





## PFTFR HART

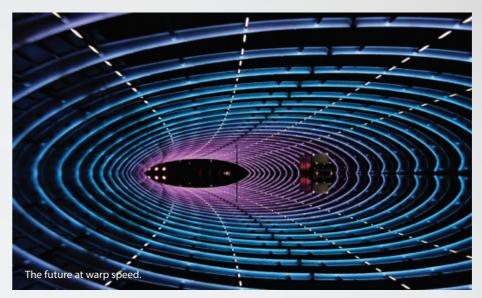
- will be brave and try to predict the trends that will shape the road transport industry over the next ten years. The effect of the COVID-19 pandemic on our industry is unclear. I will focus on what I see as long-term trends. Here are my thoughts:
- 1 Road safety improvements will be driven by smart technologies. The application of smart technologies to trucks and trailers is an unstoppable trend. The human and commercial costs of road trauma has and will continue to grow. Operators who can reduce transport risk by adopting smart technologies will have an advantage.
- 2 European manufactured trucks are in the ascendancy. This trend is clear. It arises because European regulators are forcing adoption of safety technologies into heavy transport. The Europeanmanufactured vehicles offered for sale in Australia have a clear safe-technology advantage that the industry likes. This trend will continue because of future regulatory push in Europe to improve safety and reduce greenhouse gas emissions. Enlightened government regulation is affecting the Australian marketplace – the government is overseas!

## The next ten years

- 3 Productivity improvements continue to be driven by configuration innovation. The Performance-Based Standards scheme (PBS) has provided regulators with confidence that longer combinations can be safely operated in Australia. Super B-doubles and A-train doubles are now seen around the docks and on highways in major cities. This trend will continue. Regulators realise that long combinations are delivering productivity and safety benefits for the community. Expect to see more long combination trucks further afield. Industry demand for better road access for long trucks will continue to be a point of contention with government.
- 4 Greenhouse gas emission levels will become a dominating consideration. It is inevitable that the community will expect the road transport sector to reduce its CO2 emissions significantly over the next ten years. This will supercharge the trend to high productivity vehicles and multi-modal freight movement because of low emissions per tonnekm. Attempts to introduce low greenhouse emission fuels such as CNG into long-distance Australian road transport have been a dismal failure. Diesel is almost the perfect fuel except for its emissions. Maybe hydrogen will become an important fuel in a decade or so, but the reliability of fuel cells is yet to be proven in Australia. The obvious path for Australian road transport is to put battery powered electric drives onto trailers. This will take the load of the truck without having to rely solely on battery storage, which will be range limiting. It is also a sensible thing to do on long combination vehicles because the traction and retardation can be

distributed. The result will be a

- diesel-electric hybrid. I expect this to be a significant trend over the next ten years. Government will probably give concessions to electric trailers to encourage uptake.
- 5 The truck cabin is a mobile workplace. Reliance on telematics for inventory control, trip planning, incident reporting, vehicle condition and compliance will continue to develop. Significant business efficiencies and risk reduction are on offer. Australia is the world leader in third party monitoring of accredited fleet performance. Operators who fully integrate telematics into business operations will have business and accreditation advantages. Controlling complexity by using well developed integrated business systems will be a key success factor.
- 6 Accredited fleets will have an advantage. Government will offer further benefits to accredited fleets. This will occur as the community is demanding further improvements in transport safety, reduced congestion, and emissions. Government's ability to enforce improvements in these areas is limited because of resource and staff shortages. Greenhouse emission reporting will be added to accreditation requirements. Government will choose to offer concessions to operators who agree to abide by agreements and can prove they do. This trend is well established. It will become more important. Fleets of all sizes will need to use telematics and fleet planning tools to streamline their operations.
- 7 Driver shortages remain severe. The severe shortage of drivers is a risk to the efficient and safe operation of the road transport industry. A career structure is urgently needed for drivers. 'A Master driver'



accreditation is needed. Every fleet should have a Chief driver who is a 'Master driver'. This position should oversee the performance and wellbeing of the other drivers. The Chief driver needs to be paid accordingly. Ongoing training is needed to develop experienced drivers to the Master level. Women drivers have proven to be preferred as they treat other road users and the equipment well. To increase the proportion of women drivers into the industry the working conditions and respect offered to women will need to improve. Prominent fleets should work towards appointing a woman as Chief driver. It is likely that a greater proportion of drivers over the next ten years will be immigrants. Many will not well understand written English. The industry has a significant challenge to find and train the next generation of drivers. A career development and wellbeing path for drivers is urgently needed.

8 There is also a severe shortage of truck mechanics. A career path for mechanics to 'Advanced Technician' level is urgently needed. As trucks get more complex through safety and efficiency technologies, the role of computer diagnosis will become critical. The modern truck will be a mobile node in the 'internet

of things'. That is, workshops will rely upon remote computer diagnosis. This situation will favour equipment suppliers who can integrate their gear into truck. In return the suppliers will report on truck condition and efficiency to the operators. Advanced Technicians, who know how to use diagnostic tools and who can instruct mechanics how to repair complex systems, will be needed. While the mechanical servicing of trucks and trailers will continue to be important, the electrical servicing will grow in importance. In total, the maintenance task will grow because the equipment will become more complex. It is hard to name another industry that is as complex as road transport!

9 Local delivery services will grow further. The trend for consumers to purchase items online and expect immediate delivery will continue to grow. There will be more local deliveries and delivery time pressures will only increase. To be efficient different logistics suppliers will start to share work. That is, smart parcel control systems will emerge that allow competing logistics suppliers to co-operate and share some local delivery work. The ACCC will probably get upset that competitors are co-operating;

but resource efficiency, congestion reduction and emissions reduction will become more important considerations. The same trends will affect long-distance road transport. Technology and cooperation between competing operators will become important adaptations to a changing world where environmental and human limitations become dominating concerns.

10 The economic viability of the road transport industry needs to improve. This industry is hardworking and it is efficient. The renumeration levels are low for the effort expended. Consequently, many people in this industry have a poor work-life balance. The industry struggles to attract adequate numbers of new workers who have high skill levels because the industry is so lean and has not developed career paths. Government will probably try to introduce road-user charges and is likely to pull back the diesel fuel rebate. Many operators will feel increasing financial pressure. Further industry rationalisation is likely. The most efficient operators with modern equipment, decent working conditions and advanced business control systems will prosper. Many others will go out of business.

The road transport industry is important to Australia's economic and social well-being. It needs to be more aggressive in telling the community and its governments about its performance and its problems. The industry must develop career paths for its workforce.

This is my last Prime Mover article. It is number 111. I have enjoyed writing the monthly article for ARTSA-i over the past ten years. The time has come to move on. I wish you well!

Dr Peter Hart, **ARTSA** 

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