



How do Road Transport Management Certification Schemes stackup safetywise? What's best: NHVAS, Trucksafe or the Other One?

A very common question that gets asked is what road transport certifications schemes produce the best safety results? This is a relevant question as the development of certain road certifications schemes often had specific safety intentions behind their initial development. Well how do the Certifications undertaken by the Australian road freight industry compare? Well this analysis does not give a total answer to this question but does give an insight for at least the high performing end of the Australian road transport sector, namely the High Productivity Vehicle fleets.

The Trucksafe evolution

A major focus towards road transport certifications happened in the 1990s following two horrendous bus and truck collisions in 1988 and 1989. The accreditation developmental wheels started turning when the then Road Transport Forum created the first step towards the Trucksafe scheme with the 1995 Team 200 initiative. This scheme became Team 2000 in 1995 and in 1997 Trucksafe, the ATA's proprietary accreditation scheme, was launched. (See Table 1).

The National Heavy Vehicle Accreditation Scheme

This certification schemes modules emerged spanning mass, maintenance and fatigue. This scheme is viewed as the alternative compliance scheme and was first established in 1995 as the alternative pathway as the NRTC had rejected the 'operator licensing' alternative. This was the same year that the Draft ISO 9001 Road Transport Standard was developed, and the ATA's Team 200 was expanded to the Team 2000 trials.

It should be noted that the then NRTC rejected the idea of putting the NHVAS modules under an ISO National Standard, and as such it can be argued that no current Road Transport Certification Scheme is actually a 'public domain' national standard as NHVAS can be viewed as a proprietary government scheme.

ISO 9001 Draft Road Freight Industry Standard (QR/002-0050, 1995)

This draft standard saw the light of day in 1995 and was effectively shelved as regulatory attention only embraced the government owned NHVAS certification. There were many good, and basic, quality assurance features in the scheme that could have been adopted by both the government and the various industry schemes that existed in 1995 and thereafter. There was a belief by the then NRTC that the government scheme was a national standard, however, being a proprietary scheme, this assumption is not, and was never true. Since its handover the National Heavy Vehicle Regulator (NHVR) the scheme is even more so a "national governmental proprietary certification scheme". In Australia, Standards Australia is the gatekeeper for ISO standards and is the peak, non-government, not for profit, standards organization.

Table 1: Chronology of Transport Management Certifications 1990–2000

Dates	Description
1988–1989	Major Bus and Truck accidents bring a major regulatory focus on heavy vehicle safety
1990	Pilot Team 200 is launched by the then Road Transport Forum. It is their initial pilot accreditation program which is the precursor to Trucksafe
1993	National Road Transport Commission releases a discussion paper rejecting operator licensing in favour of a compliance-based accreditation program
MAY 1995	ISO 9001 Draft Guidelines for the Road Transport Industry is released for Initial Committee discussion (project:QR/002-0050)
1995	The RTF's Pilot Team 200 program is expanded to become the Team 2000 Program
1995	The pilot modules of the National Heavy Vehicle Accreditation scheme are established
MARCH 1997	The RTF's Trucksafe Accreditation program is formally launched, following on from Team 2000
1997	HACCP (food handling) transport standards and PACIA (chemicals and DG transport code) accreditations become operational
1998	The NRTC releases the Transitional Fatigue Management Scheme (later to become BFM)
JULY 1998	TruckCare Accreditation Standards are released for livestock operators
JULY 1998	National Workshop on Road Transport Accreditation is conducted in Melbourne focuses on modularity, flexibility and presents a possible QA framework for putting certifications modules under the ISO framework
JULY-DEC 1999	The Australian States agree on the standards for National Heavy Vehicle Accreditation Scheme for modules 1 and 2. Module 3 with the Fatigue Management module being still in trial prototype mode
OCT 2000	Australian Parliamentary inquiry into transport fatigue recommends that transport fatigue related accreditation modules be lodged with Standards Australia and the International Organization for Standardization. (ISO) (Paul Neville – Chair, Recommendation 32)
JUNE-DEC 2000	PACIA Carrier Accreditation becomes operational
OCT 2000	TransCare (via the VTA) operator standards are released in Melbourne
NOV 2000	The Australian Trucking Association (formerly the RTF) relaunches the new Trucksafe standards

Who Operates and Who does Policy Development for Road Certifications in Australia?

Who owns the respective certifications and who is responsible for the policy changes to a certification scheme may be two different organizations. For example, the Performance Based Standards framework, although it is not a certification, is an example where the operational delivery (NHVR), but the policy ownership and reviews (NTC), sits with different agencies. This is not true however, for ISO Standards or Trucksafe whose operational ownership and policy development are owned by just one organization, namely Standards Australia for ISO and the ATA for Trucksafe. With NHVAS operational ownership is in the hands of the National Heavy Vehicle Regulator but, as with PBS policy, NHVAS policy should lie with the National Transport Commission, however, no NHVAS Policy changes have been implemented by the NTC since the handover of the NHVAS Certification to the NHVR in 2013. That is seven years without new policy initiatives happening. (See Table 2).



Table 2: Who Operates and Who own policy development for road certifications

Scheme	National Operational Owner	National Policy Agency
National Heavy Vehicle Accreditation Scheme	National Heavy Vehicle Regulator	(National Transport Commission) ????
Trucksafe Certification Scheme	Australian Trucking Association (ATA)	ATA/Trucksafe Industry Accreditation Council
International Organization for Standardization (ISO)	Standards Australia	Standards Australia via Industry Committees
Performance Based Standards	National Heavy Vehicle Regulator	National Transport Commission

ISO/QA and what it reflects in this Analysis

For this article ISO/QA is used as an abbreviation for the group of ISO Certifications, see Table 3, spanning the areas of management, OH&S, environmental and food handling operations respectively. In most cases fleets with these ISO certification(s) may not have any specific transport modules in their management system mix, however, all ISO certifications do reflect a serious internal management focus and are usually accompanied by a more intensive audit regime.

Table 3: ISO Quality Assurance Schemes (Quality Assurance)

ISO 9000 Quality Management
ISO 9001 Quality Management (Small Businesses)
ISO 45001 Occupational Health and Safety
ISO 14000 Environment
ISO 22000 Food Safety Management

Note: ISO 39001 had not been adopted by any survey participants

The survey

Historical data from a previous large national PBS operator report was available to examine the behaviour of not only fleet safety and productivity, by vehicle configuration, but also the safety behaviour by the certifications that PBS operator fleets actually held. This relationship between Safety and Certifications held was not in the terms of reference for that original PBS Operator report. However, from a safety performance perspective, focussing on the certifications held by PBS operators, this analysis should prove interesting as an initial comparative benchmark between the respective certifications.

This analysis examines only the safety performance of some 600+ PBS vehicles. There is no comparative performance as to the evaluated accident rates versus those for the conventional, non PBS, vehicle fleet. Also, the accident classes examined was for a combined group of "serious and major" accidents, whereas previous analysis has often only examined "major" accident impact collisions. There was only one safety metric used for this comparison and that was the accident rate per 100 million kilometres of travel. The overall vehicle kilometres travelled in the survey was 273 million kilometres.

Table 4: The Accident Rates of PBS Vehicles holding differing Certifications

Management Certification Held	PBS Vehicles	Million Kms Performed	Major & Serious accidents	Accident Rate/100m kms
NONE (no certification)	230	45.05	6	8.81
NHVAS only	155	118.51	11	9.28
NHVAS & Trucksafe	101	24.17	2	8.27
QA(ISO) only	51	22.40	1	4.46
NHVAS & Trucksafe & QA(ISO)	66	31.09	1	3.22
NHVAS & QA(ISO)*	8	2.86	0	0.00*
Trucksafe & QA(ISO)*	5	6.00	0	0.00*
TOTAL	616	273.17	21	7.69

Note: * indicates may not be statistically valid due to low kilometres travelled.

Major observations from the survey analysis were:

- 37% of PBS vehicles surveyed were not in any road certification scheme,
- PBS vehicles with 'only NHVAS certification' performed slightly worse than those with no certification, 9.28 vs 8.81 hits per 100 million kms,
- PBS operators in both NHVAS and Trucksafe performed marginally better than operators with no certification, 8.27 vs 8.81 hits per 100 million kms,
- Unfortunately, no vehicles in the survey were 'only' in Trucksafe. All Trucksafe operators surveyed held either NHVAS or QA certifications, or both,
- Fleets that held an QA(ISO) only certification performed twice as well as those holding no certification or even NHVAS certification,
- Those fleets holding the 'triple crown' of NHVAS/ Trucksafe/QA(ISO) performed almost three times as well as fleets holding just NHVAS certification,
- Fleets that held an QA(ISO) certification jointly with NHVAS, or jointly with Trucksafe, saw no serious or major accident incidents in the survey. However, the NHVAS/QA(ISO) group performed only 2.86 million kilometres and the Trucksafe/QA(ISO) group only performed some 6 million kilometres. So, these two results may not be statistically valid, although observably very positive.
- In all cases where a PBS vehicle was covered by any form of QA(ISO) certification, either as a standalone certification, or in combination with another certification the safety results are very, very significantly positive.

It is possible that even these initial results might form an initial benchmark and generate further discussion, and even interest in future analysis looking at the safety performance of conventional heavy truck fleets, and their certifications held.

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Note: The views expressed in this Bulletin are not necessarily the views of the Institute.