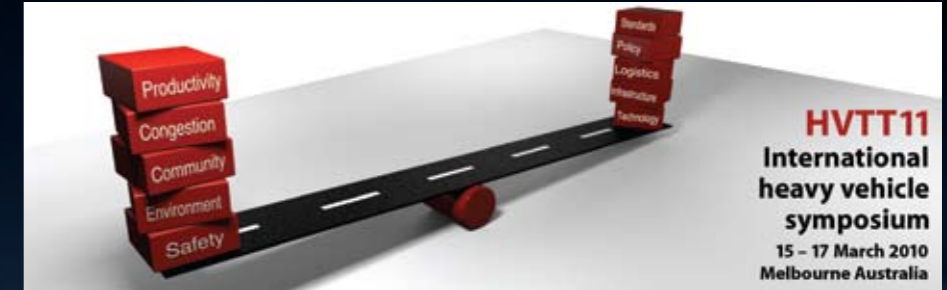




Jorgen Christensen.



SETTING THE STANDARD

One of the speakers at HVTT 11 has been overseeing a project to compare performance of trucks in different parts of the globe using Australian developed standards.

When the Heavy Vehicle Transport Technology Symposium convenes

in Melbourne next March during the week in the run-up to the International Truck, Trailer and Equipment Show, delegates will be presented with a report looking into the future of trucks and trucking with an emphasis on developing regulatory systems to improve productivity and environmental outcomes.

One part of the study involves comparing the performance on the road of different trucks from around the world. The study has used the standards developed for the Australian Performance Based Standards rules used here, to assess the suitability of innovative trucks on our roads. The initial study was commissioned by the Organisation for Economic Corporation and Development (OECD) to give an assessment of where the industry stands now and where it will need to go to maintain the kind of trucking industry the world has come to expect.

Leading this study is Jorgen Christensen, a longtime industry analyst based in Denmark. After a lifetime working for the Danish government, he is now a freelance consultant. The study was commissioned by the International Transport Forum (ITF), a member of the family of OECD organisations dealing with the transport industry sector.

Jorgen also works as an adviser to the European Commission where he is one of a team assisting the research commissioner on how to use the money available on transport research over the next few years.

Earlier in his career Jorgen was involved in working for the Danish Ministry of Transport on road safety issues. He was head of the Road Safety Research Establishment in Denmark as well as doing research on road transport infrastructure as Director for the Danish Road Institute. The working group Jorgen has been chairing involves representatives from 20 nations. 10 countries have been involved as the main contributors to the report.

“This particular project is one of several projects being run by the ITF,” says Jorgen. “The ITF has been working on these sorts of transport research projects for more than 40 years and Australia has been involved for many years in this work.”

“We plan to produce a report which will document our findings in virtually all aspects of trucks and trucking. We are not just looking at the vehicles, we are also looking at the conditions under which they operate. We are examining how governments can influence the productivity and safety outcomes for road transport.”

“We will be issuing a summary of the main report because a big report like ours, of 300 pages or more, is not read by many people. Even a 20 page summary report is quite an ambitious project for some readers.”

Included in the project is also a standalone report in which Australia has been heavily involved. This documents the work done in benchmarking around 40 truck specifications from around the world to a selection of the PBS standards we use in Australia. The standards selected are those that have relevance for all the truck markets of the world. Some of the Australian standards are important here, applying to our infrastructure needs

but are unlikely to have less relevance elsewhere in the world.

“It’s important to see how a truck from the United States, for example, compares with European, Australian and South African trucks,” says Jorgen. “We can compare them in terms of truck dynamic behaviour. We are looking at the basic safety of the vehicle as it can be computed in the performance-based standards.”

“We are doing this to show how the larger and heavier trucks under consideration in various parts of the world can be operated safely in many situations. In fact, in some situations they are safer than the current trucks being used. There is a need to have it documented that these longer and heavier vehicles constitute a way of improving both productivity and safety as well as reducing environmental impact.”

The report will be written in terms of internationally consolidated advice to governments. There is a large amount of interest in what the committee is suggesting in several countries. Europe has serious problems with infrastructure capacity and road freight is a problem in terms of congestion. One of the expected recommendations is that trucking regulations need constant review to keep up with the latest technological developments in road transport.

“I think compliance has a lot to offer,” says Jorgen. “Compliance has a major role to play in our report and we see great opportunities to have improvement in compliance to the regulations in order to convince the community at large that these higher capacity vehicles are not only a benefit to the industry, but should be allowed to run where they need to run.”



"We have a lot of options available to make it an effective and lean process to supervise the compliance of trucking with the regulations. You can come a long way with supervision and internal compliance measures to get the industry to behave correctly. I see compliance to be something which is increasingly technology-based. The improvements will centre around, not only on the kind of hardware you can fit on the roadside and in the truck, but also on intelligent systems of registration of the operators to monitor their behaviour in regards to things like the safety of their vehicles. "Accreditation systems can come a long way to help in this regard. It will require sophisticated information technology which will become available around the world and there is a growing recognition this can be done. It can be seen as helpful to the community as well as helpful to the operators themselves, it can help suppress unfair competition. It also ties in very neatly with the hardware technologies which are becoming available."

There are now secure axle load monitoring systems and similar technologies monitoring braking systems. It is also possible for the monitoring of driver behaviour from the operations base to allow the operator to ensure compliance with the rules. Tightly controlled accreditation systems are being tried around the world to ensure compliance with road transport industry rules.

Jorgen is also of the opinion the chain of responsibility rules introduced into Australia could be copied in other

countries. The concept of sharing the responsibility of road safety and compliance between the transport operators and their consignors and customers is seen to be a useful method of improving outcomes. Jorgen believes it will be possible to convince the community at-large of the responsible attitude being taken by trucking operators.

"My impression is that road transport is high on the political agenda in Australia," says Jorgen. "Many countries envy the priority it is given over there. It is recognised in the report that other countries in the world are looking to Australia to gather experiences and policy direction ideas."

The report takes a ten-year perspective on road transport and looks at current technology available and innovations about to be introduced. It does recommend to other countries the adoption of performance based standards in order to develop their standards for vehicles. It also recognises the issues such an open system can create, as it has done here, with the bureaucratic obstacles slowing the introduction of innovative vehicles.

The positive, recognised by the report, is that genuinely innovative vehicles can, if they are persistent enough, get an opportunity to work out on the road and prove their worth. It is felt the PBS path can be used to develop new prescriptive standards in a country's legislation. This is the way Canada has developed its vehicle legislation for many years. Jorgen thinks this may be a good interim solution before moving to a full PBS

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type answer to the problem.

"Such performance-based systems have been used in other sectors of industry for many years," says Jorgen. "Workplace health and safety standards are set by describing the target and not the precise detail of the equipment used. Operators had to adopt methods and the right technological solutions to meet these standards. This is precisely the idea of PBS as it is used in Australia."

The paper is to be presented at the Transport Research Board meeting in the USA as well as being unveiled at the HVTT 11 Symposium in Melbourne. There is also a large gathering of transport scientists in Europe in June 2010 at which the report will be presented and discussed.

"When we have presented the report, we can only hope that the authorities will make use of it while it is still hot and still interesting," says Jorgen. "This is important because such reports are quite often not very long-lived, especially in this particular field. We see new reports coming out on the same subject, many of them are extremely good, coming up with intelligent analysis similar to our own. "It is a rich field and it is good for us because it is extremely important, not only in terms of productivity but also because of its recognised impact on the environment. There is no doubt about the impact of transport on the carbon dioxide emissions issue and therefore on our assumptions concerning the development of a climate change policy. The pressure on politicians to act to reduce carbon dioxide emissions due to transport is very big."