP policy position".

2g. Partially Completed Vehicles (PCV) Notice:

Historical recap:

The NHVR released their Partially Completed Vehicles (PCV) Notice in mid July 2018 after some consultation with 2 x QLD TIC Members and limited discussions with TIC.

Notice # C2018G00461 applying in ACT, NSW, Qld, SA, Tas, and Vic, refer to:

https://www.nhvr.gov.au/law-policies/notices-and-permit-based-schemes/national-notices

The NHVR admitted that there was a disconnect between the information that they received from jurisdictions and what actually happens currently when a PCV is driven on a public road.

NHVR provided a formal response in October 2018 to the PCV Notice issues/concerns raised by TIC in our email of 24th July 2018. The response addressed a number of the issues, however some remain outstanding, including:

Road testing of new vehicles requires the fitment of the entire vertical exhaust system (if applicable), for a simple, few kilometers drive. NHVR claims that this was included due to "concerns" stated by VGA (who were contact directly by the NHVR). Despite repeated request by TIC CTO for those "concerns" to be detailed by the NHVR, they have not provided any explanation, in over 6 months.

The details required in an OEM Letter of Compliance (LoC):

- Should the LoC be VIN specific (a letter per truck)?
- Should the LoC be carried with the vehicle?

What responsibilities does the driver of a PCV have?

What level of OEM evidence is required for Risk Mitigation Measures?

The NHVR are proposing 3 individual documents that will collectively detail the requirements of a PCV movement:

- PCV Notice (NHVR)
- PCV Operators Guide (NHVR)
- PVC Industry Guideline (Industry – TIC developed)

TIC believes that 3 documents is simply too many and has proposed just 2 documents.

<u>February 2019 update:</u>

- TIC and NHVR PCV Notice discussions are ongoing.
- The Notice will continue to evolve to cover other vehicle movements to be undertaken by OEM's (or under OEM direct control), including for test and evaluation vehicles, plus some non-ADR compliant trucks being moved for export.
- Are any TIC members experiencing any issues moving PCV's?
- TIC plan to close this issue (pending any future activity/issues arising). Objections?

Other Actions Arising:
Will be dealt with during the course of today's meeting.

Item 3: SVSEG and TLG Update:

SVSEG:

Last SVSEG meeting was held on the 6th December 2018 in Canberra, TIC was represented by Mark H and Chris L.

Issues relating to Heavy Vehicles were:

- ADR61 Vehicle Markings and fitment of Vehicle Plate: DIRDC detailed that some States and Territories have objected to the removal of the Vehicle Plate on NC category trucks. TIC continued to argue that the Vehicle Plate was redundant once the RAV commenced. TIC's position was supported by the NHVR and DIRDC. More on this in Item 6 today.

- DIRDC to discuss with the Australian Competition and Consumer Commission (ACCC) the possibility of banning advertising of speed limiter and emissions control defeat devices. The NHVR advised SVSEG that the HVNL now has a $10K penalty for "possession of" a device that can tamper with a speed limiter, or engine emissions. NHVR have not used this power as yet but are exploring how this could be enforced.

- Electric Vehicles: TIC CTO raised the issue of a potential increase in GVM to 6.0t (same as NZ) for a Car Driver's License to offset the additional mass of a LD electric truck (this had been requested by one specific TIC member). TIC was advised that the request would need to be

made to the Austroads Licensing Taskforce. ACT suggested that a review of Driver License GVM could result in a move down to 3.5t GVM. TIC will NOT pursue this issue.

- Euro update: DIRDC detailed that the UN-ECE Working Party 29 are developing a new regulation for Blind Spot Detection for heavy vehicles. No timeframe was given. (*TIC note: TIC understands from OICA that the intent is to have a "performance based" regulation in place by 2021. UK were pushing for a prescriptive regulation for set-forward and low cabs only, this was rejected by other EU countries*).
- Vehicle Width >2.5m: Now part of the National Road Safety Action Plan 2018-2020. Austroads have been commissioned to review all potential impacts of increasing vehicle width beyond 2.5m. Project NEF6116: Exploration of Heavy Freight Vehicle Dimensions: Productivity, Safety and Other Considerations. Update given on this project in Item 2d today. DIRDC awaiting the findings of the Project before considering next move/s.
- **Next SVSEG meeting: TBA, possibly May 2019**, but dependant on Federal Election. TIC to give an update at the May or August 2019 CTO's meeting.

TLG:

Last TLG meeting was held on the 7th November 2018 in Canberra. TIC was represented by Mark H and Chris L. Update was provided at November 2018 CTO meeting in Melbourne.

- **Next TLG meeting: TBA, likely to be early in quarter two 2019.** TIC expects to be able to provide an update to TIC members at the 1st May 2019 CTO meeting in Canberra.

TIC TLG Discussion Papers:

- Twin steer axle separation to be increase beyond 2m NHVR is currently undertaking infrastructure assessment modelling.
- Removal of the 825kPa tyre inflation pressure limitation.
  An addendum covering off additional points raised to be submitted by the end of 1st qtr.
- Retractable axles lift points/rear overhang issues.
  Project is to become part of a broader review of vehicles dimensions.
- Higher available axle rating for Ultra-Wide Load Base tyres
  Grant funding package is being developed to provide funds for testing and targeted to be submitted by the end of 1st qtr.

Item 4: Euro VI and equivalents (ADR80/04), Emission Standards, Fuel Standards and TIC's official position on introduction timing as decided by TIC CEO's Nov 2018:

Historical recap:

In June 2018 DIRDC released its findings and action plan following consideration of submissions received for the Fuel Quality RIS:

- Implement a voluntary monitoring plan for all grades of Petrol wholesaled in Australia 2019 to 2022 inclusive.
- Review the results of the voluntary monitoring plan and develop a RIS for upgrading of Australian Petrol fuel standards in 2023. Develop new fuel standards by late 2023 with a 3 year introduction timeframe to allow local refineries to upgrade their facilities and infrastructure.
- This would allow the introduction of Euro 6 and ADR80/04 starting from 2027

TIC and the FCAI believe that maintaining a common timeline for the introduction of Light and Heavy Vehicle Euro 6 and ADR80/04 is unrealistic.

Current Position (based on CTO feedback) November 2018:

- There is NO united TIC position. 4 Brands are opposing a move to Euro VI (and equivalents). Other TIC members are split between adoption of Euro VI Step "b" or "c" (and equivalents).

- FCAI position for NB1 and NB2 is Euro VI Step "b" only, NOT Step "c" (they don't objection to equivalent standards, probably won't oppose an alternative standard being used for NC category vehicles).
- Australian ADR categories don't align with Euro categories (Euro N1 = ADR NA, **Euro N2 = ADR NB1 + NB2** and Euro N3 = ADR NC). This substantially complicates the issue of using different versions of the Euro VI standard for different ADR categories.
- Euro VI Step "c" is currently in a state of "flux" in Europe and the Real Drive On-Road Test is being reviewed/revised. Regulation clarification not due until end of 2019.
- DIRDC are not interested in discussing technical issues that are unique to Australia, such as higher GCM's, different differential ratios and different engine ratings. They have a timeline approved by the Government and see no reason for Euro VI (and equivalents) discussion.
- Absolutely no interest or appetite within any part of the current Government for a move to Euro VI.

<u>February 2019 update:</u>

The following policy options were posed to TIC CEO's at the 29th November 2018 Council Meeting in Canberra:

1. Do nothing (work to Government's detailed timeline, 2027 introduction).

2. Align with FCAI's suggestion and push for the early introduction of Euro VI Step "b", NOT Step "c" (and equivalents), does not have unanimous TIC member support.
3. "Go it alone" with a push for Euro VI Step "c", or some hybrid Step "b"/Step "c" introduction (with equivalents), does not have unanimous TIC member support, nor FCAI support.
4. Review TIC position post 2019 federal election.

Drum roll please……. and the winner is……

Option 2. Align with FCAI's suggestion and push for the early introduction of Euro VI Step "b", NOT Step "c" (and equivalents).

TIC Note: Step "c" would of course be an option for OEM's.

- TIC has taken this position to both the federal Government and Opposition and has received positive feedback that both sides of government would consider "splitting" Light and Heavy Euro 6/VI introduction. With the possibility that Euro VI and equivalents could be introduced for NEW Models from 1st November 2022 and ALL models 1st January 2024.

Item 5: NTC VS-MAG and HVNL-MAG meeting (25th February 2019) issues, outcomes and discussion:

1) Amendments are currently underway to HVNL/ALVSRs in order that they align and support the introduction of RVSA. Drafting finalised and lodged 1st February 2019.
COAG TIC/TISOC - target approval out of sessions by 23rdMarch 2019.

2) Engine Brake Noise Standard:
   Requirement is a Ministerial directive. Test to finalised by mid-year for review at the next VS-MAG.
   Concern that the test procedure is not appropriate for an operator or dealer to undertake ***reasonable steps approach*** to compliance/CoR.
   Note: the motor bike stationary test standard is also currently being reviewed.

3) Length exemption for Class VI forward look down mirrors:
   Issue: Coroner's inquest into death of cyclist Meyer 11th Sept 2014, a Dutch tourist killed in a Brisbane CBD crash involving a conventional truck and dog trailer with "restricted forward visibility". Request an additional 150mm in length to allow for optional Class VI mirrors.
   ADR amendment is underway to reflect UN ECE exemption.
   Proposal: broaden to reflect all indirect vision devices and develop in-service requirement in parallel with the development of the ADR requirements.

Item 6: Road Vehicle Standards Act (RVSA):

Historical recap:

The first Road Vehicles Recalls Working Group and Type Approvals Consultation Group meetings were held in Canberra on 10th August 2018, TIC was represented by Barry Noble, Steve Ghaly, Chris Loose and Mark Hammond:

- Fair to say that the Department were not that well prepared.
- FCAI and TIC raised issues about the RAV and the lack of action and consultation by DIRDC.
- Participants were told by DIRDC that under the RVSA road vehicle manufacturers and importers (IPA and Concession Vehicle Approval holders) would submit their recall requests/actions via DIRDC, not the ACCC. It is hoped that this will significantly improve the response times for "commercial vehicle" recalls.

February 2019 update:

Second meetings for the:

- Road Vehicles Recalls Working Group
- Type Approvals Consultation Group

And first meetings for the:

- RVSA Tools Consultation Group
- RVSA Concessional RAV Pathway Consultation Group

Were held on 21st and 22nd November 2018 in Melbourne. Barry N, Steve G, Chris L and Mark H represented TIC:

- DIRDC were better prepared than in the August 2018 meetings (just)
- Lots of questions and issues from industry, not too many answers from DIRDC!
- General TIC/FCAI feeling was that DIRDC have a LOT of work to do, to implement the RVSA

Vehicle Recalls: (Chris L)

- ACL is not being amended and for light vehicles, ACCC will still need to be advised of a recall under the RVSA. DIRDC to work out how to facilitate this action for RVSA users.
- Draft Recall CoP was provided to DRIDC for comment, it basically parallels FCAI's version.
- Joint TIC/FCAI meeting was held 22 February.
  DIRDC is generally supportive of draft. Rules have now been issued and DIRDC supportive material to be published July.

- Issues to be addressed:
  - Any mandatory or compulsory recall will be undertaken inline with detailed guidance and requirements provided by DIRDC and the TIC CoP cannot be relied upon.
  - Vehicle Registering Authorities (ilo NEVDIS) are being further investigated to improve quality of contract details, including mobile/addresses/email contracts.
  - Scope of recall CoP is, on-road vehicles and OEM accessories fitted at the time of delivery.
  - Heads up provisions for Infrastructure and NHVR to be clarified.

The RVSA Act received parliamentary approval in early December 2018 and **Royal Assent on the 10th December 2018**. RVSA introduction timeline is:

- 10th December 2018 Royal Assent granted
- 10th December 2019 RVSA Act commences (beginning of NEW DIRDC Recall powers AND beginning of the 6 month "opt in" period for the RVSA. During the "opt in" period all valid MVSA IPA's can be transferred to the RVSA by completing a Declaration Form, that essentially details that the IPA is "up to date" and that the IPA holder has "control" over the vehicle design, certification and manufacturing processes, either directly or via a legal agreement with the vehicle manufacturer). From the date that an IPA is transferred to the RVSA you MUST upload vehicle details to the RAV and an Identification/ Compliance Plate can NOT be fitted.
- 9th June 2020 the LAST day of the "opt in" period for the RVSA (from the 10th June 2020 any MVSA IPA transferred to the RVSA will be treated as a NEW submission/approval). *TIC tip: DON'T leave your "opt in" to the last minute!!*

- 9th December 2020 last day of the MVSA (the LAST day a MVSA IPA is valid and the last day that an Identification/Compliance Plate can be fitted to a vehicle)

TIC CTO and Steve Ghaly (Daimler) attended an FCAI/DIRDC/NEVDIS Register of Automotive Vehicles (RAV) forum on 7th February 2019 where:

- The latest changes to the RAV Data Fields (to be updated in RAV Guide V3)
- The latest updates to the NEVDIS RAV system were discussed, including upload procedures, limits and upload error messages/notifications and IT requirements
- Timelines were set for the circulation by DIRDC of the RAV Guide V3 and Stage 2 of RAV testing (now scheduled for early April 2019)
- DIRDC also committed to contacting all current IPA holders to invite them to register for a RAV submitters license/log-in

On 26th February 2019 the Road Vehicle Standards Rules 2019 (the "Rules") were released by DIRDC after approval by Minister Michael McCormack (13th Feb 2019). The Rules are now available on the Federal Register of Legislation and on the DIRDC Road Vehicle Standards legislation webpage. The new Road Vehicle Standards Rules 2019 webpage also provides

links to two documents prepared by DIRDC that will assist stakeholders in understanding the difference between the exposure draft and the latest version of the Rules.

Next series of RVSA forum meeting are to be held on 27th and 28th March 2019 in Sydney. Barry N, Steve G, Chris L and Mark H will represent TIC:

- Road Vehicles Recalls Working Group
- Type Approvals Consultation Group
- RVSA Tools Consultation Group
- RVSA Concessional RAV Pathway Consultation Group

It has been promised by DIRDC that "they will come to this series of meetings with all the answers". TIC CTO remains sceptical!! TIC does hope to have a much better understanding of the RVSA issues after these meetings.

Given the significant changes between the MVSA and the RVSA, detailed transition requirements and the pending introduction of the RAV and new IT system requirements, TIC is proposing to hold a one-day TIC RVSA Workshop and proposes a date AFTER the next round of RVSA forum meetings in late March 2019 and BEFORE the commencement of Stage 2 RAV testing in mid-April 2019. Suggested attendees are:

- IPA/ADR certification persons
- VIN data uploaders and logistic persons (handle Identification/Compliance Plates, etc)
- IT Systems persons

Good idea?
Proposed dates: April 3rd, 4th, 5th, **8th, 11th**, 12th – 2019. **Email TIC CTO by 7th March 2019**
Location and Venue: Melbourne? TIC member's offices, or near Airport?

Item 7: DIRDC RVCS Discussion Forum:

- Next meeting is on the 20th March 2019 in Melbourne.
- TIC is to be represented by Chris Loose (TIC), Barry Noble (Hino), Steven Ghaly (Daimler), Lawrence Lee (Scania), Charith Arunachalam (VGA) and Steven Plumridge (PACCAR) and possibly Mark H (TIC).
- TIC requires your RVCS issues, problems, feedback, etc. for this meeting, however, no feedback has been received to date from TIC members. Previous member feedback in this area has proven to be poor or problematic. Frequently problems have been found to lay with TIC members (RVCS users) and not necessarily with DIRDC or the RVCS system.
- Please provide details of any RVCS issues by Friday 8th March for inclusion.
- ASAHI GLASS CO. LTD changing their name to AGC Inc. (and changing existing Test Reports and Test Facility Numbers). Same procedure as Takata Co. name change applies. **TIC CTO to circulate DIRDC's clarification/adjudication to TIC Members.**

Would TIC members be interested in a half RVCS/ADR compliance workshop in Canberra on the 30th April (mid-morning to mid/late afternoon, before the CTO dinner) to investigate this area with DIRDC homologation staff, TIC staff and other TIC members?

Item 8: TIC Submissions:

8a) NTC's Safety Assurance System Automated Vehicle Regulations

Historical recap:

The State and Territory Ministers goal is to have "end-to-end regulation in place by 2020 to support the safe, commercial deployment and operation of Automated Vehicles (AV) at all levels of automation" and the NTC is working to deliver this request.

The NTC has to date released five guideline papers that support the introduction of Autonomous Vehicles and/or AV Trials in Australia

The NTC released their "Safety Assurance for Automated Vehicles Regulation Impact Statement" in April 2018 which detailed four regulatory reform options:

- Option 1: Current approach, uses the existing regulatory processes to manage the safety of automated vehicles.
- Option 2: Administrative safety assurance system (SAS); introduces a SAS using administrative arrangements under the existing regulation (ADR's). It requires an Automated Driving System Entity (ADSE) to self-certify against principles-based safety criteria where there is a "short fall" in AV regulations.

- Option 3: Legislative safety assurance system; introduces a SAS with a (new) dedicated national agency for automated vehicle safety, with specific offences and compliance and enforcement tools.
- Option 4: Legislative safety assurance system with a primary safety duty; in addition to the elements of Option 3, includes a primary safety duty (laws) on ADSE's.

The NTC's Autonomous Vehicle Safety Assurance Regulation RIS is not a typical government RIS, in that it makes unsubstantiated claims and assumptions, as well as not providing a cost-to-benefit analysis of each of the four options. The document was in reality a Discussion Paper, not a RIS.
TIC worked closely with the FCAI in developing a response to the SAS RIS.
The whole document was closely aligned and based on the voluntary (non-legislative) autonomous vehicle safety assurance system that has been deployed by various States in the USA. The key recommendations do not align with the direction that European regulators are taking for the control of autonomous vehicles. This is a key failing of the NTC's document, given that Australia is bound by international agreements to align with UN-ECE vehicle regulations.
The NTC's preference is for a Legislative Safety Assurance System with a Primary Safety Duty (Option 4 above). Such a system would make an organisation (likely the OEM) legally responsible for the life of the AV when it is operating in Autonomous Mode. TIC and the FCAI oppose this position.

The NTC's Autonomous Vehicle Safety Assurance Regulation RIS failed to differentiate between new vehicle approval/compliance and in-service/whole-of-life issues/responsibilities. The RIS concentrated on the former issue (new vehicle certification).

<u>February 2019 update:</u>

- Supply to Market: COAG TIC confirmed in late November 2018 that the current Australian Design Rule (ADR) system/process is to be kept for certifying new Autonomous Vehicles and Autonomous Vehicle Systems (Option 1 above). This was TIC and the FCAI's preferred option.
- In-Service: COAG TIC instructed the NTC to further review the In-Service Assurance Regulation issues and better justify the NTC's recommended position (Option 4 above), or provide an alternate proposal to COAG TIC. TIC and the FCAI did not support the NTC's recommendation of Option 4. Timeline TBA, but won't happen for March 2019 COAG TIC meeting.

8b) Developing Technology-Neutral Laws for Driver Distraction – Issues Paper

- The NTC released their "Developing Technology-Neutral Laws for Driver Distraction" Issues Paper" in December 2018. The paper reviewed the following regulatory issues:
  - Current driver distraction laws are very prescriptive and not technology "neutral".
  - No current definitions in Australian driving laws for "the driving task" and "driver distraction"! The NTC Paper proposes definitions.
  - How can road rules be developed that reduce, or prevent, driver distraction, that are agnostic to technology?
- TIC discussed our submission to the Issues Paper with the FCAI.
- TIC provided a submission that included:
  - A revised proposal for the definition of "the driving task" that recognises that the driver is responsible for "appropriate speed of the vehicle" and "self-monitoring of fitness to drive" (health, fatigue, etc).

- Commented on technologies that "assist" the driver and others that "distract" the driver. Pointing out that vehicle OEM's spend enormous amounts of money to develop better human/machine interfaces and reduce driver distraction, all of which can be undone by use of a personal device, or fitment of some untested piece of technology within the driver's environment.

- NTC to provide an update of this issue in Item 11 today.

Item 9: DIRDC Issues, update and discussion:

9a) DIRDC staff changes:

There have been some recent staffing changes in Vehicle Safety Standards Branch.
Sue Tucker has taken up another opportunity in the Department and **Rob Bradley** is the new **Senior Director & Vehicle Standards and Operations Manager**. Rob will work closely with other Directors and oversee the ongoing vehicle standards development program and regulatory operations of VSS under the Motor Vehicle Standards Act. Rob can be contacted at: Robert.Bradley@infrastructure.gov.au or (02) 6274 8049.

Thomas Belcher, who was previously was acting as Section Head Standards Review and Maintenance, has moved back to New Standards Development under Steven Hoy.

Stephen Spencer has now moved into the position of **Director, Standards Review and Maintenance** on an ongoing basis. Stephen brings a wealth of experience as a long standing member of VSS to his new role. Stephen can be contacted at: Stephen.Spencer@infractructure.gov.au or (02) 6274 7430.

9b) HV Brake Strategy - ADR35/06 ESC circular:

TIC member feedback along with Wabco and Knorr has been provided to DIRDC.
The final version of the Circular is expected to be released shortly.

9c) HV Brake Strategy - ADR35/07 AEBS ADR development:

Historical recap:

ADR35/07 (AEBS) RIS is progressing:

- TIC has now provided AEBS fitment rates for in-service vehicles (with a few exceptions where TIC members did not provide details).
- AEBS for HV is based on ECE-R131 with an active speed range from 15 km/h to 100 km/h.
- AEBS "off" switch allowed in ECE-R131 (must have Ignition key reset function).
- DIRDC plan to release RIS in early 2019.

DIRDC had hoped to have the ADR completed and approved (law) by May 2019.

February 2019 update:

- Project is now led by Andrew Dankers, who has recently had significant medical leave (2 months) and is currently working part time.

- DIRDC note that the above timing is challenging! Hopefully will be approved (law) by December 2019.
- A draft ***Potential Benefits of AEBS (LV/HV)*** was received mid-February 2019 from MUARC to allow the development of the cost/benefits ratios for the various vehicle subgroups.
- Heavy vehicles are the priority and aiming for the RIS to be released 1st half of 2019.
- TIC Update #47 DIRDC's advised the focus is still on AEBS for heavy vehicles in Australia. The United Nations (UN) recently announced that a regulation for Autonomous Emergency Braking (AEB) for light vehicles has been agreed to by 40 countries, including Australia. This does NOT mean that light vehicle AEB will be universally applied (mandated) in all 40 of those countries.
- Light vehicle AEBS in Australia will apply at a time yet to be determined.

9d) TIC's has had informal discussion with DIRDC on the following:

- **4.5t GVM break point definition clarity/consistency**

HVNL covers vehicles with a GVM more than 4,500kg
ARR200: HV is 4,500kg and greater. But a change has been drafted.
Issue: In which class does the breakpoint lay? It is not 100% clear. DIRDC has provided guidance and there is no issue operating within the ADR world, but elsewhere issues occur!

From ADR Definitions and Vehicle Categories:

4.5.5. LIGHT GOODS VEHICLE (NA)
A goods vehicle with a Gross Vehicle Mass not exceeding 3.5 tonnes.

4.5.6. MEDIUM GOODS VEHICLE (NB)
A goods vehicle with a Gross Vehicle Mass exceeding 3.5 tonnes but not exceeding 12.0 tonnes.

4.5.7. HEAVY GOODS VEHICLE (NC)
A goods vehicle with a Gross Vehicle Mass exceeding 12.0 tonne

The above is based on UN ECE wording.

5.7. Medium Goods Vehicle (NB)
NB1 over 3.5 tonnes, up to 4.5 tonnes 'GVM'
NB2 over 4.5 tonnes, up to 12 tonnes 'GVM'

By clarifying these break points within the ADR's, it is hoped that will provide a precedence for the issues to be resolved in other areas.

- **ADR42 and exhaust outlets proposed wording**

TIC has proposed new ADR42 wording for exhaust outlets for trucks, this is based on the current ADR text for buses. This rewording was at the request of DIRDC/TLG.

24.4. N Category vehicles
24.4.1. Except in the case of vertical exhaust systems, the exhaust outlet must discharge at a height of less than 750mm above the ground and must not extend beyond the perimeter of the vehicle when viewed in plan. The direction of discharge must be horizontal or below and not forward. It is not permissible for the exhaust outlet to discharge beyond the left hand perimeter of the vehicle.

24.4.2. When the exhaust outlet is vertical, it must be located behind the rearmost seating position and the lower edge of the discharge orifice must be above the maximum height of the cab. Discharge can be either vertically upwards or rearwards at any angle above the horizontal.

24.4.3 Any exposed section of an exhaust system, excluding the discharge pipe if located below 750mm above the ground, must be shielded to prevent accidental personal contact in areas where contact can occur during normal operating conditions.

TIC proposed this revised wording to DIRDC over 2 months ago. TIC was hoping for some initial feedback from DIRDC before discussing this issue with TIC members. However, as no formal feedback/comment has been received from DIRDC, TIC is seeking TIC member feedback.

Please review and send you comments/feedback to TIC CTO by mid-March 2019.

Item 10: National Heavy Vehicle Regulator (NHVR) Update:
10a) NHVR's Technical Working Group (TWG)

Historical recap

- Meeting was held in Brisbane 1st November 2018 and was attend by all HV truck industry associations (TIC, HVIA, ARTSA, ATA, CVIAA) as well as DIRDC.
- TIC was represented by Mark H and Chris L.
- BIC has declined to be involved.
- WA and NT jurisdictions are to be invited to the next meeting (for in-service consistency)

February 2019 update:

The planned February 2019 meeting has been delayed, pending alignment with the release of the Mr DuPont PBS tyre discussion paper, which is expected mid-March 2019.

The following is an "out of sessions" update on NHVR TWG Issue Papers:

TWG2-01 Type approval of modifications. Proposal from HVIA.
Proposal to allow appropriately supported items to be fitted by appropriately qualified persons negating the need to have an engineer inspection and sign-off.
Items proposal include Bull Bars/reversing automated braking/Automated Park Brake Application. General agreement. Target end 2019.
Item closed (pending any future activity).

TWG2-02 Draw bar certification – no details provided.
Proposal from HVIA. Target a draft VSG by end of the year.
Waiting on support material to be circulated.

TWG2-03 Issues with low loaders / dolly combinations. No details provided.
Proposal from ATA.
Waiting on support material to be circulated.

Update of key truck issues:

➢ National AVE Scheme

Historical recap:

The NHVR advised that this project has been put on hold due to push-back from some jurisdictions (who stand to lose significate federal government funding of their existing schemes). The NHVR has also identified legal and process issues with a national AVE scheme being "acknowledged" by States and Territories.

February 2019 update:

NHVR is implementing a skills assessment for each the VSB6 certification area.
Implementation of a National AVE Scheme is still expected to be a "few years away". TIC best guess is 5 years.
Item closed (pending any future activity).

➢ VSB11 RFS Review

Historical recap:

NHVR is to formally requested the material and responsibilities be transferred across to them. It is currently proposed Infrastructure would continue to host and issue the RFS certificates.
TMR's in-service compliance (eg shock absorber) testing project has been completed.
TMR report/feedback has not yet been published. NHVR will start VSB11 review after reviewing the TMR report.

February 2019 update:

Responsibilities for the document still lays with the NTC.
Planning to be on the 2019/20 NHVR work program.
Item closed (pending any future activity).

➢ VSB5 Manufacture and installation of additional seats

Historical recap:

VSB6 refers to VSB5 for replacement and new seat installations, however TfNSW recently updated VSB5 and noted its applicability as only NA, NB1, MA, MB and MC ADR classes. Situation is currently being reviewed at TLG. Currently there is no standard/guide for replacing or fitting seats in Heavy Vehicles.

February 2019 update:

VSB6 Section K Cabin version 3.1 contains adequate reference material and does not refer to VSB5.

"This section of Vehicle Standards Bulletin 6 (VSB6) relates to alterations to heavy vehicle cabins and outlines the minimum requirements when adding or removing seats, seatbelts, seat and seatbelt anchorages, installing child restraint anchorages, performing major cabin alterations, modifying cabin interiors and installing wheelchair occupant restraint systems."

Item closed (pending any future activity).

➢ Roadworthiness Inspection Framework

Historical recap:

The NHVR plans to use the data gathered to develop metrics for a Risk-based Roadworthiness Inspection framework. The NHVR also stated that they were not considering publishing such information based on State or Operator due to legal "implications". TIC rejected the concept of publishing truck Brand and Model information. This was backed by a strongly worded submission to the NHVR from TIC (31st January 2018), that amongst other points, questioned the statistical validity of the data gathered by the NHVR, primarily due to the limited sample size of vehicles inspected. TIC does support the concept of targeted roadworthiness inspections based on risk, however TIC does not support the public disclosure of truck Brand or Model data.

At the 9th April meeting, the NHVR has agreed to share a list of the available data fields, from which TIC could choose the data they would like to view. This was to happen by mid-April 2018.

The NHVR did advise TIC at our meeting that the Risk Based Roadworthiness Inspection Frame Work Project would not proceed as originally suggested form due to "push back" from industry and jurisdictions. The NHVR has now also conceded that they do not have sufficient data to support their original plans. NHVR has conditionally agreed to share a limited data set.

February 2019 update:

Waiting for NHVR to provide a deed of release for the data, which is expected shortly.

➢ VSB14 Light Vehicle Modifications (GVM < 4,500 kg)

Historical recap:

Proposal has been submitted to allow under VSB14, chassis-based vehicles can be modified via VSB6 for a selected set of codes.

February 2019 update:

VSB14 is currently being managed by VicRoads. VSB14 provides some reference to VSB6 regarding modifications but it is not clear or explicit about what is allowed.
TIC/TMR proposal to be tabled in the next round of TLG/AMVCB meetings.

GVM and GCM rerates: TMR is currently reviewing their process and procedures. They have circulated LS11/LS15 codes which TIC is currently reviewing with FCAI. Longer term, TMR aims for these codes are rolled into VSB14 to become part of the national guide.

➢ **Steerable axles and rear overhang – NSW issue**

A change in NSW is impacting a range of in-service units for ***low wheel cut*** steer axles (typically camber driven), as the RoH assumed that the axle is not steerable.
Still under review. Limited activity
Item closed (pending any future activity).

➢ **New National Notices**

- B-Doubles: issued.
- HML and Road Trains: NHVR are still working through approval of all 400+ road managers. Likely to be referred to COAG TIC for approval as NHVR believes that they will not find a compromise that all 400+ road managers support.

➢ **PBS tyre review is under way by an independent organisation/expert.**

<u>February 2019 update:</u>
Expect the draft PBS discussion paper with be released mid-March 2019.

10b) NHVR's HV Voluntary Advanced Safety Package:

Historical recap:

NHVR is proposing a Safety Initiative that would allow higher steer axle masses (7.0t, possibly 7.2t) and 2.55m width for trucks with addition safety features. This is a result of State and Territory pressure to find solutions to the Heavy Vehicle Road toll and the results of the recent NHVR's Truck OEM Safety Feature Survey.

Sal Petroccitto addressed the TIC CEO's at the August 2018 TIC Council meeting.

NHVR provided TIC a copy of their draft HV Voluntary Advanced Safety Package proposal on 2nd November 2018. Key points are:

- 2.55m width (NHVR preference is 2.6m)
- Minimum 6.8t steer axle mass, possibly with 315 tyre (NHVR preference 7.0t, likely with 385 tyre)
- Cab strength (continue current practice, Euro "Stage 3" would NOT be required)
- Euro VI (any version). TIC requires "and equivalents"
- ESC (even on Rigid's) and AEBS mandated safety features

No mention of additional rear axle mass despite TIC recommendations.

February 2019 update:

- The NHVR released their draft proposal to States and Territories and the NHVR's Industry TWG in mid-December 2018 and TIC circulated the draft to TIC members on 18th December 2018 for review and comment. The draft was in-line with the discussions at the November 2018 TIC CTO meeting in Melbourne, except that the additional 500kg mass could be "shared" between front and rear axles. NHVR requested feedback on the proposal by 11th January 2019.
- Only one comment received (from Isuzu) wanting clarification of the proposed mass limits for twin steer trucks (this is detailed below).
- TIC lodged a submission that:
  - Supported the NHVR's proposal
  - Requested additional mass for twin steer trucks (with justifying text)
- Feedback from the NHVR is that the draft proposal was generally been well received by the States, Territories and industry, with one exception, the ATA "pushed back" strongly on the requirement for Euro VI (or equivalent), only wanting ADR80/03 as the

requirement and they rejected a move to 2.55m, requiring instead 2.6m. The ATA provided no credible evidence to support their claims**.

- The NHVR rejected the ATA's proposal and have simply renamed the package a Voluntary Advanced Safety and Emissions Fleet Renewal Plan. The NHVR have said that they support TIC's proposal for additional mass for twin steer trucks. The (slightly) revised plan should be issued at end of February 2019 and is expected to recommend:
  - 2.55m width (2.6m is unlikely based on feedback for the States and Territories)
  - Cab strength (continue current practice, Euro "Stage 3" would NOT be required)
  - Euro VI (any version) and "equivalents"
  - ESC (even on Rigid's) and AEBS mandated safety features
  - The Plan to recommend LKAS, or Lane Change Warning, BUT not a mandated requirement
  - 500kg mass increase for single steer trucks (can be shared between front and rear axles):
    - 7.0t steer axle mass with 385 tyre
    - 6.7t (or 6.8t) steer axle mass with 315 tyre (subject to PBS and/or ARRB tyre testing/analysis), remaining mass, 300kg (200kg) on the rear axle/s
    - 0kg steer axle mass increase and 500kg on the rear axle/s

- 500kg mass increase for twin steer non-load suspension share trucks (NOT to be shared between front and rear axle sets):
  - 10.5t front axle set (up from 10.0t. No tyre section width requirement)
- 1000kg mass increase for twin steer load share suspension trucks (NOT to be shared between front and rear axle sets):
  - 12.0t front axle set (up from 11.0t) fitted with 275, or greater tyres

Approval and Timing:

The above Plan's increased axle masses (500kg and 1000kg for load share twin steer) and dimensions (2.55m) requires State and Territory approval. The NHVR will work on gaining approval in the first half of 2019. The Plan than needs to be developed into law and the HVNL changed. The HVNL is currently in "maintenance mode" (as agreed to by COAG TIC and the NHVR) until the end of 2020. Meaning this Plan could not be implemented until early 2021, at the earliest. However, TIC should know if this Plan "will fly" by mid 2019.

** The ATA raised doubts regarding TIC claims of improved fuel consumption with Euro VI trucks, ATA claiming Euro VI fuel consumption was worse than that for ADR80/03 trucks.
TIC requests member feedback regarding fuel consumption: ADR80/03 vs Euro VI(a), (b) or (c)

10c) NHVR's Investigation Into Truck Fires:

- The NHVR has started an investigation into all (was just Dangerous Goods) truck fires, recent fires (past 2-3 months) and ongoing fires.
- TIC strongly urges any TIC member who is contacted by the NHVR with regard to this matter to full co-operate.
- Initial investigations by the NHVR have shown a lack of service information is being made available to 3rd party (non-OEM aligned) service providers by truck OEM's. Making it difficult/impossible for some trucks to be serviced/repaired correctly.
- The NHVR has written to TIC's CEO, Tony McMullan, requesting an explanation of the TIC and TIC member, position/policy on the availability of service and repair information for vehicle owners and/or 3rd party service providers to adequately service and repair trucks.
- This could become a CoR issue for OEM's who do not provide adequate service and repair information to vehicle owners and/or 3rd party service providers.
- This issue will be discussed with TIC CEO's at the 13th March 2019 TIC Council meeting, before TIC replies to the NHVR's information request.

- TIC note: The NHVR have far more streamlined legislative "powers" than under Australian Consumer Law.

10d) NHVR's 50mm Tow Coupling Vehicle Standards Guide (VSG), update and discussion:

Historical recap:

The NHVR has developed the 50mm Tow Coupling Vehicle Standards Guide - 16 (VSG), without industry consultation to our knowledge.

TIC CTO strongly advised that TIC Members who sell (or fit) a 50mm towing system for trucks with a GVM above 5,000kg provide suitable advice to their customers, dealers, etc that references VSG-16.

Drivers/operators should adhere to the towing capacities detailed in VSG-16 for ALL vehicles fitted with a 50mm towing system.

If greater towing capacity is required than that allowed in VSG-16, vehicle owners should consider upgrading their towing systems with a tow coupling system with a suitable rating. Such modifications MUST be approved by an AVE and suitably "Mod Plated" using VSB6 guidelines.

Quotes for testing have been received.

NHVR has flagged AS4177 (ageing Standard) for review by Standards Australia, likely to commence in approximately 12 months.

February 2019 update:

Quote requested from The University of Queensland for ADR62/02 Clause 12 testing

		AS4177.2 50mm diameter towballs for LD couplings			ADR62/02, Clause 12 for trailers between 750kg and upto 3.5T			ADR62/02, Clause 12 for trailers above 3.5T		AS3819.1 70mm and 110mm diameter towballs for HD couplings **Dynamic only for $2*10^6$ cycle @ less than 30Hz**	
		static	**or dynamic** $2*10^6$ cycle less than 35Hz		**static**	**or dynamic** $2*10^6$ cycles @ less than 35Hz		**dynamic** $2*10^6$ cyclea @ less than 35Hz		70mm test values defined in Table A2	110mm calculated forces
		Max. tow vehicle 5 tonnes			no other conditions					Trailers up to 10T ATM	Trailers over 10T ATM
		defined in the standard	=±0.6 * D-Value		Minimum force	fixed figure!		Minimium force		fixed figure!	Minimium force
Longitudial force		85kN for a min. 10s	±12kN		=±1.5*9.81*ATM for a min. 10s	±12kN		=±0.6 *D-Value		±45.0	=±0.6 *D-Value
Calculated D-Value, if applicable			12.12	±kN	51.50		±kN	12.12		44.50	45.78
transverse force		NA	NA		=+0.5*9.81*ATM	NA		NA		NA	NA
				±kN	17.17						
								optional			
								mean element		**mean element**	**mean element**
vertical force		NA	NA		=±0.5*9.81*ATM	NA		=±9.81 * (ATM-GTM)		fixed figure!	=9.81 * (ATM-GTM)
				±kN	17.17		±kN	3.43		19.62	9.81
								amplitude element		**amplitude element**	**amplitude element**
								=±0.6 *V-Value		fixed figure!	=±0.6 *V-Value
							±kN	5.04		14.4	14.40
								Combined		**Combined**	**Combined**
							kN	=3.4±5.0 kN		=19.62±14.4	=9.81±14.4

10e) NHVR's Bull Bar Vehicle Standards Guide (VSG-20), update & discussion:

Historical recap:

Multiple issues of non-compliance to ADR requirements (particularly Dipped Beam headlight illumination angles). The NHVR announced a tentative 9-month transition period until 1st June 2018 for ALL manufactures to have compliant bull bar designs. The date is flexible and is based on support/feedback from the bull bar manufacturers.

In-service bull bars will be grandfathered.

VSG-20 was expected to be issued end February 2018 (TIC asked that the release be held over until all issues raised by industry are effectively resolved) with an effectiveness date 12 months after issue of VSG. The NHVR has agreed to hold the release of VSG-20.

TIC (Mark H and Chris L) met with the NHVR on Monday 9th April 2018.

ALL Bull Bars, OEM and Aftermarket, will need to comply with ADR13 visibility requirements from a particular date of manufacture.

The NHVR is likely to insist that the date of manufacture be stamped on all new Bull Bars (OEM and Aftermarket).

The NHVR requested TIC develop a Discussion Paper (May 2018) that details a potential RVCS/ADR certification process for Bull Bars that use additional "fill-in" lamps that would "replace" the

Dipped Beam light cut/obscured by part/s of a Bull Bar. DIRDC has raised the issue, with the NHVR, that the ECE lighting regulation specifically restricts the number of Dipped Beam lights on a vehicle to a total of two.
TIC CTO made a presentation to the NHVR's TWG meeting 1st November 2018 detailing a certification approach that could be used by both truck OEM's and Aftermarket bull bar suppliers, using the current RVCS system (IPA's and CRN's respectively). 4 bull bar "types/scenarios" were identified/proposed. Feedback has been requested from TWG industry members as well as DIRDC. A final proposal will be developed by TIC and submitted to TLG in March 2019.

<u>February 2019 update:</u>

- DIRDC are struggling to find a pathway of allowing additional Dipped Beam lights ("fill-in" lights) and honour their governmental UN harmonisation commitments.
- The NHVR's appetite to release VSG-20 appears to be waning, as they have no evidence that existing bull bar designs that "cut" or "reduce" the Dipped Beam light spread create a safety issue.
- Hopefully some direction will be given by the NHVR at the next TWG meeting? (March 2019?)

From 12.00 noon:

Item 11: Guest Speaker: Update from NTC Project Managers on key NTC projects, including:

- **Driver Distraction – *Mandi Mees, Director Safety and Productivity***

  Mandi's update included the following points/issues:

  - Driver distraction is one of the "top 5" causes for crashes and fatalities on Australian roads and this is in line with international trend/findings.
  - The NTC have contracted ARRB to conduct an international literature review and develop a report on driver distraction. The NTC hope to be able to publicly release the findings of that report, likely Q2 2019.
  - NTC's Driver Distraction Issues Paper released December 2018, submissions closed on 14th February 2019, TIC provided a submission.
  - Next steps: Driver distraction stakeholder workshops to be in June/July 2019 to coincide with the release of the NTC's Driver Distraction Discussion Paper. The NTC to make final recommendations for changes to the Australian Driving Laws to the November 2019 COAG TIC meeting.

- **Heavy Vehicle Driver Fatigue – *Mandi Mees, Director Safety and Productivity***

  Mandi's update included the following points/issues:

  - The NTC's Heavy Vehicle Driver Fatigue project was now in its final stages having been conducted over the past 2 years.
  - Field trials concluded in December 2018 and the NTC's consultant was finalising their project summary and report at present.
  - A Heavy Vehicle Driver Fatigue Summary Report is due for public release in mid April 2019. Mandi made the comment that "the Report will make very interesting reading for drivers/operators/transport companies/legislators".
  - The detailed report will not be publicly released until it has been "peer reviewed", this was an agreement reached between the NTC and the participants before the trials commenced. The detailed report is due for release by approximately April 2020.
  - The findings of the HV Fatigue Report will be considered in the current review of the NHVL, another current NTC project, https://www.ntc.gov.au/current-projects/heavy-vehicle-national-law-maintenance/

- **Autonomous Vehicle Regulation – *Helen Tsirlina, Acting Manager Automated Vehicles***

  Helen's update included the following points/issues:

  - The NTC will be making the following recommendations to COAG TIC in June 2019:
    - Autonomous Vehicle (AV) data laws should be developed in-line with the NTC's previous AV Data Regulation Discussion Paper recommendations (TIC note: TIC and the FCAI supported these Discussion Paper recommendations)
    - AV Third Party insurance should be based on an expansion of the existing automotive Third Party insurance practices/regimes
  - COAG TIC in November 2018 approved the NTC's recommendations that AV "supply to market" compliance/regulation should be controlled by the current ADR process. (TIC note: TIC and the FCAI recommended this approach and this was approved by COAG Ministers)
  - COAG Ministers rejected the NTC's proposal that "in-service" AV compliance should be controlled by an AV Entity (TIC note: TIC and the FCAI also strongly opposed this NTC recommendation that would effectively make the vehicle OEM legally responsible for the AV's compliance and performance for the life

of the vehicle). COAG Ministers instructed the NTC to further review this matter and provide alternative recommendation/s.

- The NTC is now in the process of developing a new RIS for in-service" AV compliance/regulation. This RIS will consider:
  - On-going compliance and roadworthiness over the life of the vehicle
  - Obligations of all parties: vehicle OEM/supplier to market, vehicle owner, vehicle driver, State and Territory authorities, etc
  - What new "in-service" AV laws/regulations are required
- The new RIS is due to be released for public consultation in by mid 2019.
- This will be followed by further NTC review and recommendations for legislative reform developed by the NTC to COAG TIC for review and action at the November 2020 COAG TIC meeting.

Item 12: Buffet lunch served from 12:30pm (30 minutes)

From 1:00pm

Item 13: TIC Codes of Practice revisions, update and discussion:

Please be reminded that TIC CoP's are officially and/or legally binding documents for TIC Members.

a) Field of View (FoV)

Historical recap:

Current situation is deemed by the authorities to be unsatisfactory

TIC's current FoV Code is not proving not to be effective

Vulnerable Road Users groups want a clearer enforceable standard

VicRoads is updating their FoV guide for light vehicles. It will also highlight the issue of internal cab visual obstructions.

Circulated to CTO's for approved.

Feedback received and included in the draft for discussion.

February 2019 update:

- The draft did not receive anonymous approval from all truck CTOs.
- Changes have been highlighted as either additions in yellow overlay or crossed out. Key changes were: the 11 metre dimension has been replaced in Figure 1 by an "X" to reflect either 11m or the "OEM opening". The wording generally aligns with an AMVCB draft code regarding internal visual display units impact on the driver's field of view.
- TIC members will be requested to approve the updated draft in writing.

b) Electromagnetic Compatibility (EMC)

Historical recap:

The TIC's EMCs CoP is being updated to reflect multiple recent updates to the European Regulations on which it is based.

Work has been undertaken in collaboration with FCAI.

Note: TIC members complying with the Code are exempt from having their compliance documentation randomly audited by ACMA and all elements labelled, however, ACMA can required

TIC members to provide compliance documents in the event a product is suspected of being non-compliant and penalties can be applied.
The ACMA labelling notice applies at the time the unit is supplied to market. OEMs need to comply to the applicable version of R10 at the time the unit is supplied to market.
There are transitional requirements in each of the R10 versions which provides some flexibility, noting R10/05 basically adds requirements for units with electric energy storage systems – hybrid, fuel cell and battery powered vehicles.

<u>February 2019 update:</u>

- Draft has been approved by ACMA.
- TIC members will be requested to approve the updated draft in writing.

Alternative EMC Standards**:**
TIC is developing a proposal to include alternative EMC standards from Japan, Canada or US. It must be shown these alternative standards are of an equivalent or higher standard to the existing approved standards/code.

c) Vehicle Recalls

Historical update:

The TIC Vehicle Recalls CoP is being updated to reflect the establishment of the NHVR and changes due to the MVSA review/RVSA implementation.

Please email NHVR at VehicleStandards@NHVR.Gov.AU when a recall is ready for execution, until the CoP is updated.

DIRDC must be advised as soon as an OEM establishes that there is a need for a recall.

DIRDC believe a CoP will still be required under RVSA. RVSA legislation details penalties but not the steps to undertake either a voluntary or mandatary recall.

DIRDC comment they are not getting regular monthly updates on recalls underway. TIC members to ensure regular reporting of progress be provided to the DIRDC.

February 2019 update:

Discussed in Item 6 of today's meeting, refer to that Item for update/details.

d) Manufacturers Plate

November 2018 update:

Format and appearance have been updated – no technical changes.
It is being identified as Version 1.1, November 2018 and will be uploaded shortly.

February 2019 update:

- No progress in uploading Code to TIC website.
- TIC will facilitate the uploading of Code on to the new TIC website before the next CTO meeting in May 2019.
- Issue closed.

Item 14: TIC Technical Guides (TG), update and discussion:

TG's are proposed to be a new class of TIC document. They are designed to be informational, provide recommendations and be widely distributed.

a) Impact of Vehicle Modifications on ABS/ESC Function and Certification

Historical recap:

This TG was developed to fill a knowledge gap within the industry. VSB #6 Heavy Vehicle Modifications Guide provides little guidance regarding modifying a vehicle where either ABS or a stability control system has been fitted. Refer to TG details. We are currently waiting for feedback from Wabco and Knorr.

February 2019 update:

- An update draft has been recirculated.
- No additional feedback has been received.
- TIC members will be requested to approve the updated draft in writing.

b)Trailer Wiring for Reverse Light/Alarm

Historical recap:

Updated Voluntary CoP originally drafted with HVIA has been turned into a standalone document, to support the fitment of wiring between a towing units and following trailers in order to support the fitment of reversing alarms for the protect Vulnerable Road Users. Refer to TG for details.
Qualified agreement by all TIC CTO's.

February 2019 update:

- Feedback has received and include into the draft, which has been circulated to CTO's.
- TIC members will be requested to approve the updated draft in writing.

Item 15: The VSB6 Review Update:

VSB6-V3 was implemented on the 1st September 2017 in all States and Territories (including WA and NT) and has moved from NTC control to the NHVR for future management and maintenance. VSB6 Version 3.1, released on 1st February 2019.

a) Tipper Bodies + Tilt Trays – Chris L

Historical recap:

Issues with compliance with AS1418.8 "emergency stops" by many Australian manufacturers. Originally brought to the attention of the NHVR by Phil Webb at PACCAR on 2nd September 2017, one month before the implementation date of VSB6-V3. On 5th October 2017 the NHVR announced a 6-month transition period (until 1st March 2018) where tippers do not have to comply with the "emergency stop" requirements of AS1418.8.

HVIA is leading the code development. TIC members – Paccar, Isuzu, Hino, Fuso, Volvo.

WorkSafe's etc have been contact to quantify the need burst valve protection. Most don't have adequate data.

Qld provided a WHS Plant Safety Link for ***Falling Truck Tipper Trays,*** dated Nov/02.

Additional reference material from UK IRTE ***GUIDE TO TIPPER STABILITY*** was circulated.

February 2019 update:

- Data is filtering in from various State and Territory WorkSafe Department's. TIC understand that there has been enough reported incidences to reflect an industry issue.
- TIC is still waiting for this data to be circulated for review and comment.
- NHVR is interested in reviewing alternative standards including the Japanese standard. Could TIC members please request information from their parents.

b)Tow Trucks + Tilt Trays – Chris L

Historical recap:

Draft VSB section was sent to TIC CTO's on 26th February 2018

The specific licenced tow truck requirements have been removed from VSB as they are covered by the State and Territory governments requirements. This removes the need for non-licensed tow/tilt trucks to be burdened with the same requirements and costs as emergency licenced tow/tilt trucks. Requirement for minimum steer axle loading in order to maintain control is being developed.

February 2019 update:

- Progressing (slowly), but timing for the release of the update has not been advised.

c) Rear Wheels and Tyres – Mark H

Historical recap:

Draft VSB section was sent to TIC CTO's on 26th February 2018.

Primarily looking at fitting Wide Single wheels and tyres in place of dual wheels and tyres on 4x4 trucks. Will also look at Super Single wheel and tyre fitment on trucks and trailers (to replace dual wheel and tyre combinations).

Mark H. reviewed the draft and provided extensive feedback back the NHVR, primarily around changing wheel offsets from OEM design standard and the induced wheel bearing and wheel end loads that this offset loading produces.

Also, the requirement to retest ADR35 Brakes was not stated in the Mod. Code where tyre diameters change beyond OEM limits.

The Mod. Code Draft does now state that it is NOT applicable to *"conversion of dual wheels to single wheels where directly prohibited by the vehicle manufacturer"*.

Draft of VSB6 D3 – Fitting of non-standard wheel components and checklist was received June 2018 and Mark H has provided extensive feedback.

February 2019 update:

- The Code was finalised with no significant changes from those recommended by TIC.

- The revised Rear Wheels and Tyres Section was published with the release of VSB6 V3.1 on 1st February 2019.
- Issue closed.

d) ROPS and FOPS – Mark H

Historical recap:

Draft VSB section was developed by CVIAA in 2017 and attracted some industry criticism at the time. The NHVR agreed to be reviewed this section in 2018.

Little visible progress has been made, other than NHVR has confirmation that the Code will be split in two, "design" and "installation" and NHVR have initiated some FEA studies of ROPS/FOPS/chassis attachment will be a mandatory design requirement.

February 2019 update:

- TIC has no further update.

e) Engine Emission Testing (Engine change or modification or alternate fuel) – Mark H

Historical recap:

Draft VSG-26 circulated to TIC members 17th September 2018, by TIC CTO. No significant issues raised by TIC members. TIC replied to the NHVR detailing that TIC and TIC members did not endorse, or support, the modification and changing of baseline engine characteristics or functions, fuel switching, or fuel supplementation via any form of hardware or software changes to the engine/vehicle. However, TIC did acknowledge that the proposed changes to VSB6 requiring PEMS testing equipment for verification was a far more robust system to test/check for in-service exhaust gas emission compliance. As such, TIC supported the NHVR's proposal. The NHVR finalised the text of VSG28 in November 2018, with no significant changes other than some "Australianising" of the UN-ECE R49 Revision 6 - PEMS test procedure. A significantly better outcome than the current test requirements.

February 2019 update:

- Notes were added to the Engine Code in VSB6 referencing VSG28. This change was published with the release of VSB6 V3.1 on 1st February 2019.
- Issue closed.

f) Vehicle Mounted Cranes – Mark H

- TIC CTO was contacted by the NHVR on the 7th January 2019 requesting TIC's approval to add EN13001 standard as an alternative to AS1418 (in conjunction with AS2550) in the R Code, Vehicle Mounted Cranes, of VSB6. This proposal was put forward by HVIA, without any consultation with TIC or truck OEM's.
- TIC CTO contacted the NHVR to discuss this issue. A summary of those discussions and the NHVR's proposed changes were circulate to TIC members on the 11th January 2019.
- Based on concerns expressed by some TIC members and TIC CTO, TIC replied to the NHVR detailing that TIC had concerns over the proposed changes and requested more time to review this issue. TIC also outlined some problems that TIC members were having with the application of the existing R Code.
- Based on TIC's feedback, the NHVR has decided to conduct a complete review of the R Code. Due to the NHVR's current VSB6 workload, this review is not likely to start until Q2 or Q3 2019.
- TIC is looking for TIC members to join a TIC VSB6 - R Code review group. Volunteers?

Item 16: TIC sub group: Engine ECU and Road Speed Limiting (RSL) tampering, interrogation and enforcement, introduction and discussion:

- Mike Fowler (Cummins), at the November 2018 TIC Council meeting, raised the issue that most enforcement officers (police) and HV inspectors do not know how to interrogate a truck/engine ECU correctly and are issuing Defect Notices for Road Speed Limiting and Engine Emission infringements to perfectly legal and compliant trucks.
- The Council decided that TIC should discuss this issue with the NHVR and offer to provide information, guidance, training, etc as how to correctly interrogate a truck/engine ECU. It was also decided by the Council, that this action would begin with USA engines (CAT, Cummins and Detroit), as typically these engines were being "targeted" for enforcement due to their "relatively open" electrical architecture.
- TIC CTO spoke with the NHVR and they have agreed to allow TIC to make a presentation to their Enforcement Group, at a date to be decided.
- A phone hook with the three USA engine providers and TIC (Chris L and Mark H) was held 22nd January 2019 to discuss the contents of the TIC presentation.

- TIC subsequently developed a template for the presentation and circulated that to the group with a request for specific information to complete the presentation. That presentation is currently being prepared for an NHVR briefing to forge a collective approach to support and train HV inspectors.
- Are other TIC members experiencing similar "issues" in this area that they would like to share with TIC?
- If there are significant similar issues with European and Japanese trucks, TIC will look to expand this project, in the future, to cover these trucks/engines too.
- Is there a need to develop a CoP or Technical Guide to assist truck owners/operators?

Item 17: QLD-TMR and Industry review of S10 Livestock Loading scheme:

Historical recap:

TMR agreed to a maximum steer axle limit of 7.1t (not 7.2t as recommended by the TRG) when fitted with 375mm, or greater, section width tyres. A maximum 6.5t steer axle limit will apply when the steer axle is fitted with less than 375mm section width tyres.

A maximum 6x4 GVM of 28.1t was agreed to by TMR.

TIC CTO was contacted by the QLD-TMR Chair of the S10 Technical Reference Group (Mark Mitchell) in early July 2018 and asked to review and finalise the Truck Section of the S10 Code (HVIA were asked to finalise the Trailer Code) using the TMR proposed axle mass limits (the lower limits detailed above).

TIC CTO completed this task and responded to TMR in July 2018.

HVIA had not yet finalised the S10 Trailer Code as of the end of November 2018

TMR and the NHVR then "cocked up" the S10 Livestock Notice draft (generated the Notice from an out of date S10 Guideline document)

The Notice does not reference the Code and the Code does not reference the Notice

TMR have set 6 dates for S10 training workshops starting on the 27th November 2018, even though the S10 Livestock Notice is incorrect and the S10 Trailer Code is yet to be completed……..

The S10 Technical Working Group has not been consulted on the Notice, nor the planned S10 training workshops…….

February 2019 update:

- TIC CTO attended the 1st training workshop on the 27th November 2018 in Brisbane. TMR were unable to answer a number of questions that were raised by livestock operators, primarily because the S10 Notice and S10 Code documents were not complete.
- At the 2nd training workshop in Toowoomba, TMR distributed an "S10 Facts Sheet" that had some significant errors in it. This caused MUCH confusion at the workshop. At this point, TMR (finally) realised that their S10 review was nowhere near complete!!
- TMR requested the S10 TWG to review and correct the S10 Notice and update the Truck and Trailer Codes. TIC completed this task on 18th January 2019. HVIA did not provide the Trailer Code.
- TMR then called a meeting 30th January 2019 of the TWG to review these updated documents (less the Trailer Code that HVIA had still not completed).
- At this meeting the TWG agreed that an S10 rated vehicle (truck or trailer) needed to be fitted with both an S10 Rating Plate and a Manufacturers Rating Plate (something

that TIC CTO and Anant Bellary (TMR) had been calling for, since the S10 review began).

- This change required yet another update/rewrite of the S10 Truck and Trailer Code documents. TIC completed these revisions and submitted the revised Truck Code to TMR (and HVIA for reference) on 14th February 2019. TMR gave the S10 Truck Code to the NHVR on 18th February 2019.
- The original S10 Scheme legally finished on the 9th February 2019 and the new NHVR S10 Notice took effect from 10th February 2019 (however the S10 Code, Truck and Trailer were not complete!).
- HVIA finally sent the S10 Trailer Code to TMR on 25th February 2019. TMR (and TIC) have some significant issues with the S10 Trailer Code. It has not been developed inline with the direction determined by the S10 TWG and TMR. TMR is likely to send the S10 Trailer Code to the NHVR "as is" and "let them sort it out". TIC will detail our concerns with the Trailer Code directly to the NHVR.
- TIC CTO's "best guess" on when the NHVR will have the S10 Truck and Trailer Code complete and released is the end of March 2019. **Transition exists until 30th August 2019.**

Item 18: Standards Australia (SA):

Effective dates for Standards

- Standards are typically effective from the published date located inside the cover of the Standard. From that date, the old standard is archived.
- However, Standards Australia can provide for a transition, for example:

AS3000:2018 - This Standard may be applied through legislative requirements, as indicated in Clause 1.2. This Standard supersedes AS/NZS 3000:2007 from its date of publication. This may not be practicable in some cases, and a transition period, e.g. 6 months, may need to be arranged. For example, where work on an installation was commenced before publication of this edition, the relevant regulatory authority or electricity distributor should be consulted regarding permission for the installation to be completed in accordance with AS/NZS 3000:2007.

AS2809 Dangerous Goods Vehicles code

- Public comments closed 31st January 2019 with 2809.1 and 2809.2 receiving 83 and 74 comments respectively. This may require another period of public comment, potentially delaying their release until late 2019 or early 2020. All comments need to be reviewed by the AS technical committee which is planning to meet April 2019. If you have any thoughts regarding the comments circulated, please send them through by mid-March.

AS3001 "High Voltage AC" power Electrical installations—Transportable structures and vehicles - applies to caravans/their park BUT also ***livestock or car transporters with accommodation included***.

- The standard is called up in ADR42.
- The standard is expected to be released for public comment from mid-2019 (subject to change) and published by the end of 2019. TIC will advise when public comment is open.
- Standards Australia are looking at a scoping a project proposal for a third part - ***other vehicle types***, Chris L believes that this will be a 3 to 5 year project.

AS2080 Glazing for Land Transport Vehicles

February 2019 update:

- No feedback has been received from TIC members after TIC request at November 2018 CTO meeting.
- Standards Australia has established an Expert Working Group (EWG) to review the standard.
- The scope of the AS2080 review is to update the standard in line with changes to similar UN automotive glass standards. Based on this scope and after discussions with the EWG leader, TIC CTO decided that TIC did not need to be part of the AS2080 EWG. TIC CTO will however be part of the AS2080 Review Group.
- The update and review process is expected to be complete by the end of 2019.
- TIC CTO will keep TIC members up to date with the AS2080 update and review process throughout 2019.

Standards Australia has not progressed the review of following Standards:

- AS 2213.1-2001 - Commercial road vehicles - Mechanical connections between towing vehicles - Selection and marking of pin-type couplings and drawbar eyes.
- AS/NZS 4968.1-2003 - Heavy-road vehicles - Mechanical coupling between articulated vehicle combinations - Design criteria and selection requirements for fifth wheel, kingpin and associated equipment.
- AS/NZS 4968.2-2003 - Heavy-road vehicles - Mechanical coupling between articulated vehicle combinations - Testing and installation of fifth wheel and associated equipment.
- AS/NZS 4968.3:2011 - Heavy road vehicles - Mechanical coupling between articulated vehicle combinations Kingpins and associated equipment.
  Note was included to ensure alinement across all parts.
- Issue closed (pending any future activity)

Item 19: National Heavy Vehicle Write Off Vehicle Register (HV - WOVR) project:

Historical recap:

COAG TIC at their May 2017 meeting agreed to develop a National Written-Off Heavy Vehicle Register (WOHVR), similar to the WOVR that exists for light vehicles.

TfNSW was appointed by COAG TIC to head the project.

The HV-WOVR will cover all road registered vehicles above 4.5t, trucks, buses, trailers and mobile plant equipment.

COAG TIC approved the HV-WOVR in late May 2018 and approved the HV-WOVR's Expert Reference Group recommendation that a WOVR be developed for vehicles in the 3.5t to 4.5t GVM range. Action on this work is TBA by TfNSW.

Technical Guide (for industry use) has been completed and released in June 2018.

TfNSW held a HV-WOVR industry workshop on 26th June 2018. TIC CTO attended. No serious issues or objections raised, however TIC raised concerns about the definition change to "plant equipment" (the "yellow" machines), now defined in the HV-WOVR as "special purpose trucks", TIC's concerns were supported by the NHVR. The NHVR also suggested that the WOVR for 3.5t to 4.5t GVM range vehicles needed to be "fast tracked" to avoid the pending "hole" that will exist in the WOVR.

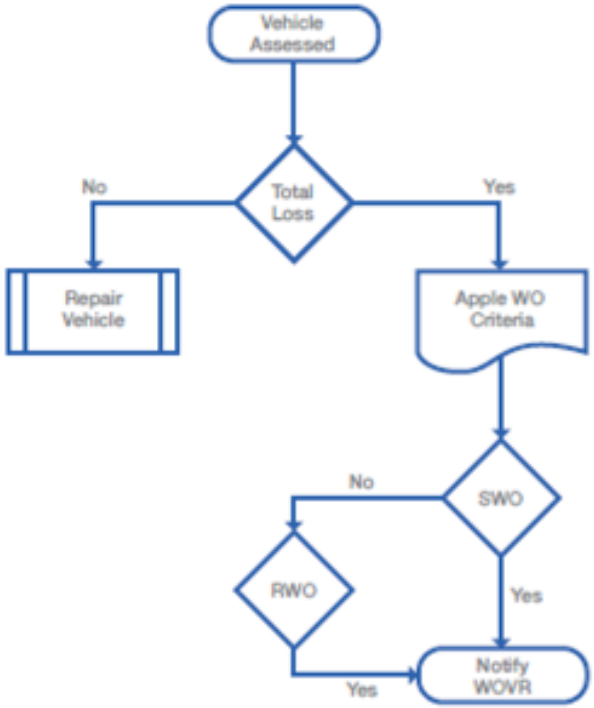
TIC CTO asked to review NSW-RMS HV-WOVR "press release" in late October 2018.

RMS are intent on using the "special purpose truck" definition rather than "plant equipment". TIC has exhausted all avenues with this issue.

<u>February 2019 update:</u>

- NSW-RMS launched the HV-WOVR on 3rd December 2018.
- NSW-RMS put the HV-WOVR implementation on permanent hold on 17th December 2018.
- NSW-RMS changed the HV-WOVR assessment process developed by the ERG, without consultation with the ERG or other States and Territories!! The "model law" that the NSW Government created was fundamentally flawed!!
- Originally, the insurance company was to assess the vehicle to decide if they wanted to repair the vehicle, and if not, the vehicle would be assessed against the HV-WOVR criteria and that would determine if the vehicle was a "repairable write-off" or a "statutory write-off" and put on the Written Off Vehicle Register as such.
- However, the NSW Law has been written to apply the HV-WOVR criteria first, before the insurance company makes its economic decision to repair, or not.
- So the insurance industry and BIC, forced NSW-RMS to halt implementation.

Figure 1



- TIC has no information as to when the NSW Law will be changed and the HV-WOVR will be re-launched.
- And the sleeper is still the exemption for "special purpose trucks" (should be "plant equipment").

Item 20: C-ITS and Autonomous Vehicle Update:

- Austroads C-ITS Industry Advisory Group, update:
  - New Austroads Connected and Autonomous Vehicle (CAV) Project Manager announced, John Wall (formerly head of the TfNSW CITI Project).
- Austroads Connected and Autonomous Vehicle (CAV) heavy vehicle projects review, update:
  - TIC CTO met with the new CAV Project Manager John Wall on 19th February 2019.
  - TIC CTO detailed the harsh reality of connected and autonomous trucks in Australia.
  - John was surprisingly receptive!
- Transurban's Level 2 Autonomous Vehicle/Infrastructure trials 2019, discussion:
  - Transurban wish to run a trial in Melbourne of advanced driver assist features on trucks (similar to the car trial run in 2018) and are looking for trucks!!
  - Autonomous Cruise Control, AEBS, LKAS (or Lane Departure Warning) are Transurban's requirements
  - All Brands and Models wanted.
  - TIC CTO to send details to all TIC members.

- Transurban will supply a detailed (and reasonably confidential) review of the functionality of these systems on YOUR truck/s on Australian roads. The car OEM's (and their Parent's) found the trial very useful.

- CITI Project Phase 3, update
  - Phase 1 complete
  - Phase 2 will be completed by the end of 2019
  - There will be a Phase 3, but the scope is yet to be defined

Item 21: General Business:

a. <u>AARC's further development</u>

AARC has undertaken "stakeholder" engagement regarding the further development of Anglesea to support autonomous tests and trials. They have advised this development will also support trucks.

OEMs represented were VGA (VW), Ford, Bosch, Rheinmetall Defence.

For further information please contact Ari Suss Ari_Suss@linfox.com, GM AARC.

b. ADR35/06 truck clause 5.8.1.1 and .2 - ABS/ESC wiring clause

5.8.1.1 The continuous current capacity of the electrical conductive material between each contact of each ISO 7638 connector and its current source (or return/ground) must be at least the following:

	Vehicle designed to tow a single trailer only		**Vehicle designed to be used in *'B-Double'* and/or *'Road Train'* combinations**
	12 volt connector	**24 volt connector**	**12 volt or 24 volt connector**
Contact 1	20 amps	10 amps	20 amps
Contact 2	4 amps	2 amps	4 amps
Contact 3	6 amps	3 amps	6 amps
Contact 4	20 amps	10 amps	20 amps
Contact 5	2 amps	1 amp	2 amps

5.8.1.2 Each vehicle designed to be used in 'Road Train' combinations, must be equipped with a special connector conforming to ISO 7638-1:2003 together with a permanent electrical supply system configured for 24 volt operation.

Is there need for a minimum current provision for road train operations?

Refer to the following ECE R13 Clause
There seems to be a need for a clause similar to the following to be included with ADR35/07 AEBS update:

5.2.1.19.1. the power supply (generator and battery) of the power-driven vehicle shall have a sufficient capacity to provide the current for an electrical braking system. With the engine running at the idling speed recommended by the manufacturer and all electrical devices supplied by the manufacturer as standard equipment of the vehicle switched on, the voltage in the electrical lines shall at maximum current consumption of the electrical braking system (15 A) not fall below the value of 9.6 V measured at the connection. The electrical lines shall not be capable of short circuiting even when overloaded;

c. Churchill Fellowship awarded to Michael Holmes from TfNSW

Mr Michael Holmes has been awarded the 2019 NRMA-ACT Road Safety Trust Churchill Fellowship to investigate best practices to improve heavy vehicle safety in urban environments - UK, Sweden, Belgium, Luxembourg.

Contact has been made and guidance being provided. Is there an opportunity for Michael to visit OEM's in any of these countries?

Leaving 8th March and returning on the 16th April

Michael has secured meetings with Volvo/Scania trucks, but has the follows dates/locations free: -

- 18, 19 & 21 March (in London, UK)
- 3 & 5 April (Stockholm, Sweden)
- 8, 11, 12 April (New York, USA)

Note Applications open for Churchill Trust Fellowships are NOW open
They close 30th April - https://www.churchilltrust.com.au/application-process/how-to-apply/

d. NSW Centre for Road Safety - Be Truck Aware Advert.

Trucks have blind spots - https://www.youtube.com/watch?v=EhgvdII-QTU

e. QLD-TMR request for Steer Axle GCM rating letter for every truck that is to be towed

2 members have been contacted by QLD-TMR requesting information on for matter.

"When the combinations are towed by a heavy tow truck via attachment of the steer axle to the heavy tow truck, the drive forces of the tow truck are tension through the tow coupling into the steer axle, springs and spring eyes into the front of the chassis, then through the length of the chassis into the 5th wheel.
These forces (equal to whatever is necessary to haul 90+ tonnes up the Toowoomba range, for example) are in the opposite direction and significantly greater than the normal service loads the steer axle, suspension and chassis experience. The vehicles may well be capable of withstanding these forces but there doesn't appear to be any kind of 'rating' system or specific capabilities stated anywhere in relation to this."

TIC would appreciate some comment from heavy vehicle manufacturers on this issue – are the steer axles, springs, chassis mounting points and so on rated to or capable of this method of towing, and to what extent, under what conditions?

Has any other member received a similar request?
A request has been sent to TMR for the rational and justification for the request.

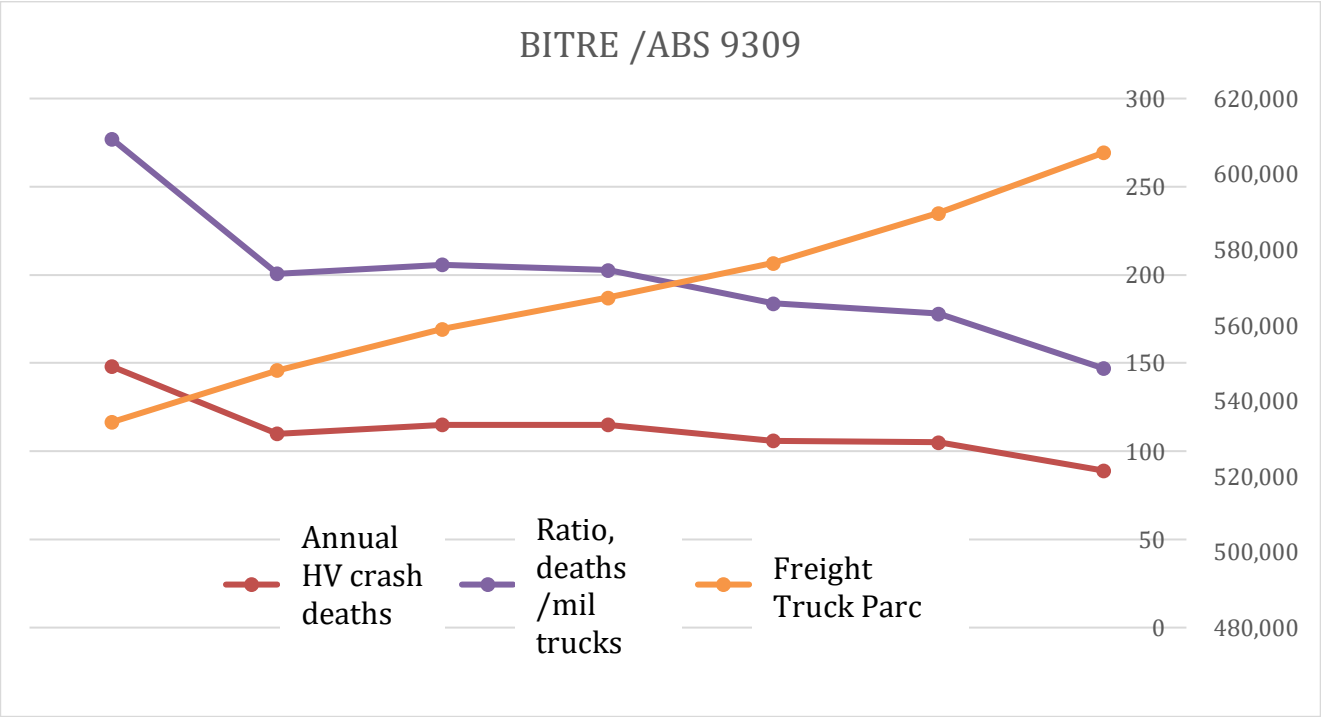
- Does anyone have such a rating available?
- Can you please provide rating for any factory fitted tow hooks and similar items?

TIC will officially respond to TMR on members behalf. Pending any new information: -

- Steer axles can't be provided with a GCM rating as a tow coupling without unique Australian extensive testing and assessment.
- They are designed to support and control, in all directions, the forces applied for the axle's rating with a manufacture safety margin.
- Steer axles should not be solely relied on as a method of coupling by a tow truck.
- The towing loads should be appropriately applied back through to the chassis.

f. Heavy Vehicle truck crashes

HV truck crashes trended down significantly in 2018, this is a good news story for our industry.



g. Interesting videos

https://www.youtube.com/watch?v=xpdrtSejtBw
https://boingboing.net/2019/02/26/the-truck-eating-bridge-claims.html

Item 22: 2019 CTO meeting calendar:

Next Meetings, proposal:

- TIC CTO Dinner Tuesday evening 30th April 2019 – Canberra (Venue – TBA)
  CTO Meeting #2, Wednesday 1st May 2019 – Canberra (FCAI's Offices – TBC) 9.00am start
- CTO Meeting #3, Thursday 8th August 2019 – Brisbane (NHVR's Offices)
- CTO Meeting #4, Wednesday 13th November 2019 – Melbourne (Cummins's Offices)

Item 23: Meeting Close

CTO thanked TIC members for their continued attendance and participation in this TIC technical forum. The meetings scheduled close is 3.00pm

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0408 225 212

Chris Loose
Technical Officer (TO)
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